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A description of a mother's play guidance for her child with autism in the process of playing by the rules

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Key words: Children with autism, integrated playgroups model, play-by-the-rules qualitative case study.

The purpose of this study is to describe the strategies used by a mother with a child with autism during games activities with peers to provide the child with social skills.

The research method of this study is 'a qualitative single-subject case study'. The participants in this research are a mother and her 9-year-old child with autism, one brother and three typically developing peers. The research data were collected through field notes, interviews, audio and videotape recordings during natural interactions between the mother and her child.

The strategies the mother used were analysed using video records during games activities in a natural park. The interactions of the mother with her child were examined in the context of a hide-and-seek game. Micro-ethnographic-analysis techniques were used in the analysis of the video records. According to the research data, it was found that the mother with a child with autism made extensive use of 13 different verbal strategies and seven different non-verbal strategies. It was observed that the mother guided her child and the group during the hide-and-seek game, arranged the environment of the games, carried out routine activities both at the beginning and at the end of the games and arranged the games in accordance with the abilities and preferences of the child. These applications bear a resemblance to the model of integrated game groups.

As a result, the data from the present research reveal that a mother having a child with autism acts as a guide during the games and uses verbal and non-verbal interaction strategies in this guidance process and by doing so contributes to the process of participation in the games by the child with autism and in the child's social interaction with his peers.

Autism spectrum disorder is a developmental disorder that reveals itself as disorders in social interaction and communication skills, repetitive behaviours, and limited interests (American Psychiatric Association, 2000). Among children with autism spectrum disorder, there are generally restrictions even in simple social behaviours such as making appropriate eye contact, using gestures, responding to the speech of others, initiating and continuing communication, playing simple games, and developing friendships appropriate to his/her age (Carter, Ornstein-Davis and Klin et al., 2005; Paul, Chawarska and Cicchetti et al., 2008). Social interaction disorders seen in these children are among the most common problems (Wang, Cui and Parrila, 2011) and continue all their life (Callahan, Gillis and Romanczyk et al., 2011).

As children with autism spectrum disorder have difficulty in initiating and continuing social interaction with their peers and adults, it is important to support their social development with education (Tsao and Odom, 2006).

Even though the play development of children with autism spectrum disorders reveals differences as they have different cognitive, social and language developments, similar characteristics are seen in the play's qualifications (Wolfberg, 1994). The play skills of most of these children are repetitive and solitary (Hannah, 2001) and are games that do not have the developmental maturity suitable to the child's age (Weiss and Harris, 2001). In the literature, it has been established that there is a significant positive correlation between play skills and early attachment (Marcu, Oppenheim and Koren-Kaire et al., 2009), language and communication development (Blanc, Adrien and Roux et al., 2005; Stanley and Konstantareas, 2007), and joint attention (Rutherford, Young and Hepburn et al., 2007) among children with autism spectrum disorder. However, it was seen that play skills have a negative correlation with repetitive behaviours (Honey, Leekam and Turner et al., 2007; Lee, Odom and Loftlin, 2007). Consequently, it is important to make play skills one of the teaching objectives because they relate to language, communication and social development (Tsao, 2008). Repetitive behaviours are expected to decrease by the acquisition of social interaction skills through play (Lee et al., 2007).

Play with rules, one of the developmental phases of play, is a social game played within the framework of rules that are

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accepted by the group (Brain and Mukherji, 2005). These games require mutuality in social relations and continuance in the activity (Gottlieb, Levy and Gottlieb, 1986). They also enable children acquire such social skills as winning, losing, cooperation, sharing, leadership and taking turns (Stone, 2005). Children who play games should understand the rules and be able to change their behaviours according to the situation (Brain and Mukherji, 2005). As children with autism have difficulty in understanding the rules of the game and in estimating what other children will do, they encounter many difficulties when playing games with rules. Besides, they may always want to win, not accepting others winning, and they may show some inappropriate reactions when they lose. Children with autism also have difficulties in reading the clues that the other children give during the games, and they experience limitations when approaching their peers, and with focusing on and continuing in the activity (Cardon, 2007).

Using technological instruments (e.g., video modelling), adult-mediated, adult- and peer-mediated or peer-mediated methods are among the methods used with children with autism spectrum disorder for teaching them social skills and play skills (Reichow and Volkmar, 2010). Peer-mediated methods help children with autism spectrum disorder to expand their friend network while helping them learn and implement various social skills in natural contexts (Sansosti, 2010). There are many studies in the literature that show that peer-mediated methods are effective in children with autism spectrum disorder for giving them play and social skills (e.g., Ganz and Flores, 2008; Harper, Symon and Frea, 2008; Nelson, McDonnell and Johnston et al., 2007; Owen-DeSchryver, Carr and Cale et al., 2008). Being in a working or social interaction with peers is a part of the social development of children. Consequently, initiating an interaction and responding to the interaction, maintaining verbal communication, playing, and cooperative social behaviours are the objectives of peer-related social interventions (Tsao, 2008).

