

# The Institution of Parallel Support as a Parameter to Promote the Social Integration of **Students with Attention Deficit Hyperactivity Disorder: Views of General and Special Education Teachers**

# **Evaggelia Nikiforou**

University of Crete, Crete, Greece Email: evagelianikiforou@hotmail.com

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# Abstract

Through this research we intend to research teachers' perceptions for the effectiveness of parallel support in students with Attention Deficit Hyperactivity Disorder. More specifically, the focus was set on planning, implementation and the results of the implication of parallel support. A quantitative approach was employed for the above purpose. We administered a questionnaire to a sample of 137 teachers. Results suggested a positive orientation to parallel support of children with ADHD. Results are discussed for their practical implications.

## **Subject Areas**

Special Education

# **Keywords**

Special and Inclusive Education, Parallel Support, ADHD

# **1. Introduction**

The diagnostic process of ADHD is achieved through specialized diagnostic manuals and criteria that include a list of key features that must be present for the diagnosis to occur. More specifically, the two manuals are the Diagnostic and Statistical Manual of Mental Health Disorders DSM-IV and DSM-V (Diagnostic and Statistical Manual of Mental Health Disorders) and the International Classification of Diseases and Related Health Problems ICD-10 (The ICD-10 Classification of Mental and Behavioral Disorders) [1].

According to the latest version of the DSM-V by the APA carried out in 2013, some changes are included regarding the diagnostic criteria of ADHD, the terminology in terms of its subtypes and the creation of two modifiers that define the severity of the disorder in mild, moderate and severe [1].

An important modification is that ADHD is not classified in the disorders diagnosed during infancy, childhood and adolescence, but is transferred to the category of neuro-developmental disorders. Also, in terms of the number of criteria for people over 17 and adults, the presence of four symptoms of either inattention or hyperactivity-impulsivity is required as opposed to the six required by the 4th edition of the DSM [1].

Furthermore, in terms of the age of onset of symptoms, it is modified to 12 from 7 years. It is observed that the changes in age show the impossibility of clearly ascertaining them until the first teenage years, while the modification in the minimum number of criteria required for adults shows the evolutionary course of the disorder based on the age level [1].

However, the DSM – V manual has been severely criticized, as its diagnostic criteria contribute little to the differential diagnosis of ADHD from other developmental disorders that may coexist, with the result that specialists are called upon to assess its primary symptoms and differentiate them from the symptoms of other disorders [1].

However, this paper follows the DSM-IV as a guideline since it is the backbone of the diagnostic criteria for ADHD. The first criterion states that the diagnosis of ADHD requires the existence of six or more symptoms of inattention, hyperactivity and impulsivity lasting at least 6 months and to a degree that is completely inconsistent with a child's typical developmental age [1].

Then, according to the second criterion, it is defined that the aforementioned symptoms should have appeared before the age of 7 years of a person. In addition, under the third criterion, the symptoms are required to cause significant impairment in the individual's functioning in at least two or more contexts, such as school, family, and occupational settings [1].

Furthermore, the fourth criterion points out that there must be clear evidence of a significant impairment in a person's social, scholastic or occupational functioning. The fifth criterion states that these symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better explained by the presence of another disorder (eg, Mood Disorder, Anxiety Disorder, Dissociative Disorder or Personality Disorder) [1].

Subsequently, it is deemed necessary to emphasize that his symptoms are grouped into two distinct categories, distraction and hyperactivity -impulsivity. Therefore, depending on the number of these, the diagnosis can be defined as either ADHD with a predominance of the inattentive type, or ADHD with a predominance of the hyperactive-impulsive type, or a combined type of ADHD or ADHD not otherwise specified [1].

Finally, it is observed that the DSM-IV has received intense criticism for the differentiation of the diagnostic criteria in terms of the age factor, as its symptoms vary during the developmental stages of a child. Also, the insufficient cognitive background regarding the differences that exist in the manifestation of symptoms based on gender, is a black point of the manual [1].

