An Investigation of the Opinions and Suggestions of Parents and Teachers about The Teaching of Play Skills to Children with Autism Spectrum Disorders*

Abstract
The purpose of this study was to examine the opinions and suggestions of parents who have children with between the ages of three and seven who have autism spectrum disorder (ASD), and the teachers working with them. A semi-structured interview form was prepared and the final version was validated by seven experts in the field. Easily-accessible case sampling method was applied to determine the participants. Interviews were conducted with 15 selected parents and 15 teachers. The data obtained from the opinions were analyzed descriptively. The findings showed that both parents and teachers defined the play skills as an activity that supports the child's developmental areas. The demonstration of the play skills of children with ASD shows that they find teaching various skills and concepts through games necessary, as well as supporting the play development area of the child. Finally, both parents and teachers were found to need visual material for the teaching of play skills to the child diagnosed with ASD.

Keywords: Autism Spectrum Disorder, Play Skills, Opinions of Parents, Opinions of Teachers

Introduction
“Game” is a considerably difficult concept to define (Whitebread, Coltman, Jameson and Lander, 2009). The concept of game has many definitions due to its multi-faceted effect on child development, being thought of as a natural part of a child's life, having an abstract structure and having different types (Johnson, Christie and Wardle, 2005; Scarlett, Naudeau, Salonius-Pasternak and Ponte, 2005). In addition to being an activity that entertains the child, it also supports the child's motor, social-emotional, cognitive and language development in a positive way (Freeman and Kasari, 2013; Warreyn, Paelt and Roeyers, 2014). Children with normal development (ND) learn daily life through play and various developmental areas are supported by games. Most ND children can play when they are modeled or directed verbally (Brown and Murray, 2001). It can be said that ND children complete all the different stages of games hierarchically, albeit at different ages. However, play behaviors differ for children with ASD as they are not at the same developmental stage of social interaction, language development, cognitive development and motor development as their...
peers and they can exhibit atypical behaviors (Hobson, Lee and Hobson, 2009; Rutherford, Young, Hepburn and Rogers, 2007; Williams, Reddy and Costall, 2001). ASD is a neuro-developmental disorder emerging in the first 3 years of life, which is characterized by repetitive behaviors and limitations in the social interaction (American Psychiatric Association, 2013). It is stated that the quality (suitability, variety, creativity, complexity) and quantity (duration, frequency) of the play activities of children with ASD is different from those of ND peers (Hobson et al. 2009; Rutherford et al. 2007; Williams et al. 2001).

Children with ASD exhibit atypical behaviors in playing skills; for example, choosing a limited number of objects / toys or dealing with the physical properties of objects / toys, self-stimulating behaviors such as placing the toy into the mouth, rotating, beating, stringing objects, and so on (Brown and Murray, 2001; Lewis, 2003; Ozonoff et al. 2008; Wolfberg, 2003). The imaginary play of children with ASD does not progress at the same rate as their ND peers and they are delayed in exhibiting these skills (Sherratt 2002; Lifter, Mason and Barton, 2011). When the play behaviors of ND children are examined, characteristics can be observed such as moving from simple to complex, assigning various roles to surrounding objects and producing creative scenarios. However, the steps of the imaginary games of children with ASD are dislocated, unplanned and stereotyped (Chan, Chen, Feng, Lee, and Chen 2016; Wolfberg, 2003). Children with ASD have difficulty in understanding the rules of regular games and how other children will behave (Cardon, 2007). During the process of play, children with ASD have difficulty in understanding the social cues of other children. Therefore, they may not be able to make sense of the social messages brought by the game. As they may have difficulty understanding the rules of the game, they may not be able to easily approach their peers, focus on game activity or play the game (Cardon, 2007; Wolfberg, 1995). Any delay or failure in play development adversely affects all other areas of developmental growth. Therefore, children with ASD can be taught play skills, and they can experience and make sense of new learning during the games (Lifter et al. 2011). In this respect, parents and teachers of children with ASD should provide the systematic implementation of teaching by adding goals to the play skills (Freeman and Kasari, 2013).