An integrated playgroup model, a peer-mediated method, is an efficient method that increases social interaction between children with autism and typically developing children, and it increases play behaviours together (Terpstra, Higgins and Pierce, 2002; Wolfberg, 2004; Wolfberg and Schuler, 1999). In this model, there is adult guidance in contrast to other methods that use peer models. It is thought that participation in social play and the interaction of children will increase when an adult guide creates a common objective for the play, organises the play and scaffolds their play based on the natural interests and abilities of the children (Wolfberg, 1994; 2003). When the literature is examined, only a limited amount of research that uses an integrated playgroups model can be found (Lantz, Nelson and Loftin, 2004; Roeyers, 1996; Wolfberg, 1994; Wolfberg and Schuler, 1993; Yang, Wolfberg and Wu et al., 2003; Zercher, Hunt and Schuler et al., 2001). In this area of research, it was found that this method increases social interaction, symbolic play and role play (Yang et al., 2003); it improves joint attention development, an interest in play and symbolic playing behaviours; it provides a significant increase in expressive language usage (Zercher et al., 2001); and it decreases passive observer behaviour in children (Lantz et al., 2004). Wolfberg and Schuler (1993) found an improvement in the joint attention and social interaction of participants. They also found that they participate in functional and imitation play more, and improvements in play behaviours are then generalised to other environments. Apart from this research, Wolfberg (1994) conducted a research that described the interactions among three children with autism while playing and the interaction templates of guide participant (who described the interaction pattern between adult participant and children in the playgroup with children). This research, which is a multi-participant case study, proved that social relations among children and their behaviour templates in the process of participation in symbolic play are effected by such stimulus as the social experiments of each child, the social guidance of the adult, the assistive role of play friends and the social behaviours of peers.

Vygotsky emphasises adult inputs in a child's learning process and the importance of the complexification of these inputs in parallel with the child's development (Weismer and Robertson, 2006). Parents have a significant role in the social development of children as they spend a lot of time with their children (Pang, 2006). There are a limited number of studies in the literature that examine the efficiency of parents as mediators or teachers in assisting children's social interaction skills and friendship relations (e.g., Schertz and Odom, 2007; Vismara and Lyons, 2007). As a result of these studies, it was found that children with autism spectrum disorder in early ages gain such social interaction skills as initiating interactions, taking turns and joint attention skills. Laugeson, Frankel and Mogil et al. (2009) found in their research that teens with autism spectrum disorder gain the social skills their peers have with parent-assisted approaches. This research examined only the efficiency of parent-mediated methods and did not examine in-depth the interactions among parents, children and peers that happen in play and the social skills gaining process. Describing how parents, especially the mother, help their autistic child acquire play and social interaction skills by providing the participation of peers will provide important clues for mothers and make an important contribution to the literature by giving a new perspective for future researchers.

Within this framework, this study aimed to determine the strategies used by the mother of a child with autism for nurturing her child's social skills during the play activities that she constructed with the typically developing children

Method

Design

For the present study, a case study method, which is a qualitative research design, is used to determine the strategies used by a mother during play activities, in her interactions with her 9-year-old child with autism. The play also involved three typically developing peers and one brother.

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Play is a social developmental-based skill. This study is based on the theoretical stance that the development of play by rules, like all social learning, occurs and is best studied within the framework of natural, meaningful, social interaction. A qualitative research approach, which calls for observations to be contextually embedded, involves the observation of children as players in a manner compatible with this theoretical stance (Kuvshinoff, 1993).

Location

The study was carried out in the family home and at the children's park. The family lives on the first floor of an apartment in Istanbul. The mother takes her children to the children's park, which is covered with trees and is within walking distance of their house.

Participants

The participants of the study were determined via a purposeful sampling technique (Mason, 2002; Patton, 2002). The criteria used in determining the sample are detailed in the following section, titled 'process of determining research participants'. The case study participants were made anonymous and are referred to as 'Mrs. Melek' and her child 'Burak'. The real names of the study participants were kept confidential.

Process of determining research participants. The mother and her child participating in the present study were determined following a study lasting for 7 weeks. This selection process was comprised six stages.