In addition, at this point it is worth mentioning, the tenth edition of the International Classification of Diseases ICD-10 of the World Health Organization [2], which includes hyperactive type disorders in the category F90-98 "Disorders of behavior and emotion, with onset usually during childhood and adolescence", which in turn are coded according to four types. Typically, the manual lists F90.0 Activity and attention disorder, F90.1 Conduct disorder hyperactive type, F90.8 other hyperactive type disorders and F90.9 Hyperactive type disorder unspecified [3].

Therefore, based on the ICD-10, the characteristics of the syndrome are attention deficit and hyperactivity, which must have appeared before the age of 7, have a duration of at least 6 months, be inconsistent with the age stage of the child and his IQ (above 50) and appear in more than one situation (eg family, school and social environment) [2]. Finally, for the diagnosis, the exclusion of the existence of anxiety disorders (F41), emotional disorders (F30-F39), pervasive developmental disorders (F84) or schizophrenia (F20) plays a key role, while for the coding of the disorder the presence or absence of symptoms of aggression or antisocial behavior [3].

ADHD causes significant effects in a variety of areas of a person's life involving socialization, academic performance, intra-school and intra-family relationships, learning style, self-concept and psyche. For example, symptoms of inattention lead to low school performance, while impulsivity leads to the difficulty of creating and maintaining social relationships [4].

More explanatory, a significant number of children with ADHD are catalytically affected in the area of socialization, which will be the focus of this paper. The child experiences behavioral problems, such as the development of conduct disorders, the formation of an antisocial personality, and delinquent activities [5].

The above described behavior of children with ADHD ends up having a negative impact on their interpersonal relationships with those around them [2]. Therefore, they experience social rejection, victimization and labeling through school bullying.

Ultimately, this perpetual cycle of violence is continuously fueled by the social ostracism of children from their peers, which may also lead to criminal behavior in adolescence and adulthood [2].

It is worth pointing out that the effects of ADHD affect not only the child's life but also the people who come into contact with him, namely the family, peers and teachers. According to the literature, studies show that the children's parents experience anxiety, stress, depression, social isolation, self-mutilation or even intra-marital conflicts, as a result of which family ties is disrupted [6].

Also, due to the need for constant and close supervision of the child, other children in the family may be disturbed. As a consequence, stressful situations are created that can end up in the collapse of family life [6].

At the same time, ADHD also affects the financial sector, if it is taken into account that these people use the mental health system more often, such as medical, social and special education services. This need for medical care imposes a financial burden on the family environment [6].

Finally, it is worth mentioning that ADHD affects the school process to a crucial extent. More illustratively, low academic performance is a result of all three symptoms of the disease, which leads to severe learning difficulties and dropping out of school. Various studies show that the effects of the child's illness tend to affect him long-term and in adult life [7]. Adolescents are prone to delinquent behaviors, substance abuse and crime, while adults form poor social relationships [8].

At this point, it is worth mentioning that the "comorbidity" of ADHD plays a decisive role in the socialization of a child. Based on research, it is concluded that it presents high rates of comorbidity with Disruptive Behavior Disorders. Typically, 54% - 67% of children with ADHD are diagnosed with oppositional defiant disorder and 20% - 50% with conduct disorder [9]. Additionally, anxiety disorders and affective disorders are comorbid disorders.

In more detail, the hyperactive and impulsive behavior of children in the classroom is a brake on the development of their socialization [10]. Children show an inability to develop social skills that contribute to social interactions with their school environment, high levels of social involvement and aggressive behavior [10].

In addition, severe antisocial behavior manifests itself in different symptoms according to gender. For example, girls tend to display more verbal aggression towards their classmates than aggressive behaviors. On the contrary, boys show a higher degree of aggressive behavior towards their classmates, intense hyperactivity, impulsivity and disobedience to classroom rules [11].

In addition, it is worth noting that children with ADHD experience social and emotional difficulties to a greater degree than their peers, which are due to the lack of self-regulation of their behavior [11] [12]. Additionally, lack of insight and limited ability to use language for social interaction are due to weakness in executive functions, results in social rejection [12]. In summary, it is understood that children with ADHD face serious problems in various areas of their lives, which catalytically affect their social relationships and in the long term [13].