Many studies have investigated the views on play skills of the parents and teachers of typically developing children (Brett, Valle Riestra, Fischer, Rothlein and Hughes, 2002; Erden 2001). However, there has been no research investigating the opinions of parents and teachers of children with ASD on their play skills. Learning the opinions of teachers of children with ASD on the teaching of play skills will provide a greater depth of understanding of this issue. In this regard, how the game skills curriculum is prepared in schools in Turkey, and the methods used by teachers to elicit observations are important. However, it is also important to understand the perspectives of the Turkish parents who have children with ASD, the difficulties in the process and the material support they need. Therefore, the aim of this study was to evaluate the opinions of Turkish parents who have children with ASD and the teachers working with them, in respect of play skills and the teaching of these skills. Answers were sought to the following questions:

1) What are the views of parents and teachers on play and the skills involved?
2) What are the views of parents and teachers on the teaching of play skills to the child with ASD?
3) What kind of materials do parents and teachers need to guide their children regarding play?

Method

Research model
This research was designed as a phenomenological study to investigate the views of parents of children with ASD and their teachers on the teaching of play skills. Phenomenological studies reveal the views, thoughts and experiences of participants about a concept (Gay, Mills and Airasian, 2009).

Participants
The study was who live in Turkey’s Eskisehir conducted with 15 parents (13 mothers, 2 fathers) and 15 teachers working with pre-school children with ASD. A targeted, simple sampling method was used to select the participants, and a readily available...
situation sampling method, which is both rapid and practical for the researcher, who chooses a situation that is close and easy to access (Miles and Huberman, 1994). The demographic information of parents and teachers is given in Tables 1 and 2. As shown in Table 1, the teachers comprised 8 females and 7 males in the age range of 21-46 years. The duration of professional experience of the teachers varied between 7 months and 21 years, with 9 working in private education, and 6 were university graduates, working as a pre-school teacher or classroom teacher. No training in the teaching of play skills to children with ASD was reported by 6 teachers whereas 9 had received training during undergraduate education or from the institutions where they worked. The criteria for the inclusion of the teachers in this study were that they were employed as a teacher of children in a formal institution and they participated voluntarily. As seen in Table 2, the 13 mothers and 2 fathers in the study were in the age range of 29-50 years, with an educational level ranging from high school to doctoral level. No training for the teaching of play skills to their children with ASD had been received by 10 parents, while 5 parents had received training from a teacher, an expert or the institution where their child was educated. The criteria for the participation of parents in this study was to have a child with ASD, confirmed by a hospital report, with ASD characteristics according to the Gilliam Autistic Disorder Rating Scale-2-Turkish Version (GOBDO-2-TV) (Diken, Ardiç and Diken, 2011) and voluntary participation in the study.

Table 1
Demographic characteristics of the teachers included in the study

<table>
<thead>
<tr>
<th>Participants</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female (n: 8)</td>
</tr>
<tr>
<td></td>
<td>Male (n: 7)</td>
</tr>
<tr>
<td></td>
<td>21-30 (n: 7: T1, T4, T6, T7, T11, T12, T15)</td>
</tr>
<tr>
<td></td>
<td>31-40 (n: 5: T2, T3, T5, T9, T13)</td>
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<tr>
<td></td>
<td>41-46 (n: 3: T8, T10, T14)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>Special Education (n: 9: T1, T2, T5, T6, T8, T9, T12, T13, T15)</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>Preschool Education (n: 1: T14)</td>
</tr>
<tr>
<td></td>
<td>Child Development Education (n: 2: T11, T4)</td>
</tr>
<tr>
<td></td>
<td>Business Education (n: 1: T10)</td>
</tr>
<tr>
<td></td>
<td>Classroom Teaching Education (n: 2: T3, T7)</td>
</tr>
<tr>
<td></td>
<td>7 months-6 years (n: 6: T1, T4, T5, T6, T7, T11, T12)</td>
</tr>
<tr>
<td>Occupational Experience Duration</td>
<td>6-10 years (n: 4: T3, T5, T15)</td>
</tr>
<tr>
<td></td>
<td>11-15 years (n: 1: T2)</td>
</tr>
<tr>
<td></td>
<td>16-21 years (n: 4: T8, T9, T10, T14)</td>
</tr>
<tr>
<td>Have you ever received any training in the teaching of play skills?</td>
<td>Yes (n: 9: T1, T2, T4, T6, T8, T9, T10, T12, T13)</td>
</tr>
<tr>
<td></td>
<td>No (n: 6: T3, T5, T7, T11, T14, T15)</td>
</tr>
</tbody>
</table>