1. *Determining the criteria to be considered*: Examining the literature, it is seen that several studies determined the effective mother's feature in developing the social skills of a child with autism. These features include (1) making them play with their peers in natural environments, (2) making the child aware of his/her peers in play, (3) providing his/her peers' participation in the game, (4) making the child wait in line during play, (5) making task distribution in the game for her child and his/her peers, (6) participation in the game and playing with her child when necessary, (7) supporting her child when she is guiding her child in the game using such strategies as verbal prompts, gestural prompts and asking questions gradually withdrawing herself from the game as the time goes by (Hannah, 2001; Sussman, 1999; Weitzman, 1992).
2. *Preparing the interview questions*: *A series of* interview questions were prepared to determine that the mother met the criteria identified by the literature review. The interview structure consisted of 14 open-ended questions.
3. *Conducting the pilot studies*: Pilot studies were conducted with two mothers to test the suitability of the prepared interview questions and the interview skills of the researcher.
4. *Conducting interviews*: Seven semi-structured interviews were conducted with mothers who met the criteria. Each interview lasted approximately 1 hour, and they were recorded with the permission of the mothers.
5. *Assessing the mothers*: Following examination of the recorded interviews, it was determined that two of the mothers were a close match for the study criteria. The characteristics of both of these mothers were examined, and it was decided to continue the studies with the mother referred to as 'Mrs. Melek' because she volunteered to allow the researchers access to her home environment.
6. *Informed consent*: In accordance with the appropriate guidance on research ethics, Mrs. Melek was informed of the approximate duration, content and data collection instruments of the study, and her written consent to the study was obtained.

Mother

The mother was a 36-six-year-old housewife with three children. Besides Burak, she had two other boys, 8 and 14 years old.

Mother's opinions about developing her child's social skills. The mother stated that she gave importance to making her child play with his peers frequently. For this purpose, she says:

> *'At first, I speak to children. Burak is generally excluded from these kinds of situations. That is to say, generally, when children see that he is aggressive, they tend to behave like, 'Let's run and play somewhere else.' I talk the children immediately, "Burak can play with you." Or, "let's play together." Then, when Burak starts to break the rules, I skip over right away, "Burak, it's not played that way, it's played this way." '* (Interview #2; 7/6)

During the process, it was observed that the mother made Burak play by the rules frequently. She spoke of Burak's having difficulty in playing by the rules: 'Burak does not understand the rules if I do not participate in the game along with him. At that time, he doesn't know what to do and this is the problem for us' (Interview #5; 17/7.07). The mother explained that to help Burak play by the rules, she made him play first at home with his brothers, and then in the park with his peers (Diary #74; 9/7). The mother stated that she taught the rules of play during the play activity itself, 'I taught during the play. Burak, we are running, and you will chase. When you are "it," you will touch me, and I will be "it" ' (Interview #2; 7/6).

The mother revealed that Burak also liked games such as hide-and-seek; however, he only wanted to hide but did not like to seek. She said, 'Burak loves to hide, he loves to hide very much, but, er. . . . "I will always hide that way. " ' The mother explained Burak's adjustment process to the rules by saying: 'he got angry when he was "it" or caught on occasion. But he adjusted after I corrected him' (Interview #5; 17/7). Burak's playing by the rules is important. His mother said: 'If Burak plays by the rules, he can play with other children in the park' (Interview #5; 17/7).

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When explaining her role in her child's development, the mother said that she taught Burak to overcome his fear of crowds by disciplining him and by teaching him a lot of behaviour such as greeting, saying goodbye, asking permission, and waiting his turn (Diary #41; 30/5). In a semi-structured interview, she said: 'Burak, err, namely, can't play with other children on his own. He breaks loose from the play. When I take part in the play, Burak plays by the rules to a greater extent' (Interview#5; 17/7). Mrs. Melek observes that most mothers only watch their children in the park, but in fact, a mother should play with her children much more. Her advice to mothers of children with autism is 'honestly, playing together for the most part. I, well, playing games together with the mother and father for the most part' (Interview #1; 30/5; Diary #41; 30/5).

Child: Burak

Burak is a 9-year-old boy. Burak is receiving education in a school for children with autism who continues to attend an integrated class 1 day per week at a different school.

His mother revealed that she was suspicious of Burak's lack of speech until the age of four, his unresponsiveness to his name and his repetitive behaviours. She took him to the Marmara University Hospital Department of Child Psychiatry where he was diagnosed with autism. During the diagnosis, Burak was observed rocking back and forth for long periods of time; he could not make sentences using tense suffixes; he did not use gestures and facial expressions while speaking; he did not deal with his peers and participate in cooperative games without a guide; and he did not exhibit the behaviours of initiating and maintaining communication with his peers.

