

Case Study

Psychosocial intervention program on emotional skills of an ADHD child: A case study

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The purpose of this study was to examine the effect of a psychosocial intervention program on the social and emotional skills of a seven year old child with Attention Deficit Hyperactivity Disorder (ADHD) syndrome. Prior to the intervention program, the child's adjustment was assessed using the 'Questionnaire Interpersonal and Intra-personal Adjustment'. The boy, hereafter referred to as N., was aggressive and presented intense negativity feelings against any activity used to describe his relations between himself and his environment. N. had participated in a psychosocial intervention program for four months and afterwards he has displayed significantly different behavior, reduced aggression and increased teamwork. These changes were confirmed by his teacher, mother and special educator who all completed the questionnaire a second time and validated its results.

Key words: aggressive and negative behavior, ADHD, social and emotional skills

INTRODUCTION

Preschool and primary school ages are important developmental periods for any growing person. The formed period is particularly difficult, in the case of infants who present either developmental or behavioral disorders or they belong in groups highly risky of revealing such difficulties. Nevertheless, it's a typical and fertile period for effective interventions. Researchers support that interventions on children with psychosocial difficulties must be modified depending on the type of needs, the nature of the difficulties and the specific characteristics of the child and his family (Beail, 2000; Brown et al., 2007; Drotar, 2006).

It is generally accepted that students who have behavioral problems, encounter difficulties and often fail in their academic path (Mooney et al., 2005). The common reference point in most definitions, proposed so far, is the presence of unacceptable behavior, which creates problems both on the child's individual and social environment. The term problematic behaviors refers to the actions and attitudes of the child, which do not match

their age and are associated with strong defiant, antisocial and aggressive behavioral standards or patterns towards others namely their peers, parents, teachers, etc (Burke et al., 2002; Frick, 1998; Hinshaw and Anderson, 1996; Mash and Wolfe, 2001). A result of the aforesaid behavioral types is the difficulty in interpersonal and social relations (Carr, 1999) with consequent severe child adjustment difficulties at all grades of education (Fraser and Williams, 2004; Kourkoutas, 2007).

The behavior of primary school age children acquires a variety of types of expression. At this age, relationships with peers play an important role and are key factors of socialization, providing learning opportunities and interaction even through play (Kourtoglou, 2009).

The purpose of this study is to support the development of intervention programs which exhibit the aforementioned basic characteristics, in such a way, that these programs might not have negative effects on the child's relationship with himself and the others.

The necessity of this research resides in the fact that pre-school and early school age constitute crucial periods for the development of skills and the provision of support towards the emotional situation of children. This

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emotional condition is demonstrated to a high degree through their perception of themselves and their self-respect (Gallahue and Ozmun, 1998; Piek, 2000). In addition, there is limited research activity in Greek literature, regarding intervention programs of socio-emotional form and assessing the support of such programs on the development of psychosocial characteristics of the students of primary and pre-school age.

The hypothesis of this study was that a psychosocial intervention program which encourages teamwork, good cooperation, self-activity, growing self-confidence and self-esteem could support a child with psychosocial difficulties.

METHODS

Sample

The present paper is a case study. N. is a student in the first grade of primary school in the prefecture of Rethymnon (Crete, Greece). He is the first of two children of a four-member family and is 7 years old. He, also, has a younger sister. The economic situation and the socio-educational level of the family are pretty good. N.'s kindergarten teacher reported that the child had difficulty adjusting to the school environment while he could not join in team play. He was aggressive not only towards his peers, but also towards her. His behavior had also been characterized by intense negativity towards any activity in the kindergarten. She also referred to the lack of limits on the child. The teacher of the first grade of primary school commented on the child's behavior, from September to October, when the special educator came to school. She claimed that the child had attention deficit, because he could not concentrate for a long time in classroom activities. He seemed to have intense negativity, while becoming aggressive towards his classmates both during the course, and during the break.

According to the special educator's observations of the child, both in the classroom environment, and at break time, N. presented intense negativity, lack of communication and regular tendency to flee from the classroom, probably due to feelings of cancellation and a lack of confidence and self-esteem. Also, he had no knowledge of basic emotions and could not manage them. In cases of tension with peers he exhibited temper tantrums, accompanied by aggressive behavior such as physical and verbal abuse against other students.