T: Teacher

Table 2
Demographic characteristics of the parents included in the study

<table>
<thead>
<tr>
<th>Participants</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female(n: 13)</td>
</tr>
<tr>
<td></td>
<td>Male (n: 2)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>29-35 (n: 6: M4, M6, M8, M9, M11, M13)</td>
</tr>
<tr>
<td></td>
<td>36-40 (n: 6: M1, M3, M5, M7, M10, M12)</td>
</tr>
<tr>
<td></td>
<td>41-50 (n: 3: M2, F1, F2)</td>
</tr>
<tr>
<td>Age of the child (years)</td>
<td>6-7 (n: 8: M1, M3, F1, M5, F2, M10, M12, M13)</td>
</tr>
<tr>
<td></td>
<td>3-5 (n: 7: M2, M4, M6, M7, M8, M9, M11)</td>
</tr>
<tr>
<td>Education Status</td>
<td>High school (n: 3: M1, M2, M10)</td>
</tr>
<tr>
<td></td>
<td>University (n: 8: M3, M4, M5, M6, M7, M9, M12, M13)</td>
</tr>
<tr>
<td></td>
<td>Master’s degree (n: 3: F1, M8, M11)</td>
</tr>
<tr>
<td></td>
<td>PHD (n: 1: F2)</td>
</tr>
<tr>
<td>Have you ever received any training in the teaching of play skills?</td>
<td>Yes (n: 5: M1, M4, F2, M11, M13)</td>
</tr>
<tr>
<td></td>
<td>No (n: 10: M2, M3, F1, M5, M6, M7, M8, M9, M10, M12)</td>
</tr>
</tbody>
</table>

M: Mother, F: Father

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**Instruments and Data Collection**

Data were collected using a semi-structured interview technique. These interviews provided flexibility, with the researcher able to change direction with sub or side questions during the interview and could elaborate on the questions according to the answers (Gay, Mills and Airasian, 2012). In addition to the answers of the interviewee, it is suggested that further questions are asked (Lodico, Saulding and Voegtle, 2006). The interview form used during the semi-structured interview was prepared by the researchers, based on the analysis of previous research that has examined the opinions and suggestions of parents and teachers about play skills. Data collection instruments were sent electronically to seven holding doctorates in special education who had extensive teaching experience in working with parents and teaching children with ASD, qualitative research methods. They suggested to add one question, asking about the meaning of the play skills to both parent and teacher forms. They also suggested rewording two questions to include “What kind?” and revised the grammar for several other questions. Questions were divided into two parts in each data collection instrument: (a) Demographic Questions, (b) Play Skills Questions. There were six open-ended questions in the forms for parents and teachers. The interview questions prepared for the parents and teachers based on the opinion of the experts are given in the Tables 3 and 4 respectively.

The first author (MSC) conducted a pilot interview with a mother and teacher of a preschool age child with ASD to test the questions, to control the functioning of the interview and to improve the experience. Voice recordings of the pilot interviews were examined by both researchers. After listening to the interviews, it was decided that the questions had to be asked to each participant in the same order, unclear questions had to be repeated and if a question was not answered, it should be expressed in a different way and asked a little more clearly without directing or leading the respondent. Should the participants not respond to the scope of the question despite these explanations, the interviewer could give more information about the subject without guiding.