Role of the researcher

The researcher entered the study environment as 'participant observer' to collect qualitative data. In the study, the mother gave the researcher the role of 'teacher'. Although no training was given to the mother or the child by the researcher, the fact that the teacher role was given to the researcher can be explained by the researcher's concurrent employment as a teacher at an institution.

Data collection

Diary, field notes, detailed observations, physical and social data, interviews and video recordings formed the data obtained in the study. The data collection tools and their ratios can be seen in Table 1.

During the study, a triangulation method was used to relate data obtained by different methods such as interviews, field notes, documents, notes, diaries and video recordings. In writing the study findings, physical data were used for physical descriptions related to the house and play environments. Detailed observation data were used for descriptions related to individuals and how the game was played. Diaries in which semi-structured and structured interviews were written were used to record views and ideas of individuals. The data obtained from video recording were used for the interactions during hide-and-seek.

Table 1: Data collection techniques and amount of data collected

Type	Piece	Duration	Number of pages
Diary and field notes		530′	145
Detailed observations	20	770′	318
Semi-structured interviews	13	199′	152
Physical data	8	222′	130
Video recordings	3	98′55″	83
General total	44	1126′55″	803

Table 2: Types and distributions of the games

Type of activity	Number	Percentage
Play by the rules	19	52.8
Dramatic-symbolic play	8	22.2
Functional play	8	22.2
Constructional play	1	2.8
Total	36	100

Stages of focusing

Focusing was realised in six stages in the study process.

1. *Determination of environment and individuals*: In the first 2 days after initiating observation in the study environment, visits were realised to acquaint the researcher with the environment and to help the mother and child get acquainted with the researcher's presence in the environment.
2. *Determination of activities made by the mother and child*: In this stage, detailed observations were carried out for 7 weeks with the aim of determining the activities of the mother and child. Detailed observations are objective, written data about what is happening in the field (Bogdan and Biklen, 1998). Types and distributions of the games observed during the investigation are given in Table 2.

Examining Table 2, it is seen that play by the rules is the type of game that is played most frequently at 52.8% – it is followed by dramatic-symbolic and functional games.

3. *Making selections among the determined activities*: At this stage, we decided to focus on the 'play-by-the-rules' games because its incidence frequency differed considerably from the others. Types and distributions of the play-by-the-rules games are shown in Table 3.

According to Table 3, tag is the most frequently played game among the play-by-the-rules games. In spite of this, because teaching the 'hide-and-seek' game was begun during the observation, it was determined as the game to be focused on by taking the probability of being able to observe all of its teaching stages.

4. *Video shooting*: A video shooting of 45′15″ was recorded for the hide-and-seek game. Table 4 shows the stages and durations of the hide-and-seek game captured in the video recordings.

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Table 3: Types and distributions of plays by the rules

Type of activity	Number	Percentage
Tag	7	36.8
Hide-and-seek	4	21.1
Car racing	2	10.5
Football	1	5.3
Computer games	3	15.8
Atari	2	10.5
Total	19	100

Table 4: Stages and durations of hide-and-seek game

Content of the chapter	Durations of recording
Starting the game	5′13″
Counting-out tongtwister	8′50″
tongtwisters	
Burak hiding	15′31″
Burak being ‘it’	12′2″
Ending the game	3′39″
Total	45′15″

5. *Preparation of video master tape*: A video master tape of 12′17″ was developed by taking into consideration the sequences and durations of the full-length hide-and-seek recording.
6. *Videotape analysis*: At this stage, a transcript of the verbal mother–child interactions in the master tape was taken. When examining the videotape, essentially, we were trying to answer two questions: ‘What are the contributions of a mother to setting up play and maintaining it?’ and ‘What are the strategies that the mother uses to make her child participate in a game with rules?’ As a result of this examination, it was determined that the mother uses some verbal and non-verbal strategies to provide the child’s participation in play activity. The researcher names the strategies that the mother uses, taking the names used in the literature. Video recordings were watched with the mother, and her approval was received to determine the convenience of these strategies’ names. Thus, a code key was created, and interaction templates in the video recordings were codified accordingly. Figure 1 shows the coding categories for the mother’s communication strategies.

Their frequency of repetition was determined by counting the codified interaction templates.

