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An analysis of children's play behaviors towards toys representing diversity

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ARTICLE INFO	ABSTRACT
	The purpose of this study is to analyze the play behaviors of children aged 60-72 months with respect to individual differences, cultural differences, and special needs differences. The study employs the basic qualitative research method. Fifty-two children enrolled in four different pre-school classes were given toys that featured diversity. The children's play behaviors were analyzed through the researchers' non-participatory observations. The data obtained from the observations was analyzed through content analysis. The study showed that while the pre-school children displayed similar behaviors towards both the toys representing individual/cultural diversity and the ones without diversity, their play behaviors towards the toys representing special needs and the roles they assigned to these toys differed greatly in both positive and negative terms. **Keywords:** diversity, play behaviors, preschool education, toys

INTRODUCTION

The modern world is transitioning to a social order that makes or forces people coming from various cultures and ethnicities, speaking different languages, adopting different ways of life, displaying diverse characteristics, and having specific needs that pertain to themselves to live together. It is a need to develop a culture of compromise and a concept of respect for diversity so as to ensure and sustain a peaceful and tranquil environment for people and groups living together in harmony. The most important problems encountered in providing this unity at the social level are bias and discrimination. Contrary to popular belief, children start modelling about diversity from very early ages.

The concept of diversity starts to develop in the infant stage when the child is only 3-4 months old. During this phase, children start to distinguish themselves from other people. From 12 months old and on, an infant is aware that s/he has a distinct mental world, even if certain points are common to others as well. A 24-month-old infant starts becoming curious about physical diversity and becomes aware of his/her gender. Between 24-36 months, perception of diversity develops, and it is followed by pre-discrimination. By the time children are about five years old, they have begun to make sense of their self-identity and cultural values: hence, their ethnicity (Ekmisoglu, 2007).

Children also begin to notice the differences in special needs status in the preschool period. Prejudices and negative attitudes towards differences cause adverse events in society. Negative attitudes towards individual, cultural, or special needs disrupt the social order. These negative attitudes and prejudices will be noticed in childhood, and individuals who respect and accept differences will be brought into society with the proper education. They can develop a positive attitude towards diversity and begin to develop ideas about what people who have been wronged for their differences can do to be better and feel better. This situation may continue in adulthood (Ekmisoglu, 2007). Therefore, it is very important to analyze what children think about diversity and how they develop attitudes towards diversity.

One of the most efficient ways to collect data on what happens in children's mental world is to analyze their play. According to Casey (2010), play is one of the most important activities of children. While playing, children speak their inner language and reflect the values they have adopted and the rules specified in their lives.

Based on the assumption that each play behavior has underlying motivations, the present study employs psychodynamic play theories. According to psychodynamic theories, children reflect their emotions or lack thereof in their play. Hence, play is considered to be the most accurate gauge for finding clues about a child's behavior and identity. Children's emotions such as love, hate, and anger not only towards their play mates but also towards the play objects are mirrors for their inner worlds (Baykoc Donmez, 1992; Sevinc, 2004).

Some researches (Baris & Uslu, 2009; Harper & McCluskey, 2002; Killen, 2007; Killen et al., 2002; Margalit, 1998; Mulvey et al., 2010; Scholes et al., 2010; Unal, 2018; Wainman et al., 2012) show that people with special needs stay away from social life except for vital needs and live as a disconnected community from society due to urbanization and limited physical opportunities negative attitudes towards the disabled. 78.5% of the disabled think that social awareness and understanding towards themselves are not sufficiently developed, and 40% feel excluded from other segments of the society. Therefore, in Turkish culture, individuals with special needs have a lifestyle isolated from society instead of being intertwined with society. It makes difficult for people to encounter individuals with special needs from an early age and accept this as a part of society. It is thought that this situation will affect children's schemas related to special needs or differences in preschool ages.

Metin (2016) published a review article covering the papers, master theses, doctoral dissertations, book chapters, presentations, and reviews published between the years of 1993-2016. It is determined that the subjects most studied on the topic of diversity concerning disabilities are based on parents or teacher's experiences, attitudes, knowledge, and perspectives. However, few studies focusing on children.

It has become more important to teach respect for differences, both because of the limited number of studies conducted in this context, as mentioned above, and because the increasingly diverse modern world now needs more studies on this. The basis of adult behaviors is laid in early childhood, and they are shaped, to a great extent, in the same period. Thus, detecting children's worldviews regarding diversity in early childhood could potentially prevent biased worldviews that are intolerant of diversity. This study analyzes the play behaviors of children who are 60-72 months old, reflecting diversity in terms of individual, cultural, and special needs.