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**Table 3**

**Interview questions of parents**

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What comes into your mind when I say “play skills”?</td>
</tr>
<tr>
<td>2. What kind of problems do you encounter when you try to play games with your child?</td>
</tr>
<tr>
<td>3. What do you think about teaching your child “play skills”?</td>
</tr>
<tr>
<td>4. What kind of information and skills do you need while teaching your child “play skills”?</td>
</tr>
<tr>
<td>5. What kind of things do you think should be taken into account while teaching “play skills” to a child who is diagnosed with autism?</td>
</tr>
<tr>
<td>6. What do you think about using written and visual materials while teaching play skills to a child?</td>
</tr>
</tbody>
</table>

**Table 4**

**Interview questions of teachers**

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Please tell me what do you understand from “play skills”?</td>
</tr>
<tr>
<td>2. Do you think it is necessary to teach play skills to students who are diagnosed with autism? Why?</td>
</tr>
<tr>
<td>3. How do you evaluate play skills of your students?</td>
</tr>
<tr>
<td>4. What kind of games do you think children who are diagnosed with autism find difficult to learn? What do you do to eliminate these problems/hardships?</td>
</tr>
<tr>
<td>5. What kind of methods do you think should be used while teaching play skills to children who are diagnosed with autism?</td>
</tr>
<tr>
<td>6. What is your opinion about having written and visual materials to guide you while teaching play skills to children with autism?</td>
</tr>
</tbody>
</table>
In order to determine the participants, the following processes were followed. First, the necessary permission was obtained from the Anadolu University Social Sciences and Humanities Scientific Research and Publication Ethics Board (decision no: 38129), after which the face-to-face interviews were conducted with the administrators of the institutions where the interviews were to take place. Then, the contact information of the parents and teachers who met the study inclusion criteria were accessed and they were informed about the process. The researcher signed the volunteer participant form, stating that participation in the research was conducted on voluntary basis, the interview would be conducted with a voice recorder and these records would be used for research purposes only. Parents who agreed to participate in the interviews were informed about the process in detail. Interviews with the teachers were conducted in an empty classroom of the institution where they worked, and interviews with parents took place in an empty classroom, at home or in the grounds of the institution where their child was educated. The interviewer diary was written by first author after each interview. This journal included the questions answered extensively by the respondent, whether the participant was informed about the questions, the difficulty of the interview, the views of the interviewee, the duration and the environment of the interview, and the personal opinions of the interviewee. This written record for each participant was a guide for the researchers, especially when editing the findings and making citations. Interviews with teachers lasted an average of 12 mins (range, 4.46 -16.32 mins), while interviews with parents lasted an average of 20 mins (range, 8.39 - 28.24 mins).

Data analysis

First author used three steps suggested by Creswell (2007) to analyze the data. First, the researcher transferred the interview records from the voice recorder to the written text for analysis of the data. The interviews that were transferred on paper were also checked by the first author. All questions were examined separately by each researcher and a coding key for each question was formed. Second, the researcher divided the written texts into categories using the interview coding key. Finally, the researcher used tables to express the data (Merriam, 2009). In addition, the reflective interview log written by first author during the data analysis process was examined for each participant. The interviewer journals were used in the process of examining the findings, establishing the interview coding key and themes, examining the retrospective interview casts and making the quotations.

To determine the reliability of the themes, a total of 10 parent and 5 teacher interview forms were randomly selected and sent to a specialist in the field of special education. The second author was informed verbally and in writing about the purpose and process of the study by MSC. The percentage of reliability was calculated by comparing the markers of the researcher and the scientist with the consensus for each question, and the difference of opinion + divergence x 100 (Miles and Huberman, 1984 cited: Campbell, Quincy, Osserman and Pedersen, 2013). For each question, an average of 98.12% (range: 85-100) agreement was achieved on the Teacher forms and an average of 97.85% on the parent forms (range: 85-100).

Results

Semi-structured interviews were conducted in order to determine the opinions and recommendations of parents with pre-school-age children diagnosed with ASD and the teachers working with them. The findings of the interviews were reported in response to the following three main headings.