During the last years various changes have been made in the context of SEN in revising the approach of people with SEN and ensuring their right to equal access to education. In today's era, educational systems apply the fundamental principles of integration policy, with the main pillar being the utilization of educational techniques in order to ensure the harmonious coexistence of all students in school units [13].

Taking into account the current reality of inclusive education, it is found that the convergence between legislation and practice is a continuous challenge in the Greek area. More explanatory, according to a recent report of the Ombudsman, a continuous underfunding of the S.E is found, resulting in a deficiency of the available educational resources, contrary to the statutory special measures of the law.

At the same time, with regard to the recruitments in the S.E., it is pointed out that "sufficient organizational positions are not recommended, since there are temporary educational staff, nor are the existing organizational positions filled with the appointment of permanent staff in the SMEAE" [14], while the funds available for the staffing of the SMEAE are characterized by inadequacy.

However, beyond the economic factor, a large percentage of teachers argue that stereotypical perceptions are the main brake for the lack of manpower in the field of staffing and the non-implementation of inclusive education in our country [15].

Subsequently, it has been found that Greek schools are disadvantaged in the provision of building and logistical infrastructure and at the same time the mode of operation, teaching and evaluation reinforces social segregation [15].

Regarding social inclusion through parallel support, it is worth mentioning the findings of the research by Zoniou-Sideri and Vlachou [16] regarding the attitudes of primary and secondary education teachers towards inclusion practice [16]. In more detail, the survey was conducted on a sample of 641 teachers from 10 regions of Greece, where 62.1% of the respondents argue that segregation exists due to the insufficient training of appropriate educational structures for the inclusion of the disabled (56.3%) [17].

Various researches revealed teachers' feelings of insecurity regarding the education of students with ADHD due to the lack of training and infrastructure, resulting in a strong hesitation regarding its implementation [18]. Additionally, many researchers argue that a catalytic role is played by the cooperative relationship of teachers with all stakeholders in the educational process [19]. Modern perceptions of inclusive education are placed in the context of social welfare, where educational policy seeks to eliminate social inequality [20].

Nevertheless, it has been observed that many teachers consider ADHD to be a depressing factor for the school attendance of the other students in the classroom, simulating students suffering from this disorder as a nuisance, as they make it difficult for the lesson to flow [21]. Also, many teachers believe that ADHD has a biological origin, with the result that they shift their own responsibility to external factors, such as their treatment by specialist pediatricians without any attempt to modify their pedagogical practices [22]. As a result, they blame the children's environment for the manifestation of the symptoms [23].

A remarkable fact is how the research overview in the Greek literature fluctuates in low percentages. According to existing research, ruled that the cognitive background of Greek teachers is incomplete, as a result of which they argue that its symptoms will bring about future educational difficulties due to school failure.

However, a recent research showed that the implementation of the integration policy in the classroom contributed catalytically to the elimination of stereo-types, stigmatization and social exclusion of children [24]. Additionally, the educational training and specialization of the teachers is considered as a reinforcing factor [25].

Then, according to the columnist of the Journal of Editors [26], the modernization of the EA is ineffective and is not done in practice. At the same time, the operation of the current education system is under-functioning and specifically, the institution of parallel support is carried out in the context of part-time employment. Another key point is that integration classes are not implemented in all schools in Greece [26].

Additionally, according to a second article [27], it is emphasized that the creation of structures, such as the establishment of 538 TEs in primary and secondary schools during the 2016-2017 school year, although it offers educational support, creates a contradiction between the concept of integration and the establishment of more separate structures.

At the same time, based on the research of Lambropoulou & Panteliadou [28], it was decided that the social, cultural and economic level of each society plays a significant role in shaping inclusive education. The integration practice involves significant deficiencies at various levels, such as in the provision of logistical material, support structures and early intervention programs [28].

In contrast to the above positive actions, the difficulties faced by the institution of parallel support are mentioned due to the delay in the validation of the tables by ASEP [29]. In particular, since the approval of 5300 requests for parallel support, the number of teachers hired reaches 2300 [29]. Therefore, the insufficient staffing with specialized personnel reveals the need for educational modifications.

