



**THE CONTRIBUTION OF STRUCTURED PLAY
AS A PSYCHO-EDUCATIONAL TOOL FOR STUDENTS
WITH HIGH-FUNCTIONING ASD IN KINDERGARTEN:
THE TEACHERS' PERSPECTIVE**

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Abstract:

The purpose of this study is to investigate the effectiveness of structured play as a learning and educational tool for students with high-functioning ASD. Qualitative research was applied to investigate the above purpose. 12 semi-structured interviews were conducted with primary school kindergarten teachers. The results of the survey showed that the majority of the teachers considered structured play to be necessary for the effective education of students with high-functioning ASD. Also, educators can easily integrate it into their daily educational practice, although the curriculum limits its use. The biggest obstacles that teachers encounter have to do with available educational materials, infrastructure and the need for training. The majority of teachers stated that new technology and digital play are very important in enhancing the skills and progress of students with high-functioning ASD. Finally, teachers differed among themselves regarding the gendered dimension of gaming with the majority stating that they do not choose games that reinforce stereotypes.

Keywords: high-functioning ASD, structured play, educational programs, digital play, gender dimension

1. Literature Review

1.1 High-Functioning Autism

According to the literature, the term autism was first proposed by psychiatrist L. Kanner to describe the inability of some individuals to communicate and socialize with others

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(Tsamoura, 2020). The term "autism" is rooted from the Greek word "autos" (self), symbolizing individual's isolation and his/hers social alienation (Margari et al., 2019). In the scientific community, there is a disagreement about the first mention of the term. Specific researchers claim that it was first mentioned in 1911 by the Swiss psychiatrist Eugen Bleuler. Over the years, the term has been adequately clarified, finally taking its modern synthesis, according to which autism becomes a permanent developmental disorder with deficits in the individual's perception and understanding of external stimuli (Tsamoura, 2020). The origin of the disorder remains unknown to this day, and various hypotheses have been made about hereditary, biological, psychomotor, familial, genetic immunological, perinatal, neuroanatomical, biochemical, neuropsychological and other factors of the developmental disorder of autism. The onset of the disorder is mainly evident in the first two years of a child's life, and during the development period, some of the symptoms may change. According to the latest edition of the DSM (DSM-V), this developmental disorder is defined as Autism Spectrum Disorder (ASD) and the basic diagnostic criteria are five, while epidemiological data demonstrate an overrepresentation of males over females, with a sex ratio of 4.3 males to 1 female.

According to the Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (DSM-V), the definition of High Functioning Autism Spectrum Disorder is a subtype of the disorder and it is included in the category of ASD "without cognitive disabilities".

1.2 High-functioning Autism in Toddlers

For children with ASD, the first signs of the disorder are mainly noticed in kindergarten. Until the beginning of kindergarten, children's social skills development, involves developing an emotional bond with parents through gestures and maintaining eye contact, using social smiles, imitating movements and sympathy for other's emotions. Unlike typical children, toddlers with ASD desire and seek alienation from other people as well as express repetitive patterns of behavior using protocols and rules. Scientific study has shown that individuals with ASD tend to treat other people as objects, rather than as interlocutors whom it is possible to communicate with. Another characteristic is the deficit in social imitation and the inability to develop symbolic play during preschool age (Fyssa, 2023). Then, at school age, children show an explosion of symptoms, such as the inability to communicate, which implies the complexity of social development with an impact on the infant's general perceptions of interacting with other people (Bania et al, 2019). These characteristics are displayed in the school context, as children with ASD tend to deviate from typical development, while also displaying inattention and behaviours that are labeled as idiosyncratic and requiring special treatment in the classroom. The state's goal for children with ASD is to enable them to attend general education settings, with the appropriate support and early intervention kindergartens, structures from which children graduate at the age of 7 (Patel, et al., 2022).