Reliability

In qualitative studies, it is important to determine how data are understood by the individuals in the environment so that the study has validity and reliability (Bogdan and Biklen, 1998; Mehan, 1978). By watching video recordings together with the individual in that environment, the researcher finds the opportunity to compare her interpretations with those of other individuals (Mehan, 1978). For this reason, the researcher watched video recordings with the mother. During this period, we asked the mother questions such as: ‘What are you doing now?’ or ‘Why are you doing this?’ The researcher wanted to name and interpret the strategies she used. Thus, the appropriateness between the naming and the interpreting behaviours of the mother and those of the researcher were examined. This technique is considered to have increased the reliability of the study.

Findings

Hide-and-seek was played in a leafy park near their house. Burak’s mother, Ates (Burak’s brother), 9-year-old Sevda, 10-year-old Selda and 8-year-old Seyma (neighbours of the family) participated in the game.

Examining video master recordings of the hide-and-seek game, it was determined that the mother used 12 verbal and seven non-verbal communication strategies during the game. These are the mother’s verbal communication strategies and frequencies: giving verbal instructions (90), asking questions (37), making explanations (32), whispering (23), reminding (17), approving (16), verbal prompting (15), self-talk (4), encouraging (4), comical actions (3), giving feedback (2), and rewarding (2). The non-verbal communication strategies are physical prompting (69), modelling (35), gestural prompting (17), making eye contact (15), touching (12), waiting (10), and using gestures and mimics (6).

How the mother used these strategies is as important as the kind and frequency of these strategies. For this reason, the methods by which the mother used these strategies are given as examples by explaining them under the headings of ‘mother’s contributions to building and maintaining a play with rules’ and ‘mother’s monitoring play initiations and the preferences of her child’.

Mother’s contributions to building and maintaining a play by the rules game

This section explains the mother’s determination of her child’s play preferences and play initiations, environmental arrangements, guided participation process, finding playmates and inviting them to the game.

Mother’s monitoring play initiations and the preferences of her child. The mother knows Burak’s play preferences and plans the games accordingly. Burak loves computer games and cycling very much, and his mother uses these activities as rewards.

The mother first played with Burak alone for monitoring play initiations in the hide-and-seek game. When she saw that Burak did not meet his hiding and seeking tasks, she told his brother to participate in the game. She then hid with Burak and jointly sought out Ali together as ‘it’ (Diary #80; 9/7). A few days after the first hide-and-seek game, the mother played the game again together with his brother in

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Figure 1: Coding categories for mother's communication strategies

Verbal communication strategies	Non-verbal communication strategies
Giving instruction	Physical prompting
Whispering	Modelling
Asking question	Gestural prompting
Making explanation	Making eye contact
Reminding	Touching
Approving	Waiting
Verbal prompting	Using gestures and mimics
Self-talk	
Encouraging	
Comical action	
Giving feedback	
Rewarding	

the house. During this game, she hid with Burak and helped Burak find the other boys when Burak was 'it' (Diary #93; 25/7).

Environmental arrangements. The mother used the slide unit in the park for the children's hide-and-seek game. She determined the street lamp near the playground as the home base.

Finding playmates and inviting them to the game. The mother finds the friends to play with Burak on her own and invites them to the game. Ates (Burak's brother), Selda, Sevda and Seyma were invited to play hide-and-seek (Diary #97; 31/7).

Mother's process of guided participation. The mother participated in the hide-and-seek game and guided the children. The mother's process of guided participation can be examined under three headings that are scaffolding interactions, social-communication guidance and play guidance.

Social-communication guidance
By participating in the hide-and-seek game, the mother guided Burak's initial interaction with his peers, responded to the subsequent interactions and helped sustain this interaction.

Play guidance
The mother played with her son to help him take part in the game; she gave reminders to make him perform tasks in the game and maintain his focus.

Scaffolding interactions
The mother provided support according to the needs of her child by giving instructions, serving as a model and providing verbal assistance. The mother withdrew her support as the child's play initiations increased; however, she never carried out any independent application.

The mother's interaction examples related to the guidance process mentioned above are displayed together with the interaction strategies used by her under the heading of 'mother's contribution in making her child participate in a play by the rules game'.

Mother's contribution in making her child participate in a play by the rules game
Hide-and-seek is a game with five aspects: starting the game activities, counting-out, hiding, being 'it' and ending the game activities. The mother's guidance process in these aspects, the strategies she to make her child participate in the game and the child's participation process are explained through descriptions.

Starting the game activities. At the beginning of the game, the mother wanted the children to gather in the playground and greet each other. She guided them in planning the game and remembering the rules. The interaction example related to the greeting routine is given below.

Greeting
The mother pulled Burak off the slide so he would perform the first task. Burak petitioned his mother: 'Let's play tag.'

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She pulled the boy in front of her and wanted him to greet his friends (Master Tape 16/8, 0′34″–0′38″).