In conclusion, taking into account the literature review, the increasing preference for EA in Greece in the last decades is reflected. All the above black points are a significant obstacle for the effectiveness of the implementation of the integration policy for children with SEN. Below are the individual research questions that will be answered through this research study:

1) Is there an effect of the demographic characteristics of the Educators (Special and General education) on their opinions regarding the planning, implementation as well as the results of the application of techniques and activities that promote the social inclusion of children with ADHD?

2) Is the parallel support teacher in a cooperative relationship with the class teacher, with other specialties and with the parents, for the planning of techniques and activities that promote socialization?

3) What are the opinions of teachers (general and special education) regarding the implementation of techniques and activities that promote the socialization of students with ADHD in the general school context?

## 2. Research Methodology

## 2.1. Methods

Specifically, for the purposes of the study a quantitative method was employed, since it is a method emphasizing a quantitative description of the data.

#### 2.2. Sample

A total sample of one hundred and thirty-seven teachers participants were enrolled in the study working either in typical (72), or in special educational settings (65).

#### 2.3. Measures

The questionnaire that was employed for the purposes of the study, demonstrated good reliability (a = 0.856). The questionnaire includes 35 close-ended items. The items are divided to three subscales, assessing planning of techniques and activities to promote the socialization of students with ADHD, implementation of the employed activities and the effectiveness of the application of techniques and activities.

## 2.4. Analysis

For the data analysis, we used SPSS and SPSS AMOS.

## 3. Results

#### 3.1. Results of Descriptive Statistics—Demographics

Starting with the analysis of the aggregated data of the questionnaires, a reference is made to the demographic data accompanying this survey.

The sample of this research was 137 teachers, 65 of special education (47.4%) and 72 of general education (52.6%). The vast majority of participants were female at 83.2% (n = 114), while 16.1% were male (n = 22). Regarding their age, 40.9% (n = 56) were between 25 - 35 years old and are the largest age group in terms of percentage. They are followed by 38.7% (n = 56) from 36 - 45 years old, 12.4% (n = 17) under 25, while only 8% (n = 17) is the smallest percentage of the whole, who are 46 years of age or older. Regarding the marital status of the sample, 50.4% (n = 69) are married and 48.9% (n = 67) are single. Then, to the question of whether there is a person with ADHD in the family, the majority of teachers with 85.4% (n = 117) answered negatively "no", in contrast to the remaining 13.9% (n = 19) who gave positive answer "yes". With reference to the years of previous service in a SMEAE, 50.4% (n = 69), essentially half of the participants, have worked in a SMEAE 0 - 1 year, 19.7% (n = 27) 2 - 3 years, 7.3% (n= 10) 4 - 5 years and 21.9% (n = 30) over 6 years. Finally, regarding the previous experience of the participants with the institution of parallel support, the majority of teachers, a percentage of 67.9% (n = 93) have worked for 0 - 1 year. 16.8% (n = 23) have 2 - 3 years of experience, while there was also a smaller number of research participants, 5 teachers (3.6% of the total) who stated that they have 4 - 5 years. Finally, the remaining 9.5% (n = 13) have more than 6 years.

#### 3.2. Results of Research Questions

#### 3.2.1. Research Question 1

After the completion of the statistical analysis, the inductive analysis was followed in order to answer the research questions and the degree of reliability of the questionnaire. More explanatory, the first question concerns the presence or absence of an effect of the demographic characteristics of the Educators on their opinions, regarding the planning, implementation as well as the results of the application of techniques and activities that promote the social inclusion of children with ADHD.

Characteristically, to investigate the differences in the three scales according to gender, t-tests were applied in the case that the parametric assumptions were met and the corresponding non-parametric Mann-Whitney test in the case that the data did not follow the normal distribution. According to the results of the tests, no statistically significant difference was found in the "Design" section between men (M = 50.0, SD = 10.3) and women (M = 48.8, SD = 9.3), t(134) = 0.566, p = 0.572. Likewise, no statistically significant difference was found in the "Results" section between men (M = 28.2, SD = 5.6) and women (M = 28.2, SD = 4.6), t (134) = 0.014, p = 0.989. Finally, regarding the "Application" section, also, no significant difference was found between men and women, U = 1138, p = 0.493.