1.3 The Importance of Structured Play for Children with ASD

According to Cogher (1999), the importance of structured play is multidimensional for children with ASD. More specifically, its beneficial properties are evident in the psychological, pedagogical and educational domains. As a consequence, the influence of structured play is seen to have a positive effect on the development of children with ASD on emotional, social and physical levels. Depending on the content and style of play, there is a connection with the movement, with a vital goal of the child's motor and intellectual development. However, in order for structured play to be constructive, it is necessary to be consistent with the child's developmental level and abilities (Paweni & Rubovits, 2000).

According to research on children with ASD, they face in implementing structured play as a result to their lack of understanding of structured play in general. Their inability to establish social relationships with others in the context of social play, is the main obstacle. Children with ASD tend to show little interest in the process of structured play. As far as children with high-functioning ASD are concerned, they are a special case as structured play is applied, but following their own particular rules (Kok, et al., 2002).

On the contrary, children with ASD use objects and/or toys without being interested in their function, but use them in a stereotypical, repetitive, simplistic and uniform way (placing them in the oral cavity, rotating them, throwing them or breaking them). In this way, they give the impression that they enjoy solitary play with a limited number of activities available (Gunn et al., 2014). By engaging children with ASD in structured play, we make them able to overcome their deficits and weaknesses, while enhancing and strengthening their potential. As for parents, they themselves can continually raise the expectations of their children's abilities, prompted by their children's developmental achievements (Freeman & Kasari, 2013). Therefore, family and adult support are necessary in order for children with ASD to achieve the learning process. Specific learning goals that can be achieved through structured play and proper design of educational programs, are also essential. It is, of course, necessary to emphasize that during the design of structured play, the child's needs and capabilities are taken seriously into account in an attempt to create individualized methods of intervention (Odom, 2019).

1.4 The Importance of Digital Play and Software for Children with High-functioning ASD

In the 21st century, the concept of structured play has partly shifted to technological media and the internet. More specifically, it has been recognized that digital play reveals learning outcomes beyond the entertainment factor. These can be divided into two subcategories: familiarization with technological media and the understanding of technological concepts. Also, by using digital play you can save time, as the rules are automatically applied by the computer algorithm (Papanastasiou et al., 2017).

The relationship between children with high-functioning ASD and educational digital games is also evident through the curriculums. The main goals of the curriculums

for children with ASD are the acquisition of social skills, i.e. the acquisition of self-concept and self-esteem, the development of interpersonal relationships, communication and responsibility. These skills can be developed through the use of digital games, which are aiming in acquiring responsibility or acceptable social behaviour (Hardiyanti & Azizah, 2019).

Personalized digital games and/or educational software for children with high-functioning ASD respect the needs and interests of children, take into account their weaknesses and manage to set realistic goals, in order to ensure their active participation in the process. Some of these are the 'Rays' software, the 'Hot Potatoes' software, the 'Magic Potion' software, the 'Notary' software, etc.

Through this process, students with high-functioning ASD manage to use educational software and computer games in order to gain experience with difficulties and situations they will face in their daily life (Saridaki et al., 2009).

1.5 Play and Gender Differences

There is a tendency that the two sexes exhibit different, almost opposite behaviour towards each other. This case has, in many cases, concerned researchers, who tried to formulate theories and made some attempts to explain the causes of this phenomenon. By reviewing the literature, it appears that boys systematically seem to be more physically active than girls, which places the occurrence of differences in their behaviour on a biological axis. In fact, it appears that as early as the second year of age, sex differences are so pronounced that they can be distinguished by the type of toys they choose and the activity they engage in during play. It appears that sex differences vary according to cultural factors, however, according to Rhoads (2005), it appears that systematically boys exhibit more aggressive behaviour than girls.

