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The Role of Family Factor in Digital Game Addiction Among Children

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Abstract: We are living in an era of rapid transformation in technology due to continuous progress of computer and internet technologies. New media and new communication technologies have emphasized the phenomena of speed and digitalization has had a deep impact on almost every field. Today, digital games, as the extensions of digital technology, effect people of all ages and segments and different games with different qualities are commonly used. Along with the effects of globalization, digital games caused changes in life styles, standards of living and cultural activities. This has led to the birth of a new technological order; and at the same time, digital games provided a basis for the formation of a uniform culture. Game consoles, smart phones and games on the social media platforms influence the personal development of children deeply and are capable of causing changes in their perspective on life.

In addition to this, the economic structure of digital games should also be considered. There is a rapid growth in the digital games sector and the number of users of these games increased accordingly. The real progress began in the 1980's and by the 2000’s, the impact of the sector have been felt profoundly on internet and virtual platforms. There is a linear supply-demand relationship in the digital game sector. This demand varies depending on the conditions. As they serve as means of recreation, escapism, entertainment and relaxation, the use of digital games increases continuously. There are many reasons underneath this rapid increase. The overuse of digital games in an uncontrolled manner is called “digital game addiction”. Digital game addiction can be defined as playing games on game consoles, computers, smartphones, tablets etc. for long periods of time, to ignore daily tasks, to isolate oneself from society, or to be unable to fulfill ones duties and responsibilities.) Today, digital game addiction is seen as an ever increasing psychological issue. It is a threat especially to children as it effects the socialization process of children negatively. In the development of children, families are inarguably the most important factor. Family is the smallest unit of society. Children receive their first education from the family and are prepared for life within this family environment. Hence, family plays a big role in the life of a child. Therefore, this study aims to determine the role and effects of families in the use of digital games by children. As the method of the study the in-depth interview technique was used. Five different, open-ended questions were asked to thirty families and the answers were used to determine the situation. In addition to that, a detailed research was conducted on the subject matter and relevant discussions were included in the study. Families living in the Şişli District of Istanbul participated in the study and these families were selected through random sampling. The results of the study showed that family and
environmental factors lead children to digital game addiction. Another important result was that families had a low level of knowledge about their children's digital game addiction. It was determined that not only children, but also their families were interested in digital games and they played games particularly on their smartphones. It is a notable conclusion that children play digital games mostly for entertainment purposes and compromise their daily lives and studies for this reason. Digital game addiction not only effects the social life of children, but also directly effects their physical and emotional environment. Creating awareness in families, spending more time with children and receiving psychological help are among the steps that can be taken against digital game addiction. In addition to these, increasing the level of digital media literacy within society is another suggestion that can be made in order to prevent digital game addiction.

**Keywords:** Child, Digital Game, Addiction, Family, Digital Media Literacy

**Introduction**

Technology is the ability and knowledge required for the manufacturing or production of tools and devices matching human needs. Technology is the knowledge that involves all methods of production and of all the tools, equipment and devices used in those productions in any given industry. In terms of human activity, technology emerged before engineering and science in the history of humanity. As technology is used as the most effective form of data sharing, it is also a very efficient instrument in directing new discoveries. Today, technology is right in the midst of our lives. Technological advancements have profound influence on social life. Global life has penetrated into each and every segment of society. In our day, the information age companies control humans in every stage of their lives and force the use of informatics. Since it made life easier to use technological means such as computers, internet and telecommunications to meet their needs, people now expect all sectors and segments to provide these services. The emergence of Internet and Web 2.0, the rich contents provided by the non-profit organizations and end-users, led to important changes in reordering of the information sources and services.

Encoding of the audio, video and visual contents brought about the emergence of the digital media concept. With the encoding of the content, audio, video and visual inputs are transformed to media files. After that, they can easily be used, distributed, processed by the computers and transmitted. With the development of internet and computers, digital media has grown into a whole new world. Since both the media and the content change rapidly, people’s ways to communicate online change correspondingly. As a result, new interactive media platforms and social networks emerge. Digital media is the embodiment of this new formation. Whether it is to give a message for peace or to show differences in opinion, or to call for mass action or to defend personal opinions, every
platform in which there is human expression, social interaction, communication and online education, is within the scope of digital media.