The Views of Teachers and Parents on Play Skills

When the teachers were asked what the word ‘play’ meant in the semi-structured interview, 15 teachers defined play skills in their own terms. Ten teachers defined play skills as supporting activity areas, six teachers defined them as means of expressing oneself, three teachers defined them as a little rehearsal of life and a means of comforting the child. Teacher #13 stated, "I believe that playing is one of the most important phases in a child's development," thereby defining play skills as an activity supporting development areas. Teacher #15 stated that a game is "a reduced, compressed form of life for children," indicating that play skills are a small rehearsal of life. Teacher #6 emphasized the relaxing effect of the games on the child...
as follows: "I use play skills as reinforcement for my students. I use it to motivate the lesson." Twelve of the parents defined play skills as an activity that supported development areas, eight of them defined the term as an activity that the child was happy with, and three expressed it as an activity that prepared the child for life. Mother #8 defined game playing as an activity which supports development areas of the child as "It is like communicating with my child, sharing something with each other." Mother #1 defined the term as an activity that makes her child happy as "Playing is something fun. It is something that my child laughs and enjoys." Father #7 defined a game as an example of life, stating "It is an example of life. I see it as an environment where my child can learn about life with aspects that he knows and does not know."

The Opinions of Teachers and Parents about Teaching Play Skills to Children with ASD

The teachers and parents were asked about their opinion on play skills in the semi-structured interview. While both groups of participants stated that it was necessary to teach play skills, one of the parents, Mother #1 was undecided, stating "I do not know whether it should be taught."

A total of 10 teachers emphasized its importance as it supports developmental areas, seven teachers emphasized its importance as a teaching tool, six teachers stated its importance in respect of the limitations the students experience, and two teachers emphasized its importance for the student to learn about life. Teacher #14 stated the contributions of games to development areas as "I think games are the biggest tools in supporting communication, so it's very important. It supports all development areas, especially language development, together with social and emotional development." Teacher #5 emphasized the importance of teaching play skills as a useful tool in teaching, as follows: "When you proceed through the interests of the child with a game, it is easy to catch the child's attention and have interaction. As you proceed in the fields of interests, you teach what you try to teach easily." Teacher #10 emphasized the significance of teaching play skills because of the limitations of a child with ASD, stating that "Because there are limitations in this issue, receiver language has some restrictions in tactical skills, so we need to teach these children in a different way." Teacher #15 emphasized the importance of teaching play skills as they can help children with ASD to participate in life: "Because, as I said earlier, play skills are actually a reduced, differentiated, maybe more simplified format for children."

While six parents wanted play skills to be taught as a lesson through games, five of the parents expressed their opinions about the kinds of games and three wanted play skills to be taught to give the child an expression of life itself. Father #5 expressed his opinion about other desired attitudes the child could learn through games as "I believe that I can give all kinds of desired behavior to ..., through games. He learns more easily when he has play skills." Mother #3 stated that games with rules had to be taught to her child: "He must know how to play in the classroom or outside in the garden, follow the rules and play sequentially." Father #7 stated how important games are for a child with ASD as "A game is an example of life. I see it as an environment in which my child can learn about life with aspects that he knows and does not know."

The Views of Teachers and Parents on the Materials They Need to Teach Play Skills to the Child with ASD

The question regarding the views of the parents and teachers of children with ASD on the materials they need to teach play skills was the last question for both groups of participants. Seven of the teachers stated that visual material, four written materials, and four both written and visual materials should be provided. Teacher #2 expressed the need for visual material as "I think it is visual material. When we look at our society, we are not ones who like to read a lot. I think it would be better to see or watch pictures. There may be something like a CD with short videos." Teacher #4 expressed the need for written material as "There should be written resources of course. We have written resources in the methods we use during the lesson, so I believe something written is necessary for games, too." Teacher #10 expressed a need for both visual and written material as "Both written and visual. In other words, visual material is very important, but I think it is much more effective and efficient to read something and then combine it with a visual material."
Of the parents, six expressed the need for more visual material, five for written materials, and four stated that the number of both written and visual materials should be increased. One of the six mothers who wanted visual material, Mother #6, expressed this need as "At least when it is shown in practice, I can better understand how to do it." Mother #4 expressed the need for written material as "Children's books are very limited. Books with games adapted for them should be produced. There are many books for normal children, but there aren't many for our children..." Mother #15 expressed the need for both visual and written material as "The more written and visual materials there are, the more we can develop ourselves in this sense... This type of thing will enlighten the families about how to do it, how to carry out this process. It is necessary."