As reported by Iriberry and Rey-Biel (2021), boys are more animated and aggressive during play and do not follow the game with discipline, in contrast to girls who are more disciplined and are characterized by patience, calmness and orderliness. In school environment, gender is what separates children from each other and acts as a "social classifier", which adults use conceptually in order to separate children (Weisgram, 2019). But differentiations are not only evident during play. In the pathology itself, it appears that boys and girls show significant differences. For example, boys with ASD are more likely to develop externalizing disorders such as ADHD, in contrast to girls who, according to Solomon et al. (2012), are at significant risk of internalizing psychopathology.

2. Material and Method

In order to conduct this research, preschool teachers were asked to complete a questionnaire. Analyses were conducted using a quantitative methodological approach in order to conduct a multifaceted analysis on the key variables related to the effectiveness of creative play as a means of learning and education for students with High

functioning ASD from the teachers' perspective. At the same time, an attempt was made to understand the gender discrimination observed by teachers during group games in kindergarten.

The quantitative method was chosen to provide an adequate numerical record of the sample's views. Moreover, in this way, it is possible to reach a sufficient number of participants on the total population to make the results generalizable. In addition, the data obtained from open-ended questions, as present in the questionnaire used for survey, can also be numbered for analysis purposes, after having been structured and processed appropriately.

2.1 Research Questions

The interest of the research is focused on the study and recording the effectiveness of creative play, as a learning tool in teaching and education of infants with High Functioning ASD, according to preschool teachers. Specifically, the individual types of creative games, either group or individual, developed by teachers, the way they are organized and developed are examined, but their usefulness in relation to the development of cognitive and socio-emotional skills of children with ASD High Functioning is also investigated. Finally, the possible gender discrimination observed by teachers in group games is recorded.

According to the above, the research questions of the study were formulated as follows:

- 1) What are teachers' views on the usefulness of creative play (individual or group) in the education of infants with High Functioning ASD?
- 2) What is the importance of technology and digital play in the education of toddlers with High functioning ASD according to the views of their teachers?
- 3) What is the contribution of creative play in the development of children with High functioning ASD according to the views of their teachers?
- 4) What is the gender discrimination observed in the group games of toddlers with High functioning ASD in the school setting according to the views of their teachers?

2.2 Participants

The final sample was formed with the participation of 104 pre-school teachers from schools in the region of Central Macedonia.

Regarding the characteristics of the sample, these are:

The distribution in terms of gender consisted in the whole sample body of women, as male preschool teachers in Greece are hard to find. The distribution of the sample with regard to age, employment relationship, educational qualifications and training is presented in Table 1.

Table 1: Distribution of frequencies and percentages of demographic characteristics

Demographic Characteristics			
	Categories	Frequency	%
Age	- 34	60	57,7
	35 +	42	40,4
Work relation	Permanent teacher	52	50,0
	Associate teacher	52	50,0
Indicate your higher education qualification:	Bachelor's degree	84	80,8
	Master studies	20	19,2
Have you been trained in Mental Retardation issues?	Yes	88	86,3
	No	14	13,7
Have you been trained in creative play?	Yes	44	42,3
	No	58	55,8

2.3 Research Tools

When creating the questionnaires addressed to teachers, the type of questions, the order of their sequence and the creation of measurement scales were obstacles. Ultimately, Likert-type graduated scales with 5 possible responses and avoiding neutral responses were chosen.

In addition, a pilot survey was carried out to select the most appropriate wording for each question with 4 teachers and no further refinements were needed to be implemented as the questions were perfectly clear and understandable.

In summary, the designed questionnaire consisted of 5 sections (Table 2):

Table 2: Questionnaire

Questionnaire's Sections	
Section A	Demographic data
Section B	Utility of creative play
Section C	Contribution of play to development
Section D	Importance of technology and digital play
Section E	Gender discrimination in team games

2.3.1 Demographic Data

In terms of demographic data, these are:

- Gender,
- Age,
- Working state,
- Training,
- Previous experience,
- Number of children.

