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DISSERTATION

TEACHERS' PRIORITIES AND PREFERENCES ABOUT SOCIAL SKILLS TRAINING FOR STUDENTS WITH AUTISM IN RESOURCE CLASSROOMS

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ABSTRACT

The general aim of this study was to examine teachers' perceptions about the importance of social skills training for students with Autism Spectrum Disorders (ASD) within Resource Classrooms (RCs).For the purposes of this study, an online questionnaire was used exploring teachers' priorities and preferences about social skills training and their instructional practices. Data were collected from 80 teachers, who had students with ASD within RCs in public general education schools in Greece. Results indicated that the social adjustment and independent living of students with ASD were afforded high priority, compared to other educational objectives, including academic skills. The analysis of the evidence also revealed that teachers in the RCs were aware of evidence-based educational practices appropriate for social skills instruction. Specifically, they mostly preferred to use teacher-centered and behavioral practices, while they also appeared to take into consideration the individual characteristics of their students in determining the content of social skills training. It seems that social skills' training has been mostly scheduled within the weekly program rather than incidentally applied. Results also revealed that the availability of resources and the provision of continuous training were highly ranked amongst the factors that influence their adequacy when dealing with students with ASD. Implications for future research and recommendations for practice are also discussed.

Keywords: *teachers, preferences, social skills training, autism*

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ΠΕΡΙΛΗΨΗ

Σκοπός της παρούσας έρευνας είναι η ανίχνευση των απόψεων των εκπαιδευτικών ως προς τη σημασία της διδασκαλίας κοινωνικών δεξιοτήτων σε παιδιά με αυτισμό πρωτοβάθμιας εκπαίδευσης σε τμήματα ένταξης. Για την έρευνα αυτή, χρησιμοποιήθηκε ένα πρόσφατα ανεπτυγμένο ερωτηματολόγιο με σκοπό να διερευνήσει τις προτεραιότητες και προτιμήσεις των εκπαιδευτικών ως προς την διδασκαλία των κοινωνικών δεξιοτήτων σε μαθητές με ΔΑΦ, καθώς και τις πρακτικές διδασκαλίας που χρησιμοποιούν. Πληροφορίες συλλέχθηκαν από 80 εκπαιδευτικούς, οι οποίοι είχαν μαθητές με ΔΑΦ σε τμήματα ένταξης σε δημόσια δημοτικά σχολεία στην Ελλάδα. Τα αποτελέσματα έδειξαν ότι η κοινωνική προσαρμογή και η αυτόνομη διαβίωση των ατόμων με ΔΑΦ, αποτελούν εκπαιδευτικούς στόχους υψηλής προτεραιότητας σε σύγκριση με άλλους εκπαιδευτικούς στόχους, συμπεριλαμβανομένων και των ακαδημαϊκών δεξιοτήτων. Τα αποτελέσματα φανερώνουν επίσης ότι οι εκπαιδευτικοί των τμημάτων ένταξης έχουν γνώση των επιστημονικά έγκυρων πρακτικών που ενδείκνυνται για την διδασκαλία κοινωνικών δεξιοτήτων. Στην πραγματικότητα, φαίνεται ότι οι εκπαιδευτικοί προτιμούν να χρησιμοποιούν κυρίως δασκαλοκεντρικές και συμπεριφοριστικές μεθόδους διδασκαλίας, ενώ λαμβάνουν υπόψη τους τα ατομικά χαρακτηριστικά των μαθητών τους όταν προσδιορίζουν το περιεχόμενο της διδασκαλίας των κοινωνικών δεξιοτήτων. Οι συμμετέχοντες εκπαιδευτικοί προτιμούσαν η διδασκαλία των κοινωνικών δεξιοτήτων να είναι προγραμματισμένη και να λαμβάνει χώρα κυρίως σε προκαθορισμένη ώρα σε εβδομαδιαία βάση. Τα αποτελέσματα δείχνουν επίσης ότι η πρόσβαση σε κατάλληλο εκπαιδευτικό υλικό και η συνεχής κατάρτιση αποτελούν παράγοντες υψηλής επιρροής ως προς την επάρκεια των εκπαιδευτικών κατά την διδασκαλία μαθητών με ΔΑΦ. Επίσης, περιλαμβάνονται θέματα και προτάσεις για μελλοντική έρευνα.

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INTRODUCTION

The aim of the present study is to investigate teachers' priorities and preferences about social skills training of students with ASD within RCs. Data were collected from 80 RCs teachers through an online questionnaire. The instrument of the study was designed to gather information αbout teachers' priorities on setting educational goals and teaching social skills to students with ASD within RCs. Information was also collected about the time, the setting, the activities, and the type of educational material that teachers prefer to use for teaching social skills to students with ASD within RCs. Last, factors viewed as influential for teachers' suitability to teach social skills to students with ASD were also investigated.

The first part of the dissertation presents, the theoretical background of the study. First, the social skills deficit experienced by children with ASD is described through the diagnostic criteria of the latest DSM version (APA, 2013). The consequences of this core deficit in autism as well as the importance of social skills training are also highlighted. The significance of developing social skills is stressed with respect to the successful inclusion within the school environment and the community. The controversial issue of inclusion for this special population is also discussed. Considering the prerequisites for successful inclusion, teachers' training, their priorities and preferences turn out to be critical determinants for the successful inclusion of students with ASD. The background of this study lies in the high correlations between teachers' priorities and the successful inclusion for students with ASD, as well as the fact that RCs are regarded as educational settings with the potential to enhance school inclusion for students with special educational needs (SEN). Therefore, research in this area would be beneficial for social skills training within RCs considering this special population.

In the second chapter of the dissertation, details are presented about the methodology of this study, such as the aims, and the design of the study, the questionnaire, and the

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participating teachers as well as the procedures for data collection and analysis. In the next chapter, the findings of the quantitative analysis of teachers' responses to the questionnaire are presented. In the last chapter, the main findings, the limitations and the implications of this study are discussed.

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Chapter 1

THEORETICAL BACKGROUND OF THE STUDY

1.1 Diagnosis of ASD

Children with Autism Spectrum Disorders (ASD) are characterized by persistent deficits in social communication and social interaction across contexts, not accounted for by general developmental delays. These deficits are manifested in the following three domains: The first domain being affected is social-emotional reciprocity; ranging from abnormal social behaviors and failure in appropriate back and forth conversation, restricted sharing of interests and emotions to total lack of initiation of social interaction. Secondly, nonverbal communicative behaviors used for social interaction are manifested; ranging from poorly integrated verbal and nonverbal communication, through abnormalities in eye contact and body-language, or deficits in understanding and use of nonverbal communication, to total lack of facial expression or gestures. There is also a deficit in the development and maintenance of relationships, appropriate to developmental level (beyond those with caregivers); ranging from difficulties adjusting behavior to suit different social contexts through difficulties in sharing imaginative play and making friends to an apparent absence of social interest.

Persons in the autistic spectrum also show restricted, repetitive patterns of behavior, interests, or activities as manifested by stereotyped or repetitive speech, motor movements, or use of objects (such as simple motor stereotypies, echolalia, repetitive use of objects, or idiosyncratic phrases) or excessive adherence to routines (such as insistence on the same route or food, repetitive questioning or extreme distress at small changes). (Simons Foundation Autism Research Initiative, 2012).

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1.2 The social skills of children with ASD

Social deficits have a central place in the definition of autism. This condition was first described by Leo Kanner (1943) who used the word autism, from the Greek word “autos”, meaning “self” to reflect the congenital lack of interest in other people(Lord, 1995). From Kanner’s (1943) original conceptualization to the most recent definition in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (American Psychiatric Association, 2013), problems in social relatedness have been identified as the core diagnostic feature of the disorder. Children with ASD may have difficulty processing social cues; initiating, sustaining, or terminating a conversation or behaving appropriately with peers. Further, many children with ASD have a restricted repertoire of interests or behaviors that limits interaction with same-aged peers. Finally, communication with peers may be further challenged due to limited speech and/or use of alternative communication devices (Boutot, 2007). In spite of their ubiquitous nature, the remediation of these symptoms remains one of the biggest challenges for professionals who serve people with autism (Weiss & Harris, 2001).

Competent social skills are essential for the effective inclusion of children with ASD in mainstream schools, although mastering social skills can be a daunting task. Children with ASD are required to learn to generalize a full range of skills in a bewildering variety of settings and people, but they also need to be able to extend these skills beyond the memorizing of rote responses, to spontaneous behavior in novel contexts (Handleman, Harris & Martins, 1997). Individuals with ASD suffer from the direct and indirect consequences related to social interaction deficits (White, Koenig & Scahill, 2006). If individuals with ASD lack the development of appropriate social skills, they will most likely continue to exhibit social failure and will not achieve independent functional skills (Sansosti, 2010). There’s also evidence that social deficits in young people with ASD contribute to their academic and

occupational underachievement (Howlin & Goode, 1998). Studies examining long-term outcomes have demonstrated that individuals with ASD who have limited social skills develop serious mental health problems, fail to establish long-term relationships and may also encounter problems with the law system (Barnhill, 2007; Engstrom, Ekstrom, & Emilsson, 2003; Howlin, 2000; Howlin, Goode, Hutton, & Rutter, 2004). Moreover, only 12% of individuals with ASD seem to attain employment in adulthood (Barnard, Harvey, Prior, & Potter, 2001).

It is apparent that the need for teaching social skills within schools is warranted. One of the greatest challenges for an individual with ASD is navigating the social world. Schools can be the source of both challenge and opportunity for developing social skills and peer relations (Jones & Frederickson, 2010). In spite of research evidence demonstrating the importance of specialized and systematic interventions for social skills and friendships, many of them are not readily available to educators (Rogers, 2000). The importance of social competence in peer relationships for later adjustment, acceptance by others and argues for its significant role in the design of early intervention programs. Even though inclusive settings appear to be conducive to the development of social skills, mere placement in inclusive settings does not guarantee positive outcomes and does not eliminate the need for specific social skills intervention (Koegel, Koegel, Frea & Fredeen, 2001).In order to assist teachers in educating students with ASD within inclusive settings, authors have summarized inclusion practices and treatments for students with ASD (Harrower & Dunlap, 2001; Simpson et al., 2005).

1.3 The inclusion of students with ASD

Nowadays, public policies in most developed countries support the inclusion of individuals with disabilities in society, reflecting a strong demand by the individuals

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themselves and their families. The main thrust of the inclusion movement is to promote the integration of children with SEN into mainstream schools (Coudourier et al, 2008). Recognizing that the push for full inclusion is primarily a philosophical and political movement, with a limited theoretical base and rigorous research, support for the idea of inclusion of students with ASD has become increasingly widespread (Ferraioli & Harris, 2011). Lately, there has been strong trend to include students with ASD and other disabilities in general education classrooms. This trend has largely stemmed from theoretical arguments related to social development and legal issues pertaining to the civil rights movement. However, the educational inclusion of students with ASD remains a fiercely controversial topic. One of the contributing factors in this controversy has been the limited number of studies that have focused directly on the procedures that facilitate the educational inclusion of children with ASD (Harrower & Dunlap, 2001).

On the one hand, the 'rights-based' perspective argues for an ending to all educational segregation and calls for the inclusion of all children and young people in general education. Within this perspective, it is strongly believed that the right of children with special needs to academic and social inclusion and the importance of changing schools to accommodate these children are matters of top priority (Ravet, 2011) On the other hand, there is the 'needs-based' perspective that draws attention to the lack of research evidence in support of mainstreaming and the dangers of exclusion that can arise from it. The preservation of a range of educational provision to meet the additional needs of support for this distinctive group of learners is considered as high priority (Ravet, 2011). It is apparent that there are two different interpretations of what inclusion means and how it should be enacted as underpinning these two perspectives (Norwich, 2007). The impact of medical labeling and special pedagogies within the two contradictory perspectives are especially salient to practitioners supporting learners with ASD. These practices are generally considered to be exclusionary within the

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rights-based perspective (Slee, 2001; Florian, 2007; Allen, 2008). Rights-based inclusionists consider medical labeling as negative and exclusionary, while special pedagogies are believed to reinforce difference. They advocate for a single 'inclusion pedagogy' for all learners and they do not recognize the need for specialist autism training (Gilman, Heyman & Swain, 2000; Thomas & Loxley, 2007; Ho, 2004). Within the needs-based perspective, medical labeling is considered to be useful and inclusionary, since a diagnosis enables individuals with ASD, their families and teachers to make sense of their condition, learn to cope with and adopt to it, as well as the fact that strengths and challenges associated with the condition can be identified (Jones et al., 2008). With respect to the special pedagogies, they are considered to be inclusionary as they are linked to specific group needs and they advocate for specialized teacher training (Cigman, 2007).

