THE GAME PREFERENCES OF GIFTED CHILDREN

Nisa Gökden KAYA¹

Abstract

Play, which is an old and universal phenomenon, keeps an important place in children's life. Play is a significant and functional tool in terms of supporting the development of gifted children as well as normal developing children. Gifted students who develop rapidly from their peers in terms of cognitive characteristics have above-average ability, creativity and task commitment and apply these three into one or more fields by combining them. This research aimed to determine the types of games, which gifted children prefer to play. The 'case study' pattern, out of the qualitative research patterns, was preferred. The data were obtained through phone interviews with 20 students attending Science and Art Centers in Turkey during the 2019-2020 academic year. After analyzing and interpreting the data using content analysis technique, it was determined that gifted children prefer playing games such as chess and lego, which develop their creativity and thinking skills.

Keywords: Game, Gifted Children, Development

ÜSTÜN YETENEKLİ ÇOCUKLARIN OYUN TERCİHLERİ

Özet

Eski ve evrensel bir olgu olan oyun, çocukların hayatında önemli bir yer tutar. Oyun, normal gelişim gösteren çocukların yanında üstün yetenekli çocukların da gelişimini desteklemek açısından önemli ve işlevsel bir araçtır. Akranlarından bilişsel özellikler açısından hızla gelişen üstün yetenekli öğrenciler, ortalamanın üzerinde yetenek, yaratıcılık ve görev bağlılığına sahiptir ve bu üçünü birleştirerek bir veya daha fazla alana uygularlar. Bu araştırmada üstün yetenekli çocukların oynamayı tercih ettikleri oyun türlerinin belirlenmesi amaçlanmıştır. Nitel araştırma modellerinden biri olan 'durum çalışması' modeli tercih edilmiştir. Veriler, 2019-2020 eğitim öğretim yılında Türkiye'deki Bilim ve Sanat Merkezlerine devam eden 20 öğrenciyle yapılan telefon görüşmeleri sonucunda elde edilmiştir. Verilerin içerik analizi tekniği kullanılarak analiz edilip yorumlanmasının ardından üstün yetenekli çocukların yaratıcılıklarını ve düşünme becerilerini geliştiren satranç ve lego gibi oyunları tercih ettikleri belirlenmiştir.

Anahtar Kelimeler: Oyun, Üstün Yetenekli Çocuklar, Gelişim

¹ Dr. Öğr. Üyesi, Hitit Üniversitesi, Sağlık Bilimleri Fakültesi, Çocuk Gelişimi Bölümü, e-posta: nisakay@gmail.com

INTRODUCTION

Gifted children; can be defined as children who are determined by specialists as having a high level of performance in intelligence, creativity, art, leadership capacity, motivation or special academic fields compared to their peers (Renzulli, 1986). These children need an enriched environment due to the improved cognitive characteristics. Gifted children can produce original products within the enriched environment where they can use their high learning motivation and creativity capacities. Ozbay (2013) emphasized the importance of the game in enriching the environment for gifted children. Enriched activities, maze games, music, etc. Materials, toys, contact with nature, organizing family events, creating group games and hobby will be supported. Playing games is both a need for children and a tool that supports all areas of development. In that sense, play is an important need for all children, whether gifted or non-gifted. However, some parents and teachers of the gifted children may see play as a waste of time. Ruf and Ruf (2005) mention the need of play for gifted children in order to relax. Moreover, play is essential for emotionally well-being of gifted children.

Play supports physical, cognitive, psychological and social development of children. Gifted children, who are energetic, relax physically through play. Gifted children usually learn to sit up, walk and run earlier than other children in their age. Thus, they begin to play complex games earlier than their peers do (Webb, 1993). Play also helps gifted children to develop cognitively. The differences in cognitive domains between gifted and non-gifted children affect the game preferences. Playing with friends has an important role in social development of gifted children. However, many of gifted children have some difficulties in their relationship with peers. Some characteristics of gifted children cause differences in interests between gifted and non-gifted children. Because of unusual sophisticated vocabulary, creativity, perfectionism and leadership characteristics of gifted children, they usually prefer to play alone or with older friends (Rogers and Silverman, 1998).