Then, to investigate the differences in the three scales depending on the age groups, ANOVA tests were applied, if the parametric assumptions were met, and the corresponding Kruskal-Wallis non-parametric test, if the data did not follow the normal distribution. Considering the results, no statistically significant difference was found in the "Planning" scale between the four age groups F(3, 133) = 0.80, p = 0.498. Furthermore, no statistically significant effect of age was observed on the "Results" scale F(3, 133) = 0.60, p = 0.619. Finally, the levels in the evaluation of the "Application" scale were similar for all four age groups H(3) = 0.84, p = 0.841.

Furthermore, based on the results of the t-test and Mann-Whitney tests for the differences in the 3 scales regarding marital status, no statistically significant difference was found in the "Planning" section between singles (M = 49.0, SD = 9.9) and married (M = 48.9, SD = 9.0), t(134) = 0.017, p = 0.986. Likewise, no statistically significant difference was found in the "Results" section for single (M = 28.9, SD = 4.5) and married (M = 27.5, SD = 4.6), t(134) = 1.710, p = 0.09. Finally, no significant difference was found between married and unmarried people, U = 2216.5, p = 0.679, for the "Application" section either.

In addition, regarding the results of the t-tests for the differences in the 3 scales regarding whether there is a person with ADHD in the family, no statistically significant difference was found in the "Planning" section between those who do not (M = 48.8, SD = 9.7) and those who have (M = 50.1, SD = 7.8),

t(134) = -0.534, p = 0.594. Similarly, no statistically significant difference was found in the "Application" section between those who do not have (M = 50.4, SD = 11.9) and those who have (M = 52.5, SD = 10.4) a person with ADHD in their family, t (134) = -0.727, p = 0.468. Finally, not even regarding the "Results" scale was a statistically significant difference found between those who do not have (M = 28.0, SD = 4.9) and those who have (M = 29.4, SD = 3.5), t(134) = -1.220, p = 0.130.

At the same time, the difference of the three scales of the questionnaire in terms of the participants' specialty was checked. According to the results of the t-test for the differences in the 3 scales in terms of specialization, no statistically significant difference was found in the "Design" section between the EAE teachers (M = 50.0, SD = 10.0) and the GE teachers (M = 48.0, SD = 8.8), t(134) = 1.239, p = 0.217. Likewise, no statistically significant difference was found in the evaluation of the "Implementation" scale between the S.E teachers (M = 50.4, SD = 12.2) and the GE teachers (M = 50.9, SD = 11.1), t(134) = -0.261, p = 0.794. Finally, not even regarding the "Results" scale was a statistically significant difference found between the SE teachers (M = 28.6, SD = 4.9) and the GE teachers M = 27.9, SD = 4.5), t(134) = 0.897, p = 0.371.

Also, with regard to the years of service in a SMEAE, no statistically significant difference was found in any of the three scales. Specifically, for the "Design" section it was found that F(3, 132) = 0.97, p = 0.407. Similarly, no statistically significant difference was observed in the rating of the "Implementation" scale since it was found that H(3) = 1.58, p = 0.664. From the analysis it emerged that no statistically significant differences are observed even in terms of "Results" H(3) = 4.52, p = 0.211.

Subsequently, regarding the years of previous service with the institution of parallel support for students with ADHD, no statistically significant difference was found in any of the three scales. In more detail, for the "Design" section it was found that H(2) = 2.40, p = 0.302. Similarly, no statistically significant difference was observed in the evaluation of the "Application" scale since it was found that F(2, 131) = 0.54, p = 0.582. Finally, not even with regard to the "Results" section was a statistically significant difference detected F(2, 131) = 0.29, p = 0.749.

#### 3.2.2. Research Question 2

Regarding the second research question, whether the parallel support teacher is in a cooperative relationship with the class teacher, with other specialties and with the parents, for the planning of techniques and activities to promote socialization, various findings were observed. More illustratively, regarding the question of whether teachers receive information from parents and siblings about the profile of students with ADHD, 35.8% answered "a lot" and 27.7% "quite a bit", 27.0% "very much", 8.8% "a little" and 0.7% "not at all", with a mean of 3.80 and a standard deviation of 0.96.