The playing and socialization habits of children have changed entirely due to reasons such as the fast progress of technology and the scarcity of play grounds. Traditional games were gradually replaced by digital games played on computers and the internet. It can be comfortably said that nowadays young people prefer digital games more than traditional games. Traditional games are natural tools that improve the social relations and mental capabilities of children. There has been many definitions given to describe the child – game relationship. Along with the ones who describe games as a means of entertainment, a mirror of the children's psycho-social development and a tool through which children express themselves, there are explanations arguing that games are the ways through which children add meaning to their environment and learn how to exist in this environment. Gaming is a method for the child to learn things, things that cannot be taught by others, through his own experiences. Playing a game is the actions done without thinking about the consequences for the purpose of entertainment.

Since children spent more time in computer and internet environments, they are more interested in digital games. Often this goes as far as a level of addiction. The most important effect of digital games on the users is the psychological and physiological addiction. Digital game addiction is defined as the person's overuse of computer or video games and inability to control this use, even though it causes social or emotional problems. The concept of digital game addiction stands for the emerging negative consequences rather than the time spend in the game. The relationship of mother, father and the other people in the family with the child determines the child’s place within the family. The attitudes towards the child have significant effects on the socialization of the child. In this study, it is aimed to determine the role and impact of family on the child’s use of digital games. The in-depth interview technique, which is one of the qualitative method of research, is used. Five different, open-ended questions were asked to thirty families and the answers obtained were used to determine the situation. The duties and responsibilities of families to increase the awareness of children's digital game addiction were determined and in addition to that, the importance of digital media literacy in solving the problems was told.

Digital Game and Child Relationship

Today, when we think about the concepts of games and toys we should think of computer games, video games and mobile games played on portable devices thanks to the developing technology. “Video games”, “mobile games” and “computer games” can be used interchangeably, because in all three of them, data input is made via equipment such as joystick, keypad or keyboard while the display of the game is through the screen. On the basis of these commonalities, in this research, video, mobile and computer games are defined as “digital games” (Pala and Erdem, 2011: 54). Digital games become more widespread with the increasing use of smartphones.
There is a strong bond between the child and game, because children are vastly interested in games. There is a lot of research about the relationship between the child and game in the literature. The effect of Vygotsky’s (as cited in Çankaya and Karamete, 2008: 117) on game research is more complex and widespread than that of Piaget. According to Vygotsky, game is always a social activity. Typically, game involves more than one child and the subjects, stories or the roles in the game reveal children’s interpretation of their society’s socio-cultural materials and their use of them with the purpose of the game. Therefore, even when a small child plays a game on his/her own, since this game’s subjects and parts express socio-cultural elements, Vygotsky thinks that this game is significantly social.

Today, while digital games are increasingly preferred by people from all age groups, it is also seen that they are used at early-childhood. The use of digital games at early childhood is through the introduction of the game by the adults around the child. It is understood from the service providers that the use of digital games is categorized based on age levels. When this age-based categories are observed, it is seen that the categories of digital games are lowered to age 1, however, the most extensive use is at the age of 5. It is stated that the responsibility of adults who take care of the children play a significant role in the level of use of digital games (Toran et al., 2016: 2265) Therefore, it is possible to say that parents also have a role in this regard. It appeals to more and more people for many reasons. First of all, games entertain the player, award the success, give the feeling of progress. Through the gameplay, the socialization needs of the person is fulfilled. Gameplay is a process to which the users actively participate instead of being passive users who just spend time and this process gives the satisfaction of success. In addition to this, games are differentiated for different segments, like for women, families and children. “Online” games played on Facebook and smartphones are preferred more within this context (Gürcan et al., 2008: 6)

Digital games have more negative effects then positive ones. They can be stated as follows (http://www.guvenliweb.org.tr/dosya/wXK68.pdf/indir, Access Date: 29.03.2018):