In this context, answers to the following questions were sought in the study:

1. How is play behaviors displayed when children encounter the toys featuring diversity in terms of individual, cultural, and special needs differences and behaviors displayed when they encounter toys representing no diversity?

2. How are the roles of children attribute to toys representing diversity or not in terms of individual cultural and special needs differences?

METHOD

Research Model

The study employs the basic qualitative research method. This method involves data collection through observations, interviews, or document analyses. In a basic qualitative study, what is observed changes depending on the theoretical framework (Merriam, 2009). For the observations to be made in this study, physical differences in physical appearance such as being freckled, being bald or being black are "individual differences"; special needs such as walking, sight, and hearing that create physical barriers are taken as "special needs" and physical elements that exhibit the contextual characteristics of a different culture are taken as "cultural differences".

Participants

The study involved 52 children, ages 60-72 months old, enrolled four different classes in independent pre-schools affiliated with the Ministry of National Education of Turkey in the Ankara province.

The criterion of this study is "not having received any education on cultural and individual diversity." Since the selected institutions did not give children diversity education, these children met the criterion of the study.

There are no children with special needs in any classes. Children have the dominant culture in society. All of the children speak the same language as the elements of the dominant Turkish culture, have the same lifestyle and the same socio-cultural behaviors. A dominant culture is one whose values, language, and ways of behaving are imposed on a subordinate culture or cultures through economic or political power" is added. In addition, no training was provided for cultural diversity and individuals with special needs in this classrooms. Teachers have previously reported that they do not share anything with children in this context and do not consider its educational content.

Data Collection Tools

This study collected data through observation notes. The observations were non-participatory. Three researchers took independent observation notes in the learning environment at the same time.

Data Collection Process

At the beginning of this study, voluntary participation consent forms were received from the administrators and teachers of the schools that were selected, as well as the parents of the selected children. Briefly, no manipulation was made on the participants during the research. Also there isn't any material in the learning centers representing the diversity for toys in the classrooms. The data collection process started with the pilot study.

Pilot Study

The pilot study was conducted in a pre-school classroom with 18 children (six boys, 12 girls). To begin with, the researchers created a learning center for diversity before the children came to the class. The materials placed in this learning center

represented individual/cultural diversity as well as diversity stemming from special needs. The materials in this learning center were (**Appendix A**):

1. Man in Wheelchair Toy (MWT)
2. Woman with Visual Disability Toy (WVDT)
3. Woman with Hearing Disability Toy (WHDT)
4. Old Lady Using Walker Toy (OLUWT)
5. Man with Prosthetic Feet Toy (MPFT)
6. Woman with One Blind Eye Toy (WOBET)
7. Person with Freckles Toy (PFT)
8. Bald Woman Toy (BWT)
9. Japanese Woman Toy (JWT)
10. Russian Man Toy (RWT)
11. Native American Man Toy (NAMT)
12. Black Man Toy (BMT)

In addition to the researchers placed 12 other toys in the learning environment. The toys are placed in the middle of the classroom, which is visible to everyone and has both soft and hard floors, during the children's. These toys did not have individual or cultural differences but were the kind that children would encounter frequently in daily life. These toys differed from each other in certain aspects, such as hair/eye color, height, clothes, etc., but were standard children's toys. The researchers observed and recorded the play behaviors and interactions among children in this learning center without offering any explanations. There were also other learning centers in the class. The children were not directed to this center specifically. In this part of the process, the children were allowed to play freely for 45 minutes only one day per class and this took four days in total.

The observations indicated that most of the children were initially interested in these toys because they were new and the children wondered about them. After the sense of newness was gone, they engaged the usual toys and materials in the class. Individual/cultural diversity as represented by the toys, forming the basis of this study, did not draw the attention of the children at the expected level. For instance, the woman with the visual disability wore a pair of black glasses. The children assumed that it was a pair of sunglasses. Their play behaviors were shaped according to this assumption. Similarly, the woman with the hearing disability wore a hearing aid device on one ear. The children thought it was an earring/accessory. Thus, the need to revise the activity became apparent.

Main Study

After the pilot study, the data collection process was revised in the following ways:

1. The study was implemented during activity hours when the children could focus only on these materials.
2. In order to help the children to focus individually on the materials and explore different their unique characteristics, each toy was introduced separately.