Additionally, regarding the question of whether there is information and co-

operation with the parents of the other children in the class, 31.4 % of the respondents stated that they cooperate "quite a bit", 29.9% "a little", 18.2% "not at all", 13.1% "a lot", while only 7.3% "very much", with a mean of 2.61 and a standard deviation of 1.15.

Additionally, regarding the question of the existence or non-existence of cooperation with the other educational staff of the school unit for the planning of techniques and activities, 31.4% answered "quite a bit", 29.9% "a lot" and 20, 4% "very much", 15.3% "a little", while only 2.9% answered "not at all", with a mean of 3.50 and a standard deviation of 1.07. Then, taking into account the question about the collaboration with the Director of the school unit in the planning of techniques and activities, 33.6% answered "quite a bit", 21.9% "a lot" and 19.0% "a little", 15.3% "not at all", while only 10.2% answered "very much", with a mean of 2.93 and a standard deviation of 1.20.

Likewise, regarding the question about the cooperation of teachers with the special support staff of the school, 34.3% answered "quite a bit" and 29.2% "a lot". However, it was recorded that 13.9% said "too much", while 13.1% said "a little", percentages that vary approximately to the same degree. Finally, 9.5% answered "not at all", with a mean of 3.25 and a standard deviation of 1.14. Also, regarding the question of whether teachers consult and collaborate with a speech therapist, occupational therapist, physiotherapist and/or psychologist, 32.8% answered "quite a bit" and 29.9% "a lot", while 19.7% "a little bit". 9.5% answered "not at all" and 8.0% "very much", with a mean of 3.07 and a standard deviation of 1.10.

At the same time, regarding the question of whether teachers consult and cooperate with school counselors, 29.2% answered "quite a bit", 28.5% "a little" and 19.7% "a lot". 16.8% answered "not at all" and 5.8% "very much", with a mean of 2.69 and a standard deviation of 1.14.

Similarly, for the question of whether teachers consult and collaborate with school SE counselors, 27.0% answered "quite a bit", 22.6% "a lot" and 21.2% "a little". However, it was recorded that 19.0% stated "not at all", while 10.2% "very much", with a mean of 2.84 and a standard deviation of 1.26.

Completing the second research question, regarding the question of whether teachers consult and collaborate with the managers of CES, 31.4% answered "a little", 25.5% "quite a bit" and 21.9% "not at all". Finally, 13.9% said "a lot", while 7.3% "very much", with a mean of 2.53 and a standard deviation of 1.19.

#### 3.2.3. Research Question 3

Then, with regard to the third research question on the opinions of teachers regarding the implementation of techniques and activities to promote the socialization of students with ADHD in the context of the general school, it was observed that the majority was positioned positively.

In more detail, about the question about whether they apply techniques and activities to promote socialization in the classroom, the majority of teachers 39.4% support that they apply them "a lot", 32.1% "enough", 17.5% "too much",

8 .8% "a little", while 2.2% "not at all" with a mean of 3.61 and a standard deviation of 0.95.

In addition, regarding the question about the implementation of activities during the break, equally high levels were observed, since 31.4% state that they implement them "quite a bit", 30.7% "a lot", 20.4% "very much", 12.4% "a little" and correspondingly, 5.1% "not at all" with a mean of 3.49 and a standard deviation of 1.11.

#### 3.3. Data Discussion

Summarizing, taking into account the results of the data analysis, it is legitimate to make a concluding discussion. More illustratively, regarding whether there is an effect of teachers' demographic characteristics on their views regarding planning, implementation as well as implementation outcomes, in general no effects appear to exist. In particular, the demographic factor of gender, age, family status, the existence of a person with ADHD in the family environment, the specialty of SE and GE, previous service in a community care center and in a parallel support institution, did not constitute a differentiating factor in any of the three scales.

Subsequently, it is worth mentioning that the teachers show a positive attitude towards the inclusion of students with ADHD in the General school and for the benefits of the parallel support they reap. Also, a positive opinion of the teachers was observed for the significant role of the socialization of the students through the institution of parallel support, since the majority claims that they apply techniques. Nevertheless, a statistical dichotomy was found among teachers regarding the existence of sufficient knowledge for teaching social skills, maintaining a neutral opinion.