The set of responses is closed-ended with a 5-point Likert-type scale where 1 means Strongly Agree and 5 corresponds to Strongly Disagree. The sections and subsections of the questionnaire are as follows:

A. Creative game utility:

- The usefulness of individual or group play,
- The participation of the game in the curriculum,
- Usefulness of play in the assessment of cognitive development,
- Usefulness in the educational process,
- Existence of game adaptation to the educational needs of students,
- Game application readiness and needs,
- Recording team games.

B. Contribution of play to development:

- The contribution of creative play to the development of the infant,
- The identification of specific skills,
- The information and participation of parents at home.

C. The importance of technology and digital play:

- The contribution of technology in developing skills and enhancing the cognitive progress of infants with high-functioning ASD,
- The contribution of digital play to encouraging practical thinking and improving performance,
- The contribution of interaction in creating a safe environment.

D. Gender discrimination in team games:

- The questions relate to teachers' views and habits and explore the existence of gender differentiation in terms of preference for group games,
- the division between boys' and girls' games,
- the existence of role diversity,
- the contribution to gender identity formation and the availability of time for commenting on gender roles.

2.4 Procedure

The questionnaires were distributed and collected over a period of two months from (March-April, 2022). During the first visit to the kindergartens, information was given on the topic of the survey and the questionnaire. In a second visit, the questionnaires were collected. 110 questionnaires were distributed and 104 (94%) of these were returned completed.

2.5 Statistical Processing

First, the distribution of frequencies and percentages of the categorical variables of the questionnaire is presented (descriptive statistics). The presentation is by variable module based on the grouping of the tool. Supporting graphs are also presented. This is followed by a test of the dependence of the questionnaire variables, by section, on the demographic characteristics of the survey sample (statistical inference).

Likert-type variables are utilized as continuous variables in order for the controls to distinguish the dependence of demographic characteristics on the module variables based on the trend of the rating/scoring of each variable.

The dependence of the variables on the categorical variables of demographic characteristics is tested by applying a means test, specifically by applying a t-test for the dichotomous independent variables. In order to make this check possible, appropriate groupings of demographic characteristics have been made. The demographic variables involved in the controls are age, employment relationship, training in creative play and years of service. Finally, in order to examine dependencies of the above demographics with game type, a double-entry correlation matrix and χ^2 test are applied. The significance level used is $p=0.05$.

The sample was analysed using the Statistical Package for the Social Sciences (SPSS 22).

3. Results and Discussion

3.1 Results

3.1.1 Utility of Creative Play

Regarding the usefulness of individual creative play in the education of children with high-functioning ASD, based on the teachers' responses, it seems to be very helpful, as the vast majority, 98 teachers (93.8%) stated that it helps "Much" and "Very much" in the educational process of these children.

As far as the contribution of group creative play in the education of children with high-functioning ASD is concerned, the whole sample, 104 teachers (100%), answered "Much" and "Very much". Typically, 84 teachers (80.8%) answered "Very much", which demonstrates a more positive attitude towards group play rather than individual play.

For the inclusion of creative play in the program, there was no negative response in any case, while only 6 teachers (5.8%) gave the answer "Neutral". In contrast, 66 teachers (63.5%) gave the response "Very much", demonstrating a high degree of confidence in structured play. Furthermore, 42 teachers (40.4%) stated that they believe to a "Great extent" and 56 (53.8%) to a "Very great extent" that playing can be used to assess the cognitive development of children with high-functioning ASD.

Regarding the game-object and its importance in the educational process, 100 teachers (96.2%) chose "Much" and "Very much" important, while only 4 (3.8%) chose "Moderate".

Regarding the use of play tailored to the child's needs, the trend that emerges continues to be overwhelmingly positive. It is worth noting that 96 teachers (92.3%) gave positive responses with a greater concentration on the "Very much" option, while only 8 teachers (7.7%) gave the "Moderate" option.

However, there is moderation in the degree of teachers' readiness to implement creative play. Out of the total sample, 16 teachers (15.4%) selected "Very much" and the highest percentage was accumulated in the "Much" option with 46 teachers (44.2%).