After the researchers introduced the toys, the children were told that they could play with these toys and an activity hour was held where the children could focus only on these materials. Introductory posters were prepared to use in the familiarizing process. They are presented by researcher. The following information was given in the posters: living spaces of the toys, their diversity (individual and cultural differences and special needs), the things they like doing, their professions and family lives, and other people in their families. No changes were made in the toys themselves. The toys used in the pilot study were used again.

Implementation Process

In order to attract the attention of the children, the researchers brought materials into the classroom in a covered toy truck. The toys were removed from the truck one by one, and 15-minute introductions were made using the posters. Then the children were given half an hour of time to set up a game and play with these materials. The children were allowed to play in small groups as they wished. During the children's play time, the researchers made non-participatory observations.

Data Analysis

The data obtained was analyzed using the content analysis method. The researchers compiled the observations, coded the observations independently, and carried out content analysis. For data analysis, Dey's (1993) qualitative analysis steps were employed. According to Dey (1993), qualitative data analysis involves three steps: description, classification, and association. In description, the person, object, or events that are under consideration are described. The content is then explained. In classification, the data points are coded and analyzed. Afterwards, they are sorted into categories based on themes that emerge. This allows the obtained data to be compared and contrasted. Finally, the themes are defined in relation to each other in order to establish the underlying connections in the data set. Based on Dey's classification, the data was analyzed as follows:

The researchers' observational data was pooled and examined, and similar play behaviors were grouped. The data points were independently coded by the researchers, and then they collaborated on the code categories in order to arrive at a consensus. Finally, the data was grouped into specific themes, and the differences and similarities were examined.

While obtaining themes and categories from the codes, the following exemplary approach was followed: In the notes taken by the researchers in the games, the codes such as "not taking into the game", "ignoring", and "not giving a role" were gathered

under the theme of "not included in the play". Codes such as "cynical attitude about what is different" and "nickname" were gathered under the theme of "making fun". Codes such as "not accepting difference" and "ignoring physical difference" were gathered under the theme of "rejection". These three themes were discussed under the category of "reactive play behavior".

Validity and Dependability

Credibility

One of the ways to improve the credibility of a qualitative study is prolonged engagement (Holloway & Wheeler, 1996).

Prolonged engagement

To ensure credibility of the study, prolonged engagement was employed. To accomplish this, the researchers made observations for three days in the classes. They observed the classroom atmosphere, the children's playing and communication with one another, and their free-play behavior. The extended period of the researchers' observations of child behavior in the classroom helped to distinguish whether the behaviors they reflect in practice are general behaviors or if they were directed towards those toys in particular. For instance, one of the children displayed aggressive behaviors, but it was noted that the aggressive behaviors were not directed specifically to diversity. It was observed throughout all of that child's interactions.

Dependability

Triangulation: To increase the dependability of this study, researcher triangulation, one of the common triangulation methods, was employed. For researcher triangulation, more than one researcher is involved in the data collection, analysis, and interpretation processes (Houser, 2015; Speziale et al., 2011). In the present study, all the researchers participated in the implementation and observation processes and took separate observation notes.

Confirmability

Audit trail: Audit trail ensures that the decisions made in the research process, the designs and procedures considered, and the problems encountered during the analysis phase are recorded in a thoroughly detailed manner. The main purpose of this method is to enable the same research to be carried out by different researchers following the same processes. This method documents how the data obtained in the research was used to reach the final conclusions (Houser, 2015; Speziale et al., 2011).

Holloway and Wheeler (1996) emphasize the following criteria as essential for confirmability:

1. **Raw data such as voice recorder data, field notes, and diaries:** In the present study, field notes taken by the researchers were used as raw data.
2. **Analyzed data:** Analyzed data in this study are presented in the findings section.
3. **Access to value clauses, themes, codes and categories showing the formation of findings:** In this study, themes, codes, and categories were formed while making in-depth analyses of the data. In addition, key data points and conclusions are presented in this paper.
4. **Definition of the preferred method, the procedures implemented in the method, the purposes of the study, and the expectations from the study, a.k.a., defining the research process:** In this study, these criteria are provided in detail under the method section.
5. **Explanations for the development and implementation of the measurements used for the data collection, e.g., open-ended questions and observations:** In this paper, the pilot study, the changes made after the pilot study, and the process for classroom observations are explained in detail. For confirmability, the quotations and stories extracted from the research process are important. In this sense, the findings should involve the direct quotations of participants rather than the biases or views of researchers (Lincoln & Guba, 1985). This paper makes use of direct quotations from the children.