Despite the importance of research evidence for treatment planning and decisions about educational placement, the existing outcome research on inclusion of students with ASD remains scarce. The existing literature reports outcomes for the cognitive-academic and adaptive social domain (Ferraioli & Harris, 2011). However, conclusions about the outcomes of inclusion for students with ASD must be made tentatively, as studies show both benefits and risks of inclusion (Kasari, Locke, Gulsrud & Rotheram-Fuller, 2011; White, Scahill, Klin, Koenig & Volkmar, 2007).).

The strongest argument in favor of inclusion is that the mainstream school setting promotes social development in children with ASD (White et al., 2007). Researchers have documented that students with disability, including students with ASD, who are fully integrated, display higher levels of engagement and social interaction, give and receive higher levels of social support, have larger friendship networks and their individualized educational goals are more developmentally advanced in comparison to their counterparts in segregated placements (Harrower & Dunlap, 2001). Mixed-ability friendships are thought to raise

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behavioral expectations for the child with a disability by providing age-appropriate role models and skilled interactional partners. Mixed settings, for example, can enhance the generalization of newly learned social skills (Chamberlain, Kasari & Rotheram-Fuller, 2007). According to advocates for the inclusion of students with ASD, some of the benefits of full inclusion include increased expectations by teachers for the learning potential of included students, behavioral modeling of normally developing peers, greater learning, higher self-esteem, more accepting peers' attitudes and less isolation and stigma for disabled students and their families (Mesibov & Shea, 1996).

However, research evidence suggests that inclusive settings could increase the risk of isolation and peer rejection for students in the autism spectrum (Chamberlain et al., 2007). The physical setup of the mainstream classroom, the social expectations and the sensory demands of a busy and noisy school environment can be very challenging for a child with ASD. Recent research suggests that pupils in the autism spectrum generally find school to be a stressful and anxiety provoking place (Humphrey & Lewis, 2008). Furthermore, these students can be the target of bullying and teasing due to their poor social skills (Attwood, 2006). In addition, poor social skills can contribute to emotional distress, unless sufficient support is provided by staff in the mainstream environment (Humphrey, 2008). Placement in a regular education classroom can be counterproductive for children who cannot model the behavior of others or benefit from group instruction in a regular classroom. Students with autism, when faced with changes in their schedules and high curriculum demands, may have difficulty following the flow of activities and keeping up with peers and become even more dependent on adults in mainstream classes (White et al., 2007).

Given the potential benefits and drawbacks of inclusive education, it is unclear how placement decisions are made for these students (White et al., 2007). As it has been widely known, autism is a highly heterogeneous disability with regard to level of functioning. Thus,

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the level and intensity of supports required for a given student with autism will depend largely on the student's characteristics and its level of functioning (Harrower & Dunlap, 2001). It is unclear, however, whether differences seen across studies area result out of children's level of social involvement, or are an artifact of measurement practices (Rotheram-Fuller, Kasari, Chamberlain & Locke, 2010). Due to the lack of randomized controlled designs, which are necessary to fully determine for whom inclusion is effective and under what conditions, careful planning is difficult to implement. To answer the question of whether inclusion is the best educational placement/option for children on the autism spectrum, it is necessary to carry out research that employs gold standard methodology, including random assignment to treatment groups, large sample sizes and adequate control groups (Ferraioli & Harris, 2011).

1.4 The inclusion of students in the autism spectrum in Greece

The right of inclusion for children with disabilities in Greece was established by the Laws 2817/2000 and 3699/2008. The Greek educational system supports students with S.E.N. and has promoted their school inclusion over the last decade offering the following inclusive educational settings: a) the regular classroom and the mainstream teacher, when this is feasible or in case special educational services are not available, b) the resource classrooms where the collaboration between the special education teacher and the mainstream teacher is considered to be fundamental, c) the regular classroom with a support teacher, specifically trained to work in the field of disabilities, not specifically trained for children with ASD.

According to a recent study in Greece, only 20.23% of the students with ASD in attend RCs (Pedagogical Institute, 2004). Additionally, the fact that the majority of these students (17.04%) is found in the RCs of elementary schools, a minority of them (3.19%) attends the RCs in the kindergarten schools, whereas nearly zero percentage of attendance is

found in junior high schools, raises a lot of questions about the success of their inclusion in the mainstream school environment (Padeliadu, 2005).

1.5 Teachers' training and inclusion

Following the nationwide emphasis on the inclusion of students with special needs in general education classrooms, general education teachers are more likely than ever to be faced with the task of accommodating students with ASDs in their classrooms. Given that legislation and research supports the inclusion of students with ASD in general education classrooms, it is vital to provide general education teachers with the necessary information and support to meet the needs of these students in their classrooms. Considering the increasing number of students diagnosed with ASD in general education classrooms, individuals who enter the teaching profession need to fully become aware of their role in facilitating inclusion of children with ASD (Barned, Knapp & Neuharth-Pritchet, 2011).

Teacher disposition and behavior are identified consistently as important to successful inclusion. Beyond generally accepted personality traits, such as kindness and patience, experts suggest that teachers have to be predictable, consistent and concerned with social development in addition to academic gains to create a successful inclusion experience for students with ASD (Safran & Safran, 2001). Consistent with these suggestions is the recommendation that teachers of students with ASD need to be knowledgeable about the disorder itself and the various educational practices and strategies that will facilitate inclusion for the students (Jordan, 2005). Teacher training is a key determinant factor for successful inclusion.

Teaching students with ASD requires the use of specific strategies and approaches with which general education teachers may not be familiar. The social, communication, behavioral, and cognitive challenges that may affect the performance of students with ASD

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can be barriers to their successful inclusion, if general education teachers are not provided with information and support from special educators to meet the needs of their students (Leach & Duffy, 2009). Teacher training is important because it enhances teachers' confidence in dealing with pupils with ASD, while a lack of training has been linked to heightened teacher anxiety. Teachers experience tension when dealing with the difficulties these pupils have in social and emotional understanding. Evaluation of teacher training programs for teachers working with people with ASD have found that training can result in increased awareness of ASD alongside a significant improvement in the classroom behavior of pupils with ASD and reduced teacher stress (Humphrey & Symes, 2011). These tensions refer to the anxiety the teacher feels over the ability to meet the needs of these pupils, while at the same time meeting the needs of other students in class, and these tensions can determine the quality of teacher-pupil interactions. As a result, it is likely that teachers report having a negative relationship with them. (Robertson, Chamberlain & Kasari, 2003). Inadequate preparation of teachers is thought to contribute to less than favorable attitudes towards the inclusion of students with ASD in mainstreamed schools (Ashburner, Ziviani & Rodger, 2010).

This support is typically welcomed by general educators faced with the challenges of including students with ASD and they have reported that the techniques found most useful are those that help support the social integration of a child with ASD into the classroom (Leach & Duffy, 2009). It is important to ascertain the level of expertise held by teachers in the area of social skills, given that the training of students with disabilities relies on their knowledge base and teaching experience. Although, studies have reported that teachers consider social skills as an important component of school success, only a limited amount of research has been carried out to demonstrate the type of instruction or support provided to general and special

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education educators in the pre-service or in-service settings (Dobbins, Higgins, Pierce, Tandy & Tincani, 2010).

1.6 Teachers' training and research evidence

Despite the accumulative numbers of peer-reviewed publications demonstrating effective interventions for children with ASD, fewer studies have been published on teacher training and teacher effectiveness (Koegel, Matos-Freden, Lang & Koegel. 2012). Specifically, among in-service teachers, the literature suggests that teachers hold different views about ASD, have some knowledge of characteristics, limited experiences with training to support inclusion of children with ASD in their classrooms and limited knowledge of strategies to support children with ASD. For preservice teachers, the literature focused mostly on attitudes about teaching pupils with ASD, which seem to be positive (Barned, Knapp& Neuharth-Pritchet, 2011).

According to Dobbins, Higgins, Pierce, Tandy & Tincani (2010) general and special education teachers have received a limited amount of direct and incidental social skills instruction in their pre-service or in-service training programs. Both groups reported receiving more instruction in particular areas of social skills within their in-service training. Special education teachers who teach in RCS received more social skills instruction in their preservice training, in comparison to general education teachers, while in comparison to special education teachers who teach in self -contained settings, there were no differences in the level of instruction they received. Segall and Campbell (2012) found that special education teachers and school psychologists hold higher levels of experience, training and knowledge as compared to general education teachers and administrators. A Greek survey revealed that the majority of teachers possessed adequate general knowledge of ASD but there was confusion regarding its onset. Special education teachers were more likely to identify the

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specific characteristics of ASD, but general and special education teachers were able to identify different, though appropriate instructional priorities in the treatment of ASD. The authors suggested a need for in-service training for all teachers focusing on ASD specific characteristics (Mavropoulou & Padeliadou, 2000).

1.7 Rationale of the study

Research findings reveal a strong correlation between teachers' attitudes, practices and successful inclusion for people with ASD. It is also well documented that social skills training is a key factor to enhance pupils' adjustment and improve their school inclusion. The legal mandates for inclusion and its ambiguous findings for this population, as well as teachers' mixed feelings and attitudes towards inclusion for pupils with ASD and their own feeling of competency to meet their needs, highlight the need to assess teachers' knowledge of specific social skills strategies and their priorities when teaching students with ASD within inclusive settings. The focus of this study on teachers' priorities and preferences on social skills training for students with ASD exclusively in the RCs, is associated with the fact that it is a well-established educational service secured with public funding whereas the support offered to students with ASD by a support teacher within regular classrooms, is dependent on European funds which may fluctuate from year to year. Therefore, the aim of the study was to shed light on how social skills' training is perceived by teachers dealing with these students in RCs, as well as to reveal their priorities for teaching pupils with ASD.

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Chapter 2

METHODOLOGY OF THE STUDY

In this chapter, the research design of the study is presented in detail. Specifically, information is provided about the demographic characteristics of the participating teachers, the instrument and the procedures followed for data collection. In this study, a quantitative research approach was adopted, emanating in part from the positivist tradition (Cohen & Manion, 2008). This approach involved conducting a survey of teachers' perceptions about the importance of social skills training, resulting in the collection of numerical data which were subsequently statistically analyzed. Specifically, the analysis included descriptive statistics and correlations. To fulfill the aim of the study, which was to explore teachers' priorities and preferences on social skills training when dealing with this special population within RCs, the instrument of this study had to be cost and time effective in order to attract as many participants as possible throughout the country. The distribution as well as the size of the sample necessitated the use of an online questionnaire, as the appropriate research instrument. According to Avramidis, (2006), the questionnaire is the most suitable instrument to answer descriptive questions investigating the degree or frequency of occurrence of a phenomenon. Additionally, the statistical analysis of the quantitative data enhances the validity and reliability of the questionnaire which turns out to be a popular method. The survey research method has been chosen as suitable for e examining the status of certain variables within a sample (Avramidis, 2006).

2.1 The aim of the study

The purpose of this study was to explore teachers' priorities and preferences for social skills training for children with ASD within inclusive settings. Additionally, the associations between special demographic characteristics such as age, gender, experience, training and

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teachers' attitudes were also investigated. This study sought to explore teachers' perceptions on: a) the priorities for teaching goals, b) the defining criteria for setting the content of social skills training, c) the instructional methods used for social skills instruction for their students with ASD, d) the instructional arrangements for social skills training, e) the type of activities and materials used for teaching students in the autism spectrum within inclusive settings and f) the factors affecting teachers' competence for social skills instruction.

2.2 Participants

To be included in the study, participants were required to have at least one student with ASD in the RC of a primary school, during the school year 2012-2013.Out of the 136 teachers who had been informed about the details of the study and had received the questionnaire, 82 responded (60.29%). Two of the respondents were rejected as the participants wouldn't meet the criteria of this study. As there is no official source providing information about the percentage of students with ASD attending RCs in Greek primary schools, it is not possible to define how representative this sample is regarding this special population. The final sample included 80 teachers working in RCs. The average age of the teachers was 41.81years (SD=8.84), ranging from 24 to 59 years old, 26 (32.5%) of the participants were males and 54 (67.5%) were females.