However, 36 teachers (34.6%) gave the "Neutral" option and 6 teachers (5.8%) gave the "Little" option.

Investigating and recording the needs that exist in order to effectively implement creative learning games, it emerges that the available material available to teachers is highlighted as the main factor, followed by the need for training. The other observations mentioned were stated with much lower percentages (see. Table 3).

Table 3: Teachers' needs for the more effective implementation of creative learning games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Material	52	12,6	56,5	56,5
	Limited spaces	6	1,4	6,5	63,0
	Training	26	6,3	28,3	91,3
	Time	2	,5	2,2	93,5
	Knowledge of parents	2	,5	2,2	95,7
	Organisation	2	1,0	4,3	100,0
	Total	92	22,2	100,0	
Total		207	100,0		

Examining the availability of the game-object in quantity and variety, it was evaluated as moderate with 50 teachers (48.1%) answering "Neutral", 18 teachers (17.3%) answering negatively and 32 teachers (32%) answering positively.

Finally, regarding the content of the games, it appeared that the most prevalent games were those with balls, which were mentioned by 36 teachers (21.9%), followed by traditional games, which were mentioned by 32 teachers (17.1%) and next in line were musical-moving games, board games and role-playing games.

In a grouping of games into social, intellectual and sports games, it emerged from the answers that the most frequently used games are social games, which were chosen by 72 teachers (85.7%), followed by sports games, while intellectual games were chosen in a much smaller percentage (19%).

3.1.2 The Contribution of Play to Development

Examining the contribution of play to children's development, based on teachers' responses, it is high, since 86 teachers (82.7%) chose the most positive answers, with the highest concentration on "Very much".

The empirical data of teachers show that the application of creative play contributes significantly to the skills of cooperation with peers and social interaction. To a large extent, the skills of friendship and verbal communication with other children without special educational needs also appear. Emotional skills are ranked next, followed by mathematical, self-care and autonomy skills. Finally, reading skills, spelling skills and writing production skills are ranked lowest (Table 3).

Finally, in terms of informing parents about creative play and practice at home, 64 teachers (61.5%) answered "Much" and "Very much", stating that they inform parents to a great extent. In contrast, 40 teachers (37.5%) responded "Very little" and "Neutral",

stating that they inform parents to a small extent. Thus, information is mostly provided to a great extent.

3.1.3 The Importance of Technology and Digital Play

Regarding the contribution of technology in developing skills and enhancing academic progress of toddlers with high-functioning ASD, teachers' responses were positive with 96 teachers (93.3%) responding that the contribution of technology is "Much" and "Very much" important in developing skills and enhancing children's progress.

In addition, responses were also positive on the content of the digital game in terms of providing sensory learning experiences and enhancing practical thinking. In fact, 82 teachers (78.8%) stated that the contribution was "Much" and "Very much" significant, while only 22 teachers (21.2%) stated that the contribution was "Moderate". Finally, regarding the interaction and safety of the digital environment for children, 56 of the teachers (53.8%) responded "Much" and 30 (28.8%) responded "Very much" regarding the creation of a safe environment. The "Moderate" category was chosen by 16 teachers (15.4%) and the "Very little" category was chosen by only 2 of them (1.9%).

3.1.4 Gender Discrimination in Team Games

In the distinction of games into "boy's" and "girl's" there was a difference of opinion as to their usefulness or not. Typically, 42 teachers (40.4%) in the sample agreed to some extent with the existence of the distinction, while 44 (42.3%) disagreed. Meanwhile, 18 teachers (17.3%) have no opinion as they chose the answer "I am not sure". Therefore, there was no clear tendency towards a choice.

Regarding the existence of a variety of roles and activities in the school, 64 teachers (61.5%) stated that they "Strongly Agree" with this distinction, while on the other hand 16 teachers (15.4%) stated that they "Disagree" and "Strongly Disagree". Finally, 22 teachers (21.2%) stated that they were "Not sure". Thus, the trend in favour of having a variety of roles and activities in school is evident.