- The user is not able to control the time of gameplay.
- There is a loss of interest towards other activities.
- It is observed that the games with violent content are related to psychosocial problems such as loneliness, low satisfaction of life, aggression, depression, anxiety, tendency to violence, decrease in positive behavior, increase in hostile feelings, desensitization to violence.
- Games damage the improvement of social skills since they cause the person to move away from society.
- The person continues to play the game despite the negative consequences.
- The person feels psychological deprivation when he is not able to play the game.
General Look at Digital Game Addiction

It is very important to access information in the digital game sector. While some game developers defend that in order for the game to bring financial income, it should awake happy and positive feelings, many others care only about the entertaining content. On the other hand, while the relationship between digital games and addiction is tried to be explained with different psychological and behavioral research, the effects of violence element in digital games in creating addiction is another important subject that researchers study (Kuşay and Akbayır, 2015: 141). Digital game addiction is one of the major problems of our time. Griffiths stated that, no matter which terminology is used, overuse of digital games could lead to behavioral addiction. Lemmens and his friends defined digital game addiction as “excessive and compulsive use of computer or video games despite the social and/or emotional problems” (Irmak and Erdoğan, 2015: 11).

There are many agents prompting children to addiction in digital games. There is a chat section in almost all games. People playing the game have also the opportunity to chat with each other. In addition to that there are forums created for the players of many of the online games. Players communicate via these forums, exchange ideas about the tournaments they will hold, organize events, carry their friendships from virtual platform to real life. In this way, games are not just games anymore, but they are growing into environments where players socialize, chat, get new friends. There are pages of online games on the most popular social networking sites. Thousands of people follow and like these pages. In this way, players can communicate with each other via a different channel also. The necessity of research on online games increases even more within this context (Kaya, 2013: 74). Hence, the fact that digital games can create addiction came forth as a result of the research conducted.

It is thought that, since it involves internet addiction, cell phone addiction, social media addiction and digital game addiction, digital addiction, which gained an even more complex structure with integrated technologies, should be approached and researched as a whole. Several negations were reported about this digital addiction which has negative effects on daily life (Anderson, 2001: 21-26). Lemmes et al., (as cited in Hazar and Hazar, 2017: 206) discussed the digital game addiction under seven criteria, based on the addiction criteria on DSM IV. These criteria are;

1. **Salience**: Playing the game becomes the most important activity in the person’s life. The game is the dominating power of the person’s thinking (anxiety, worry), feeling (desire, craving) and behavior (excessive use).

2. **Tolerance**: The frequency and duration of gameplay are gradually increased.

3. **Mood Modification**: The person experiences the in-game entertainment personally and experiences a lot of moods on top level and as a result turns towards the game-behaviour in order to get rid of problems.
4. Withdrawal: Unpleasant emotions and physical effects such as moodiness and irritability that occur during the gameplay.

5. Relapse: the person cannot control the excessive gameplay and repeatedly revert to gameplay behavior.

6. Conflict: As a result of excessive gameplay, the person experiences conflicts with others around him and in order to continue to play the game, lies to them.

7. Problems: The person starts to experience problems in his school, work and social life due to excessive gameplay.

There are a number of studies on digital game addiction. Chiu, Lee and Huang (2004) have developed a game addiction scale which consists of nine criteria in order to measure game addiction on children and adolescents. In this scale the criteria used was different than that of DSM. A two-factor scale, under the name of game addiction and game interest, in which these nine criteria explains 60% of the total variance with a reliability of 0.86 in a two-factor structure, was developed. There has also been some comprehensive studies done in Turkey. A research conducted by Horzum, Ayas and Çakır (2007) in Trabzon with 460 elementary level education students in order to develop a valid and reliable scale is among them. As a result of this research, they developed a scale with psychometric qualities within acceptable limits.