As far as teachers' training concerns, 40 teachers (50%) had graduated from the Pedagogical Academy (2-year initial teacher training), 53 teachers (66.3%) had received in-service training, 41 teachers (51.3%) had graduated from the Department of Primary Education, 19 teachers (23.8%) had graduated from the Department of Educational and Social Policy, 15 of them (18.8%) possessed a Master Degree and four teachers (5%) had a PhD.

The average general teaching experience of the sample was 87.34 months (SD=69.27), while the average teaching experience in special education was 60.04 months (SD=44.24).

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The average teaching experience within this particular school was 37.82 months (SD=1.68) and the average experience with students with ASD was 33.06 months (SD=24.92). Due to the fact that this study explored teachers' priorities and attitudes towards social skills training exclusively within the RC, the class level of the students has not been recorded. Table 1 presents the percentage of participants from each region in Greece. Table 1 presents the sample distribution across geographical regions (See Table 1b in the Appendix).

Table 1a*Frequencies and Percentages by geographical Region*

Geographical Regions	Frequency	Percent
Attica	36	45.0%
Macedonia	17	21.3%
Thessaly	9	11.3%
Peloponnese	6	7.5%
Crete	4	5.0%
Thrace	3	3.8%
Central Greece	3	3.8%
Epirus	1	1.3%
Aegean Islands	1	1.3%
Total	**80**	**100.0%**

2.3 Instrument

For the purposes of this study a self-report instrument was used, which had been first developed and used for the exploration of special education teachers' views on social skills training for students with ASD in Greece (Papoutsi, 2012). Therefore, it was deemed as appropriate to explore teachers' views in a different educational setting, such as the RCs of general education schools.

The questionnaire was intended to capture teachers' perceptions and is divided into three parts, designed to investigate in detail the beliefs teachers hold on the issue of teaching social skills to children with ASD within RCs. The first part of the questionnaire focuses on the education of children with ASD in general and how teachers prioritize their teaching goals. As far as the second part concerns, the criteria teachers utilize in determining the

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content of social skills training are further investigated. The third part is designed to highlight the educational practices that teachers prefer or are mostly aware of, for teaching social skills.

In total, the questionnaire consists of nine closed questions with Likert type response format, ranging from “1” to “6” or “7”.Closed questions prescribe the range of responses from which the respondent may choose. Highly structured, closed questions are useful in that they can generate frequencies of response amenable to statistical treatment and analysis. They also enable comparisons to be made across groups in the sample. They are quicker to code and analyze than word-based data and, often, they are directly to the point and deliberately more focused than open-ended questions. In general, closed questions are quicker to complete and straightforward to code and do not discriminate unduly on the basis of how articulate respondents are (Cohen & Manion, 2008).

Each of the nine questions is analyzed in a list of statements. The first question investigated teachers’ priorities about setting teaching goals for students with ASD and this question included twenty statements, referring to distinct teaching goals, such as academic skills (i.e., reading, writing, performance of arithmetic operations and solving math problems), communication skills (i.e., the use of alternative communication means, verbal expression, theory of mind), group skills (i.e., playing with peers and following rules), flexible thinking (i.e., trying to restrict obsessions and stereotypies, adjustment to changes), sensory tolerance, reduction of behavior problems , self-care and autonomy skills, and transition making. This question was based on the questionnaire developed by Mavropoulou and Padeliadu (2000) to examine teachers’ views on the education of students with ASD.

The second question explored the possible factors involved in teachers’ decision-making for the content of social skills training for children with ASD. In particular, fourteen factors were listed and were divided into five areas: a) individual factors related to the characteristics of the student, such as the age, the cognitive level and the severity of autism,

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b) factors related to the child's needs, such as the student's daily needs, the needs of the present school setting and the future school, the person is going to attend, c) teacher-related factors, including the evaluation and the educational assessment d) other-related factors, such as student records, teachers' opinions, parental expectations and the norms of typical peers, and e) instructional factors, such as the curriculum for students with autism as well as the time available for social skills training within the daily schedule. This question was based on Uysal and Ergenekon's research (2010), especially on the section including the content of social skills training, which was defined through the qualitative analysis of the participants' answers.

The third question was a closed question that investigated teachers' knowledge of special educational practices, which were based on the literature, such as one to one instruction, direct instruction, physical guidance, verbal instruction, task analysis, Social Stories, role playing, peer tutoring, verbal praise and tangible. In the fourth question, respondents had to state how often (7-point Likert response format) they used these practices in the RCs. In the fifth question teachers had to indicate how often (a 7-point Likert type response format) they teach social skills within different settings, such as in the classroom, in the playground or in the community. In the sixth question, teachers had to report how often (7-point Likert type response format) social skills' training was incidental or scheduled. The fifth and sixth question was based on Battalio & Stephens (2005) research. In the seventh question, teachers had to indicate how often (7-point Likert type response format) they use activities as described in the Specialized Curriculum for students with ASD, how often they make adaptations, or how often they prefer to use other activities not related to the curriculum. The eighth question explored how often (7-point Likert type response format) teachers use different kinds of educational material within RCs. In the last question, the respondents had to rate (6-point Likert-type response format) the level of influence of ten factors on their competency for teaching social skills to students with ASD. The specific

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factors listed, included undergraduate training, practicum experience, inservice training, collaboration with others, attending seminars and personal study of the literature, having access to the appropriate educational material, professional support. This question was based on the study by Battalio and Stephens (2005), covering the causes of teachers' lack of competence and the recommendations for teaching social skills found in the study of Uysaland & Ergenekon (2010).

Demographic information was included in the last page of the questionnaire. Participants had to record the city, and the school level they work in, as well as their age, gender, type of undergraduate training and teaching experience in general education, special education, the most recent school they were working in and their teaching experience with students with ASD. As far as teacher training was concerned, participants were asked to fill in their academic background using a list of higher education institutions (i.e., 2-year Pedagogical Academy, Inservice Training in Special or General Education, Department of Primary Education, Department of Educational and Social Policy) and academic degrees.

2.4 Procedure

The first step in conducting this study was to locate the sample. The participants of this study were special education teachers working in RCs of primary schools with at least one student with ASD in their class. After a thorough search on the internet, a database of public primary schools with RCs with all contact details of each school was found in the Hellenic Ministry of Education and Religious Affairs, Culture and Sport (2013). The next step was to identify those RCs with students with ASD and formulate a new data base (See Appendix). For this purpose, the researcher contacted by phone the headteacher of each school, explaining the details of the study. Those schools that met the criteria of inclusion in

this study received via email the questionnaire, which would be forwarded to the teacher of the RC. Teachers were requested to send the completed questionnaire within ten days. If not, the researcher would call back to remind teachers. Next, the researcher contacted the teacher for any clarifications on the questionnaire. Teachers, were given the choice of completing the printed version of the questionnaire, sent to them. Also, the researcher posted a call for participation to this research on the official website of the Alumni Association in Special Needs Education.

A covering letter explaining the aim of the study, the institution and the people involved, as well as the contact details of the researcher, was also sent to each participant. Teachers who would fill in the questionnaire using their computer would receive instructions for sorting out technical problems that might arise, whereas teachers who received the printed version of the questionnaire, would receive the covering letter and a prepaid envelop to send it back.

The validity of the initial instrument was not tested again, since it was checked in the initial study (Papoutsi, 2012).

Data collection lasted almost five months, from early February to early June. As far as teachers' response rate is concerned, 136 schools in total were invited to participate. Out of the 136 schools the researcher contacted, 82 responded to this survey, while two of the participants were rejected, because these teachers didn't work within RCs, therefore they wouldn't meet the criteria of this study. In this study, the total number of participants was eighty (n=80) special education teachers.

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Table2. *Demographic characteristics of the sample*

Total N=80	**Mean (years)**	**SD**
Age	41.81	8.84

Sex	**Frequency**	**Percentages**
male	26	32.5%
female	54	67.5%

Education	**Frequency**	**Percentages**
Academy	40	50%
Inservice Training	53	66.3%
Primary education	41	51.3%
Special education	19	23.8%
Master	15	18.8%
PHD	4	5%
Experience	**Mean (months)**	**SD**
General education	87.34	69.27
Special education	60.04	44.24
Present school	37.82	41.68
Students with ASD	33.06	24.92

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Chapter 3

FINDINGS OF THE STUDY

Descriptive statistics were used to analyze the data, calculating the means and standard deviations for each question included in the questionnaire. The statistical analysis of the results was carried out using the Statistical Package for Social Sciences (SPSS, 20.0). In this section, findings on teachers' responses on the nine questions will be presented.

Table 3. *Means and standard deviations of teachers' priorities on instructional objectives for students with ASD.*

Instructional objectives of students in the autism spectrum	Mean	SD
1. Control of aggressiveness	4.79	0.54
2. Ability for self care	4.79	0.66
3. Control of self-injurious behavior	4.71	0.75
4. Play with peers	4.58	0.65
5. Verbal expression of needs	4.58	0.70
6. Transitioning	4.47	0.69
7. Followingrules	4.46	0.72
8. Transitioning	4.39	0.75
9. Recognition of emotions	4.27	0.91
10. No resistance to changes	4.24	0.75
11. Understanding emotions and thoughts	4.15	0.94
12. Use of alternative ways to communicate	4.14	1.06
13. Reduction of obsessions	4.04	0.94
14. Reduction of stereotypies	3.84	1.04
15. Tolerance of sound	3.67	0.95
16. Tolerance of touch	3.66	1.06
17. Reading	3.30	1.25
18. Arithmetics	2.91	1.17
19. Writing	2.85	1.14
20. Problem solving	2.72	1.36

**Degree of importance was rated on a 1-6 scale, where 1=non significant and 6=extremely significant. Higher mean scores indicate the most significant educational objectives rated by the teachers.*

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The hierarchy of the educational objectives set by teachers reveals the importance of social adjustment and independent living for teachers. It is clear that the first category of teaching goals is related to the elimination and management of behavioral problems as well as communication skills. Playing with peers as well as following the rules, were also were also viewed as salient for students with ASD. Teachers rated the treatment of sensory problems as less important, while academic goals appeared to be the least important of all.

Table 4 *Means and standard deviations of teachers' views about the factors that influence their choices for the content of social skills training*

Defining criteria	Mean*	SD
1. Severity of autism	4.53	0.74
2. Daily life needs	4.14	0.99
3. The present school needs	3.90	0.93
4. Teachers' educational assessment	3.89	0.84
5. Personal evaluation for the child's needs	3.71	0.83
6. Time available in the daily schedule	3.66	1.07
7. Cognitive level of the student	3.54	1.16
8. Age of the student	3.36	1.19
9. Future school needs	3.30	0.99
10. Curriculum for students with autism	3.23	1.12
11. Norms of typical developing peers	2.91	1.19
12. Student records	2.88	1.08
13. Parental expectations	2.84	1.18
14. Views of other colleagues	2.52	1.13

**Degree of influence was rated on a 1-6 scale, where 1=no influence and 6=very high influence. Higher mean scores indicate the factors considered to be as the most influential on setting the content of social skills training.*

It is obvious that teachers took into consideration their pupils' individual characteristics, as well as their daily needs in order to set the content of social skills training. As far as the individual factors are concerned, teachers seemed to be mostly influenced by the severity of pupils' level of autism, less influenced by their age, while their cognitive level was

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found to be the least determinant factor. Children's daily life needs, as well as the needs of their present school environment were also strong determinants of teachers' decisions on social skills training. Among the factors related to teachers' evaluation and the other significant people participating to the child's education, they seem to highly prioritize their own educational assessment and evaluation of the situation, while parents' expectations and colleagues' views appeared to be the least influential factors of all, when defining social skills training. As far as the influence of the factors related to curriculum is concerned, teachers seemed to consider the available time they have within the daily schedule, as a stronger determinant in comparison to the curriculum for students with ASD. In summary, teachers' responses indicated that the individual characteristics of the pupils, as well as their daily life needs were the key factors for the content of social skills training, while other people's views and curriculum issues were not the most influencing factors for teachers.