Looking at whether play is helping to gender identity formation, the trend is positive towards this view, with 70 teachers (67.3%) stating that they agree to some extent. On the other hand, 43 teachers (32.7%) stated that they have no opinion on this issue. Consequently, the trend is noted in favour of gender identity formation through children's play (Table 4).

Table 4: Level of gender identity formation from children's play

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	13,5	13,5	13,5
	Agree	28	53,8	53,8	67,3
	I'm not sure	17	32,7	32,7	100,0
	Total	52	100,0	100,0	

Finally and complementary to the above, in the question about commenting on gender roles with children, the trend was in favor of this version, as 84 teachers (80.7%) said they

agreed to some extent, 14 (13.5%) said they had no opinion and only 6 teachers (5.8%) said they disagreed.

3.1.5 Report Variables by Sample Demographic Characteristic

3.1.5.1 Age

In order to test whether the variables are dependent on the age of the individual, an average price control is applied.

Regarding the correlation of the level of effectiveness of implementing creative learning plays in relation to teachers' age, it is found that teachers under the age of 35 are less prepared than their colleagues who are over 35 years old ($t(49)=-2.345, p=.023<0.05$). Regarding the correlation of the level of development of social interaction skill with peers through play, in relation to the teachers' age, it is found that teachers below 35 years of age, report a higher level of development of social interaction skill compared to their colleagues who are above 35 years of age $t(49)=2.125, p=.040<0.05$.

3.1.5.2 Work Relationship

Regarding the correlation of the level of evaluation of the variables regarding teachers' working relationship, it is found that the degree of positive responses is higher for all permanent teachers than the other teachers. To begin with, in the assessment of cognitive development of children with high-functioning ASD through play, permanent teachers state that the assessment is achieved to a greater extent than substitutes ($t(50)=2.635, p=.011<0.05$).

In adapting the type of play based on the specific educational needs of each student, permanent teachers report that adaptation is achieved to a greater extent than substitutes ($t(50)=2.508, p=.015<0.05$). In readiness to effectively implement creative learning games, permanent teachers report a greater level of readiness than substitutes ($t(50)=3.407, p=.001<0.05$).

On the contribution of creative play to better child development, permanent teachers report a greater level of contribution than substitutes ($t(50)=2.692, p=.010<0.05$). In the development of the skill of self-care, permanent teachers report the contribution of play in the development of this skill to a greater extent than substitutes ($t(50)=2.472, p=.017<0.05$). Finally, regarding the correlation of the level of development of social interaction with peers through play, it is found that substitute teachers report the contribution of play in the development of this skill to a greater extent than permanent teachers ($t(50)=-2.647, p=.011<0.05$).

3.1.5.3 Training in Creative Play

No dependence on teacher training in creative play is observed.

3.1.5.4 Previous Experience in Special Education

In order to examine whether the variables are dependent on the individual's previous experience in special education, an average price control is applied.

First, regarding the correlation of the level to which play-based education should be included in the curriculum in relation to teachers' years of experience, it is found that teachers with less than 10 years of experience rate the need to include play in the curriculum higher than their colleagues with more years of experience ($t(50)=2.026$, $p=.048<0.05$).

Concerning the correlation of the level to which teachers rated the extent to which play can be used to assess the cognitive development of children with high-functioning ASD in relation to their years of experience, it is found that teachers with less than 10 years of experience rated the use of play to assess cognitive development as most important compared to their colleagues with more years of experience ($t(50)=2.101$, $p=.041<0.05$). With regard to the correlation of the level to which the toy-object is rated as an important tool in the educational process in relation to teachers' years of experience, it is found that teachers with less than 10 years of experience rate the value of the toy as a tool in the educational process as most important compared to their colleagues with more experience ($t(50)=2.276$, $p=.027<0.05$).

