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SOCIAL SKILLS DEVELOPMENT FOR THE INTEGRATION OF PRESCHOOLERS WITH ASD IN MAINSTREAM EDUCATION

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Abstract:
With each passing year, it is found that there is a growing need for methods and strategies to make education more efficient, methods that correspond to the particularities and developmental needs of children. A special category that requires a varied and distinct approach is preschoolers with ASD; they often find it harder to adapt to the structured environment of the kindergarten, and they fail to communicate effectively or make friends as easily as their peers of the same age. They may also find it difficult to interpret what others are thinking and feeling, and to recognize their own emotions. As a result of these deficits, emotional problems such as anxiety and stress can appear, which often lead to unwanted behaviors (tantrums, meltdowns). The aim of this research was to develop and implement a personalized intervention program in order to improve social skills to facilitate the successful integration of preschoolers with ASD in mainstream education. After calculating the size of the effect to demonstrate the effectiveness of the proposed personalized intervention program, an r=.91 for social reciprocity and an r=.90 for social interaction were obtained, which means that the personalized intervention program had a strong effect.

Keywords: integration, mainstream education, personalized interventional program, preschoolers with ASD, social skills

1. Introduction

Currently, after a lot of research, Autism Spectrum Disorder (ASD) is described by a series of deficits, such as: communicative dysfunctions of receptive and expressive

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language and social skills, with an inability to express reciprocity and attachment, difficulties in establishing and maintaining visual contact and joint attention, stereotyped and repetitive play, poor stereotyped behavior in activities and interests, hyper- or hyposensitivity to stimuli, rigidity in thinking, deficits in the development of socio-emotional skills, especially the skills of metarepresentation and many others (Crișan, 2021, pp. 14-15).

Also, these features are also found in DSM-5 (APA, 2013):

- the existence of significant deficits in the sphere of mutual social communication and social interactions (diagnostic Criterion A),
- the existence of restrictive and repetitive behavioral patterns, interests or activities (Criterion B).
- the symptomatological dyad presented must be noticeable during early childhood, significantly affecting the individual's adaptation to social norms and implicitly day-to-day functioning (Criterion C and D).

From the perspective of the first criterion, it is trying to trace potential deficits in the sphere of interaction and social communication in various contexts, including here the difficulties in the manifestation of social-emotional reciprocity behaviors, nonverbal communication and the development, maintenance and understanding of relationships (Kronke *et al*., 2016).

According to Siegel (2010), the fundamental problem of social communication difficulties is determined by the very lack of understanding of the meaning of social interaction, behavior that involves a two-way communication, by giving and receiving social messages. Children also have difficulties in analyzing information from the upper part of the face, for some, even looking into the eyes can trigger a state of strong or even unbearable emotion (Costescu & Blaga, 2021). Because of the limited range of facial expressions, people with ASD experience difficulties in encoding and adequately integrating their own emotions and those of their social partners into the content of a dialogue (Siegel, 2010). A person with ASD has limited resources in initiating, maintaining or ending a dialogue as well as making authentic friendships, which affects their social participation, making them vulnerable and anxious (Kawachi & Berkman, 2001).

Preschoolers with ASD "*survive in the environment, controlling events with difficulty, adapting with difficulty and clinging as best they can to sensations that offer them some security, sensations that have become stereotyped over time*" (Mureşan, 2007, p. 51).

The second defining criterion of ASD is the behavioral patterns, interests and repetitive restricted activities. This criterion includes a wide range of behaviors, including constant repetition, invariant rigidity and resistance to change (Turner, 1997).

Preschoolers resort to a series of stereotyped and repetitive manifestations (swinging of the trunk back and forth or left-right, walking on tiptoes, hopping, rotational movements around the axis, waving hands, fingers or objects in front of the eyes, following lines of on the ceiling of the room or on the walls of the room) with the role of self-stimulation, reduction of brain activity and avoidance of overload (Crişan, 2014).

Also, it was noticed a persistent preoccupation with certain parts of the objects or with the accessories of the people they come into contact with, and a occurance of strong emotional reactions in case of changes in their rituals (anxiety, extreme agitation, laughing out loud, screaming or (self) aggressive behaviors) (Gal & Yirmiya, 2021).