At this point, it is worth mentioning one of the prominent questions of the work, which concerns the level of the cooperative relationship between the parallel support teacher with the classroom teacher, with other specialties and with parents, in order to plan techniques and activities. Characteristically, through the factorial analysis of the results, it was found that the level of cooperation between the teacher and the parental environment of students with ADHD is largely high. However, at the opposite of this positive attitude is the cooperative relationship of the teacher with the parents of the other children in the class, as a neutral to negative view was observed.

In addition, based on the findings, the high level of collaboration with other educational staff regarding planning is highlighted. At the same time, regarding the collaborative relationship with the manager, the findings are characterized as neutral, as a dichotomy of responses is found. It is worth pointing out that the above-mentioned finding has a degree of agreement with the existing research [30], as they argue that there is a broad low level of cooperation with school principals.

On the contrary, the findings are particularly positive for the degree of cooperation with the special support staff and with other specialties, such as for example speech therapists, occupational therapists, physical therapists, psychologists. On the contrary, it is the low level of cooperative interaction of the teacher with the school counselors of general and special education and in particular with those in charge of KESY, a fact that is inextricably linked to the existing findings [30] [31].

Additionally, regarding the opinions of the teachers regarding the application of techniques and activities, it is found that the majority chooses to apply them both in the context of the class and during the break. In addition, the teachers had a fairly high positive orientation regarding their cooperation with the classmates of children with ADHD when performing these activities.

At the same time, according to the statistical analysis, the participants apply to a greater percentage the technique of play, group games and the creation of a group of helpers-peers to promote socialization. Afterwards, the next teaching options are visual cues and musical-motor activities, so as to create the appropriate conditions for social interaction.

Therefore, taking into account the findings of the work in comparison with the findings of a related research [32] [33], the conclusion is drawn that there is a direct identification of them, regarding the positive attitude of teachers to-wards inclusive education through the institution of parallel support.

Then, regarding the opinions of the teachers regarding the results of the implementation, they are distinguished with a positive sign, as they argue that substantial inclusion is achieved. More explanatory, the participants respond positively to the participation of students with ADHD in all school life activities. Furthermore, they had an equally positive attitude towards their participation in group activities during the break.

At the same time, the image of the teachers regarding the acquisition of students' friends after the application of techniques and activities is judged at a high level, a fact that directly converges [34] [35] [36]. Therefore, it is concluded that the institution of parallel support works as an aid for their socialization, since it contributes to the development of friendly ties with their peers.

In addition, the main point of reference for this work was the opinions of the teachers on the reasons they consider to be making it difficult for the students to socialize. In more detail, the three dominant causal factors were the incomplete planning of educational policy in matters of socialization, the lack of appropriate teacher training and insufficient time for activities.

### 4. Epilogue-Conclusions

Therefore, concluding this specific work, it is right to highlight the conclusions drawn, as well as future proposals for the development of practical issues concerning the institution of parallel support.

According to the literature, the institution of parallel support for students with ADHD plays a catalytic role. Characteristically, it has been investigated how parallel support contributes to the inclusive education and socialization of students, since through their social interaction with typically developing peers, the creation of socially acceptable behaviors and interpersonal relationships is achieved. The previous point of view is certified by the present work both at the theoretical level through the literature review, and at the research level through the research analysis of the data.

The ultimate goal of this postgraduate thesis was the teachers' opinions on the institution of parallel support as a means of promoting the socialization of students with ADHD. To serve this objective, a quantitative research methodology was carried out using the questionnaire, where answers were given regarding the design, implementation and results of the application of socialization promotion techniques and activities.

Based on the analysis of the research data, it is concluded that the views of the teachers are particularly positive, as they confirm the value and importance of parallel support as a means of socialization. Nevertheless, the theoretical approach differs from the practical level, since it is found that there are inhibiting factors that make socialization difficult.