Regarding the gender dimension, and in particular, whether children's play contributes to the formation of gender identity in relation to teachers' years of experience, it can be seen that teachers with less than 10 years of experience agree to a greater extent with this view than their colleagues with more experience. ($t(50)=-2.009$, $p=.050<0.05$). Also, in relation to the opinion on whether time should be spent on children commenting on gender roles in relation to teachers' seniority, it is again found that teachers with less than 10 years of experience agree to a greater extent with the above opinion compared to their colleagues with more seniority ($t(50)=-2.479$, $p=.017<0.05$).

3.2 Discussion

As pointed out by the literature, the contribution of structured play contributes to the smooth developmental progress of the child in general, but its contribution has also been crucial for toddlers with Autism Spectrum of High Functioning, in terms of cognitive, emotional and social domains (Kok et al., 2020). The above data were also validated by the teachers who participated in the present study.

First of all, regarding the contribution of structured play in the educational process, it was affirmed by the Teachers that both individual and group play contribute significantly to the developmental progress of children with High Functioning ASD (Gunn et al., 2014). Furthermore, there was a high level of agreement among the Teachers regarding the inclusion of structured play in the Curriculum. However, it was clarified that teaching structured play to children with High Functioning ASD is not an easy process and its results will not demonstrably bring about a permanent change in the behaviour of these children. However, play should be an integral part of their daily routine, as it can have a significant impact when combined with other intervention techniques (Chester et al., 2019).

Complementing the above, it was suggested by the majority of teachers that structured play should be used as a way of assessing the Cognitive Development of

children with High Functioning ASD. The above findings are also validated by Carruthers et al. (2020) research, where the use of play was reported as an ideal way of assessing children's Cognitive Development. The view that the use of play significantly helps in the Cognitive Assessment of children with mild mental retardation was supported to a greater extent by permanent teachers compared to substitute teachers. The same difference of opinion was observed among teachers with less than ten years of service as opposed to senior teachers, as the first ones considered the evaluative use of play more important than the latter. It is likely that younger teachers are better trained and better able to recognise the benefits of educational play.

Regarding play as an object, all the teachers in the sample agreed with its usefulness in the educational process, while it was again observed that teachers with less experience rated it as of major importance for children with High Functioning ASD. Vertically positive views were also expressed regarding the customization of the play, as none of the teachers gave a negative response. In fact, the entire sample considered the customisation of the play to be essential (Hong et al., 2020).

In terms of teachers' readiness to implement creative play, it appeared that experience and age played a role, as teachers under 35 years old said that they were less ready to adapt creative play to children, in contrast to teachers over 35 years old. Overall, the average sample appeared to be moderately ready for this. The lack of teacher training probably contributes to this (Bariffe & Pittas, 2021). In the exploration of teachers' needs for implementing creative play, the availability of materials was most important, as it was commented that the adequacy of materials available for the play-object in the school unit where the teachers work is moderate, and secondarily the need for training. The above is probably due to the non-institutionalized creative play in the Greek educational system and the economic crisis the country is facing (Cook, & Ogden, 2022).

Regarding the content of group plays for toddlers with High Functioning ASD, the most frequently observed are ball games, followed by traditional games and finally music-movement and board games. Regarding the grouping of group games, three groups emerged, social, sports and intellectual games respectively according to their level of application. In fact, it emerged that spiritual games are preferred by teachers under 35 years old and substitute teachers. However, teachers with some additional training prefer the application of sports games (Charitaki et al., 2023).

Regarding the contribution of play to child development, most of the sample supported the above proposition. As mentioned, the contribution of creative play is mainly evident in the development of skills of cooperation with peers and the improvement of social interaction. It was further noted that creative play helps the skill of friendship and verbal communication. Help was recorded in emotional skills, mathematical, self-care and autonomy skills. This is explained by the important opportunities for interaction provided by creative play. In fact, the development of self-service skills was noted to a greater extent by the permanent teachers. Finally, a small number of teachers with relatively short experience stated that creative play helps with reading ability, spelling skills and writing fluency. According to Sherratt & Peter (2002),

teaching plays to children with High Functioning ASD increases their thinking flexibility. It was also reported to help reduce rigid behaviours and encourage the development of communication.

