

# Being a Child in the Digital World: Balancing Anxiety Levels

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## ABSTRACT

**Purpose:** The aim of this study is to examine the anxiety levels of children who are alone with the digital environment.

**Materials and Methods:** The research was carried out with 15 children aged between 14-18 in Ankara. Data were collected through in-depth interviews and analyzed by content analysis.

**Results:** When children's views on the concept of digital game are examined, it can be said that digital game has positive and negative aspects for children. While positive emotions are felt at the moment of success in the game, unhappiness, anger, anxiety and anxiety occur at the time of failure.

**Conclusion:** It can be said that children playing digital games are exposed to the anxiety and anxiety created by the virtual world while playing digital games, as a result of the answers given by the children to the questions regarding this concept.

**Keywords:** Anxiety, Digital Game, Addiction

## Dijital Dünyada Çocuk Olmak: Kaygı Düzeylerini Dengelemek

### ÖZET

**Amaç:** Bu çalışmanın amacı, dijital ortamla baş başa kalan çocukların kaygı düzeylerinin incelenmesidir.

**Gereç ve Yöntem:** Araştırma, Ankara'da yaşları 14-18 arasında değişen 15 çocuk ile gerçekleştirilmiştir. Veriler derinlemesine görüşmeler yoluyla toplanmış ve içerik analizi ile analiz edilmiştir.

**Bulgular:** Çocukların dijital oyun kavramına ilişkin görüşleri incelendiğinde, dijital oyunun çocuklar için olumlu ve olumsuz yönlerinin olduğu söylenebilir. Oyunda başarı anında olumlu duygular hissedilirken, başarısızlık anında mutsuzluk, öfke ve endişe ortaya çıkıyor.

**Sonuç:** Dijital oyun oynayan çocukların bu kavramla ilgili sorulara verdikleri cevaplar sonucunda sanal dünyanın yarattığı kaygı ve kaygıya dijital oyun oynarken maruz kaldıkları söylenebilir.

**Anahtar Sözcükler:** Kaygı, Dijital Oyun, Bağımlılık.

Childhood is a process that evolves day by day, creating a culture as it does so while also reproducing itself throughout this period. Play is the most significant instrument of childhood culture and the most efficient way for a kid to express himself (1). The game is characterized as “talent and intellect development, entertainment with specific rules, for fun” or “any form of agility-based competition organized to enhance physical and mental ability.” (2).

Children learn abilities such as problem solving, exploring, thinking, reasoning, sharing, communication, power, balance, coordination, and self-organization via play (3).

With the advancement of technology, the notions of games and toys have expanded to encompass computer games (atari, commodore64, etc.), video games (Playstation, Xbox, Wii, etc.), and mobile games played on portable devices such as mobile phones, portable PlayStation, Gameboy, and so on. The words “video games,” “mobile games,” and “computer games” are all interchangeable. Because data entry is supplied with instruments such as a joystick, keypad, or keyboard in all three of them, while the game is observed through the screen (4). Based on these collaborations, video, mobile, and computer games are referred to as “digital games” in this study (5).

It is argued that with the rapid development of technology, rapid and unplanned urbanization, and the removal of open playgrounds, the attention and orientation levels of mainly young persons towards digital games are growing (6).

An anxious individual appears to be terrified of something, feels uneasy, and is in a delusory state (7). Anxiety, on the other hand, differs from fear in that it is objectless; although the object of fear is apparent, whether it is a person or an event, the object of anxiety is ambiguous (8). As a result, whereas fear refers to events with a known origin, anxiety refers to situations with an unknown cause (9).

Anxiety is defined as negative since it is irrational and disrupts mental activity, namely thinking. The elements that characterize anxiety as good are that it warns the person when confronted with the dreaded things and takes measures, directs the person to be happier and more successful, and, most significantly, it plays an active part in the formation of character and personality (10).

Given that diverse emotional changes occur when playing a digital game and that the ability to make decisions

is active, it is clear that emotional states influence decision-making throughout the game. The purpose of this study is to investigate how emotional changes that occur when playing digital games affect the anxiety stimuli on youngsters.

## METHOD

### *Research Model*

The qualitative research approach was used to support this study, which explores the impact of digital games on children’s anxiety levels. The qualitative research design was chosen because it allows for a detailed evaluation of the effects of digital games on children’s anxiety levels (11) as well as the exploration of suggestions on this subject (11,12) based on the digital game experiences of the children from whom the data was obtained. In this study, a fixed qualitative research design (13), which was constructed differently from the quantitative research kinds, was utilized since it was intended to gather replies from the youngsters determined for the research.