In literature, the benefits of play are emphasized by many researchers (Anderson-McNamee & Bailey, 2010; Bergen, 1998; Ginsburg, 2007; Schaefer & Reid, 1986). Play has an essential role in children's life, supporting physical, cognitive, social and emotional development. Like all children, gifted children need to enjoy, socialize, relax and have good time while playing. Gifted children, who have high energy both physically and mentally, relax with physical activities (Ozbay, 2013). In that sense, sport games are also helpful for gifted children. However, differences between gifted and non-gifted children cause some problems for gifted children in relationship with their peers. Barnett and Fiscella (1985) conducted a study in order to compare the playfulness of gifted and non-gifted children with a study group consist of 15 preschoolers. The results revealed that gifted children demonstrated higher degrees of physical, social and cognitive play styles. Furthermore, due to different interests, gifted children may face difficulties in finding like-minded playmates (Wright-Scott, 2018). In addition, gifted children's language developments are earlier than their peers. Because of these differences, gifted children usually prefer to play alone or with older friends.

Play is also a way of learning for gifted children (Roeper,2015). Since gifted children have exceptional learning motivation and curiosity, they turn play into an opportunity to learn, discover and create. Recently, Kaya (2020) conducted a study to determine the activities preferred by gifted students in their leisure. The results showed that gifted children prefer playing chess, lego and puzzle as leisure activities. These games develop creativity and thinking skills that are significant skills for gifted children. Chess is helpful game for gifted children (Marjoram, 1987) and improves leadership skills (Hunt and Cangemi, 2014). In that sense, parents and teachers of gifted children can guide them in order to improve their talents and skills through play. Teachers have an important role in supporting social development of gifted children while playing with peers despite individual differences.

METHODOLOGY

Qualitative research method was used in the research. Qualitative research is characterized by a qualitative process that reveal perceptions and events in a realistic and holistic way in the natural environment with qualitative data collection methods such as observation, interview and document analysis (Yıldırım & Simsek, 2013). The 'case study' pattern, which is one of the qualitative research patterns, was preferred because it focuses on a current phenomenon, event, situation, individual and groups and provides an in-depth examination (Yin, 1994). This study aimed to explore the importance of game, games gifted children play and preference reasons.

Research Goal

This research aimed to determine the types of games that gifted students prefer to play. In this context, the sub-problems of the research:

1. What is the meaning of game for gifted children?
2. What kind of games do gifted children prefer to play?
3. What are the features that are considered in game preferences?

Study Group

This study was conducted in 2019- 2020 academic year with children who attend Science and Art Centers in Ankara, Mersin, İzmir and Manisa. Science and Art Centers are institutions that meet the educational needs of the gifted individuals by out school programs in Turkey. The data were collected from 20 gifted children volunteering to participate in the research. In order to determine the study group, snowball (chain) sampling and maximum diversity techniques were used from purposive sampling method. In the purposive sampling, the judgment of the researcher is used about the selection of the study group that is most suitable for the purpose of the research (Balci, 2010). The chain is based on the identification of individuals or situations that may be rich source of information about the sampling problem (Yıldırım and Simsek, 2013). In the maximum diversity sampling; the aim is to create a small sample that reflects the diversity of the individuals who may be parties to the problem (Yıldırım and Simsek, 2013). Gender and grade level distributions of the participants are given in Table 1.