According to the State Diagnostic Operator diagnosis N. presented Attention Deficit – Hyperactivity Disorder (ADHD) accompanied by adversative and provocative behavior. He had no problem in fine and gross motor skills and regarding his cognitive development, he belongs to the upper normal level compared to children of the same chronological age. Also, concerning the

assessment of his ability of observation and concentration he presented attention deficit. N. had emotional immaturity, because he gave the impression that he did not know the basic emotions. As a result, he did not have the ability to manage and decode social behaviors, according to rules of the social environment. So, N. had no problems in the cognitive development but only in psychosocial and emotional skills. Consequently, it was supposed that an individual intervention program emphasizing the development of emotional and social skills, could develop N.'s confidence, self-esteem and positive emotions, in order to deal with the consequences of such adversative and provocative behavior.

Procedure and intervention program

For this study, the research team had collected all information on the child, such as the personal and family history, diagnosis of the state diagnostic operator, teacher observations, possible cooperation with parents etc. Afterwards, teachers and parents, completed a questionnaire assessing the intrapersonal and interpersonal adaptation (Paraskevopoulos and Paraskevopoulos, 2011), so as to assess the child's difficulties.

The intervention program was based on the theory that every child develops his individual characteristics on its own time (Gallahue and Ozmun, 1998). It was a personalized program designed to take place twice per week for four months, modified depending on the type of needs, the nature of the difficulties and the specific characteristics of the child and his family (Beail, 2000; Brown et al., 2007; Drotar, 2006). The intervention program was scheduled to offer information for emotions and amending negative emotions, especially anger, denial, anxiety and generally addressing characteristics of oppositional-provocative behavior. Some important parameters included in the program were the setting of limits, the development of self-confidence and self-esteem. In addition, the intervention emphasized the development of elements of cooperation and teamwork. It included activities which were conducted through art education namely paintings, literature for instance, reading fairy tales, conversations and the written speech, as well as music-motor games, in which all children in the class participated.

Barbas (2008) cites Schalock's view (2004) on identifying eight key elements of quality of life: interpersonal relationships, social inclusion, personal development, natural prosperity, self-determination, material prosperity, emotional prosperity, rights. The intervention program was, consequently, based on these eight elements as well as on the questionnaire data. The pedagogical techniques included in developing the program were the usage of music, art, psychomotor education, interdisciplinary activities etc. All these

Table 1. Indicative program of activities that took place within four months intervention program.

Activities of the Intervention program on emotion skills of an ADHD case study	
WEEK	ACTIVITIES
1 st	<p>i. Fingers: a) joy and sadness In this activity a happy and a sad face were painted in the index and middle finger of the hand respectively. Then a discussion followed on the feelings of joy and sadness, where N. had to choose the appropriate finger-face depending on the examples of behavior that the Special Education teacher was presenting to him.</p> <p>ii. Fingers: b) anger and fear etc.</p>
2 nd	<p>i. What do I do when I get angry- what else can I do when I get angry! In this activity N. had to consider what actions should he do when he gets angry and record them under a painted angry emoticon.</p> <p>ii. If happiness, sadness, anger, fear were colors, what colors would they be? In this activity N. was given the opportunity to think and choose only the colors that would fit with the feelings of joy, sadness, anger and fear. After choosing colors, he designed smiles on the paper and went on to painting them.</p>
3 rd	<p>i. Painting a traffic light: a) green: permissive attitudes, b) red: non-permissive attitudes. A discussion followed on the permissible and non-permissible conduct.</p>
4 th	<p>i. Words that make me happy. N. should think and record words or phrases that made him feel happy (Walks, jokes, smile, mom, my friends, etc.).</p> <p>ii. What makes me really happy – Painting.</p>
5 th	<p>i. Description of his favorite game and debate around it.</p> <p>ii. What is your favorite animated series project? - Discussion.</p>
6 th	<p>i. Reading fairy tale about friendship. In this activity N. and G., a girl attending the inclusion class also participated. Both of them seemed excited during the reading of the story, while they also observed and described the book's pictures. Following, a discussion with questions such as: "Who are your friends?", "What games do you play with your friends?", "Why do we usually fight with our friends?". In the end, an activity with a balloon took place. The children had to blow their anger into the balloon. Then they should let the balloon go away. In that way the feeling of anger would disappear with the air of the balloon. Both of them were very excited with this game.</p> <p>ii. Construction of the tree of friendship. In this activity N. painted and cut the trunk of the tree and the support teacher painted the leaves and branches. N. stuck the draft on a white cardboard and to form a tree. It was called "The tree of friendship", because N. would write on the leaves the names of his friends. Even after two months he was dealing daily with the tree of friendship by adding or removing friends. A name- removing means that there was controversy but after discussion the leaf was put on the tree again.</p>