Table 5. *Frequencies and percentages of teachers' responses about their knowledge of educational practices for social skills training for students with ASD.*

Knowledge of educational practices	**Frequency (%) Yes**	**Frequency (%) No**
1. Verbal instruction	80 (100%)	0 (0%)
2. Visual instruction	80 (100%)	0 (0%)
3. Tangible	80 (100%)	0 (0%)
4. Peer tutoring	79 (98.8%)	1 (1.3%)
5. Praise	79 (98.8%)	1 (1.3%)
6. Direct instruction	78 (97.5%)	2 (2.5%)
7. One to one instruction	77 (96.3)	3 (3.8%)
8. Role playing	77 (96.3)	3 (3.8%)
9. Social Stories	71 (88.8%)	9 (11.3%)
10. Physical guidance	70 (87.5%)	10 (12.5%)
11. Task analysis	67 (83.8%)	13 (16.3%)

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According to Table 5, teachers seemed to have an adequate knowledge of the practices used for teaching social skills to students with ASD. Their responses indicated that the majority of them were aware of the special educational practices which are considered to be the most effective for this population. There is a percentage, though, indicating that teachers are not aware of specific practices, especially effective for students with ASD, such as Social Stories, physical guidance as well as task analysis.

Table 6. *Means and standard deviations of teachers' responses about the use of educational practices for students with ASD.*

Educational practices	Mean*	SD
1. Praise	5.76	0.94
2. Verbal instruction	5.64	0.69
3. One to one instruction	5.09	1.08
4. Direct instruction	4.85	1.53
5. Visual instruction	4.48	1.61
6. Tangible rewards	4.21	1.98
7. Task Analysis	3.85	2.09
8. Peertutoring	3.54	2.17
9. Physical guidance	3.49	2.39
10. Role playing	3.44	1.73
11. Social Stories	3.44	1.96

**Frequency of use was measured on a 1-7 scale, where 1=never and 7=every day. Higher mean scores indicate the most frequently used practices by the teachers within RCs.*

According to Table 6, teachers seemed to prefer to use mostly teacher centered practices including verbal, one to one and direct instruction (once a week to daily). The most frequently used method though was behavioral method of verbal praise (daily). The least used practices were those related to groups and experiential learning, like peer tutoring and role playing (twice a month). Physical guidance and Social Stories were the least frequently used practices as well (twice a month).

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Teachers preferred to teach social skills mostly in the classroom. In particular, they seemed to teach social skills within their classroom ranging from 2-3 times a week to daily (M=5.24, SD=1.11), while the school playground was another option, less frequently used to teach social skills. Teachers choose the playground for social skills training once a week (M=4.20, SD=1.68). The least favorable option for social skills training was the community, used once every three months (M=1.31, SD=1.77). Therefore, teachers preferred to use more often the school environment, in comparison to other places of the community.

As far as the timing of social skills training is implemented, teachers' responses indicated that it is mostly scheduled within the daily program, occurring once a week to daily (M=4.59, SD=1.64) rather than incidentally, which takes place twice a month (M=3.85, SD=2.08). This finding is in line with teachers' view about the high priority of social skills when setting educational objectives. Teachers seem to apply social skills training in a daily to weekly basis since their teaching goals focus on enhancing the students 'social adjustment and independent living.

Participants' responses also indicated that teachers in RCs do not often use the activities included in the curriculum for students with ASD. In fact, the curriculum is used by the teachers twice a month (M=3.38, SD=1.91). Teachers in RCs seemed to prefer other activities drawn from different sources, not related to the curriculum. These activities seem to be used from once to 2 or 3 times a week (M=4.70, SD=1.46), similarly to the frequency (M=4.37, SD=1.74) they make curriculum adaptations. Teachers' preference for curriculum adaptations and other activities indicates their efforts to individualize their teaching to their students' unique social needs. This is also in agreement with the high priority assigned to the individual characteristics, as defining criteria for the content of social skills training.

Teachers in RCs seemed to prefer the offhand educational material which they use 2-3 times a week (M=5.05, SD=1.52). Their second best choice was the printed material, used

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from once a week to 2-3 times a week (M=4.73, SD=1.52). They also appear to use 3D (M=4.16, SD=1.69) and digital material (M=4.13 SD=1.77) at the same frequency, that is, once a week. School material seemed to be the least used by the teachers, ranging from once a month to 2-3 times a month (M=2.97, SD=2.11).

Table 7 *Means and standard deviations of teachers' attitudes towards which of the following factors influence their adequacy in social skills training of students with ASD.*

Factors related to teachers' adequacy in social skills training	**Mean***	**SD**
1. Access to resources and educational material	4.42	0.96
2. Study of scientific articles	4.25	0.96
3. Undergraduate training	3.96	1.06
4. Attending conferences	3.66	1.23
5. Interdisciplinary collaboration	3.65	1.20
6. Practicum during undergraduate training	3.56	1.42
7. Administrator's support	3.34	1.56
8. Counselor's support	2.96	1.84
9. In-service Training	2.81	1.72
10. Diagnostic centers	2.72	1.84

**Degree of influence wasrated on a 1-6 scale, where 1=no influence and 6=very high influence. Higher mean scores indicate the factors of high influence on teachers' adequacy in social skills training.*

According to Table 7, teachers in RCs considered the access to resources and other educational material as the most crucial factor for their adequacy for teaching social skills to students with ASD. Their next choice appeared to be continuing education. In particular, studying scientific sources and attending seminars appeared to be strong determinants of teachers' efficacy. Teachers' studies were also ranked high on the hierarchy of important factors for their efficiency. Interdisciplinary collaboration appeared to be an important influential factor as well, while in service training was considered as a factor with low influence on their efficiency. Factors related to administration issues appeared to be less influential.

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In the second part of the statistical analysis, correlations among the items of each question have been explored, using the Pearson correlation method, which is sensitive only to a linear relationship between two variables and measures the degree of correlation (Katsis, Sideridis & Emvalotis, 2011).

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Table 8*Correlations of teachers' views about educational objectives for children with ASD.*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	-																			
2	.82**	-																		
3	.82**	.87**	-																	
4	.65**	.69**	.77**	-																
5	.31**	.13	.19	.19	-															
6	-.12	-.16	-.21	-.02	.14	-														
7	.17	.32**	.29**	.28**	.32**	.24*	-													
8	.19	.20	.28*	.28*	.43**	.24*	.78**	-												
9	.08	.06	.08	.12	.23*	.17	.41**	.47**	-											
10	.05	.09	.10	.11	.21	.09	.37**	.41**	.76**	-										
11	-.04	.14	.02	.04	.06	.02	.41**	.39**	.33**	.39**	-									
12	-.08	.10	-.01	.03	-.02	.08	.35**	.28*	.34**	.38**	.83**	-								
13	-.13	-.06	-.07	.04	-.09	.24*	.27*	.27*	.37**	.44**	.46**	.51**	-							
14	-.14	.03	-.02	.00	-.05	.04	.40**	.35**	.38**	.47**	.71**	.70**	.65**	-						
15	.01	-.03	-.02	.03	.12	.27*	.09	.15	.36**	.40**	.12	.32**	.43**	.27*	-					
16	.00	-.05	-.03	.00	.25*	.20	.18	.24*	.45**	.50**	.13	.33**	.31**	.30**	.81**	-				
17	.06	-.02	-.00	.07	.15	.27*	.05	.09	.40**	.33**	.07	.25*	.37**	.10	.81**	.67**	-			
18	.02	.03	.09	.12	.02	.34**	.34**	.35**	.36**	.40**	.29**	.24*	.54**	.42**	.46**	.35**	.44**	-		
19	.02	.01	.11	.16	.08	.28**	.27*	.37**	.34**	.31**	.20	.21	.49**	.29**	.33**	.30**	.46**	.66**	-	
20	-.14	-.13	-.12	-.02	.12	.22*	.30**	.42**	.44**	.49**	.36**	.33**	.35**	.55**	.14	.24*	.10	.37**	.48**	

**p<0.001, *p<0.05

1 *Reading skills* 2 *Writing skills* 3 *Arithmetic* 4 *Problem solving*

5 *Verbal expression of needs* 6 *Use of alternative communication* 7 *Understanding emotions and thoughts* 8 *Recognition of emotions*

9 *Play with others* 10 *Following rules* 11 *Reduction of obsessions* 12 *Reduction of stereotypies*

13 *Tolerance of touch* 14 *Sound tolerance* 15 *Control self harm* 16 *Control of aggression*

17 *Self care* 18 *Transitioning* 19 *Independent mobility* 20 *No resistance to change*

As Table 8 shows, strong correlations have been found between reading and writing skills (r= .82, p>0.001), between reading and arithmetic (r= .82, P>0.001), between writing and arithmetic (r=.87, p>0.001), as well as between arithmetic and problem solving (r=.77, p>0.001). These educational objectives such as reading, writing, arithmetic and problem solving attracted the same values, for this type of instructional goals can be conceptualized as academic skills. Teachers that considered as important the educational goals, related to the development of language skills, also tended to assign high importance goals related to mathematical thinking. This result leads to the conclusion that teachers in RCs tend to consider this kind of teaching goals related to academic skills as equally important.

In addition, a strong correlation has also been found between the objectives related to understanding other people. In particular, this strong correlation has been found between understanding others' emotions and thoughts and recognition of the emotions (r=.78, p<0.001). Another strong correlation has been found between the ability to play with others and following rules (r=.76, p<0.001). This correlation indicates there is a co-dependency on their values and these teaching goals could be considered as instructional goals related to group skills training. Another strong correlation has been found between the reduction of obsessions and the reduction of stereotypies (r=.83, p<0.001). Specifically, this correlation demonstrates that these teaching goals received the same values and could be included in the group of flexible thinking skills. A strong correlation between goals related to the tolerance to sensory stimuli was also expected. In particular, the tolerance of touch and the tolerance of sound (r=.65, p>0.001) attracted the same values, indicating there is an association, as both of these goals are related to sensory tolerance issues. Items related to the behavior management have indicated a strong correlation as well. Teachers, who set as a priority within teaching goals to control self harm, tend to consider also important the ability to control aggression when teaching students with autism (r=.81, p<0.001). A strong correlation has also been

found between transitioning and independent mobility (r=.66, p<0.001). These variables are related to adjustment skills within social skills training for students with ASD. In contrast to our expectations, no correlation has been found between the items related to the field of communication skills. In particular, teachers' answers indicated that there was no correlation between the verbal expression of needs and the use of alternative communication.

It is worth noting that a small negative correlation has been found between arithmetic and using alternative means of communication (r= -.21, p<0.05). This negative correlation demonstrates that the more teachers consider arithmetic as important educational objective, the less they consider important using alternative communication.

Table 9. *Correlations on the defining criteria of social skills training.*

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1	-													
2	.43**	-												
3	.29**	.31**	-											
4	.32**	.24*	.14	-										
5	.25*	.18	.03	.65**	-									
6	.04	-.22*	.07	.42**	.35**	-								
7	.09	-.14	.12	.11	.15	.23*	-							
8	.22*	.24*	.14	.33**	.24*	.09	.04	-						
9	.21	.28*	.13	.29**	.30**	.14	.23*	.71**	-					
10	.28**	.18	.05	.19	.19	.17	.39**	.41**	.40**	-				
11	.23*	.06	.09	.09	.04	.08	.15	.06	.13	.31**	-			
12	.08	.11	.05	.27*	.29**	.23*	.46**	.20	.32**	.32**	.06	-		
13	.27*	.10	,09	.33**	.29**	.16	.35**	.31**	.36**	.31**	.20	.42**	-	
14	.08	.06	.13	.13	.10	.21	-.00	.02	.12	.24*	.16	.04	.33**	-

*p< 0.05, **p<0.001

1 *Age* 2 *Cognitive level,* 3 *Severity of autism*
4 *Students' needs at present school,* 5 *Daily life needs,* 6 *The future school,*
7 *Records* 8 *Evaluation of the student's need.* 9 *Educational assessment*
10 *Colleagues' views,* 11 *Parents' expectations,* 12 *The analytic curriculum for students with ASD*
13 *The available time within the daily schedule* 14 *Norms of typical developing peers.*

As Table 9 shows, strong correlations have been emerged between the factors that define the content of social skills training when dealing with students with ASD in RCs. The strongest correlation has been found between the evaluation of student's needs and the educational assessment ($r=.71$, $p<0.001$). These factors are both related to the teacher, while the co dependence of the values demonstrates that both the teacher's evaluation of the student's needs as well as the educational assessment are considered crucial determinants to set the content of social skills training. Another strong correlation has been found between the daily life needs and the students' needs at the present school ($r=.65$, $p<0.001$). These factors are related to the child's needs in order to define the content of social skills training.