FINDINGS

In this section, the quotations from the children's speeches are given with codes C1, C2, C3, etc., instead of giving the names of the respective children, while the researchers' notes are given with the codes O1, O2, O3, etc.

Play Behaviors

This section focuses on whether the children's play behaviors differed towards toys with individual/cultural diversity and special needs compared to toys representing no diversity.

In **Figure 1**, it was seen that the children's play behaviors towards the toys did not change based on individual/cultural diversity. Towards the toys representing individual/cultural diversity, the children demonstrated behaviors that are similar to the ones they demonstrated towards the toys representing no diversity. Children have "completely included in the play" with toys related to individual and cultural differences. However, their play behaviors with toys for special needs were seen in six different ways.

> **O1:** A group of children are impersonating friends while playing. They assign the same roles to the toys representing individual diversity (PFT and BWT), cultural diversity JWT), and toys with which children usually play. There is no differentiation, positive or negative, regarding the diversity represented by these toys (3rd class).
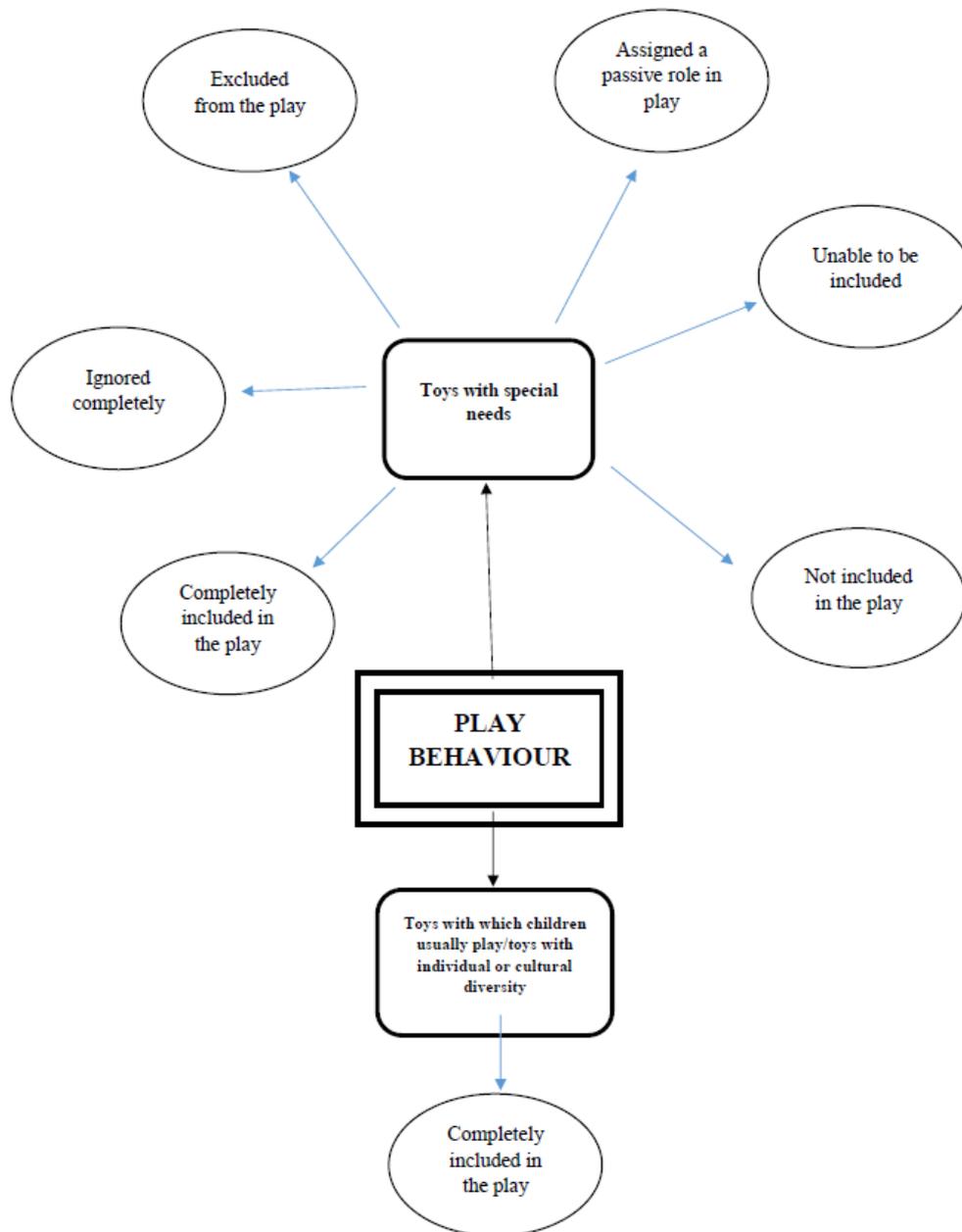
Figure 1. The children's play behaviors towards the toys

O2: The children are playing house among themselves. They ignore PFT of the doll. Or they do not highlight the features of the doll (1st class).