A Qualitative Study On the Observation of the Role of Family Factor on Digital Game Addiction among Children

Family, although it is the smallest human community consisting of mother, father and children, is the corner stone of society. From the moment of birth, the individual meets the family and communicates with the members of the family. Thus the socialization process starts, experiences and knowledge about life are acquired. The first stage of socialization takes place within the family. Especially, the family members’ characters, behaviors and perspectives on life have direct effect on the child’s development process. In this respect, the importance of family on child development is incontrovertibly profound (Kırık, 2014: 337) The first education takes place within the family before the school education. Mothers and fathers give the child information about life. There is a strong bond between the family and the child. In addition to this, the parents have a very wide sphere of influence on the child. In a way, during the 0-6 age period, parents are both the closest people the child to meet all his needs and also the first teachers of him/her. Considering the fact that the development of the human personality is founded at the age of 0-6, the role of parents in the determination of the educational identity can be understood better. The status the child gains, the value he earns and the identity he develops within the family is the determinant of the identity, status and value he will obtain within the society in the coming years (Gordon, 1993). Therefore, the family has a significant and profound role in the digital game addiction among children.
Family is thought to be quite an important factor in the prevention of digital game addiction. For this reason, this study is focused on this subject.

**Method**

In this study, the in-depth interview technique, which is one of the qualitative research methods, is used. As a frequently used data gathering technique, the in-depth interview provides the opportunity for the interviewees to express themselves and for the researcher to be able to understand the interviewees' interpretation of their worlds, life perspectives, feelings, thoughts and experiences about the specific conditions they are in with the help of their own expressions. Therefore, it is a very useful method in order to determine the role of family in the prevention of digital game addiction among children (McCracken, 1998: 8). The in-depth interview has a special place within qualitative research and it is one of the most powerful techniques of it. The in-depth interview, is a data gathering technique which includes all dimensions of the research subject. Since the questions asked are usually open ended, it allows to receive detailed answers. The interviews are done face-to-face and one-to-one using the in-depth interview, feelings, thoughts, knowledge, experience and observations of the interviewee are obtained. The most important advantage of in-depth interview is that it allows for a flexible, rich and detailed data gathering. Thanks to this technique, data, which cannot be received otherwise, could be obtained. All interviewees are asked the same questions in the same order, however, they are allowed to answer the questions as extensively as they like (Berg, 1998)

**Universe and Sampling:** The universe of the study comprises of families living in the Şişli District of Istanbul. In the determination of the participants “purposeful sampling” was used. In purposeful sampling, the universe is divided into kindred areas. The group that could represent the subject matter of the researcher the best is selected among them. Hence, it is the families with children having digital game addiction problem that matters in the study., The sampling group of the study comprised of families that reside in the Şişli District of Istanbul with children going to elementary school at the age group of 7-11. However, due to the fact that the population of Şişli is above 270 thousand and the inability to reach all participants in the sampling group, random sampling is also used. Within the frame of the study, face-to-face in-depth interviews were made with 50 families and it was assumed that they gave correct answers to the questions.

**Data gathering tools:** In order to determine the attitudes and awareness of the families towards their children’s digital game addiction, 5 different questions were prepared and these questions were asked them directly.
Findings and Commentary

Five questions that were asked to the participants were categorized and grouped based on specific criteria and transformed to quantitative data. The first question asked to families was “What digital environment your children prefer to play on primarily?” More than half of the families (32) stated that their children play digital games on mobile communication devices (smartphone, tablet), which corresponds to 64% of the participants. Other answers were; computer games (9 – 18%), game consoles such as Playstation, Xbox .. etc. (6 – 12%), games on Facebook (2 – 4%) and online games on internet browser (1 – 2%).

The second question asked to the participants was to determine the time that children spent playing digital games, with the aim of learning the addiction level of children. The question asked was “How many hours do your children play digital games per day?” 10 families answered this question as “less than 1 hour”, corresponding to 20% of the participants. 25 families stated that their children play 1-3 hours per day (50%), 9 families said 4-6 hours (18%) and 6 participants said 7 hours or more (12%). Considering the fact that children go to school during weekdays, it can be seen that the duration of children’s digital gameplay is quite high.