Some moderate correlations have been found between the defining criteria of social skills training. A moderate correlation ($r=.43$, $p<0.001$) emerged between factors related to the students' characteristics, including their age and cognitive level. Another moderate correlation has been found between items related to the curriculum ($r=.42$, $p<0.001$). The teachers who answered that they take into consideration the available time they usually have within the daily schedule, tended to consider the specialized curriculum for students with ASD as an important factor as well, for setting the content of social skills training. Teachers' responses also indicated a moderate correlation between the records and the specialized curriculum as well ($r=.46$, $p<0.001$). A small negative correlation has been found between the cognitive level of the student and the future school needs ($r= -.22$, $p<0.001$), implying that the teachers, who considered the cognitive level of the student as a determinant for social skills training, tended to attribute a low value of importance to the future school needs.

Table 10. *Correlations between the educational practices for teaching students with ASD social skills.*

	1	2	3	4	5	6	7	8	9	10	11
1	-										
2	.16	-									
3	.28**	.08	-								
4	.16	.10	.43**	-							
5	.02	-.00	.36**	.42**	-						
6	.14	.15	.00	.03	.18	-					
7	-.01	.15	.00	.08	.35**	.46**	-				
8	-.12	.13	.14	.15	.39**	.39**	.59**	-			
9	-.17	.05	.19	.24*	.06	.21	.11	.28**	-		
10	-.01	-.00	.27*	.38**	.46**	.00	.01	.07	.06	-	
11	-.04	-.06	.17	.36**	.25*	-.10	.21	.36**	.04	.06	-

*p<0.05,**p<0.01

1 *One to one* 2 *Direct* 3 *Physical*
4 *Verbal* 5 *Visual instruction (using pictures, photos, videos)* 6 *Task Analysis*
7 *Social Stories* 8 *Role playing* 9 *Peer Tutoring*
10 *Praise* 11 *Tangible*

As Table 10 shows, only a strong correlation has been found between the practices teachers use to teach students with ASD social skills. In particular, this correlation has been found between Social stories and Role playing (r=.59, p<0.001). This finding indicates that teachers, who use Social stories for social skills training, tend to use role playing as well. That was quite unexpected due to the fact the Social Stories is a practice related to visual support, while role playing is a practice related to group activities. A moderate correlation has been found between physical and verbal instruction (r=.43, p<0.001), as well as between verbal and visual instruction (r=.42, p<0.001). A moderate to strong correlation has been found between task analysis and Social Stories (r=.46, p<0.001). In contrast to our expectations, no correlation has been found between teacher centered practices, such as one to one and direct instruction (r=.16, p<0.001), while a small correlation has been found between one to one instruction and physical guidance (r=.28, p<0.001).

Table 11. *Correlations between the factors that influence teachers'efficiency for social skills training.*

	1	2	3	4	5	6	7	8	9	10
1	-									
2	.57**	-								
3	.25*	.36**	-							
4	.21	.28*	.49**	-						
5	.08	.26*	.54**	.56**	-					
6	.34**	.22*	.28*	.41**	.61**	-				
7	.23*	.34**	.32**	.53**	.59**	.67**	-			
8	.16	.30**	.49**	.37**	.46**	.40**	.44**	-		
9	.24*	.35**	.67**	.47**	.48**	.31**	.40**	.70**	-	
10	.22*	.34**	.63**	.44**	.51**	.36**	.44**	.59**	.89**	-

*p < 0.05,**p <0.001

1 *Studies* 2 *Practicum* 3 *In-service Training*
4 *Collaboration* 5 *Attending seminars* 6 *Studying scientific articles*
7 *Access to educational material* 8 *Headmasters' support* 9 *Counselor's support*
10 *Support from the Diagnostic Centers*

As Table 11 shows, there are strong correlations between the factors that influence teachers' efficiency for teaching social skills with students with ASD. The strongest correlation (r=.89, p>0.001) has been found between support from an Advisor and support from the diagnostic centers. Another strong correlation (r=.70, p>0.001) related to administration issues has been found between support from the head teacher and support from the advisor. Apparently, teachers that considered that the headmaster's support had an impact on their efficiency, tended to consider support from the advisor as well as support from the diagnostic centers as strong influential factors, too. This strong correlation was expected, as all these items are related to administrative issues.

Another strong correlation (r= .67, p>0.001) has been found between the study of research and the access to educational material. This correlation was not expected, because studying scientific articles was an item related to the continuing education of teachers, while

the access to the educational material was related to the resource availability. Other unexpected strong correlations (r=.67, p>0.001, r=.63, p>0.001, respectively) have been found between the in service training and the support from the advisor, as well as between the in service training and the support they receive from the diagnostic centers. It appears that teachers who rated the in service training as an important factor for their efficiency tended to consider also important the support they receive from the advisors and the diagnostic centers.

The last correlation (r=.61, p>0.001) was found between attending seminars and studying journal papers and books related with the science of education. The co dependence of their values is in agreement with their grouping within the category of items related to continuing education. In line with the expectations, other moderate to strong correlations have been found between items related to the same issues. The correlation between the studies and the practicum (r=.57, p>0.001), demonstrates the codependency of the values related to studies. The correlation (r=.540, p>0.001) between in service training and attending seminars indicates that these teaching goals attracted the same values and could be included in a category of factors related to continuing training.

In the third part of the statistical analysis, correlations between the demographic characteristics of the sample and the statements of each question have been explored, using the Pearson correlation method. Due to the small variance of the sample, only a few correlations have been found with respect to the education of the participants, as well as their teaching experience. No significant correlation has been found between the age or the gender of the participants and their responses to the questions of the questionnaire.

Next, significant correlations will be reported. In particular, a small positive correlation (r= .23, p>0.005) has been found between teachers' education and problem solving. This finding indicates that the more educated the teachers are, the more they prioritize problem solving as an instructional goal for students with ASD.

A few negative correlations have also been found between teachers' education and the defining criteria on social skills training. Regarding the factors related to the student's needs, such as the present school needs (r= -.23, p>0.005), the daily life needs (r= -.23, p>0.005) and the future school needs (r= -.24, p>0.005), these correlations indicate that the higher the education of the teachers, the less they consider these factors as influential, on setting the content of social skills training. Correlations between teachers' education and curriculum issues have emerged as well. With respect to these factors such as the specific curriculum for students with ASD (r= -.24, p>0.005) and the available time (r= -.22, p>0.005), teachers in RCs of higher education appear to consider these factors related to the curriculum as less important. Interestingly, another correlation emerged regarding parents' expectations (r= -.22, p>0.005), showing that the more educated the teachers are, the less they consider parents' expectations an influential factor, on setting the content of social skills training. Another correlation related to the factors that influence teachers' adequacy and especially the practicum (r= .22, p>0.005), indicates that the higher the education of the teachers, the more they consider field experience as an important factor for their efficiency for teaching students with ASD social skills.

With respect to teachers' experience in general and special education some correlations have also been found, indicating there is an association between teaching experience in each setting and teachers' views. On prioritizing the educational goals, only a small correlation has been found between the general education teachers and problem solving (r= .26, p>0.005), indicating that teachers with experience in general education tend to consider this teaching goal more important for social skills training. On rating the defining criteria of social skills training, some negative correlations have been found between the teachers with experience in general education and the future school needs (r= -.25, p>0.005), student records (r= -.24, p>0.005), parents' expectations (r= -.23, p>0.005) and the curriculum

(r= -.23, p>0.005). These negative correlations indicate that teachers with experience in general education consider these factors to be less influential for setting the content of social skills training. Another negative correlation has been found between the teachers with experience in general education and social stories (r= -.22, p>0.005), indicating that this group is not quite familiar with this educational practice. Regarding the educational material, a moderate correlation has been found between teachers with experience in general education and the school material (r= .45, p>0.001), showing that this group of the participants prefer using the school material, while a negative correlation has been found between this group and the offhand material (r= -.24, p>0.05), indicating they wouldn't prefer to use it very often. Regarding the special education teachers, a positive correlation has been found between them and the printed material (r= .26, p>0.005), showing they tend to use it frequently within RCs. Additionally, another positive correlation has been found between the same group and social skills training taking place in the community (r= .26, p>0.005), showing that special education teachers consider the community as a suitable place for teaching students with ASD social skills.

Chapter 4

DISCUSSION

With respect to the first research question regarding teachers' priorities on setting the educational objectives for students with ASD, the findings of the present study indicate that the educational goals of behavior management and independent living were accredited top priority. In line with a significant portion of the existing research on interventions to improve social functioning of students with ASD in primary education, teachers in RCs focus on communication and social skills training rather than on academic skills or others related to sensory issues (Solomon, Goodlin-Jones & Anders, 2004; Sansosti & Powell-Smith, 2006; Bauminger, 2007; Bock, 2007; Owens, Granader, Humphrey & Baron-Cohen, 2008; Beaumont & Sofronoff, 2008; Castorina & Negri, 2004; Koenig, White, Pachler, Lau, Lewis, Klin & Scahill, 2010). Empirical research on the evaluation of interventions to improve the academic skills of students with ASD is limited (Delano, 2007). The bulk of research on teaching social skills has focused on preschool children and youngsters in the elementary school (Weiss & Harris, 2001), primarily to the fact that parents and teachers report concerns about social development during this time, as opposed to later years, when academic development becomes the primary focus. In addition, researchers may concentrate on younger students because children at this age are more likely to be involved in social activities in the educational setting, whereas older students consistently receive more academically focused programming (Owen-DeSchryver, Carr, Cale & Blakeley-Smith, 2008).

Research suggests that students with ASD exhibit significantly higher levels of behavioral and emotional difficulties at school than their typically developing peers (Ashburner, Ziviani & Rodger, 2010). As a result, the elimination and management of behavioral problems as well as the communications skills of the students are ranked high among the educational goals set by the teachers within RCs. This finding is in accordance

with the findings reported by Mavropoulou & Padeliadou, (2000), in which both special and general education teachers' views were consistent with the perceived behavioral symptoms of children with autism. In particular, they tended to promote interventions focused on challenging aspects of behavior that may hinder their successful learning. They also viewed special education as a step towards independence. Although they acknowledged the importance of reading/writing and social play, these were viewed as secondary goals. The participants of the present study recognized the importance of social skills training, in agreement with research findings suggesting that children with ASD need strategies that enable them to negotiate the social environment, to communicate their needs and experiences and to understand the communications with other people (Guldberg, 2010).

With regard to the second research question, referring to the criteria teachers take into consideration, when setting the content of social skills training; it is obvious that the individual characteristics as well as the student's needs have a strong impact on their decisions. In accordance with research findings, the severity of autism appears to be one of the most determinant factors not only for teachers' attitudes towards inclusion, but for defining the content of social skills training as well (Cook, 2001). As Koegel et al, (2012) have found, the participants of this study understand the importance of carefully defining and measuring behaviors and developing intervention plans based on the symptom presentation of individual students, as symptom severity varies immensely across the autism population. In line with research suggesting that successful outcomes require not only that an effective method be chosen but that it is also properly matched to the needs of a particular student (Simpson,2005), teachers in RCs take into consideration the individual characteristics of students with ASD on setting social skills training.

Among the factors related to the teachers' evaluation and the other significant people participating to the child's education, their own educational assessment and evaluation of the

situation are considered to be factors of strong influence on implementing social skills training. In contrast to research implications, that highlight the importance of working in partnership with parents and other professionals (Gulberg, 2010), factors related to parents expectations and colleagues issues, were ranked as the least influential factors of all. The research literature and policy reports indicate that ongoing parent and teacher collaboration is an essential element in the education of children with ASD (Myles & Simpson, 2002). Moreover, studies have also identified the need for greater parental involvement, for this way they have a role in enabling greater generalization and maintenance of educational gains (Di Pipi-Hoy & Jitendra, 2004).

Regarding the third research question, the findings of the study indicate that Greek teachers in RCs hopefully have an adequate knowledge of the evidence based practices on social skills training. Only a minor percentage is not aware of specific practices, unlike the results of a study indicating that teachers have limited knowledge of strategies to support children with ASD (Barned, Knapp, Neuharth Prtchett, 2011). Exploring though the frequency of the practices they use, we can extract some conclusions. Teachers' responses indicate that the first practice they resort to is praise, a practice included in the behavioral methods, while the next most frequent used practices are teacher centered. The practices related with groups and experimental learning were the least frequently used, while physical guidance and social stories were rated as the least frequently used within RCs. The frequency of the practices the participants of the study use within RCs reveals their preference for more traditional methods of teaching as verbal instruction and direct instruction. While the least frequently used practices were those practices which involved groups and experimental learning. Therefore, it is possible that although teachers in RCs are aware of the practices suitable for social skills training, they may not feel comfortable to implement these practices

in the classroom. The lack of experience or training on implementing these practices successfully is an issue to be further investigated.