When children reach kindergarten, around the age of 2-3, children with ASD exhibit some inappropriate behaviors. Being in a totally unfamiliar environment, they can become agitated or even aggressive (hit, bite or snap at the people around them). Other times they might look for a place in the group room where they sit isolated, or on the contrary, start throwing the objects, the toys around them. Most of the time, they fail to express their thoughts, emotions, or needs either because they are non-verbal or because they have poorly developed language. To express their wishes, some children resort to taking the educator's hand and pointing at them with their finger or with their eyes. When they have health problems, they become apathetic, sleepy, and whiny.

Additionally, many of them ignore the kindergarten meals. They prefer only certain foods and even refuse to eat altogether when it does not meet their preferences. Some do not want to sit at the table and eat from their feet, run around the group room, spin, wave their hands, etc. If the adult tries to get them to sit on the chair, they oppose, cry or refuse the food.

In the group activities organized by the educator, preschoolers with ASD find it difficult to accommodate themselves (they do not have the patience to sit in a semicircle, and they do not collaborate in carrying out tasks). They refuse the proposed individual tasks and tend to retreat to a corner of the group where they seek safety and show some restrictive and repetitive behaviors (imitate various sounds, sniff some toys or objects, spin the wheels of cars, etc.). Moreover, taking into consideration the fact that many preschoolers with ASD are disturbed or frightened by loud sounds or music, it is indicated that the educator pay more attention to the organization of musical activities.

All these characteristics highlight the need for a holistic and personalized approach to preschoolers with ASD. Although there are many areas of development in which it is necessary to support these children, the area of social skills is a priority one as it has direct consequences on the child's integration into the school community, building relationships, well-being and their development as a future adult.

2. Theoretical Framework

2.1. Social Skills in Preschoolers with ASD

O'Malley (1977) defines social competence as productive and mutually satisfying interactions between a child and his peers/adults; productive interactions achieve the child's personal goals whether they are set immediately or in the long term that are adaptive to the academic context, and the interactions will be satisfying to the child when the goals are achieved and to others if the actions in achieving them are received either in a benign manner, either in a positive way (p. 29).

Also, the researcher emphasizes the following three reasons for the need for early study of social skills:

1) Social or interpersonal skills are necessary for active participation in society.
2) They are associated with academic success.
3) They are composed of essential interdependent behaviors.

Moreover, according to Orpinas (2010, p.1923), social competence refers to: "*understanding in harmony with others, forming and maintaining close relationships and being responsible in adaptive ways in social environments*".

Most preschoolers with ASD show deficits in the nonverbal behavior necessary for social interaction. They find it difficult to develop social relationships with their peers, showing limitations in sharing the interests, successes and pleasures of others and showing deficient socio-emotional behaviors (Hall, 2009; Thompson, 2007). One of the most significant deficits of preschoolers with ASD are social skills such as initiating and responding to conversation, changing routines, understanding how other people can feel, think and respond appropriately in a social situation, skills that often prevent effective relationships with peers and those in their environment (Cotugno, 2009; Reichow & Volkmar, 2010; Schneider & Goldstein, 2010).

As can be seen from the information presented and from the immediate reality, children with autism spectrum disorders develop many more social skills that allow understanding of rules, social requirements and group norms.

Social skills play a very important role in teaching a child how to behave in different situations, from how to hold a conversation to how to play with friends at kindergarten/school. They can help a child make friends, learn from them, develop new interests or hobbies and structure family relationships.

According to Matei (2020), some of the social skills needed by preschoolers with ASD are the following:

- *play skills* – for example, sharing toys, negotiating with other children, turn-taking, understanding the rules of a game;
- *conversation skills* – choosing a topic of conversation, maintaining the conversation, interest in obtaining information from the conversation partner, posture or non-verbal language during the conversation;
- *emotional skills* – understanding the emotions of others, expressing one's own emotions appropriately, managing emotions in difficult situations;
- *problem-solving skills* – such as decision-making or conflict management.

2.2. Psycho-educational Methods of Developing Social Skills in Preschoolers with ASD

Preschoolers with autism spectrum disorder are slower to develop those social skills that allow them to understand rules, social demands and group norms. Addressing this problem is a challenge in educating them and integrating them into mainstream kindergartens; however, according to review literature, there are effective strategies by

which we can teach children to make friends and have a positive social life. Below, we describe some of them.

2.2.1. Social Stories

Social stories or scenarios can take different forms and have different content, from the simplest, based on images, to the more complex written ones. These can be extremely useful in explaining social rules and behaviors: how we can play with others, why it is good to make eye contact, what to do when someone needs help, what personal space, hygiene or safety means.