Table 1. Gender and Grade Level Distributions of the Participants

Demographic variables		Gifted students	
		n	%
Gender	Female	9	45
	Male	11	55
Grade Level	3. grade	4	20
	4. grade	8	40
	5. grade	4	20
	6. grade	4	20

Data Collection Instrument and Process

In this study, data was collected with a semi-structured interview form consisting of 6 open-ended questions prepared by the researcher. Before preparing the interview form, first, the literature about the study was reviewed and then opinions are received from two academicians who are the field experts. In addition, probe questions and an alternative question were prepared. The researcher paid attention to ask understandable and nondirective questions. The participants and their parents were informed about the research by the researcher; the students who volunteered were included in the research. Students participating in the study were coded as S1, S2, S3, and so on. The interviews were done by phone and lasted approximately 15-20 minutes. Probe questions were used when extra information was needed.

Analyzing of Data

Qualitative data were analyzed and interpreted using content analysis technique. In content analysis, data and similar data are conceptualized and themes are created. The themes created are interpreted, quotations are included and then the result is reached. Also, the data obtained were analyzed separately by a specialist other than the researcher. According to the reliability formula of Miles and Huberman (1994), it has been concluded that over 70% of the consensus is reliable.

FINDINGS

The data gathered from the interviews were categorized, themes and subthemes are created out of codes and then interpreted. According to the results of the content analysis, three categories emerged. These categories are “meaning of play for gifted children”, “game preferences of gifted children” and “features paid attention in game preferences”. In order to find the answer to the first sub problem as “what does play mean to gifted children?” the answers were analyzed according to the content codes and divided into themes and subthemes. The findings are analyzed using frequency distributions (f) and percentages (%) and presented in Table 2.

Table 2. First Category: The Meaning of Play for Gifted Children

Themes	Subthemes	Content Codes	f	%
Meanings focusing on the enjoy aspect	Meanings focusing on the fun only	Having good time	7	35
		Having fun		
		Being happy		
	Meanings focusing on the fun and friends	Having fun with friends	3	15
		Having good time with friends		
Meanings focusing on the development and education aspect	Meanings focusing on the development aspect	Mandatory for basic development	4	20
		A need for development		
		A powerful thing that supports brain development		
		Developing creativity		
	Meanings focusing on the education aspect	A type of education	6	30
		Learning new things		
		Learning through games		

The meaning of play for gifted children category was divided into two themes as “meanings focusing on the enjoy aspect” and “meanings focusing on the development and education aspect”. As seen in Table 2, for half of the gifted children play means enjoy. This theme was divided into two subthemes as “meanings focusing on the fun only” and “meanings focusing on the fun and friends”. The codes under the “meanings focusing on the fun only” subtheme (f=7) are; having good time, having fun and being happy. For example, S3 (male, 3. grade) answered this question as “Play means having good time for me.” The codes under the “meanings focusing on the fun and friends” subtheme (f=3) are; having fun with friends and having good time with friends. S6 (female, 4. grade) answered this question as “Play means having good time with friends.” For the other half of the participants, play means development and education. This theme was divided into two subthemes as “meanings focusing on the development aspect” and “meanings focusing on the education aspect”. The codes under the “meanings focusing on the development aspect” subtheme (f=4) are; mandatory for basic development, a need for development, a powerful thing that supports brain development and developing creativity. For instance, the answer of S8 (female, 6. grade) is “In my opinion, play is a powerful thing that supports brain development.” The codes under the “meanings focusing on the education aspect” subtheme (f=6) are; a type of education, learning new things and learning through games. For example, S4 (male, 5. grade) replied as “Play is a type of education for me.”

In order to find the answer to the second sub problem, the second category named “game preferences of gifted children” was divided into themes and subthemes. The data was analyzed using frequency distributions and percentages. If there is more than one code in the content of the data, they are all included. The findings are presented in Table 3.