When the observer notes and observations were examined, the children (freckled figure and bald figure) and the culturally different figure (Japanese figure) did not emphasize their distinctive features. When the roles they gave were examined, it was observed that they did not make any role discrimination due to their differences.

The children's play behaviors with the toys without any special needs and the toys with cultural-individual diversity all fall under a single category of "completely included in the play." The children involved these toys completely in every part of their play, assigning active roles to these toys throughout the play process. For example, the children gave the freckled toy the role of a child and this toy was actively used in this role throughout the whole game.

The children's play behaviors towards the toys representing special needs diversity, however, fall under seven categories. As was the case with the toys representing no diversity, some children allowed the toys with special needs to be included in the play and assigned active roles to them. These play behaviors fall under the "completely included in the play" category. For example,

MWT and the ordinary toy are in a conversation (3rd class):

C1: "Are you injured?"

C2: "Yes, I am injured."

Two children took two dolls without any diversity in hand and were kicking the ball to each other. It was like a competition. They put the blue-haired girl and WOBET outside the play area as spectators. After they finished playing with the bal, they got the blue-haired girl and WOBET to play with the ball, and the first two toys were the spectators this time.

Afterwards:

One of them said:

C3: "Let's play hide-and-seek."

All four of them started to play hide-and-seek. They included WOBET in the play (2nd class).

O1: Two male children are playing with two male toys. One of them is ordinary and the other one is in a wheelchair. The child says: "Mert, help! He is sick." Then the other pushes his wheelchair and says: "Because he just got out from the hospital" (1st class).

O2: At the beginning of the activity, all the male children took all the male toys. The children who took MWT made up a basketball game play and created a court. Meanwhile, there was an old man toy, and he scored a basket as well.

When talking to that toy, the children said, "Hey, old guy, …" but they did not assign old people's roles to him. They made him play basketball (4th class).

O3: The children had the old toy say, "Hello, son." Other children said that they should check the feet of MWT (3rd class).

O1: A boy is playing with an ordinary toy and WHDT. They took a trip together, passed through tunnels, etc., and no behavior catering to his special need is demonstrated (1st class).

O2: A boy says, "This girl is a soldier firing a missile," using the doll with a hearing disability (2nd class).

The observer notes above and the dialogues between children did not make any distinction in roles or inclusion when playing with figures with special needs.

Another category emerging from the children's play behaviors towards the toys with special needs was "ignored completely." Under this category, there are situations in which the children did not include the toys in the play in any way.

C4: "There is even a man."

C5: "He has no hair."

C4: "There are two men."

C5: "I will take the baldy."

O3: Each of them took a toy and moved over. None of them took MPFT or WVDT (4th class).

O2: The toys with special needs were left. The children did not choose to take them. Three toys with special needs were ignored (2nd class).

 O1: The popular children who were the play makers of the group took the toys without any diversity. They made a dramatic play with them (1st class).

As seen in the observer's notes, the children did not want to buy and play with the visually impaired figures with prosthetic legs. When the observer notes from different classes are examined, it shows that the children ignore these figures and do not prefer to play.

The category of "excluded from the play" describes scenarios where children took the toys with special needs at first and then excluded them from their play.

O1: While playing with the toys with no diversity, the mother bathing the children says, "Take a bath and go out," to the normal children, whereas she leaves the toy with special needs alone (4th class).

O3: He takes three toys without diversity as well as MPFT; he makes them fight.

C6: "Now you are going to fight one by one, and we will see who is the champion…"

He makes the toys without any diversity fight, but he never involved MPFT in the fight (3rd class).

The category "assigned passive roles" denotes when children initially took the toys with special needs and assigned certain roles to them, but then set them aside and excluded them from the play.

O3: A group of children made up a game. MWT drew their attention for a while, and they examined him. Then they made a room and assigned the role of a child to the man in wheelchair. They took the toy to the room, and he stayed there. The children went on to play with other toys. They never picked him up again (2nd class).

O1: The toys without any diversity are given the roles of children. MWT is also considered a child and is set in his room alone. He does not play with his siblings (3rd class).