> *'The mother asked, "Did you say hello to your friends?"* (asking question)*, she let Burak go and leaned forward to touch his shoulder* (touching). *Seyma looked at Burak. Burak said, "He-llo" and looked at Seyma, and then at the ground. Seyma said, "Hello Burak" while she was looking at Burak.'*

In the example, the mother attracted her son's attention by touching him, and she asked a question to remind him to greet his friends.

Counting-out and choosing 'it'. After the mother had ensured the gathering of the children, the children played tag and sliding games for a while. After the sliding game, she gathered the children in the same playground to play hide-and-seek. She chose Selda to make the first counting-out.

Choosing 'it'
Seyma sang the counting-out song while pointing at each child one by one. The mother waited behind Burak by touching him. During counting-out, Seyma was out first. Burak looked at Seyma and smiled. Then, Sevda and Selda were out. Burak was the only one left. Burak grabbed his mother's hand (Master Tape 16/8, 4′48″–4′56″).

> *'The mother pulled Burak towards her chest* (touching). *Seyma said: "You are it" and looked at Burak. Selda said: "You are it" too and both of them looked at Burak and pointed at him with their forefingers. Burak said: "it" while he was looking at Selda and smiled. The mother said: "You are it, Burak"* (making an explanation) *and turned him towards the home base* (physical prompting). *Selda and Seyma got away from Burak.'*

As seen in the example, the mother attracted Burak's attention by touching him during the counting-out to make him wait. After other children in the playgroup told Burak that he was 'it', his mother also explained that he was 'it' and directed him towards the home base using physical prompts.

Hiding. Burak's hiding consists of the activities of finding a place to hide, waiting in that place, controlling home base and tagging home base. Examples of interactions occurred during 'waiting in the place where someone is hiding' and 'controlling home base' are given below.

Waiting in the place where someone is hiding
After Selda started to count, the mother told Burak that they would hide. Burak waited and looked at his mother. The mother then grabbed Burak's arm and walked with him behind the trees. Burak crouched down when she touched his shoulders and pointed for him to sit (Master Tape 16/8, 2′30″–4′56″).

> *'Burak was waiting in front of his mother by bowing his head. The mother said, "Be quiet"* (giving instruction, whispering). *Because Burak continued to wait, the mother said, "Down, down"* (giving instruction, whispering). *But Burak was still waiting. The mother asked, "Is it Ok?"* (asking question). *Burak said, "Ok" and then he crouched down at his mother's legs and leaned his head on her chest. The mother asked, "Look, what are we going to do?"* (asking questions, whispering). *The mother put her hands on Burak's shoulders and leaned forward to talk* (touching). *Burak started to play with the leaves under which they hid. The mother said "When "it" finds us, we will run first"*(reminding and whispering). *The mother pulled Burak a little towards herself* (touching). *Burak released the tree and put his hands on his knees. The mother asked, "We are going to tag on the stick, aren't we?"* (asking question and whispering). *At first Burak looked at the stick and then looked at the tree again.'*

In this example, the mother hid with Burak to make him wait there. She gave verbal instructions for him to hide quietly. Then, she touched Burak, attracted his attention by asking questions, reminded him what to do by whispering and asked him to verify whether he understood or not.

Controlling home base
The mother and Burak hid behind the trees when Selda started counting. Burak crouched down in front of his mother. She explained how they would tag the stick at home base and what they were going to do (Master Tape16/8, 2′48″–2′53″).

> *'Burak looked at a child going through the woods and shouted, "Coming!" The mother said, "Be quiet, son"* (giving instructions, whispering) *and grabbed Burak's shoulders* (touching). *He looked at his mother. The mother asked, "Where?"* (Asking questions, whispering). *Burak looked at the place where the child was and said, "There". The mother said, "Stop right there. Hold up."* (Self-talk). *She leaned to the front, looked in the direction of the home base* (modelling) *and grabbed Burak's shoulders so he too would lean* (physical prompting). *Burak looked together with his mother.'*

In the example, when Burak spoke loudly in the hiding place, his mother whispered instructions for him to be quiet. She asked Burak where he saw the child. After Burak's answer, she controlled the child using self-talk strategy and thus modelled for Burak. She used physical prompts to make Burak notice the approaching child.

Being 'it'. Burak's being 'it' consists of the activities of starting the game by counting, and seeking and tagging other children. Examples of interaction occurring during the activities of 'starting the game by counting' and 'seeking other children' are given below.

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Starting the game by counting
When Burak became 'it', as a result of counting, he told his mother: 'Mom, we are getting closer.' Mother grabbed Burak's hand and shoulders, turned him towards the home base and went to the home base together (Master Tape 16/8, 4′59″–5′09″).