As far as the fourth research question concerns, teachers' answers indicate that the school classroom is the place which the majority of the participants prefer for teaching children with ASD social skills. A lower percent of the teachers would choose the school playground, while only a minor percent would choose the community as an ideal setting for social skills training. This finding reveals that the classroom is considered to be the most ideal setting for social skills training, therefore outdoor activities and settings do not seem appealing to the teachers. Teachers also report that social skills' training is mostly scheduled rather than incidental. This finding highlights how important social skills' training is considered within RCs, a fact which is replicated by the priority of the educational goals set by the teachers. The participants of this study focus on social skills training when dealing with students with ASD within RCs and this training is scheduled within a time period of a week.

With respect to the question exploring the activities and the educational material used in RCs, the findings indicate that teachers prefer using activities not related to the specialized curriculum for children with ASD. Teachers often use other activities or adjustments of the curriculum in order to meet their students' needs. The adjustment of the curriculum and the variety of activities from different sources reveal the tendency to individualize social skills training according to each student's unique strengths and weaknesses. This finding is in line with previous research results suggesting that curricular adaptations that meet the individual child's enhance the student's participation and inclusion (White et al, 2007). This finding is in line with the priority of the individual characteristics on rating the criteria for setting the content of social skills training. As far as the educational material is concerned, the offhand material is the most frequently used, while teachers report they hardly ever use the school

material. At the same frequency, at about once a week they also use printed, 3D and digital educational material.

Regarding the factors that influence their adequacy on social skills training, access to resources and the educational material are rated as the most determinant factors of all. A result which comes in line with previous research findings, indicating that teachers highlight the importance of advocating for necessary resources (e.g. teaching materials, assistive devices) to successfully include students with ASD (Lindsay, Proulx, Scott & Thompson, 2013). This finding is consistent with past research, showing that including children with ASD requires significant supports, active involvement in workshops and professional development (Finke, McNaughton & Drager, 2009). Continuous training and education were also ranked high in the hierarchy set by the teachers in RCs. Researchers have found a positive relationship between teacher knowledge, experience with disabilities and teacher self–efficacy (Buell, Hallam, Gamel-McCormick & Scheer, 1999). Teachers' responses indicate that training continues to be a challenge and research is greatly needed to define the most important areas to teach, effective and efficient teacher training methods, and methods for keeping special education staff apprised of the latest research findings.

With respect to interdisciplinary collaboration, teachers' responses show this is not a highly influential factor for their adequacy on social skill training when dealing with students with ASD. In contrast with research findings, suggesting that a prerequisite for successful inclusion and best autism practice is the collaboration between different professionals both within and outside settings (Guldberg, 2010). Interdisciplinary collaboration appears to have a moderate effect on teachers' adequacy. In consistence with the criteria they consider important on setting the content for social skills, downgrading the importance of colleagues' issues and parents' expectations, teachers in RCs appear to rely mostly on their own efforts to deal with these students, rather than the support and collaboration offered by other

professionals. These findings reflect teachers' perceptions about collaboration issues, a determinant factor for successful inclusion according to literature. In particular, due to the complex needs of students with ASD, team support is necessary. For example, speech/language, motor, sensory, behavioral and academic problems evident in these children necessitate a multiperson, multifaceted approach to planning and implementing a comprehensive program (Dunlap & Fox, 1999; Jordan, 1999). The participants of this study do not recognize the importance of interdisciplinary collaboration, despite its key role for successful inclusion. This result raises some questions about teachers training on collaborative skills and issues, as well as the way this collaboration is organized and implemented within inclusive settings in Greece.

On the other hand, factors related to administration issues appear to have a low influence on their competence. The administrator appears to be more influential than the counselor and the diagnostic centers, which was ranked as the least determinant factor of all. The role of the administration on teachers' adequacy is rather doubtful for this was ranked among the lower influential factors. In this study the participants do not consider this role determinant for their own adequacy on social skills training. According to the literature, teachers cannot do what is necessary without the input, supervision, support, understanding and collaboration of the principal. If support is not forthcoming, teachers will begin to feel that they are out in a limbo state and work on their own (Eldar, Talmor & Wolf-Zukerman, 2010). The counselors' support was ranked even lower as an influential factor for teachers' adequacy, although researchers have strongly emphasized the demand for collaboration and integration between and among the various parties involved: family members, service providers and educators (Eldar, Tamor & Romem, 2009). Interestingly, diagnostic centers turned out to be the least influential factor for teachers' adequacy, although they are supposed to provide information, support and guidance to the teachers in RCs in order to organize and

implement their training. Lots of issues related to administration came up to be further investigated. There are several hypotheses we can make in order to explain the reason why administration fails to offer the support needed. At the moment, teachers' responses indicate that they are working and struggling on their own, they do not share the responsibility, they rely on their personal effort to acquire the knowledge they need, in order to implement social skills training when dealing with students with ASD, within RCs.

Regarding the correlational analysis related to the statements of each question, the findings of this study indicate that specific kinds of educational goals such as reading, writing, arithmetics and problem solving attract the same values, which can be conceptualized as academic skills. Strong correlations between understanding other people's emotions and thoughts demonstrate the association among educational goals that could be included in the category of communication skills and theory of mind. Educational goals such as playing with others and following rules indicated strong correlations, therefore they could be considered as teaching goals targeting group related skills. Strong correlations between reduction of obsessions and stereotypies seem to attract the same values as well. As a result they could be included in the field of flexible thinking skills. Other strong correlations between the teaching goals to control self harm and aggressiveness could be included in the group of behavior management skills. Strong correlations between transitioning and independent mobility could lead to the grouping of these educational objectives in the category of adjustment skills. The tolerance of touch and sound attracted the same value as well, as a result, these educational goals can be included in the field of sensory tolerance skills.

Regarding the defining criteria on setting the content of social skills training, the strong correlation between the evaluation of the student's needs and the educational assessment may lead to the conclusion that teachers value these factors equally, which can be considered as teacher centered. Another strong correlation between the daily life needs of the

student and the needs of the present school indicates there is an association among the criteria which could be defined as student centered. With respect to the practices teachers use in RCs, in contrast to expectations a strong correlation has been emerged, indicating that teachers who frequently use the Social story on social skills training, they tend to use Role playing as well.

With regards to the influential factors on teachers' efficiency, there are some findings worth to be discussed. Strong correlations between some influential factors such as the support of the headmaster, the counselor and the diagnostic centers, indicate that these factors are equally valued by the teachers. Therefore they could be included in the field of administration issues. Another strong correlation between studying scientific articles and attending seminars demonstrates teachers 'tendency to rate with the same degree of influence the factors related to continuing education.

As far as the demographic correlational analysis is concerned, interesting findings have emerged regarding teachers' education and experience within general and special education settings. With respect to teachers' education, problem solving seems to be an educational goal of top priority for the higher educated teachers. In contrast to expectations, higher educated teachers appear to focus on problem solving, which is an educational goal targeting the academic skills. The same group of participants did not appear to be influenced by student related factors such as the daily life needs of the child, the needs of the present school and the future school, nor do they seem to consider curriculum related factors important on setting the content of social skills training. Even more interesting is the finding that, the more educated teachers were, the less they considered parental expectations an influential factor for setting the content of social skills training. Contrary to research findings suggesting the ongoing parent collaboration for successful implementation of social skills training, the participants of this study do not seem to be aware how important this factor is.

On the other hand, teachers holding higher education appeared to consider field experience a determinant factor for their adequacy.

With respect to teachers' experience in general education, problem solving appeared to be an educational goal of top priority. On setting the content of social skills training, teachers with experience in general education did not consider the future school needs, students records, parents' expectations and curriculum as factors of high influence. Research findings also indicate they are not familiar with the Social Stories practice. As far as the educational material is concerned, they preferred to use the school material rather than offhand. On the other hand, teachers with experience in special education settings prefer to use printed material. In addition, this group of participants considered the community a suitable setting for social skills training. This finding indicates that teachers with experience in special education are aware of the benefits social skills training may have, if implemented in various settings of the community, regarding the issues of generalization and maintenance of social skills.

4.1 Significance of the study

The findings of the present study contribute to the scarce relevant research with respect to the teachers' priorities and preferences for social skills training within RCs. The fact that the teachers included in this study were exclusively teaching in RCs, sheds light on how teachers perceive the importance of social skills training for this population within this special inclusive setting. Although the study of social skills training for children with ASD has always been a popular topic to investigate, little research has been done on teachers' priorities and preferences within the specific educational setting. Therefore, through this study it is possible to derive information about how teachers work with students with ASD in the RCs in primary education. RCs are considered to be inclusive educational settings,

determining children's social adjustment and inclusion in the mainstream environment. Consequently, teachers' preferences offer information about the way social skills training is implemented, as well as how this training may enhance their social adjustment in the school environment and the community.

In this study, teachers' priorities and preferences were investigated in several directions. The goal of the present study was not only to acknowledge the importance of social skills training for students with autism, which is already validated in previous research but to determine to what degree social skills training is considered to be a priority. For this reason they were asked to prioritize their educational objectives in order to uncover their educational priorities. The research questions not only indicate what practices teachers prefer to use in classroom, but they also demonstrate those practices they actually use and how frequently they apply them. Furthermore, information is derived as to how frequently preferred activities are used within various settings, as well as the educational material they choose. The influence of the administration on teachers' adequacy was also investigated.

4.2 Limitations

Despite the significant results of the study, there are some limitations that have to be acknowledged. The first limitation of this study is related to the representativeness of the sample. Due to the fact that there was no formal data base for all the students with ASD registered in RCs in public primary education, it is quite difficult to define to what extent the sample of the present study represents the population including the teachers of RCs dealing with students with ASD in primary education in Greece.

With regards to the second limitation, due to the size and the distribution of the sample, the research method applied, would not allow the personal contact between the researcher and the participants. Therefore, the specific survey method used, did not allow the

researcher to give any further clarifications to the participants or assess to what extend the questions were clear. An effort to overcome this limitation was made by attaching a covering letter to the mail sent to the teachers, which included the contact details of the researcher in case the participants needed further information. The same covering letter was included in the questionnaires sent by post.

Regarding the third limitation of the present study, the researcher was not able to determine the authenticity of the participants 'responses in this self-report measure, taking into consideration that the participants in survey research methods tend to give socially acceptable answers in order to protect their social image.

The fourth limitation refers to the lack of information as far as some special characteristics of the students attending the RCs are concerned such as the severity of autism and their functioning level. Although it is known that the prerequisite for admission to children in RCs is their inability to follow the curriculum of the class, no details about the functioning level of the students attending were included in the questionnaire. The time schedule of the students with ASD attending the RCs was also unclear, as there was no information whether the students attended full time or part time.

The fifth limitation of this study is related to methodological issues. In particular, while this survey research method derived information about teachers' priorities and preferences on social skills training within RCs for children with ASD, there wasn't any other method applied to confirm what teachers actually do, when dealing with this population in RCs. In fact there is a gap between how teachers perceive the importance of social skills training and what students with ASD actually receive within RCs. Due to the self -restriction of data collected, there is a gap between teachers' priorities and preferences and the practices they actually use. For a deeper understanding, a researcher would need to follow a naturalistic observation to generate more information.

4.3 Implications for future research

The present study focused on teachers' teachers' priorities and preferences for social skills training when dealing with students with ASD within RCs. It would be interesting to collect the teachers' perceptions on the same subject, working in different educational settings and later to compare and investigate how these perceptions differentiate within the various settings.

Moreover, further research may be conducted to investigate teachers' priorities and preferences on social skills training to children with ASD within different levels of education. In particular, teachers' preferences on pre elementary level education need to be explored in more detail, taking into consideration the importance of early intervention for students with autism. At the same time it would be interesting to analyze teachers' priorities and preferences on teenagers and adults' training following the secondary level of education. Having collected this information, it is possible to extract conclusions on what degree the setting within different levels of education influences teachers' priorities towards social skills training. In addition, further research on social skills training within inclusive settings, taking into consideration pupils' individual characteristics related to their functioning level and their time schedule attending in RCs, would contribute a lot on this field of science.