The participants were asked “Do you prohibit your children to play digital games or do you limit the time that they play? What is their attitude or how do they react when you limit or prohibit digital game playing?” This question was asked with the aim of analyzing the attitude of children against the prohibition. The answers to this question were quite remarkable. 14 families (28%) stated that they prohibit playing games, 28 families (56%) said that they limit the time. 8 families (16%) said that they don't prohibit or limit the gameplay in anyway. Therefore, the reaction and attitude of the children of 42 families towards the prohibitions and limitations were tried to be determined. 13 of the families (26%) stated that the children behave aggressively, 11 of them (22%) stated that children become sad and cry, 10 of them (20%) stated that their children lock themselves in their rooms, 5 of them (10%) stated that their children don't eat food and 3 of them (6%) stated that their children keep their silence and accept the decision.

The fourth question asked was “What do you say to your children or how do you behave in order to prevent them from playing digital games?”. Majority of the families (20-40%) answered this question by saying “I prohibit the devices on which he/she plays the game”. Other answers were respectively 13 families (26%) “I say that it is unnecessary to play games”, 11 families (22%) “I tell that playing games has negative effects on his/her studies”, 4 families (8%) “I try to spend time with my child”, 2 families (4%) “I ensure that he/she is busy with other activities”.

The fifth and the last question asked to the participants was “Do you think that your child is addicted to digital games? If so, what are the precautions you are taking?”. 40 families (80%) said that their children are addicted to digital games, 10 families
(20%) said the opposite. In order to save their children from digital game addiction, 14 families (28%) said “I don’t / can’t take any precautions”, 12 families (24%) said “I request support from the teachers”, 6 families (12%) said “I play games with my child”, 5 families (10%) “I have him/her get psychological support” and 3 families (6%) said “I read informative articles, talk in this way”. What needs to be emphasized here is that the families are not completely knowledgeable with the subject matter.

**Conclusion and Suggestions**

Digital games are electronic games in which players interact via an interface. Digital games can be played online or offline, as a single player against the artificial intelligence or as multiplayers against each other or against the artificial intelligence. Especially beginning with the 1990's, there has been a rapid growth in game industry. With the increasing consumption rate, new and different types of games were released into the market. Game industry gains acceleration with each day and expands its coverage area. Digital games are played mostly by children. Especially the games that are played with the purpose of entertainment, have profound effects on children and cause the addiction problem.

Digital game addiction is defined as a situation in which the person cannot stop playing games on devices like computer, telephone, tablet etc., for long periods of time, relates the game with real life, ignores the daily tasks and duties because of gameplay and prefers playing digital games over other activities. The studies shows that, the children who play digital games at the level of addiction and cannot stop playing, are shier, more fatalist and with less belief that they can control their lives compared to other children. As a consequence, their daily lives are deeply affected.

It is surely beyond doubt that the family has profound contributions on the development of a child, because family is the smallest unit of society. The child’s position within the family is determined particularly with the communication of the parents to the child. The attitude towards the child effects the child’s socialization process profoundly. In the same way, any change in the children’s habits of games and toys are effecting the families and cause significant changes in the attitudes and behaviors of families.

It was aimed to determine the role and the effect of families on the use of digital games among children and for this reason, five different questions were asked to fifty families living in the Şişli District of Istanbul. In this way, it was tried to be determined whether their children are addicted to digital games or not and also families’ attitudes and behaviors against this problem were examined. The research revealed that children play digital games mostly on mobile communication devices (smartphone, tablet). Families stated that their children spent 1-3 hours to play games. They said that, in order to prevent their children to be addicted to digital gameplay, they prohibit the use of the devices that their children use to play the games. It is quite remarkable that 20 of the families gave this answer. However, it does not seem quite possible to claim that addiction can be prevented through prohibitions. 40 of the families stated that their
Children are addicted to digital games. This is quite a high number. In this regard, it is possible to argue that digital game addiction is a major issue. Another remarkable conclusion is that families, in general, don't know how to fight against digital game addiction.

In conclusion, particularly with the use of mobile communication devices, digital game addiction has become widespread and might have profound impact on children's lives. To this point, first of all, the awareness of families about digital game addiction should be raised, because it depends on attitudes and behaviors of families for children to be saved from this addiction. It is very important to inform families about digital literacy. To this end local authorities can organize educational programs and seminars. Psychological support against digital game addiction is also suggested. It will also contribute to the solution of this problem for families to spend more time with their children and stay away from the digital world.

References