> *'The mother let Burak's hand go when they got in front of the stick and made him get closer by indicating the stick* (gestural prompting) *and said, "Count until twenty"* (giving instruction). *Burak said, "Twenty" and then put his arms on the stick, leaned his head on his hands and closed his eyes. The mother said, "Count"* (giving instruction).*But Burak was still waiting, by closing his eyes. The mother said "One"* (reminding) *and then Burak said, "One." She leaned her right arm on the stick and looked at Burak. Burak started to count.'*

In the example, the mother reminded her son of his task and instructed him to count. Then, she used a sign clue to get him to close his eyes. After the second 'count' instruction, Burak was still waiting. At that time, she said 'one' and reminded Burak how to count.

Seeking other children
After Burak finished counting, his mother shouted the number '20' and modelled. Burak repeated the number '20' by shouting (Master Tape 16/08, 5′56″–6′09″).

> *'She released the stick and grabbed Burak's right shoulder* (touching) *and said, "Let's seek now"* (giving instruction). *He opened his eyes, let go of the stick and said "Let's". Then she let Burak go. Burak took a few steps by getting away from his mother. Mother looked at the right side of the stick and called, "Burak"* (calling his name). *Burak stopped and turned to his mother once again. She turned and looked at Burak and then said, "Come, come and look. Here is one"* (giving instruction and explaining). *He is waiting and looking at his mother. She waved her hand for Burak to come* (gestural prompting) *and said, "Come, come, come here"* (giving instruction).'

In the example, Burak completes his count at home base. His mother then attracted his attention by touching him and told him that he had to find the other children. Burak went in the wrong direction, so she called his name, attracted his attention and then called him near her by giving instruction.

Ending the game. In the process of ending hide-and-seek, the activities of planning another game session and saying goodbye were carried out. Interaction examples occurring during the activity of 'saying goodbye' are shown below.

Saying goodbye
After the hide-and-seek game was over, Burak's mother grabbed his shoulder from behind and leaned slightly towards him (Master Tape 16/8, 10′51″–10′54″).

> *'The mother asked Burak, "Did you say goodbye?"* (Asking a question).*Then Burak said, "Goodbye" while he was looking at the girls in front of him. Seyma looked at Burak and said, "Goodbye, Burak." The mother stood up and let Burak go and said, "Let's go," OK"* (approving). *She waved her hand at the girls* (modelling). *She grabbed Burak's hand. Selda and Sevda also waved their hands. The mother said: "Let's go." And then she walked towards the exit.'*

In this example, the mother reminded Burak to say goodbye by asking him a question. After Burak had said 'good evening', she gave her approval. Later, she waved her hand and modelled for him.

Discussion
When the things that the mother did to teach her child hide-and-seek were examined in the video recordings, it was observed that the mother determined her child's play abilities and preferences, found play friends, invited them to play and participated in the play as a guide participant. These orderings show similarities with the integrated play-groups model. According to the integrated playgroups model, the play competences and interests of the child are observed and interpreted before starting the play, the play environment is prepared, friends are found and invited and play materials are organised (Wolfberg, 1994; 2003; 2004; 2005).

The mother used a park in the neighbourhood as a hide-and-seek-play environment. The integrated playgroups model requires play environments to be full of peers who have social competences; natural environments (Lantz et al., 2004; Wolfberg, 1994; 2003; Wolfberg and Schuler, 1999) and the adjustment and organisation of this environment by an adult (DiSalvo and Oswald, 2002). Difficulties that children with autism spectrum disorder show in social skills are also seen frequently at home, at school and in social areas (Sansosti, 2010). For this reason, it was proposed that skills should be taught in the natural environments of children and in natural contexts where these skills were used (National Research Council, Division of Behavioral and Social Sciences and Education, Committee on Educational Interventions for Children with Autism, 2001). The mother stated that she used the home and garden environments so that Burak could play with his peers; she often invited neighbours' children to the home (Diary #41; 30.05.07, p. 41), and she preferred going to the children's park in their neighbourhood where children in particular go (Interview #5; 17.07.07, p,6). The environments that the mother uses comply with the above-mentioned criteria.