### *Working Group*

The research group included 15 children aged 14 to 18 from the region of Ankara. The research’s study group was determined using the criteria sampling approach, which is one of the intentional sampling methods. Criterion sampling is made up of individuals, events, objects, or circumstances whose features are established by the research’s objective (14).

### *Collection of Data*

The semi-structured interview was realized to collect data for the study. In a semi-structured interview, the interviewer normally asks his questions without deviating from those he has prepared ahead of time. Students have the opportunity to ask further questions in order to gain a more in-depth understanding of the interviewees’ viewpoints in accordance with the questions developed in accordance with the responses supplied by the students (15, 16). Interviews with the selected children were performed using a semi-structured interview form. The interviews we carried out lasted an average of 45 minutes, and the data was written down. By examining the responses, it was hoped to discover the link between the digital game and anxiety. Answers to the following study questions will be requested in accordance with the research’s goal.

What feelings do you experience while playing video games? What are the distinctions between the times you play digital games and the times you do not play digital

games for you? What would you say if you were to express your emotions while winning and losing in a digital game? In what scenarios do you experience dread and anxiety while playing video games? Do you feel pressed when you play video games? What exactly is digital gaming to you, and what does it imply to you? What feelings do you experience when you lose and win at digital games? Do you worry about making quick judgments when playing video games?

### Analysis of Data

In this study, the semi-structured form responses were examined using inductive analysis. Inductive analysis allows for in-depth examination of the dimensions that emerge from patterns within the context of the examined scenario (17). Essentially, the process involves gathering similar data within the context of specific concepts and themes and interpreting it in a way that the reader can understand. Data from qualitative research is analyzed in four stages. The first stage is data coding, the second stage is theme discovery, the third stage is code and theme arrangement, and the fourth stage is identification and interpretation of the findings (18). For internal validity in this study, the opinions of experts in qualitative research were consulted throughout the study and corrections were made accordingly. For external validity, purposive sampling and detailed description were used, and for internal reliability (consistency), the research data were analyzed by different experts in qualitative research. Encoder reliability Miles and Huberman (12) calculated as .88 using the formula  $(\text{Consensus} / \text{Consensus} + \text{Disagreement} \times 100)$ . After analyzing the interview transcripts, the researcher decided to the data into six major categories by coding it.

**\*Ethics Committee Approval:** Necessary permissions for data collection were obtained from the Ethics Committee. Yozgat Bozok University (dated 20/04/2022 and Decision No: 32/36)

## RESULTS

In this section of the study, the students' perspectives on digital games, the immediate feelings and thoughts they have while playing games, the situations in which they feel fear and anxiety while playing digital games, what emotions they feel when they lose or win while playing digital games, and what emotions they feel when they do not play digital games are compared. The findings about the discrepancies across time periods were scrutinized.

### What emotions do you feel most when playing digital games?

The digital game experiences of children playing digital games and the reflections of these experiences are presented in Figure 1 under the category of "Experiences and Reflections".

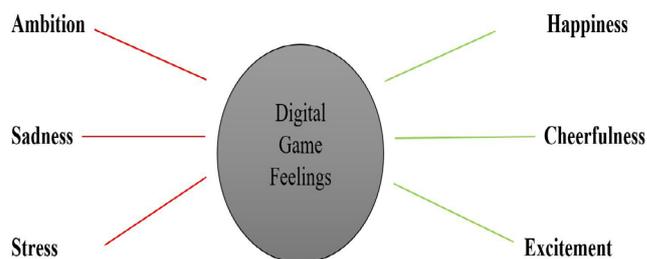


Figure 1. Digital Game Feelings

### Which emotions do you feel most when participants play digital games?

When their answers to the question are examined, (V1) mentioned that; "I play the digital game mostly with my friends and it increases my happiness. At the same time, I get excited when playing digital games." (V2) said; "During the digital game, my emotions change according to the course of the game, if I played badly, my sadness prevails, but if I played well, I am very happy." Differently (V2) he mentioned; "I don't feel a dominant emotion in general, but I have fun, which makes me happy." (V3) emphasized as follows; "I feel the feelings of determination, ambition and winning very intensely," he said. On the contrary (V4) emphasized that; "I don't get much emotion, I just feel happy if I beat it." (V5) included the following sentences; "I feel excitement and tension at the same time." (V6) said; "Playing a game is a legendary feeling, I get extremely happy while playing games." (V7) emphasized that; "I feel more excitement and stress while playing games." Similarly (V8) stated as follows; "When I play digital games, I feel excitement, nervousness and anxiety." (V9) emphasized that; "I feel very hyperactive. At the same time, I am experiencing a lot of ambition, excitement and stress." (V10) said; "It is enjoyable, I am happy, it excites me to move to new levels." (V11) mentioned; "I feel excitement and tension at the same time." (V12) said; "More ambition, excitement and feelings of winning come to the fore". However, (V13) emphasized that; "I feel the feeling of excitement the most while playing digital games." Differently (V14), he stated; "I generally feel comfortable, but sometimes I get excited." (V15)

As it is seen in the statements of the students, it was concluded that playing games reveals the feeling of happiness and excitement, but also triggers emotions such as tension and ambition.