Discussion

The aim of study was to determine the opinions and suggestions of Turkish parents who have children with ASD and the teachers working with them about teaching play skills. To determine the views of the teachers and parents involved in the research about the word “game”, they were asked what this term meant to them. Most teachers and parents defined game as an activity supporting development areas. Although the concept of game has been dealt with according to different theories, it has been stated to be a tool used to support development areas in general. Looking to the explanations of the different theorists about the game, Piaget defined external stimuli as a way of extracting and adapting (As cited in Fisher 2008). Vygotsky suggested that a game was a discovery of new things (As cited in Halmatov, 2017). Erikson emphasized the importance of games in emotional development (As cited in How, Nour, Scales and Alvert, 2015). In previous research, where the teachers and their parents of children with normal development have given opinions on the concept of play, most participants have defined a game as a tool that supports development areas (Adak Özdemir and Ramazan, 2014; Brett et al., 2002; Doganay 1998; Erbay and Durmuşoğlu Saltalı, 2012; Giren, 2016; Rothlein and Brett, 1987; Tezel Şahin, 1993; Tugrul, Aslan, Ertürk and Altankaynak, 2014; Ünal, 2017). Therefore, the role of the game is supported by both theorists and researchers in literature. On this basis, it can be thought that teachers and parents are aware of the concept of games.

In this study, parents of children with ASD and the teachers working with them were asked their opinions about teaching play skills. Parents stated that their children could be educated with games and teachers should be trained as they support the development area of the child. According to previous literature, children with ASD play less than their typically development peers because of inadequacies in social interaction and communication, and their games are quite simple and superficial (Jarrold, Boucher and Smith, 1996; Jung and Sainato, 2013; Lifter et al., 2011; Ungerer and Sigman, 1981). Therefore, children with ASD should be taught systematic play skills (Hobson et al., 2009). There has been research on systematic symbolic games (D’Ateno, Mangiapanello and Taylor, 2003; MacDonald, Clark, Garrigan and Vangala, 2005; MacDonald, Sacramone, Mansfield and Ahearn, 2009; Reagon, Higbee and Endicott, 2006), imaginary games (Barton, Chen, Pribble, Pomes and Kim, 2013; Barton and Wolery, 2010; DiCarlo and Reid, 2004; Kasari, Freeman and Paparella, 2006; Lifter, Ellis, Cannon and Anderson, 1993; Lifter, Foster-Sanda, Arzamarski, Briesch and McClure, 2005) and games with rules (Odluyurt, 2013) for children with ASD. Since any delay or failure in game development may adversely affect all areas of development, children with ASD with known inadequacy in playing should be provided with play skills, which are internalized and learned during the game (Lifter et al., 2011). Typically, development in preschool is supported by research that all development areas develop in parallel with the development of children's play skills (Russ, 2003; Rutherford and Rogers, 2003; Swindells and Stagnitti, 2006; Toth, Munson, Melzoff and Dawson, 2006; Trevlas, Matsouka and Zachopoulou, 2003). Previous studies have shown that social and academic skills can be taught using games as a method for children with ASD (Aslan, Karamustafaoğlu and Kurt, 2018; Baker, 2000).