Table 3. Second Category: Game Preferences of Gifted Children

Themes	Subthemes	Content Codes	f	%
Game preferences of gifted children in preschool period	when they are alone	puzzle, lego, memory cards, playdough, free play with toys.	14	70
	when they are with their friends	playing house, football, spud, blind man's bluff, hide and seek, hopscotch.	7	35
	when they are with their family	board games, song guessing, backgammon.	6	30
Game preferences of gifted children in primary school period	when they are alone	computer games, puzzle, lego, crosswords, sudoku.	12	60
	when they are with their friends	hide and seek, hopscotch, football, basketball, name-city game, monopoly.	7	35
	when they are with their family	chess, brain teaser, taboo game, mangala, Q bitz (MindWare).	5	25
Game preferences of gifted children in secondary school period	when they are alone	online-strategy games, computer games, puzzle, lego, rubiksnake.	8	40
	when they are with their friends	chess, brain teaser, taboo game, yes no game, mangala.	7	35
	when they are with their family	strategy games, go, reverse, monopoly.	5	25

As presented in Table 3, the second category named “game preferences of gifted children” was divided into three themes. These themes are; “game preferences of gifted children in preschool period”, “game preferences of gifted children in primary school period” and “game preferences of gifted children in secondary school period”. Also, the themes were divided into subthemes as “when they are alone”, “when they are with their friends” and “when they are with their family”. The codes under the “game preferences of gifted children in preschool period” theme and “when they are alone” subtheme (f=14) are; puzzle, lego, memory cards, playdough, free play with toys; “when they are with their friends” subtheme (f=7) are; playing house, football, spud, blind man's bluff, hide and seek, hopscotch; “when they are with their family” subtheme (f=6) are; board games, song guessing, backgammon. S12 (male, 3. grade) answered this question as “As I remember, I used to prefer playing alone. My favorite was lego.”The codes under the “game preferences of gifted children in primary school period” theme and “when they are alone” subtheme (f=12) are; computer games, puzzle, lego, crosswords, sudoku; “when they are with their friends” subtheme (f=7) are; hide and seek, hopscotch, football, basketball, name-city game, monopoly; “when they are with their family” subtheme (f=5) are; chess, brain teaser, taboo game, mangala, Q bitz (MindWare). For instance, the answer of S9 (female, 4. grade) is “I enjoy playing name-city game and monopoly with my friends.”Only the participants who attend 5.and 6. grades were asked the game preferences in secondary school period. The codes under the “game preferences of gifted children in secondary school period” theme and “when they are alone”

subtheme (f=8) are; online-strategy games, computer games, puzzle, lego, rubiksnake; “when they are with their friends” subtheme (f=7) are; hide and seek, hopscotch, football, basketball, name-city game, monopoly; “when they are with their family” subtheme (f=5) are; chess, brain teaser, taboo game, mangala, Q bitz (MindWare). For example, S10 (male, 6. grade) replied as “I like playing chess with my brother.” According to the frequency distributions, gifted children prefer playing alone rather than playing with friends and family members. Especially in primary and secondary school periods, they prefer computer games and online-strategy games. In primary and secondary school periods, frequency of playing with friends and family members increases.

The third sub problem is “what are the features paid attention in game preferences?”. In order to find the answer, the third category named “features paid attention in game preferences” was divided into themes and subthemes according to the content codes. The data was analyzed using frequency distributions and percentages. The findings are shown in Table 4.

Table 4. Third Category: Features Paid Attention in Game Preferences

Themes	Subthemes	Content Codes	f	%
Features about benefits	Features about the developmental benefits	Being beneficial for development	5	25
		Being beneficial for cognitive development		
		Being beneficial for development of creativity		
	Features about the educational benefits	Being instructional	5	25
		Teaching something new		
		Having educational aspects		
Features about pleasure	Features about enjoyment	Being enjoyable	6	30
		Being enthusiastic		
	Features about sharing	Being happy with friends or family	4	20
		Sharing good feelings with others		

Table 4 presents the themes, subthemes and content codes under the third category as “features paid attention in game preferences”. This category was divided into two themes as “features about benefits” and “features about pleasure”. As seen in Table 4, for half of the gifted children benefits are paid attention in game preferences. This theme was divided into two subthemes as “features about the developmental benefits” and “features about the educational benefits”. The codes under the “features about the developmental benefits” subtheme (f=5) are; being beneficial for development, being beneficial for cognitive development, being beneficial for development of creativity. For example, S12 (male, 3. grade) answered this question as “I usually prefer games that are beneficial for development of creativity for me.” The codes under the “features about the educational benefits” subtheme (f=5) are; being instructional, teaching something new and having educational aspects. S14 (female, 6. grade) answered this question as “In preferring games, I choose the ones which have educational aspects.”