O2: In a group game, the toys with special needs go to their rooms and stay there. The play goes on with the other toys. There are no interactions with the toys with special needs in their rooms (4th class).

O3: The blind girl toy says, "Mom, you should go to bed." They close the blind girl, the old lady, and MWT in a box (i.e., a bedroom) to let them sleep, and they go on with other play. They later separate WOBET. She goes to sleep as well. An ordinary woman toy and a man with a mark on his face impersonate parents while the others sleep (2nd class).

It was observed that the children playing with the toys with special needs abstained from joining the children playing with other toys. They could not join their friends. These play behaviors are given under the category of "unable to be included."

O3: All the children in the class have toys in their hands, but the children who have the toys with special needs do not join their friends much (1st class).

O2: A child is playing with friends. He initially has one of the toys without diversity. He is very interactive. Then, the toys change. The same child takes a toy with special needs. This time, he does not join the play actively. He stands on the side (4th class).

It was observed that the children playing with the toys possessing certain individual/cultural diversity or the toys without any diversity did not want children playing with the toys with special needs to join them. These types of play behaviors are called "not included in the play".

O2: One of the children does not want to include the toys with special needs in the play. He says, "Your leg is broken, and your arm is broken. I do not want them to play. I do not like them" (2nd class).

O1: They made up a new game. They made a pool. They were jumping into the pool. Pointing to the man in wheelchair, one of the boys said

C7: "Oh, he cannot be in this play".

Other children accepted this, and they went on to play with other toys (3rd class).

O3: A girl said, "You cannot play" to the man in wheelchair. Then she turned to the normal toy and said, "You can play" (1st class).

For example, for the figure without an arm, the child did not want to play with that figure by saying that it had a broken arm, I did not like it. In a game set in a different class, they did not include the figure in the wheelchair by removing it from the game.

The Assigned Roles

This section presents the findings about whether how the roles assigned to the toys with individual/cultural diversity and special needs and the toys without any diversity by the children while playing.

Figure 2 shows the roles assigned to the toys by the children. There is no difference between the roles based on individual/cultural diversity. The children assigned similar roles to the toys with individual/cultural diversity and the toys without diversity. For example, in a house game, the Japanese girl figure is given the role of mother, and the Russian doll is given the role of father.

C10: "JWT is mom, and RWT is the brother to the baby…."

The roles assigned to the toys with special needs are shown under two categories: roles assigned relative to diversity and roles assigned regardless of diversity. There are positive and negative roles in both groups. Positive ones involve harmless roles that are self-sufficient (e.g. basketball player, soldier, passenger). Negative ones, on the other hand, involve roles that are bad for others in real life and roles that are needy and not self-sufficient (e.g. warrior, thief). If the roles were considered negative in the children's play, they are categorized as negative roles. For instance, "…you are sick, so you cannot do it; …" "…your brother cannot do it, so you will do it; …" "…the thief stole the woman's purse…"