techniques took place individually or in groups, depending on the needs of the student involved in this case study. The sample of the program is cited in Table 1.

Tool for assessing psychosocial skills

The intrapersonal and interpersonal adaptation of N. was assessed using the 'Questionnaire Interpersonal and

Intra-personal Adjustment' (Paraskevopoulos and Giannitsas, 1999), before and after the intervention program. The aforementioned questionnaire is a list of 110 different types of child behavior, used very often in the evolutionary history of children who are to attend psychological support programs. Such behaviors are considered undesirable and are known in evolutionary psychopathology as symptoms of problematic behavior.

These types of behavior are part of the adjustment of the individual which has two sides; the intrapersonal one

which describes the relation of the individual with himself, and the interpersonal, which describes the relationship of the individual with others. Among the symptoms described in the questionnaire, there are three syndromes of 'intrapersonal adjustment': a) 'anxiety - compulsion', b) 'loneliness - bradipsichism, c) 'psychosomatic disorders'. There are also two syndromes of interpersonal adaptation': a) 'aggressiveness', b) 'delinquency'. Finally, 14 other symptoms have also been included and they cannot be classified into one of the above syndromes or any other distinct syndrome and they refer to important aspects of behavior, such as hyperactivity and attention deficit, self- image, problems identifying the role of gender, lack of movement coordination, etc. These are referred to as 'different - unclassified' symptoms of the questionnaire (Paraskevopoulos and Giannitsas, 1999). This questionnaire has been conducted based on the "Revised Behavior Problem Checklist" proposed by H. C. Quay & DR Peterson, and it has been adapted to the Greek standards. Examples of behaviors that belong to personal adjustment are symptoms reported as: "They act as bullies; constantly making threats", "talking back; they are full of objections; full of contradiction", "irritable, touchy," etc. Examples of behaviors that belong to intrapersonal adjustment are symptoms reported as: "they care only about themselves; they do not feel comfortable; they constantly feel embarrassed", "they have no friends; they prefer playing alone," "Coward, timid".

According to Papanis et al. (2009) that questionnaire could be used for describing problematic behavior of children of all ages between infancy and adolescence. It can be completed by the child's parents or teacher. It is also possible to be used as a self-assessment form of evaluation for older children who are able to understand what they read. After informing the researchers, the questionnaire was filled by the teacher of the parallel support, the teacher of the class and by the mother, prior to the start and after the completion of the intervention program. Therefore, the objectivity of measurements was tested (using the different examiners), as well as the internal validity of the questionnaire (Thomas and Nelson, 2003). In order to validate its objectivity, an agreement greater than 80% between teacher and parent (Thomas and Nelson, 2003), was found.

RESULTS AND REMARKS

After completing the program, the teachers and the mother took the questionnaire again. An over 80% agreement was observed in the re- evaluation of the intrapersonal and interpersonal adjustment of N. According to the mother's assessment, N. showed a significant change regarding 'aggressiveness' and 'delinquency' ('interpersonal adjustment'), as well as 'intrapersonal adjustment', 'anxiety - compulsion'.

Furthermore, there was a significant change in the 'unclassified' factor of 'hyperactivity'. Results showed that N. had a total score of 22 out of 21 out of 22 points in the initial measurement while in the re- evaluation he received 12/21 with regard to delinquency, he received 12/20 in the initial measurement and 1/20 at revaluation (appendix). Respective significant differences emerged from the questionnaires filled by the teachers (both the class and parallel support), which showed over 80% agreement compared to re- evaluation results.