Social stories were first developed by researcher Gray in 1991 with the aim of developing social skills in children with ASD. Social stories are short stories that explain certain indicators and provide appropriate responses for certain meaningful situations in a social context (Gray, 2002).

In this context, social stories play an important role for children with ASD in terms of a better understanding of social situations and the acquisition of an increased level of independence (Heward, 2013; Schneider & Goldstein, 2010). Compared to therapeutic stories and children's literature, social stories are shorter and are used to instruct and emphasize the child's perspective, being written in the first person (Gray, 2000).

Social stories can be used to:

- shaping/self-regulating behavior (eg., what to do when you are angry, how to deal with obsessions);
- to help a person cope with unexpected changes in the daily routine (for example, absence of the teacher, moving of personal things, weather factors);
- developing social skills (eg. sharing an event, asking for help, saying thanks);
- helping to understand how others might behave or respond in a given situation;
- to help understand the perspective of a child with ASD and why they may react or behave in a certain way;
- giving positive feedback to a child with ASD about a strong skill or achievement to develop self-esteem (Gray, 2015).

2.2.2. Group Games

While preschoolers with ASD naturally differ from one to another, as a group, they face similar obstacles when it comes to play. Children with autism present distinct challenges in both social and representational play, challenges deeply related to core features of the disorder. As first presented in the seminal research of Wing & Gould (1979 as cited in Wolfberg *et al*., 2012), the hallmarks of this neurological condition include a 'triad of impairments' in social interaction, communication, and imagination.

Developmental delays and differences in the capacities underlying joint attention, imitation, and social reciprocity are all closely related to an emerging ability to play. In stark contrast to the diversity of social and imaginative activities of typical children, the play of children with ASD is characterized by restrictive, repetitive, and stereotyped

patterns of behavior, interests, and activities, which they often pursue in isolation (American Psychiatric Association, 2013).

Preschoolers with ASD present unique profiles that manifest themselves through spontaneous involvement in some activities, playing with certain toys, or approaching certain subjects. Their game often becomes fixed. Many of them show preoccupations ranging from fascination with some objects to an intense concentration on certain subjects. Their involvement in these types of activities often seems aimless, with preschoolers repeating the same activities without variation (Wolfberg *et al*., 2012).

Some research suggests that children with autism show specific deficits in spontaneous symbolic play that may extend to functional play (Jarrold, 2003; Williams, 2003). Compared to children of a similar maturational age, manipulative play has been found to occur in a much higher proportion than functional or symbolic play in children with autism (Dominguez *et al*., 2006; Libby *et al*. 1998).

Wolfberg *et al*. (2012) present integrated playgroups as an effective way to develop the play capabilities of children with ASD. They were designed to provide children with sufficient and contextually relevant support for social and imaginative play. These focus on engaging individuals with autism spectrum disorder in culturally valuable activities (play) through the guidance, support and challenge provided by companions of varying ability and status. Groups consist of three to five children with a higher ratio of expert players to novice players. Beginner players include children with autism spectrum disorder. Expert players include typical peers and siblings who demonstrate good social, communication, and play skills and who express a willingness to participate. The program lasts a minimum of twelve weeks, during which groups meet twice a week for thirty to sixty-minute play sessions. These activities foster the development of awareness, understanding and empathy of people with ASD, as well as how they play, relate, communicate, think and learn.

Play skills can be practiced using various methods, such as the child's favorite toys or other attractive toys, to create some scenarios. Toy sets can be used for this purpose: farm animals, airport, train station, car trip, etc.

In the kindergarten, a practical way is board games, with several players. With their help, you can practice very important skills such as waiting for your turn, accepting "win-lost" situations, following the rules of the game, and creating new rules. Also, through these, preschoolers can more easily acquire turn-taking skills and can practice their language using some specific expressions ("Now I follow", "You follow", etc.). Preschoolers may be attracted to games that require movement (first mover, twist, car race, hide and seek, etc.).

2.2.3. Routines

Routines are important both in creating a sense of security and in developing social skills such as cooperation or managing emotions. They make the world seem more predictable in the child's eyes, giving him a sense of control. When some actions are carried out in the same order, day after day, the child can anticipate what follows and feels less stress

and anxiety. For example, he knows that his mother will come to pick him up from kindergarten after lunch, or he knows that he has to go to bed after a story is read to him. At the same time, routines allow a child to develop autonomy, making the adult's work easier, as they provide guidance to the child on the activities he must perform (he knows that before eating, he must go and wash his hands). In time, the child will come to do these things on his own, without needing to be reminded. Although it may seem easy for typical children, routine behaviors are much more difficult for children with ASD. In their case, routines are all the more important as they help them organize themselves and perform some tasks independently. Thus, they develop confidence in their own strength, have a sense of well-being and may be more willing to collaborate with others.