The mother created a group of five persons for her child to play hide-and-seek, tag and other games. This group included three children of neighbours and Burak's brother Ali. In the integrated playgroups model, playgroups consist of familiar children, siblings, at least three persons, at most five persons, and there are more peers who have social competences in the group (Lantz et al., 2004; Wolfberg, 1994; 2003; Zercher et al., 2001). There are various studies

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showing that typically developing siblings can help children with autism disorder to improve their social skills (Celiberti and Harris, 1993; Tsao and Odom, 2006). In these studies, typically developing siblings were instructed, and this instruction activity was examined. In the present research, it was seen that the mother did not instruct the brother particularly; however, she instructed him in the same way as the peers and her child with autism disorder were instructed during play guidance. It was seen that by making him and his brother play at home before, she taught Burak how to play hide-and-seek, which Burak had difficulty in playing with his peers (Diary #74; 9/7). Thus, the brother participated in the playgroup as a play partner in this study.

Children with autism disorder have difficulty in making play activities with their peers or toys without specific guidance (Tsao, 2008). In this study, the mother tried to help her child learn how to play and interact with his peers by participating in and guiding the play herself, and by providing the participation of typically developing children. According to the perspectives of both Piaget and Vygostky, interaction with peers has an important role in the cognitive development of the child. Vygotsky, in particular, emphasises the importance and necessity of both adult assistance and interaction with peers who are more competent than the child in the cognitive development of a child (Gauvain, 2001; Hogan and Tudge, 1999). According to this point of view, the development of children happens in a social environment, and it depends on their interaction with other individuals. Studying with a more competent peer affects the development of the child positively. As a result of this interaction, both the child and the competent peers learn (Tudge, 1990). The role of the adult in this process is to determine what the child can do independently and to determine the potential change that the child can show by offering guidance. The adult enables the child to participate in an activity that child cannot participate in independently and supports the child's performance with the assistance of the more competent peers or adults (Dixon-Krauss, 1996). In the course of the observations, the mother determined the abilities and interests of her child and guided him in play activities in which the child had not been competent.

It is seen that the mother starts an interaction with peers by participating in the playgroup; she provides guidance that enables Burak to respond to the interactions initiated by peers and for maintaining their interaction. It is seen that the mother guided the playgroup using verbal and non-verbal strategies to enable her child to complete his play tasks; she supports her child, and she withdraws her support as the child gets independent. Strategies that the mother uses during the play are similar to the strategies that the integrated playgroups model include, such as physical prompting, modelling, verbal prompting, asking questions, etc. In addition to them, such interaction strategies as talking to oneself, waiting, and using gestures and mimics were also used. The full immersion of the child with autism in play, increasing the child's competence in play and making the child interact with other children in play are aimed for in the course of the guidance (Wolfberg, 1994; 2004). It is seen that the mother makes her child pay attention to his peers, makes him watch them and be interested in play using verbal and non-verbal interaction strategies. Yang et al. (2003) stated that implementing integrated playgroup models to children with autism at home and in school provides an increase in their participation in symbolic and pretend plays and in social interaction.

The mother made all the children get together at the beginning of each game; she made them greet each other, told them what to do during the play and reminded them of the rules of play. She made the children say goodbye to each other and make an appointment for the day after. According to the integrated playgroups model, in the beginning of play, there are such activities as meeting in the same play area, making a visual scheme of play sessions, greeting, repeating the rules of play, and the use of reminding strategies and reminders of the rules of play. Such routine activities as looking at a visual scheme of play, meeting in the same play area, repeating what was done, planning other play sessions, and sharing private objects and food are done at the end of play (Wolfberg, 2003). Although strategies that the mother uses to make her child participate in play and to make him socialise show similarities with this model; the mother's not gathering the playgroup on regular days, sometimes allowing different children to participate in the play, devising play activities at home in which she does not think her child is competent, show some differences from this model.

Within the scope of this research, it was not aimed at observing an increase in the participation rate of the child in play and the verbal-expression usage. However, the mother's withdrawing her guidance gradually in the play and going back to a verbal guidance process while counting, and being the person who looks for others hiding in the game can be interpreted as a way of increasing the child's participation in play. It is thought that the mother's participation in play and the strategies she uses while guiding the play make important contributions to Burak's participation with his peers in games with rules. This research has significance in as much as it exemplifies the fact that children with autism can participate in games with their peers and can learn these games. In future research, a child's acquisitions of play skills with the guidance of the mother can be examined by making experimental studies. In addition, future research could examine the interaction of the children in the playgroup with each other using qualitative research methods.

In this research, no instructions were given to the mother, the child with autism and family members, and the mother has no educational experience about this model. However, it is thought that this model is an easily applicable one as the environmental arrangements that the mother makes and the interaction strategies that she devises are similar to those of the integrated playgroup model. It is thought that the interaction strategies that the mother uses, based on her own experiments, and the environmental arrangements that she makes and her play guidance help the child with autism to

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participate in a game with his peers and to have a social interaction with them.

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