In game preferences, pleasure is paid attention for the other half of the participants. This theme was divided into two subthemes as “features about enjoyment” and “features about sharing”. The

codes under the “features about enjoyment” subtheme ($f=6$) are; being enjoyable and being enthusiastic. For instance, the answer of S17 (female, 3. grade) is “I choose enjoyable games, I mean the games which I enjoy.” The codes under the “features about sharing” subtheme ($f=4$) are; being happy with friends or family and sharing good feelings with others. For example, S19 (male, 5. grade) replied as “I like games which make both me and my friends happy.”

DISCUSSION

It has emerged that play is an important need for gifted children in not only supporting cognitive development and also socializing, enjoying, thus well-being. This study aimed to determine the types of games, which gifted children prefer to play. According to the results of content analysis, play means enjoy, development and education for gifted children. As mentioned before, enjoying through play is a natural need for children. In addition, due to curiosity and high motivation to learn, some gifted children see play as an opportunity to develop themselves intellectually. Similarly, Roeper (2015) mentions that play is a way of learning for gifted children.

They usually prefer playing alone rather than playing with friends and family members. This result may be due to developmental differences between gifted children and their peers. Since gifted children cognitive development is superior to their peers, they may have difficulties during play activities. This result is consistent with previous research findings. Researchers stated that, despite the capability of interactive play, some gifted children choose to spend their time alone in solitary play (Webb, Gore, Amend, 2007). Moreover, according to Rogers and Silverman (1998) more than one-third of the gifted children were comfortable playing by themselves and spending time alone reading.

Another finding of this study is that gifted children prefer games, which require creativity and thinking skills. This finding is not surprising since outstanding characteristics of gifted children are creativity and superior thinking skills. Parallel to this result, a study on leisure activities of gifted students showed that gifted children prefer playing chess, lego and puzzle (Kaya, 2020). Also, in literature, chess is accepted as a helpful game which improves the skills (Hunt and Cangemi, 2014; Marjoram, 1987). Moreover, the research results comparing the developmental characteristics of gifted and average children reveal that most of the gifted children interest in puzzles (Rogers, 1986; Rogers and Silverman, 1998).

Sport games are also included in the game preferences of gifted children. In this study, some of the participants indicated that they play team sports such as football and basketball. Sports support not only physical development but also social and cognitive development. Team sports are important for practicing collaborative work. Moreover, according to a study result, beginning sports in early ages develops leadership skills (Tapşın, 2019). In that sense, sports are beneficial for gifted children.

CONCLUSION AND SUGGESTIONS

It is important to note that gifted children should not be accepted as a homogenous group. Although in literature some common characteristics of gifted children are listed, there are

individual differences among them. Due to different interests of gifted children, their game preferences vary.

It is often assumed that gifted children are superior in all developmental areas from their peers, so that parents may have unrealistic expectations from their children. Especially parents and teachers should keep in the mind that gifted are also children. This means they have essential childish needs such as play.

Since this research is conducted using qualitative data collection method, it has some limitations. In qualitative research, data are collected by time-intensive methods, thus in this study group is consisted of 20 students. Due to the small number of study group, the results of this study cannot be generalized. Similarly, in literature it is mentioned that qualitative research using interviews have limitations as being time-intensive and not able to be generalized (Queirós, Faria & Almeida, 2017).