C15: "So, you are the child that gets beaten."
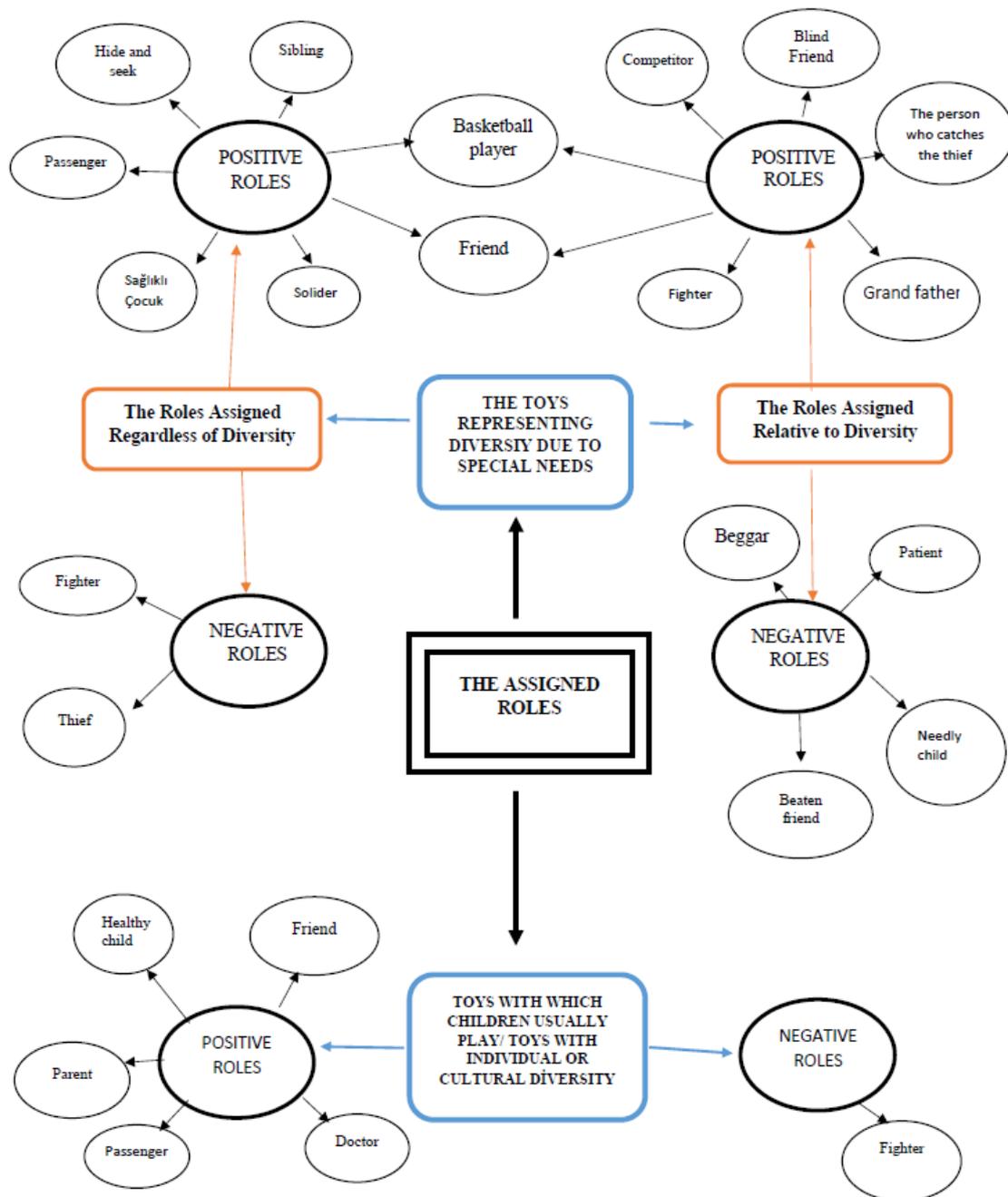
C13: "Why me?"

C7: "Because you are weak."

Figure 2. Roles children assigned to the toys

As shown in **Figure 2**, the roles assigned to these toys are divided into two categories, positive and negative. The negative role of warrior is the only negative role assigned to both the toys with individual/cultural diversity and the toys without diversity. On the other hand, the toys with special needs are assigned more negative roles whether it is related to having special needs or not (e.g., thief, beggar, needy child, patient, beaten friend).

DISCUSSION

Three main aspects of diversity were handled in this study: individual diversity, cultural diversity, and diversity due to special needs. One of the most important results of the study is demonstrating that children's play behaviors towards the toys with individual/cultural diversity and the toys without diversity are similar. The children "completely included" and assigned active roles to the toys with cultural and individual diversity the same way they did with toys without diversity.

By the time children are six years of age, they understand different types of diversity and that the diverse features are permanent. Because children of this age are highly attuned to their environments, they perceive the discriminatory attitudes of adults, peers, and media towards diversity. The attitude and behavior of the child at this age towards diversity depends on the people around him/her (Topcubasi, 2015). Children can perceive diversity as good, bad, beautiful, and ugly at an early age. The misinformation children receive from adults about people and different ethnic groups causes biases to develop (KEDV, 2006).