Additionally, observations from teachers and the mother were recorded: the teacher observed many differences in N.'s behavior since the beginning of the school year. At first N. was particularly anxious and almost every time he reacted to external sensory stimuli, which resulted to difficulties in conducting the course. He had difficulties sitting in the chair and was constantly getting up and twirling, while making strange facial expressions; this resulted in his being the subject of laughs from the other children, who made fun of him. Such an attitude outraged him and he exhibited aggressive behavior (verbal and physical) towards his classmates. These incidents obstructed the teaching procedure as a considerable amount of time was dedicated to keeping the order in the class. In order to maintain peace and balance inside the class, the teacher took him out of the classroom and then notified the principal.

However, the teacher supported that after the intervention program he showed signs of improvement. The use of the intervention program by the parallel support teacher had showed beneficial results in N.'s behavior and the basis for a smooth run of the course was set. Initially, there was a significant decrease in the student's anger explosion incidents, while he stopped getting up. After the beginning of the program the teacher started to reward N. for his behavior and in coordination with the special educator, she was creating a climate of cooperation between N. and his classmates.

Until the beginning of the emotions management intervention program, N. was not able to recognize and understand neither his own nor the other children or teachers' feelings. Thus, he presented antisocial and delinquent behavior, with great refusal to conduct work and teamwork. Activities involved in the intervention program helped N to comprehend the basic emotions of joy, sorrow, anger and fear. Noticeably, after some time, he was able to use by himself the anger and sadness emoticons when he was in an anger or sadness burst state, respectively. Moreover, when he was showing the emoticon, he also expressed verbally and the things what worried him. So by the end of the year, the teacher reported that the child showed significant progress in his social relationships and had significantly reduced outbursts and aggressive behavior tendencies towards other children.

This observation was also made by the parents of other

children since many of them admitted that their children were no longer complaining about the behavior of N. On the contrary, they seemed excited watching their children play and converse in a positive climate.

N.'s mother, was unable to control the child at the beginning of the school year. She claimed that the rage outbursts were also frequent at home. Also she was in conflict with N. almost daily, due to the lack of interest from the child's side to go to school. However, during the intervention program, she noticed that rage outbursts were significantly decreased while the child was externalizing his feelings and was willing to communicate verbally with his mother. N was also using emoticons at home and thereby externalized his feelings.

Conclusions

The importance of the results of intervention is that the psychosocial intervention program appears to have had a significant impact in N.'s behavior and feelings. N. now feels more invigorated, to participate in the cognitive fields of his class and also in working groups. He seems happy participating in these activities and he has been looking forward to repeating them. So, the program supported the communication skills of N. and also helped teachers to integrate him into the class group and not isolate him. Researchers valued greatly the importance of the good cooperation between the implementer of the intervention program, the parallel support teacher, the teacher of the class and the mother. Conclusively, the good cooperation between the special educator, the class teacher, the director, the other teachers, the mother and the child, contributed to the successful completion of the psychosocial intervention program and proved to have beneficial effects on the student's socio-emotional development.

The aforesaid conclusions are in agreement with other psychosocial and emotional intervention programs on students with special needs (7- 10 years old) (Alexandri and Kourkoutas, 2014). In another study, thirty students with social- emotional difficulties participated in a program including several activities which aimed to address their communication development: the aim was to develop activities not only for the understanding and management of emotions but also for being able to express these emotions.

The results of the study showed a significant correlation between the program and the development of behavior and 92% of the experimental group displayed positive attitudes to dispute resolution (Alexandri and Kourkoutas, 2014).

In the future, it would be useful if similar intervention programs could be conducted in larger samples of children. Furthermore, it would be useful if follow up measures could take place in similar cases after a period of time and after the conclusion of the intervention

program, in order for the maintenance of the behavior's diversity to be observed.

In conclusion, it is considered useful for teachers to be trained in psychosocial skills, as well as self-esteem and strengthening the positive aspects of a child's personality programs. Therefore, teachers can apply them in the classroom and integrate children, who have behavioral adjustment difficulties, in the educational reality. Students may experience the joy of change and gain an optimistic view of the future, which is particularly valuable for them (Herbert, 1998). Moreover, it is important that through such programs, the positive behavior of children is reinforced and disciplinary actions from their environment (parents, teachers, etc.) are reduced (Cunnigham, 1990).

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