**If you compare the time you play digital games and the time you do not play digital games, what are the differences between these two times for you?**

As a result of the answers given by the students, the differences between playing and not playing digital games are given in Figure 2.



**Figure 2.** Feelings During and After the Game

**If you compare the time when the participants are playing games and the times when they are not playing digital games, what are the differences between these two times for you? When their answers to the question are examined;**

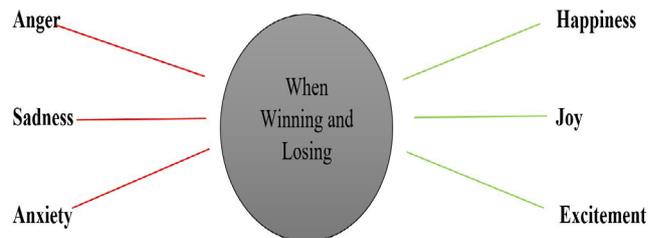
*“When I play games, I realize that my time passes very quickly and I can’t spare time for other activities, but when I don’t play, I can easily handle everything.” (V1) In addition to this; (V2) stated, “When I play, I have fun and my time passes very quickly, but when I do not play, I get bored and time does not pass.” Differently, when we look at the discourses of (V3), “There is no difference between when I play and when I do not play. It is because I only play to spend my free time.” He gave place to the sentences “When I am not playing games, I am bored, I want to play games with my friends because we cannot leave the house because of the Covid-19 pandemic.” (V4) stated, “If we compare the time I play with the times I don’t play, I can say that the only difference is a little simplification of my life.” (V5). (V6) stated that; “Time passes faster when playing digital games, but when I am not playing, I use my time better”. On the other hand, (V7) said, “I always want to play games if my family quits, but they don’t allow it. When I don’t play, I sit idly by.” (V8) emphasized that “When I compare the time I play and the time I don’t play, I can say that I feel more productive during the process of playing games.” (V9) stated, “I feel mentally unhealthy and aggressive when I don’t play.” Besides; (V10) stated, “I already play games in my spare time, if I don’t play games, I watch TV.” “When I don’t play, I get bored and I feel*

*the need to play. When I enter the game, I am happy and excited; I do not understand how the time passes, so I prefer to play” (V11). He stated, “When I am not playing, I am calmer and my adrenaline level is low” (V12). Differently; looking at the statements of (V13), he emphasized that “I don’t feel a difference between when I play and when I don’t.” (V14) stated as follows; when I play, I feel distracted, but when I do not play, I feel more stressed.” (V15) said: “When I play games, I feel braver because I do not experience any real loss, so when I am not playing, I perform behaviors that I do not dare in the game.”*

As it is monitored in the statements of the students, they stated that when they play games, they feel more courageous by isolating themselves from real life, and they feel boring and stressed when they do not play games.

**If you were to interpret your mood while winning and losing during the digital game, what would you say?**

As a result of the answers given by the students, the differences between their moods when they win or lose digital games are showed in Figure 3.



**Figure 3.** Feelings in the moment of Winning and Losing

**If you were to interpret your mood while winning and losing during the digital game, what would you say? When their answers to the question are examined;**

*(V1) emphasized that; “I feel very sad when I lose, but I am very happy to win. I am very happy and excited when I win. (V2) said: “When I lose, I get angry depending on the reaction of the people I play, or I don’t care, I look at the next games.” Unlike these, when looking at the statements of (V3), he said, “When I lose, I feel anxiety and I do not accept responsibility, I blame others. If I win, I will be happy.” (V4) stated as follows; “I am happy and joyful when winning, I feel sad and unhappy when I lose.” (V5) emphasized that; “I am not sad when I lose, but I am happy if I win.” (V6) emphasized that “I get angry when I lose. And when I win, I am happy.” (V7) included the following sentences; “When I win, I feel great, I brag about*

my surroundings, but when I lose, I cannot accept it, I always attribute the reason for my loss to others." (V8) stated, "I feel very good and happy when I win, but when I lose. I get extremely nervous and irritable." Similarly (V9) stated, "When I win, I get extremely happy. When I lose, I also get extremely angry." (V10) stated the following: "When I win, I feel happy and success gives me pleasure. When I lose, I get ambitious and aim to win even more in the next game." From a different point of view, the words of (V11) were as follows; and I play the next chapter or level in a better mode. When I lose, I feel sad, I think where I went wrong, I find my mistake and start again." (V12) stated that; and I reflect this anger on them. I am happy and excited at the same time when I win." (V13) said; "I can continue the game comfortably while winning during the game. I can see that I can be ambitious and ambitious." Similarly (V14) conveyed; "I am very happy when I win and my mood is high. e is positively affected. Even if I lose, I get angry with myself because I know that I can do better." (V15) stated as follows; "Although it is sad to lose because of my ambition, it also makes me happy to win."