In the kindergarten, routines are an integral part of the daily schedule and can be used in the socialization of children. When they wait their turn to go to the bathroom, when they ask for help to dress/undress, or perform any other routine, they are developing important social skills.

To be effective, a routine must be:

- *Constant*. It should not vary according to the mood of the adult or the child. As far as possible, the routine should be followed in the same order every day. Thus, the child with will end up adopting it and clinging to it.
- *Flexible*. However, the routine should not be too rigid. There may be some variation in the daily routine. For example, during the week, children have to get dressed after waking up, but on weekends, they can stay longer in their pajamas. When exceptions are made to the routine, it is important for the child to explain that it is an exception and to specify the moment when things return to normal.
- *Simple*. The routine must be adapted to the child's age. For the very little ones, there shouldn't be too many steps to take. The simpler the routine, the easier the child will apply it,
- *Pleasant*. The more enjoyable the routine, the more willing the child will be to follow it. For example, mealtime can be expected if it includes some form of play (a food count, riddles, etc.) or if any other child-pleasant aspects are included. He can be rewarded with a special activity if he manages to finish a routine on time (Pelletier, 2022).

2.2.4. Lego Play

Lego-based therapy is a form of mixed natural developmental behavioral intervention that was designed based on the natural interest of children, especially those with ASD, for building (Baron-Cohen *et al*., 2014; Bianco, 2009; LeGoff, 2004).

Lego-Based Therapy is designed to maximize preschoolers' learning motivation by incorporating social interaction into Lego building activities (LeGoff, 2004). Many children, including children with ASD, are interested in Lego play because of its highly structured, predictable, and systematic nature, resulting in natural positive reinforcement, for example, completing a model (LeGoff & Sherman, 2006).

In the study conducted by Pang (2010), Lego play carried out together with other children, contributed significantly to the increase of joint attention, the disposition to share materials and negotiate with colleagues, the use of simple words in communication ("Please give me this", "This piece fits"), but also to increasing interest in joint activities. Also, Hu and colleagues (2018) conducted a study on 16 preschoolers, of which 3 preschoolers were diagnosed with high-functioning ASD, to investigate the effects of LEGO-based therapy in an inclusive kindergarten. The intervention consisted of LEGO building activities embedded with peer-mediated strategies for one child with ASD and two typically developing peers. The results highlighted the adequacy of the social validity of the intervention, and all three children with ASD increased their social reciprocity.

Narzisi *et al*. (2021) conducted a meta-analysis that included 19 studies whose purpose was to examine the effectiveness of LeGoff's Lego-based therapy. The advantages of using this type of intervention for preschoolers are: significant improvements in social skills (Lindsay *et al*., 2017; MacCormack *et al*., 2015) and the development of collaborative behavior (Huskens *et al*., 2015).

The aim of this research is to develop and implement a personalized intervention program in order to develop the social skills of preschoolers with ASD, necessary for their successful integration into mainstream education.

The hypothesis from which we started in carrying out this research is:

Hypothesis: The personalized intervention program "We play together" will significantly contribute to the development of social skills of preschoolers with ASD.

3. Material and Methods

3.1. Research Design

The present research has an experimental design, being carried out over a period of 5 months, between December and April 2023.

In the *pre-experimental phase*, the objective was to assess and establish the level of social skills development of the involved preschoolers, results which served as the basis for implementing a personalized intervention program. Formal ethics approval was not required for this study, as it involved non-invasive educational observation conducted within the framework of regular kindergarten activities. The research complied with the ethical standards outlined in the Declaration of Helsinki. Informed written consent was obtained from the parents of all participating children. Participation was voluntary, and confidentiality and anonymity were ensured throughout the study.

In the *experimental phase*, the activities included in the personalized intervention plan were implemented. These took the form of games or group activities aimed at developing social skills to facilitate the preschoolers' integration into kindergarten.

In the *post-experimental phase*, the observation grid was reapplied in order to identify the level of social skills achieved by the preschoolers. These data were later

compared with those obtained in the pre-experimental stage to determine the effectiveness level of the proposed personalized intervention plan.