In this study, the children did not demonstrate discriminatory attitudes towards the toys with individual/cultural diversity, which makes this study different from the studies previously mentioned. It seems that these children had not encountered any kind of negative attitudes towards the individual/cultural diversity as represented in this study. The reason for this may be that the social environments of these children are limited to their family and pre-school institutions only. The study also revealed that the children's play behaviors towards the toys with special needs can be put under various categories. These categories include "completely included in the play," "ignored completely," "excluded from the play," "assigned passive roles in the play," and "unable to be included in the play,". Furthermore, the roles that the children assigned to the toys with special needs can be classified as "roles assigned relative to diversity" and "roles assigned regardless of diversity". We believe that it is the socio-cultural learning environment that affects the different attitudes of children towards the toys while at play. In a similar study, it was determined that children with special needs are not preferred by their peers for cooperation, and that these children are considered by their peers to be problematic in terms of adaptation and communication (Kabasakal et al., 2008). Previous studies show that children with special needs are less preferred or totally dismissed by their peers for social interaction and play (Culhaoglu-Imrak & Sigirtmac, 2011; Duman & Kocak, 2013; Karadag et al., 2014; Metin et al., 2015). Secer et al. (2010) state that children who develop normally have positive attitudes towards their physically-disabled friends and are helpful and protective towards their friends who have physical disability, although some display negative attitudes such as exclusion or ignoring (Tufan & Swadener, 2016). A similar study revealed that, while some children who develop normally accept their peers with special needs, others do not (Diamond et al., 1993; Han et al., 2006). In the current study, it was seen that the children either ignored and totally excluded the toys with special needs or that they assigned passive roles to and excluded them later in the play. While there was no difference between the play behaviors towards the toys with individual/cultural diversity, there was a distinct difference between the play behaviors towards the toys with special needs. Individual/cultural diversity does not seem to create a big difference in children's play habits, whereas a physical disability (not being able to walk, see, etc.) makes it necessary to adapt or change the play. Thus, we believe that the children's play behaviors towards the toys with special needs differ in the categories of "excluded from the play," "ignored completely," "assigned a passive role in the play," and "not included in the play."

In addition to that, the roles assigned by the children to the toys while playing show that negative roles (e.g., neediness, weakness, not being self-sufficient) assigned to the toys with special needs are more common compared to other groups (i.e., the toys with individual diversity, the toys with cultural diversity, and the toys without diversity). One of the reasons of this can be that the beggars mostly have physical impairments so the children see them mostly.

Considering the research results conducted throughout Turkey, the attitudes, perceptions, and opinions towards people with special needs are overall "positive," but there are also negative attitudes such as pitying and not preferring those with special needs in certain social environments (Administration for Disabled People, 2011). In a similar vein, the children in this study assigned the roles reflecting a sense of pity to the toys with special needs such as a needy child, a patient, a beaten friend, and a beggar. It is believed that the children's learning processes in their social lives underlie the attribution of these roles to the toys.

CONCLUSION AND RECOMMENDATIONS

Conclusion

In conclusion, while the pre-school children exhibited similar play behaviors towards the toys without diversity and the toys representing individual/cultural diversity, their play behaviors towards the toys with special needs and the roles they assigned to these toys varied both positively and negatively. From this point of view, it is possible to say that the attitudes towards diversity begin to be formed in early childhood. As seen in this study, children begin to develop discriminatory/prejudicial/biased attitudes towards diversity before they come to pre-school institutions. Therefore, it is important to present educational contents in preschool education institutions that will help children recognize that diversity is a part of everyday life, adopt the idea that differences are a part of society, and understand that these differences add a richness to social life.

Recommendations

The selected learning environment in this research was indoor classrooms. Since outdoor activities are believed to affect children's play behaviors differently, it would be useful to conduct the study as an outdoor activity as well. In addition to that, only a variety of human toys were provided to the children in the study. In addition to human figurines, the addition of materials that these toys frequently use in their daily life routines might make children exhibit more detailed play behaviors.

The non-participatory observation method was used in this research. To continue this study, allowing the observers to interact with the children and having them explain their play behaviors could be considered. Thus, interviews with children could be a second source of data.

The criterion for selecting the participants was their not having received a formal education on respect for diversity in an educational institution. It would also be useful to scrutinize the family and social dimensions to discover the origins of the children's play behaviors regarding diversity and to determine what factor(s) were influential in their behaviors.

The Ministry of National Education of Turkey offered remarkable emphasis on the education and support of children who are in need of individual support (having visual disability or hearing disability) in the 2013 Preschool Curriculum and prepared a sample activity book (MEB, 2013). There is no instruction in the materials, however, that conveys how to propagate respect for diversity and how to reflect diversity in learning centers. To assist with this, the Ministry may be able to supply the materials representing individual/cultural diversity and special needs for learning centers.

Limitations

The data obtained are limited to the behavioral patterns obtained during the observation period with the children.

The differences mentioned in the study are limited to what the toys represent.

Author contributions: FE: Conceptualization, methodology, software, validation, formal analysis, investigation, resources, data curation, and original draft writing; **EA:** Conceptualization, methodology, software, validation, formal analysis, resources, data curation, and original draft writing; and **BA:** Supervision and writing–review & editing. All authors have agreed with the results and conclusions.

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APPENDIX A

Examples of Toys and Posters