Finally, basing on the results of this study, some suggestions for practice can be offered. Gifted children's psychosocial needs should be taken in consideration. Their psychological and social development should be supported by various play, games and sports, like every child. Parents and teachers can combine play and educational curriculum and create opportunities for instructive play settings.

In the light of this study, further research may focus on different aspects of psychosocial needs of gifted children. More detailed and longitudinal research will help to understand and overcome psychosocial problems of gifted children.

REFERENCES

- Anderson-McNamee, J. K., & Bailey, S. J. (2010). The importance of play in early childhood development. *Montana State University Extension*, 1-4.
- Balcı, A. (2010). *Sosyal Bilimlerde Araştırma, Yöntem, Teknik ve İlkeler [Research, Method, Technic and Principles in the Social Sciences]*. Pegem.
- Barnett, L.A. & Fiscella, J. (1985). A child by any other name... A comparison of the playfulness of gifted and nongifted children. *Gifted Child Quarterly*, 29(2), 61-66.
- Bergen, D. (1998). *Readings from... Play as a Medium for Learning and Development*. Association for Childhood Education International.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.
- Hunt, S.J. & Cangemi, J. (2014). Want to improve your leadership skills? Play chess! *Education*, 134(3), 359.

- Kaya, N. G. (2020). Üstün Yetenekli Öğrenciler Serbest Zamanlarını Nasıl Değerlendiriyor? [How Gifted Students Evaluate Their Leisure?] *Ankara International Congress on Scientific Research-II* (March 6-8, 2020), Ankara.
- Marjoram, D. T. E. (1987). Chess and gifted children. *Gifted Education International*, 5(1), 48-51.
- Miles, M. & Huberman, M. (1994). *Qualitative Data Analysis*. Sage.
- Ozbay, Y. (2013). *Üstün yetenekli çocuklar ve aileleri. [Gifted children and their families]*. <http://www.aep.gov.tr/wpcontent/uploads/2012/10/ustunyeteneklicocuklar.pdf>.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, 3(9), 369-387.
- Renzulli, J. S. (1986). *The three ring conception of giftedness: A developmental model for creative productivity*. Cambridge: University of Cambridge.
- Roeper, A. (2015). Play and Gifted Children 1. In D.P. Fromberg& D. Bergen (Eds.), *Play from Birth to Twelve*, (p. 73-74). Routledge.
- Rogers, M.T. (1986). *A comparative study of developmental traits of gifted and average youngsters*. Unpublished doctoral dissertation, University of Denver, Denver, CO.
- Rogers, M., Silverman, L. K. (1998). *Recognizing giftedness in young children*. Gifted Development Center (ERIC Document Reproduction Service No. ED 428471).
- Ruf, D. A. & Ruf, D. L. (2005). *Losing our minds: Gifted children left behind*. Great Potential Press, Inc.
- Schaefer, E. C., & Reid, E. S. (1986). Introduction: the psychology of play and games. *Game Play: Therapeutic Use of Childhood Games*. John Wiley and Sons.
- Tapşın, F. O. (2019). *Serbest zamanlarında spor yapan ve yapmayan ortaokul öğrencilerinin liderlik becerilerinin incelenmesi. [Examination of the leadership of secondary school students who do and not do sports in their free time]*. Science Specialization Thesis, Kocaeli University, Institute of Health Sciences, Kocaeli.
- Webb, J.T. (1993). Nurturing social-emotional development of gifted children. K. Heller, F.J. Mönks, A.H. Passow (Eds.), *International handbook of research and development of giftedness and talent*, (pp. 525- 538). Pergamon Press.
- Webb, J. T., Gore, J. L., & Amend, E. R. (2007). *A parent's guide to gifted children*. Great Potential Press, Inc.
- Wright-Scott, K. A. (2018) *The social-emotional well-being of the gifted child and perceptions of parent and teacher social support*. PhD thesis, Queensland University of Technology.

Yıldırım, A. & Simsek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in the social sciences]*. Seçkin.

Yin, R. (1994). *Case study research: Design and methods*. Sage.