To summarize, it has been stated in research findings that children with ASD must be supported in play skills, that children's various development areas are supported by the teaching of play skills and that
various skills can be taught using games as a method. The findings of the current study of the opinions of the parents and teachers were similar. Therefore, it is thought that disruptions in development areas can be reduced by teaching play skills to children with ASD. In addition, it is mentioned above that many skills are taught to preschool children through games. The teachers and parents who participated in this study can be considered to be aware that games is a field which should be taught and they were aware of the potential positive contributions to the development of a child with ASD if games and play skills are taught, and these findings are supported by the literature (Boudreau and D’Entremont, 2010; D’Ateno et al. 2003; Odluyurt, 2013). The parents and teachers in this study were asked about the material they needed to teach play skills to the child with ASD. Most of the respondents stated that children with ASD needed visual material when learning play skills. Smaldino, Lawther and Russell (2007) described the benefits of visual materials for learning as embracing concepts, ideas and objects, motivating the other side, being remarkable, providing diversity, helping to remember information, reminding previous information, saving time and promise. A cone of life was created in 1946 by Edgar Dale on the learning process. According to the cone of life, the best teaching follows a path from concrete to abstract and from simple to complex (Yalin, 2006). As the number of sensory organs involved in the learning process increases, one learns better and forgets later (Davis and Summers, 2015). There are studies in literature that have demonstrated that ND individuals are better able to perceive information presented through visual materials, and learning is more effective (Cimsir and Hunt, 2017; Kay and Kletskin, 2012; Lin and Tseng, 2012; Reynolds and Mason, 2002; Schreiber, Fukuta and Gordon, 2010; Zhang et al. 2006). Studies in literature and the cone created by Dale support the view that teaching with visual materials can be easier and more permanent. These findings are supported by literature related to children with ASD, as studies have shown that visual stimuli are easier to perceive than other stimuli (Bernard-Opitz, Sirram and Sapuan, 1999; Nikopoulos and Keenan, 2006; O’Riordan, 2004). Visual stimuli have been demonstrated to be effective in providing the environments of children with ASD for tasks such as communicating, performing daily routines, learning new skills and supporting their independent lives (Quill, 1997). In the current study, it can be considered that both parents and teachers preferred visual materials to be able to better understand the stages of teaching themselves and the play skills of the children. In literature, high technology and low-tech visual materials have been used in the teaching of games to children with ASD (Boudreau and D’Entremont, 2010; D’Ateno et al. 2003; Hine and Wolery, 2006; Jarmakowicz, 2015; MacDonald et al. 2005; MacDonald et al. 2009; Nikopoulos and Keenan, 2004; Paterson and Arco, 2007; Reagon et al. 2006; Sancho, Sidener, Reeve and Sidener, 2010). As a result, visual materials are important in the effective learning for themselves and the children / students with ASD. In this respect, it is necessary for parents and teachers to understand how to teach play skills, and that children with ASD should be able to perceive visual materials better. These findings are supported by literature. Assessment tools and matrices can be developed to evaluate different types of games for children with ASD at different stages of development.

Findings obtained from the research are limited to the semi-structured interview form developed by the researcher by taking expert opinion and the answers given to the questions in this form. In addition, the findings obtained from this study are limited to the data collected from parents and teachers of children with ASD living in Eskisehir.

Conclusion

Parents of children with ASD in the preschool period and teachers working with them believe that children learn many skills by playing games and are thus supported developmentally. In addition, the parents who participated in this research think that they can teach their children using games as a teaching tool. Teachers can support families with their children in different environments and can show them how to play with different materials. It can be seen that teachers and parents need visual materials for the teaching of play skills to children with ASD. Parents can be told how to develop such materials or how to utilize daily life routines. Moreover, teachers can support parents with seminars and conferences.
on how children should adapt to various types of games at different levels of their development.

This research was carried out as a descriptive study in which semi-structured interviews were conducted. Although this research is limited to the opinions of the parents and teachers who participated in this study voluntarily, to the best of our knowledge, there are no studies in literature that have directly evaluated the opinions of the parents of children with ASD. Despite the limitations of the findings in this respect, the results of this study can provide insights for future research. The data of the study was collected by semi-structured interview technique. Future studies can be collected using different research methods to determine the views of the participants. Findings obtained from the study are limited to parents and teachers in Eskisehir. It can be repeated with different participants to generalize the findings. A variety of visual materials can be designed to teach parents and teachers about the play skills of children with ASD, and the content can be enriched with effectiveness research. Assessment tools and matrices can be developed to evaluate different types of games at different levels of development of children with ASD.

References


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