3.2. Participants

The participants of this study were 5 preschoolers diagnosed with autism spectrum disorder, aged between 6 years and 8 months - 7 years and 6 months, preschoolers who attend a center in Sighetu-Marmatiei, Romania, for ABA therapy and are enrolled in various mainstream preschool education institutions. Out of the total of 5 participants, 4 are boys and 1 is a girl.

3.3. Measures

3.3.1. The Autism Social Skills Profile (ASSP, Bellini, 2007)

The Autism Social Skills Profile (ASSP) was developed by Dr. Scott Bellini based on research in psychology and behavior analysis to identify specific deficits in the area of social skills in children and adolescents with ASD, ages 6 to 17 years. The ASSP includes 49 divided items, items that are evaluated on a Likert scale from 1 to 4 where 1 represents ″never″ and 4- ″always″; these 49 items are divided into three subscales: the social reciprocity (SER) subscale (26 items), the social interaction/avoidance (SPA) subscale (14 items) and the socially harmful behaviors (DSB) subscale (9 items).

This questionnaire can be completed by a parent, caregiver or any other professional working in special education and takes approximately 30 minutes to complete.

Regarding its psychometric properties, Bellini and Hopf (2007) obtained a test-retest reliability of 0.904 for the entire questionnaire and an internal consistency of 0.926. In this research, the application of only 2 of the 3 subscales of the questionnaire was considered, namely social reciprocity (SER) and social interaction (SPA).

3.4. Procedure

The proposed educational intervention program contains six activities (see table 1), activities that took place over a period of six months (December-May) in the 2022-2023 school year, taking into account the content of the experiential domain ″Man and society″. One will not move from one activity to another, only when the acquired skill becomes mastered. The activities were focused on the development of: cooperation, social interaction, social relation, turn-taking, practicing waiting for the turn, as well as maintaining eye contact while speaking. Among the used methods are the explanation, the demonstration, the observation, the game, prompting, and chaining.

Table 1: Tabular representation of the activities of the "Let's play together" intervention program

No.	Title of the activity	Objectives
1.	*"Catch the ball and answer"*	- developing the ability to provide answers to certain personal questions; - developing the ability to wait one's turn; - development of social relations.
2.	*"Shopping list"*	- development of social interaction and the ability to wait one's turn - cooperation development
3.	*"We draw a pizza together"*	- development of cooperation and social interaction - development the ability to express a personal preference - turn-taking development
4.	*" Let's build a tower! "*	- development of cooperation and the ability to wait one's turn
5.	*"Save the sheep!"*	- development of cooperation and social relations - development the ability to wait one's turn
6.	*"At the market"*	- development of cooperation and the ability to wait one's turn - turn-taking development

4. Results

To evaluate the effectiveness of the proposed personalized intervention program based on the social skills development among preschoolers with ASD, we used the non-parametric Wilcoxon test.

Table 2: Description of the obtained results of the measured variables under the two experimental conditions

Experimental phase	Variables	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test phase	Social reciprocity	5	1,20	1,90	1,54	,32
	Social interaction	5	1,18	2,25	1,60	,43
Post-test phase	Social reciprocity	5	2,30	3,10	2,76	,35
	Social interaction	5	2,00	3,00	2,62	,41

Table 3: The rank averages of the variables obtained in the two experimental conditions

Variables	Ranks	N	Mean Rank	Sum of Rank	z	p	r
Social reciprocity	Negative Ranks	0[a]	,00	,00	-2,04	.04	.91
	Positive Ranks	5[b]	3,00	15,00			
Social interaction	Negative Ranks	0[d]	,00	,00	-2,03	.04	.90
	Positive Ranks	5[e]	3,00	15,00			

a Social reciprocity after- Social reciprocity before
b Social reciprocity after- Social reciprocity before
c Social interaction after- Social interaction before
d Social interaction after- Social interaction before

Following the evaluation of the participants included in the research (pre-test phase), we noted that they face difficulties both at the level of social reciprocity (M=1,54) and at the level of social interaction (M=1,60) (see Table 2). Thus, preschoolers fail to maintain a close distance when interacting with their peers, they do not greet their peers when they

come to kindergarten and when they leave, they do not engage in conversations with them, they have not developed the ability to introduce themselves and they do not respond to invitations colleagues to join them either in certain activities or during free play. In addition, preschoolers do not want to share certain toys with their peers, do not engage in one-in-one social interactions with peers, do not share certain interests, desires with them and engage more in solitary activities. Therefore, behind the identified difficulties, the personalized intervention program "We play together" was developed and implemented for a period of six months.