Furthermore, this area of study would benefit from better research practices the teachers employ in their classroom. Taking into consideration that there is a gap between what teachers perceive about the importance of social skills training and what students actually receive, future researchers would make a contribution, if they observed teachers in the natural context of the school. Therefore, this survey research method combined with the naturalistic observation would reveal the true distance between what teachers believe about social skills training and how it is implemented within RCs. Future studies could incorporate

triangulation of methods and informants e.g. the observation of social skills training as well as obtaining the perspectives of the students with ASD and those of key stakeholders.

REFERENCES

Allan, J. (2008). *Rethinking inclusive education: The philosophers of difference in practice.* London: Springer.

Ashburner, J., Ziviani, J., & Rodger, S. (2010). Surviving in the mainstream: Capacity of children with autism spectrum disorders to perform academically and regulate their emotions and behavior at school. *Research in Autism Spectrum Disorders, 4*, 18-27.

Attwood, T. (2006). *The complete guide to Asperger's Syndrome.* London: Jessica Kingsley Publishers.

Avramidis., E. & Kaliva, E. (2006). Research Methods in Special needs Education *Theory and Practices.* Athens:Papazisi.

Barnard, J., Harvey, J., Prior, A., & Potter, D. (2001). *Ignored or ineligible? The reality for adults with autism spectrum disorders*. London: National Autistic Society.

Barned, N. E., Knapp, N. F., & Neuharth-Pritchet, S. (2011). Knowledge and Attitudes of Early Childhood Preservice Teachers Regarding the Inclusion of Children With Autism Spectrum Disorder. *Journal of Early Childhood Teacher Education, 32*, 302-321.

Barnhill, G. P. (2007). Outcomes in adults with Asperger Syndrome. *Focus on Autism and Other Developmental Disorders, 22*, 116 – 126.

Battalio, R., & Stephens, J. T. (2005). Social Skills Training: Teacher Practices and Perceptions. *Beyond Behavior*, *14*(2), 15-20.

Bauminger, N. (2007). Brief Report: Individual Social-Multi Modal Intervention for HFASD. *Journal of Autism & Developmental Disorders, 37*, 1605-1615.

Beaumont, R., & Sofronoff, K. (2008). A multi-component social skills intervention for children with Asperger syndrome: The Junior Detective Training Program. *The Journal of Child Psycology and Psychiatry, 49*(7), 743-753.

Bock, M. A. (2007). The Impact of Social-Behavioral Learning Strategy Training on the Social Interaction Skills of Four Students With Asperger Syndrome. *Focus on Autism and Other Developmental Disabilities, 22*(2), 88-95.

Boutot, E. A. (2007). Fitting in: Promoting acceptance and friendships of children with autism spectrum disorders in inclusive classrooms. *Intervention in School and Clinic, 42*(3), 156-161.

Buell, M., Hallam, R., Gamel-Mckormick, M., & Scheer, S. (1999). A survey of general and special education teachers' perceptions and in service needs concerning inclusion. *International Journal of Disability, Development & Education, 46,* 143-156.

Castorina, L. L., & Negri, L. M. (2010). The Inclusion of Siblings in Social Skills Training Groups for Boys With Asperger Syndrome *Journal of Autism & Developmental Disorders, 41,* 73-81.

Chamberlain, B., Kasari, C., & Rotheram-Fuller, E. (2007). Involvement or Isolation? The Social Networks of Children with Autism in Regular Classrooms. *Journal of Autism & Developmental Disorders, 37,* 230-242.

Cigman, R (2007). Editorial introduction. In *Included or excluded? The challenge of themainstream for some SEN children,* xv–xxviii. London: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2008). *Μεθοδολογία εκπαιδευτικής έρευνας*. Αθήνα: Μεταίχμιο.

Cook, B.G. (2001). A comparison of teachers' attitudes towards their included students with mild and severe disabilities. *Journal of Special education, 34,* 203-213.

Coudurier, C. Y., Darrou, C., Lenoir, P., Verrecchia, B., Assouline, B., Ledesert, B., Michelon, B., Pry, Aussilloux, C., & A. Baghdadli**.** (2008). What clinical characteristics of children with autism influence their inclusion in regular classrooms? *Journal of Intellectual Disability Research, 52,* 855-863.

Crosland, K., & Dunlap, G. (2012). Effective Strategies for the Inclusion of Children With Autism in General Education Classrooms. *Behavior Modification, 36*(3), 251-269.

Delano, M.E. (2007). Use of Strategy Instruction to Improve the Story Writing Skills of a Student With Asperger Syndrome. *Focus on Autism and Other Developmental Disabilities, 22*(4), 252-258.

Di Pipi-Hoy, C. & Jitendra, A. (2004). A parent delivered intervention to teach purchasing skills to young adults with disabilities. *Journal of Special Education*, 38(3), 144-157.

Dobbins, N., Higgins, K., Pierce, T., Tandy, R.D., & Tincani, M. (2010). An Analysis of Social Skills Instruction Provided in Teacher Education and In-Service Training Programs for General and Special Educators. *Remedial and Special Education, 31*(5), 358-367.

Dunlap, G., & Fox, L. (1999). Administration of behavioral support for young children with autism. *Journal of Positive Behavior Interventions, 1*, 77-87.

Eldar, E., Talmor, R., & Romem, Z.D. (2009). An Integrative Model for Including Children with ASD in General Education Settings – A Practical Lesson In Israel. *International Journal of Special Education, 24*(2), 66-76.

Eldar, E., Talmor, R., & Wolf-Zukerman. (2010). Successes and difficulties in the individual inclusion of children with autism spectrum Disorder (ASD) in the eyes of their coordinators. *International Journal of Inclusive Education, 14*(1), 97-114.

Engstrom, I., Ekstrom, L., & Emilsson, B. (2003). Psychological functioning in a group of Swedish adults with Asperger syndrome or high-functioning autism. *Autism, 7*, 99 – 110.

Ferraioli, S.J., & Harris, S.L. (2011). Effective Educational Inclusion of Students on the Autism Spectrum. *Journal of Contemporary Psycotherapy, 41*, 19-28.

Finke, E., McNaughton, D., & Drager, K. (2009). All children can and should have the opportunity to learn. *Augmentative and Alternative Communication, 25*(2), 110-122.

Florian, L. (2007). Reimagining special education. In L. Florian (ed.), *The Sage handbook of special education*, (pp 7–20). London: Sage.

Gillman, M., B. Heyman, and J. Swain. (2000). What's in a name? The implications of diagnosis for people with learning difficulties and their family carers. *Disability and Society* 15: 389–409.

Glashan, L., Mackay, G., & Grieve, A. (2004). Teachers'experience in the mainstream education of pupils with autism. *Improving Schools*, 7, 49-60.

Guldberg, K. (2010). Educating children on the autism spectrum: preconditions for inclusion and notions of 'best autism practice' in the early years. *British Journal of Special Education*,37, (4), 168-174.

Harris, S. L., & Handleman, J.S. (1997). Helping children with autism enter the mainstream. In D.J.Cohen & F.R.Cohen (Επιμ.), *Handbook of autism and pervasive developmnental disorders* (2η έκδ.), σελ.1029. New York: Wiley.

Harrower, J. K., & Dunlap, G. (2001). Including Children With Autism in General Education Classrooms. A Review of Effective Strategies. *Behavior Modification*, 25(5), 762-784.

Hellenic Ministry of Education and Religious Affairs (2013) Resource Classrooms of Primary Education, *weblink* http://www.pi-schools.gr/special_education_new/html/gr/8emata/sxol_monades/sx_mon_a_ba8mia_a8inas.htm

Hipp, K. A., & Huffman, J. B. (2000). How leadership is shared and visions emerge in the creating of learning communities. Paper presented at the 81st Annual Meeting of the American Educational Research Association, New Orleans, LA, USA.

Ho, A. (2004). To be labelled, or not to be labelled: That is the question. *British Journal of Learning Disabilities* 32: 86–92.

Howlin, P. (2000). Outcome in adult life for more able individuals with Asperger syndrome, *Autism*, 4, 63 – 83.

Howlin, P. Goode, S. Hutton, J., & Rutter, M. (2004). Adult outcome for children with autism. *Journal of Child Psychology and Psychiatry*, 45, 212 – 229.

Humphrey, N. (2008). Including pupils with autistic spectrum disorders in mainstream schools. *British Journal of Learning Support, 23*(1), 41-47.

Humphrey, N., & Lewis, S. (2008). What does 'inclusion' mean for pupils on the autistic spectrum in mainstream secondary schools? *Journal of Research in Special Educational Needs, 8*(3), 132-140.

Humphrey, N., & Symes, W. (2011). Inclusive education for pupils with autistic spectrum disorders in secondary mainstream schools: teacher attitudes, experience and knowledge. . *International Journal of Inclusive Education, 17*(1), 32-46.

Jordan, R. (2005). Managing Autism and Asperger's syndrome in current educational provision. Pediatric Rehabilitation, *8*, 104-112.

Jordan, R. (1999). Evaluating practice problems and possibilities. *Autism: the international Journal of Research and Practice, 3*, 411-434.

Jones, A.P., & Frederickson, N. (2010). Multi-Informant Predictors of Social Inclusion for Students with Autism Spectrum Disorders Attending Mainstream School, *Journal of Autism & Developmental Disorders, 40*, 1094-1103.

Jones, G., A. English, K. Guldberg, R. Jordan, P. Richardson, and M. Waltz. (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).

Kasari, C., Locke, J., Gulsrud, A., & Rotheram-Fuller, E. (2011). Social Networks and Friendships at School: Comparing Children With and Without ASD. *Journal of Autism & Developmental Disorders,* 41, 533-544.

Katsis, A., Sideridis, G., & Emvalotis, A. (2011). Statistical Methods in Social Sciences. (pg 111), Topos Publications

Koegel, L., Matos-Freden, R., Lang, R & Koegel, R. (2012). Interventions for Children With Autism Spectrum Disorders in Inclusive School Settings. *Cognitive and Behavioral Practice, 19,* 401-412.

Koegel, L.K., Koegel, R.L., Frea, W.D., Fredeen, R.M. (2001). Identifying Early Intervention Targets for Children With Autism in Inclusive Settings. *Behavior Modification*, *25*(5), 745-761.

Leach, D., & Duffy, M.L. (2009). Supporting Students With Autism Spectrum Disorders in Inclusive Settings. *Intervention in School and Clinic, 45*, 31-37.

Lindsay, S., Proulx, M., Scott, H., & Thompson, N.(2013). Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education.*DOI: 10.1080/13603116.2012.75832.

Lord, C. (1995). Facilitating social inclusion. Στο E.Schopler & G.B.Mesibov (Επιμ.), *Learning and cognition in autism* (σελ. 221-240). New York: Plenum Press.

Mavropoulou, S., & Padeliadou, S. (2000**).** Greek teachers' perceptions of autism and implications for educational practice. *Autism*, *4*(2), 173-183.

Mesibov, G.B., & Shea, V. (1996). Full Inclusion and Students with Autism. *Journal of Autism & Developmental Disorders, 26*(3), 337-346.

Myles, B. S. & Simpson, R. L. (2002). Asperger Syndrome: an overview of characteristics. *Focus on Autism and Other Developmental Disabilities*, *17*, 132-137.

Norwich, B. (2007). Dilemmas of inclusion and the future of education. In *Included or excluded?The challenge of the mainstream for some SEN children*, ed. R. Cigman, 69–84. London: Routledge.

Osborne, L.A & Reed, P. (2011). School factors associated with mainstream progress in secondary education for included pupils with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders* , *5* ,1253–1263.

Owens, G., Granader, Y., Humphrey, A., & Baron-Cohen, S. (2008). LEGO Therapy and the Social Use of Language Programme : An Evaluation of Two Social Skills Interventions for Children with High Functioning Autism and Asperger Syndrome. *Journal of Autism & Developmental Disorders,* 38, 1944-1957.

Owen-DeSchryver, J.S., Carr, E.G., Cale, S.I., & Blakeley-Smith, A. (2008). Promoting Social Interactions Between Students With Autism Spectrum Disorders and Their Peers in Inclusive Settings. *Focus on Autism and Other Developmental Disabilities, 23*(1), 15-28.