More explanatory, regarding the research questions, it was found that there was no effect of the demographic characteristics of the Educators on their opinions regarding all three scales of the questionnaire. Regarding the cooperative relationship of the parallel support teacher with the classroom teacher, with other specialties and with the parents, it was found that the level of cooperation with the parents and siblings of the students is very high, as well as with the other educational staff. However, it was observed that the level of cooperation with school counselors and in particular with those in charge of the KESY is low, is a black spot.

Regarding the opinions of the teachers regarding the application, it is concluded that the majority has a positive attitude, as they tend to apply them in the context of the school class and during the break. In addition, it was found that the technique of group play and the creation of a group of helpers-peers are decisive means of teaching social skills.

Additionally, regarding the opinions of the teachers regarding the implementation results, their positive orientation was found, as they believe that through the institution of parallel support, their essential integration is achieved, with participation in the activities of school life, in group games and mainly with gaining friendly ties.

With regard to the inhibiting factors of socialization difficulties, it was concluded that the incomplete planning of educational policy in socialization matters and the lack of appropriate training are important roadblocks of Greek Education.

Regarding the last research question, the factor analysis (EFA & CFA) was carried out, which did not confirm the three-factor model in the case of the effectiveness of the institution of parallel support in the socialization of students with ADHD, but created nine factors. However, it is legitimate to mention some limitations created in this research. For the collection of the data and the statistical analyzes aimed at answering the research questions, the questionnaire was used where it took place online. Therefore, there was the limitation of the number of the sample, where from the initial number of 160 it was reduced to 137 in total due to the circumstances. This resulted in the limited number and variety of responses received from the questionnaires and the difficulty of generalizing the results to the wider population. So, you suggest using a larger sample of teachers to have more valid results in future research works.

At the same time, it would be interesting and beneficial to modify this specific research, by applying the method of "triangulation", that is, the combination of quantitative and qualitative research for future results on this topic. In addition, it is worth promoting as a topic of future research a comparative study between ADHD students and students with ASD regarding the contribution of the institution of parallel support as a parameter of socialization.

Additionally, in terms of suggestions for further research, it would be reasonable to implement a corresponding future research with the same objective, but with a different sample of participants, such as Ge teachers with the inclusion of more children with ADHD in the school classroom through the institution of parallel support, or the children's parents themselves.

Also, it is worth pointing out that an interesting proposal would be to investigate the opinions of students with ADHD themselves, with the aim of their objective judgment on the effectiveness of the institution of parallel support regarding their socialization.

In addition, a future proposal could be the comparative study of the cognitive results provided in various SE training programs in matters of planning and implementation of activities and techniques.

In conclusion, it would be appropriate to conduct similar research in the future on students of undergraduate or postgraduate programs or on students of SE seminars, in order to draw safer conclusions and study further evidence. The above future proposal could be the springboard for the implementation of postgraduate educational programs specialized in social integration and interaction issues in SE in the Greek area.

# **5. Future Extensions**

Regarding the limitations and obstacles of the given work, it is fair to mention that due to conducting the research online by posting the questionnaire on a Web application-website and by placing a general request, it was not possible to achieve the exact supervision of each participant.

This research can be useful to many teachers or students and even to parents, it also constitutes an idea for a future research regarding the topic investigated in this one, that is, with the views of preschool teachers on the inclusion of children with Dissociation Attention Deficit Hyperactivity Disorder (ADHD) in kindergarten. But also with other alternative research proposals concerning children with ADHD and the difficulties or school bullying they may face. The future researcher could use it and collect more responses either from several regions of a country or collect from one city as many as he can.

Also, another proposal is for the participants to have the possibility to answer the demographic data, in which region they work, study or are located, in order to have a generalization in which region the largest percentage of the sample is located. In addition, in order to do such a research, the researcher should allocate enough time, not only to compile the results, but to inform and accept such a large sample to be able to collect his questionnaires.

Also, one last suggestion is that the researcher who wants to use the specific research in a different way should, instead of addressing teachers, address undergraduate or postgraduate students who have taught or who will be doing internships. This specific idea could be implemented with a questionnaire as well as with interviews.

# **Conflicts of Interest**

The author declares no conflicts of interest.

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