After the completion of the activities of the proposed personalized intervention program, the re-evaluation of the preschoolers was carried out (post-test phase), where we noticed improvements both at the level of social reciprocity and at the level of social interaction (see Table 3). Preschoolers at the level of social interaction with minimal promptness initiate the greeting and respond to their peers' greetings and provide answers to certain questions asked by their colleagues, stay around their colleagues and perform turn-taking and at the level of social reciprocity, preschoolers ask for help, in group games they join their peers and stay around them, and with minimal promptness they invite others to join them in activities.

The results obtained following the application of the Wilcoxon test indicate that the proposed personalized intervention program had a significant effect from the point of view of there being significant differences between the variables measured in the two experimental conditions (z=-2,04, p=.04 for social reciprocity and z=-2,03, p=0.04 for social interaction). Additionally, calculating the effect size, an r=.91 was obtained for social reciprocity and an r=,90 for social interaction, which means that the personalized intervention program had a strong effect on the development of the measured variables.

6. Conclusion and Discussion

Given the fact that the field of education is in permanent change and must respond to a wide range of challenges, new methods and strategies are needed to make educational activities more efficient. These methods must be accessible and adapt to the needs of the learner. One of the basic human needs is the need for socialization. In order for an individual to be able to interact and relate as effectively as possible with his peers, but also to ensure well-being, it is necessary for him to develop his social skills.

Social skills have an extremely important role in the integration and adaptation to the school environment, and not only of all children, but especially of those with autism spectrum disorders. Children diagnosed with ASD are known to have great difficulties in developing social skills. Deficits in these skills have a profound and lasting effect on academic performance, school behavior, social and emotional well-being, friendships and family relationships, and adult life in individuals with ASD. Jamison *et al*. (2012) described the following skills as the key components of social skills: showing interest in others, participating in group games and/or activities organized by the group, initiating

and sustaining social interaction, accepting the initiative of others at the level of social interaction and offering responses appropriately to the inappropriate behaviors of peers. The present research aims to verify whether some play-based activities are effective in developing preschoolers' social skills. The use of social games in activities increases the degree of involvement of children in their interaction with others, as well as the efficiency of learning. Thus, game-based activities are effective in increasing the socialization level of preschoolers; these activities were done in groups. Group training of social skills is the most frequent intervention implemented in the educational environment for children with ASD. According to some researchers (Koegel *et al*., 2013; Wolfberg *et al*., 2015) the most common groups held in school are: skill-based groups where the didactic training is carried out by the teacher, commitment-based groups where colleagues engage in certain mutual activities and mixed groups which represent a combination of direct didactic instruction followed by a period of active peer engagement.

The activities and games in which the preschoolers were involved in the experimental stage and the results they obtained in the post-experimental stage confirm the working hypothesis. Preschoolers were more motivated to get involved in positive social interactions; however, a deficient aspect that stood out in the research would be the fact that they failed to get involved very intensively. These activities require a lot of involvement for preschoolers to fully benefit from their effectiveness. At first, the children were quite reluctant to the group activities and to the fact that they had to perform some new tasks. However, by the end of the intervention, it was observed that with the help and prompted by the therapist, the preschoolers began to get used to what they had to do. Thus, they managed to get more involved in each stage of the activities. We can conclude that the scores obtained following the implementation of the personalized intervention program are significantly higher than the initial ones. In the specialized literature, there are limited studies that investigate the variables measured in our study, but in the meta-analysis conducted by Gates *et al*. (2017) demonstrated that the use of games and group activities among children with ASD contributes significantly to the formation and development of their social skills.

7. Limitations and Future Directions for Research

A first limitation of this research is the small number of participants. It is considered a limitation due to the fact that, being only five participants, the results obtained cannot be extrapolated in order to establish the effectiveness of the personalized intervention program proposed to improve social skills.

The second limit that we can consider is the period of activities. It takes time for preschoolers to get used to new activities, master them, and generalize them in various social contexts.

The last limitation of this research is the data collection tool; not being validated and adapted to the Romanian population, its psychometric properties remain unchanged.

Considering the mentioned limitations, this research could be extended by carrying out more work sessions and over a longer period of time. Also, another future direction of research would be to develop a study on the comparative analysis of video modeling and social stories regarding the development of social skills of preschoolers with ASD.

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