Παντελιάδου, Σ. (2005). Σχολική ένταξη και αρτιμελισμός στην εκπαίδευση. Στο Π. Αγγελίδης (Επιμ. Έκδ.), *Συμπεριληπτική εκπαίδευση: Από το περιθώριο στη συμπερίληψη* (σσ. 107-122). Λευκωσία: Κυπροέπεια.

Papoutsi, C. (2012). Special Education teachers' views on social skills training for students with Autism. (*Unpublished dissertation*), School of Humanities, Master of Arts, Department of Special Needs Education, University of Thessaly.

Pedagogical Institute, (2004). Special Needs Education Department, principal investigator: Professor Labropoulou, V. Mapping of special education needs.

Probst, P., & Leppert, T. (2008). Brief Report: Outcomes of a teacher training program for autism spectrum disorders. *Journal of Autism & Developmental Disorders, 38*(9),1791-1796.

Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school Classrooms. *The journal of Child, Psychology & Psychiatry*, *51*, 1227-1234.

Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with autism. *Journal of Autism & Developmental Disorders, 33*, 123-130.

Rogers, S.J.(2000).Interventions that facilitate socialization in children with autism. *Journal of Autism and Developmental Disorders, 30*, 399-409.

Safran, J.S., & Safran, S.P. (2001). School-based consultation for Asperger syndrome. *Journal of Educational and Psychological Consultation*, *12*, 385-395.

Sansosti, F.J. (2010). Teaching Social Skills to Children With Autism Spectrum Disorders Using Tiers of Support: A Guide For School-Based Professionals, *Psychology in the Schools, 47*(3), 257-281.

Sansosti, F.J., & Powell-Smith, K.A. (2006). Using Social Stories to Improve the Social Behavior of Children With Asperger Syndrome. *Journal of Positive Behavior Interventions, 8*(1), 43-57.

Segall, M.J., & Campbell, J.M. (2012). Factors relating to education professionals' classroom practices for the inclusion of students with autism spectrum disorders. *Research in Autism Spectrum Disorders, 6*, 1156-1167.

SFARI (2012) Simons Foundation Autism Research Initiative, *weblink:* https://sfari.org/news-and-opinion/news/2012/proposed-dsm-5-criteria-for-autism-spectrum-disoders.

Slee, R. (2001). Social justice and the changing directions in educational research: The case of inclusive education. *International Journal of Inclusive Education* 5, nos. 2–3: 167–77.

Simpson, R.L., R. de Boer-Ott., & Smith-Myles, B. (2003). Inclusion of Learners with Autism Spectrum Disorders in General Education Settings. *Topics in Language Disorders*, *23*(2), 116-132.

Simpson, R.L. (2005). Evidence-Based Practices and Students With Autism Spectrum Disorders. *Focus on Autism and other Developmental Disorders*, *20*(3), 140-149.

Sinz, C.T. (2004). Viewpoints and attitudes of teachers who have students with Asperger's disorder . Menomonie: University of Wisconsin Stout.

Solomon, M., Goodlin-Jones, B., & Anders, T.F. (2004). A social Adjustment Enhancement Intervention for High Functioning Autism, Asperger's Syndrome, and Pervasive Developmental Disorder NOS. *Journal of Autism & Developmental Disorders*, *34*(6), 649-668.

Thomas, G., & Loxley, A. (2007). *Deconstructing special education and constructing inclusion.* 2nd ed. Maidenhead: Open University Press.

Uysal, A., & Ergenekon, Y., (2010). Social Skills Instruction Carried Out by Teachers Working at Private Special Education Institutions in Turkey, *Education and Training Autism and Developmental Disabilities*, *45*(3), 459-466.

Weiss, M.J., & Harris, S.L. (2001). Teaching Social Skills to People With Autism. *Behavior Modification*, *25*(5), 785-802.

White, S.W., Scahill, L., Klin, A., Koenig, K., & Volkmar, F.R. (2007). Educational Placements and Service Use Patterns of Individuals with Autism Spectrum Disorders. *Journal of Autism & Developmental Disorders, 37*, 1403-1412.

White, S.W., Koenig, K., & Scahill, L. (2007). Social Skills Development in Children with Autism Spectrum Disorders: A Review of the Intervention Research. *Autism and Developmental Disorders, 37*, 1858-1868.

APPENDIX

UNIVERSITY OF THESSALY
DEPARTMENT IN SPECIAL NEEDS EDUCATION
MASTER DEGREE– STUDY ORIENTATION: SPECIAL EDUCATION

TEACHERS' QUESTIONNAIRE

Graduate student: Demi Aikaterini**, Supervisor:** Mavropoulou Sophia

The aim of this questionnaire is to investigate resource teachers' views about social skills training to students with ASD. Your participation is very important in order to record Greek teachers' views about this issue. Please answer all the questions, choosing the answers that best suit you. Take into consideration that the analysis of the questionnaire will be conducted in accordance with the ethic protocol, which protects the anonymity and confidentiality of the information of the participants.

A΄ Section: Education of students with ASD

1. Rate the importance of the following educational objectives related to training children with ASD in your classroom:

	Non significant	Little significant	Moderately significant	Significant	Very significant	Extremely significant
Reading skills	☐	☐	☐	☐	☐	☐
Writing skills	☐	☐	☐	☐	☐	☐
Arithmetic	☐	☐	☐	☐	☐	☐
Problem solving	☐	☐	☐	☐	☐	☐
Verbal expression of needs	☐	☐	☐	☐	☐	☐
Use of alternative communication	☐	☐	☐	☐	☐	☐
Understanding emotions and thoughts	☐	☐	☐	☐	☐	☐
Recognition of emotions	☐	☐	☐	☐	☐	☐
Play with others	☐	☐	☐	☐	☐	☐
Following rules	☐	☐	☐	☐	☐	☐
Reduction of obsessions	☐	☐	☐	☐	☐	☐
Reduction of stereotypies	☐	☐	☐	☐	☐	☐
Tolerance of touch	☐	☐	☐	☐	☐	☐
Tolerance of sound	☐	☐	☐	☐	☐	☐

	Non significant	Little significant	Moderately significant	Significant	Very significant	Extremely significant
Control self harm	☐	☐	☐	☐	☐	☐
Control of aggression	☐	☐	☐	☐	☐	☐
Self-care	☐	☐	☐	☐	☐	☐
Transitioning	☐	☐	☐	☐	☐	☐
Independent mobility	☐	☐	☐	☐	☐	☐
No resistance to change	☐	☐	☐	☐	☐	☐

B' Section: Defining criteria of social skills training

2. Rate the degree of influence for each of the following factors, when setting the content of social skills training for students with ASD in your classroom:

	No influence	Low influence	Moderate influence	Important influence	High Influence	Very high influence
Age	☐	☐	☐	☐	☐	☐
Cognitive level	☐	☐	☐	☐	☐	☐
Severity of autism	☐	☐	☐	☐	☐	☐
Student's needs at present school	☐	☐	☐	☐	☐	☐
Daily life needs	☐	☐	☐	☐	☐	☐
Future school needs	☐	☐	☐	☐	☐	☐
Educational assessment	☐	☐	☐	☐	☐	☐
Personal evaluation of the student's needs	☐	☐	☐	☐	☐	☐
Your educational assessment	☐	☐	☐	☐	☐	☐
Colleagues' views	☐	☐	☐	☐	☐	☐
Parents' expectations	☐	☐	☐	☐	☐	☐
Analytical curriculum for students with autism	☐	☐	☐	☐	☐	☐
The available time within the daily schedule	☐	☐	☐	☐	☐	☐
Social skills of typical developing peers	☐	☐	☐	☐	☐	☐

C Section:. Educational Practices for social skills training.

3.Are you aware of the following educational practices :

	Yes	No
One to one	☐	☐
Direct instruction	☐	☐
Physical guidance	☐	☐
Verbal instruction	☐	☐
Visual cues (pictures, photos,videos)	☐	☐
Task Analysis	☐	☐
Social Stories	☐	☐
Role playing	☐	☐
Peer tutoring	☐	☐
Verbal praise	☐	☐
Tangible	☐	☐

4. How often do you use the following educational practices to teach children with ASD social skills in your classroom :

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
One to one	☐	☐	☐	☐	☐	☐	☐
Direct instruction	☐	☐	☐	☐	☐	☐	☐
Physical guidance	☐	☐	☐	☐	☐	☐	☐
Verbal instruction	☐	☐	☐	☐	☐	☐	☐
Visual cues (pictures, photos,videos)	☐	☐	☐	☐	☐	☐	☐
Task Analysis	☐	☐	☐	☐	☐	☐	☐
Social Stories	☐	☐	☐	☐	☐	☐	☐

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
Role playing	☐	☐	☐	☐	☐	☐	☐
Peer tutoring	☐	☐	☐	☐	☐	☐	☐
Verbal praise	☐	☐	☐	☐	☐	☐	☐
Tangible	☐	☐	☐	☐	☐	☐	☐

5. How often do you teach students with ASD social skills within each of the following settings:

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
In the classroom	☐	☐	☐	☐	☐	☐	☐
In the playground	☐	☐	☐	☐	☐	☐	☐
In the community	☐	☐	☐	☐	☐	☐	☐

6 How often do you teach students with ASD social skills within each of the following time choices.:

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
Scheduled	☐	☐	☐	☐	☐	☐	☐
Incidental	☐	☐	☐	☐	☐	☐	☐

7. How often do you use the following activities to teach students with ASD social skills **:**

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
Curriculum based activities	☐	☐	☐	☐	☐	☐	☐
Adjustments of the curriculum based activities	☐	☐	☐	☐	☐	☐	☐
Other activities	☐	☐	☐	☐	☐	☐	☐

8 How often you use the following types of educational materials to teach social skills to children with autism.:

	Never	Once in three months	Once a month	Twice a month	Once a week	2-3 times a week	Every day
School material	☐	☐	☐	☐	☐	☐	☐
3D material	☐	☐	☐	☐	☐	☐	☐
Printed	☐	☐	☐	☐	☐	☐	☐
Digital	☐	☐	☐	☐	☐	☐	☐
Offhand	☐	☐	☐	☐	☐	☐	☐

9. Rate the degree of influence on your adequacy for each of the following factors when teaching social skills to students with ASD :

	No influence	**Low influence**	**Moderate influence**	**Important influence**	**High influence**	**Very high influence**
Studies	☐	☐	☐	☐	☐	☐
Practicum	☐	☐	☐	☐	☐	☐
In service training	☐	☐	☐	☐	☐	☐
Cooperation with colleagues	☐	☐	☐	☐	☐	☐
Attending seminars	☐	☐	☐	☐	☐	☐
Studying scientific articles	☐	☐	☐	☐	☐	☐
Access to educational material	☐	☐	☐	☐	☐	☐
Headmaster's support	☐	☐	☐	☐	☐	☐
Counselor's support	☐	☐	☐	☐	☐	☐
Support from Diagnostic centers	☐	☐	☐	☐	☐	☐

Demographics

Town where the school is situated:…….

Setting: Special School ☐ Resource classroom ☐ Support in the classroom ☐

Level-Grade : ……**Sex**: Male ☐ Female ☐ **Age**: …….

Academic Background

Academy ☐

In service Training: General education ☐ Special education ☐

Department of Primary Education ☐

Department of Educational and Social Policy ☐

Master Degree ☐

PHD Thesis ☐

Teaching experience

General education (in years and months): ……

Special education (in years and months):……..

In this school: Years …….months: ……...

With children with ASD : Years……..months: ……...

Thank you for your response.

Table 1b *Frequencies and Percentages of the Participants of each city.*

Cities	Frequency	Percentage
Athens	27	33.8%
Piraeus	9	11.3%
Thessaloniki	10	12.5%
Larisa	4	5.0%
Karditsa	2	2.5%
Trikala	2	2.5%
Skopelos	1	1.3%
Alexandroupoli	1	1.3%
Didimoticho	1	1.3%
Komotini	1	1.3%
Kozani	2	2.5%
Kastoria	2	2.5%
ArgosOrestikou	1	1.3%
Veria	1	1.3%
Florina	1	1.3%
Gianena	1	1.3%
Chalkida	1	1.3%
Thiva	1	1.3%
Aliveri	1	1.3%
Kalamata	2	2.5%
Pirgos	1	1.3%
Kiato	2	2.5%
Korinthos	1	1.3%
Iraklio	1	1.3%
Rethimno	2	2.5%
Chania	1	1.3%
Kos	1	1.3%
Total	**80**	**100.0%**