In addition, the research also highlighted the parent-teacher relationship and informing the first about the contribution of creative play and the continuity of its practice at home, as teachers stated that they keep parents informed to a large extent. In the exploration of the importance of technology and digital play in the education of children with High Functioning ASD, most of the sample stated that new technology is very important in terms of enhancing the skills and development of these children. Furthermore, it was argued that digital play provides sensory experiences and enhances practical thinking. It is also more interesting than a traditional play. Finally, regarding interaction, the environment it creates was rated as safe and comfortable for these children. Similar findings are also described in the research by Phillips & Anderson, (2020), where it is stated that digital play provides opportunities for children to put their knowledge into practice, practice their skills and continue lifelong learning through searching, reasoning, critical thinking, problem-solving and decision making.

Furthermore, part of the research is to investigate the existence of gender discrimination in team games. No clear conclusion in favour of teachers' disagreement or agreement on the above proposition emerged, as accordingly on the distinction of games into "boys'" and "girls'". No clear results emerged, as teachers seemed to waver on the gender dimension of play. Regarding the variety of roles and activities in play, most teachers supported the existence of this in the school context. At the same time, they stated that children's play contributes to the development of gender identity. In fact, teachers with less than 10 years of experience agreed to a greater extent with this view and commented that time should be devoted to gender-related discussion (Whitlock et al., 2020).

In terms of meeting the needs of special educators to support students with High Functioning ASD, it was stated by the majority that they have received appropriate training on cognitive impairment issues to improve the learning process. However, during the interviews it was reported that the Ministry of Education does not provide serious training for teachers, particularly on issues of intellectual disability. The significant lack of educational materials and infrastructure in schools was identified as a major problem most frequently encountered by teachers. Secondarily, both insufficient training and the existence of overcrowded classrooms were mentioned. The difficulties were completed by the absence of permanent teaching staff, the lack of additional support staff and finally the absence of evaluation tools (Syriopoulou-Delli, et al., 2012).

As already mentioned above, the parent-teacher relationship was examined. It was noted by most teachers that this relationship varies depending on the mood and willingness on the part of the parents. However, it was acknowledged that there are instances where parents, despite their problems and difficult daily lives, recognise the value of play and are willing to help. On the other hand, there are cases of parents who refuse to understand the diversity of their children and because of their ignorance,

cooperation between them is impossible. As can be seen from the above, the cooperation between teachers and parents of children with High Functioning ASD is an important element for the better education of these children (Azad, et al., 2021).

Finally, the teachers interviewed were asked about gender discrimination in the school setting. From the teachers' answers, it is clear that they themselves avoid games that reinforce stereotypes and in fact, it was considered necessary to train them to be prepared to deal with them. Although there was a belief that gender discrimination is rare in school, it was agreed by the majority that it would be good for teachers to receive training on equality and gender differences. In analogy, there was also discussion on how to face problems such as racism and discrimination against pupils from other countries or people with disabilities (Anderson, 2020).

4.1 Limitations of the Research

In this study was impossible to investigate the views of parents of children with High Functioning ASD on the use of creative play in the educational process of their children. Moreover, the results of the research are not generalizable since the sample was collected from the region of Central Macedonia. Finally, there was no observation on the specific topic of the research in order to get a more accurate idea of how creative play is applied in the educational process.

4.2 Suggestions for Future Research

- The research can also be directed to the group of parents, as parents can provide useful information about the use of play in children with ASD.
- The research can be conducted in more geographical areas so that the results can be generalised.
- Involve other professionals (e.g., psychologists) in the research in addition to teachers
- To carry out observational research to get a more proper insight into how creative play is applied in the educational process.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

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