As it is viewed in the statements of the students, they stated that when the digital game is won, they are in the happiness and greed of winning, and they play the next part with more pleasure, and when they lose the game, they are under the influence of anger and tension caused by sadness.

#### In which situations do you feel fear and anxiety while playing digital games?

As a result of the answers given by the students, it is given in Figure 4 in which situations they experience feelings of fear and anxiety while playing digital games.

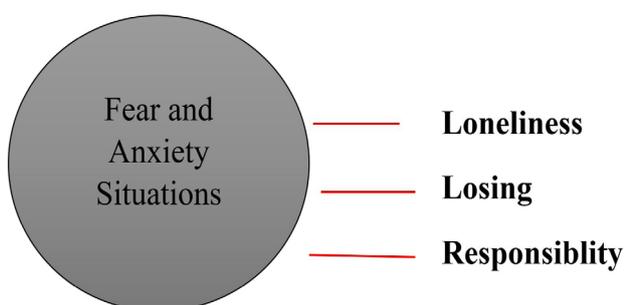


Figure 4. Fear and Anxiety Conditions

**In which situations do you feel fear and anxiety while playing digital games? When their answers to the question are examined;** (V1) stated that; "I usually prefer team games, all my teammates are dead and if I am alone, I get scared and anxious." Differently (V2) said; "I don't feel fear and anxiety while playing, I think there is no need to stress myself for the game." (V3) stated that; "When I lose, I feel anxiety and fear, I cannot digest losing in any way." (V4) emphasized that; "When I lose or win, I worry about making the last move properly. (V5) said differently: "I never experience feelings of fear or anxiety in the games I play." (V6) stated that; "When I stay at the end of the game, I get nervous and I get scared at the moment of being killed in the game." (V7) emphasized that; "I get scared when creatures come across during the game, or I get excited when I get into conflict during the war." (V8) stated as follows; "I worry when I think my abilities are inadequate." (V9) said: "I get worried if I decrease in the game." (V10) said: "I worry and fear more when I am alone with the opponent player." Similarly (V11) said; "If it is a timed game, then I get scared. When the game decreases, when I face the opponent team and play with my teammates, I have anxiety and fear about fulfilling the responsibility given to me." (V12) continued as follows; "If the game is lost because of me, I feel fear and anxiety at the same time depending on the game I play. I feel the same feeling when the team comes to my field." (V13) said, "The feelings of fear and anxiety are usually related to the game. I usually feel it during combat when playing war games." (V14) said, "Fear and anxiety are I feel anxiety only when there is an enemy that I am not sure I can defeat." Differently (V15), he stated that; "I do not feel anxiety and fear because I am already in at this platform where I feel comfortable."

As it is seen in the statements of the students, they stated that they experienced the feeling of fear while playing the digital game when they were killed in the game and thus lost the game, and they experienced the anxiety if they did not apply the techniques told in the game correctly.

#### Do you feel pressure while playing digital games? What is digital gaming for you, what does it mean to you?

As a result of the answers given by the students, their opinions about pressure while playing digital games and their personal views about digital games are given in Figure 5.

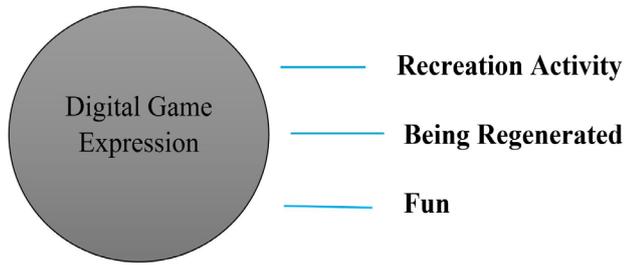


Figure 5. Digital Game Expressions

**Do you feel pressure while playing digital games? What is digital gaming for you, what does it mean to you? When their answers to the question examined;**

(V1) said; "I don't feel pressure. It has become a necessity for me, I feel unhappy and bored when I am not playing." Differently (V2) said; "Other people in the game show some pressure when I don't play the game well, but this pressure does not affect me because I enter the game to have fun." Similarly (V3) emphasized that; "I don't feel pressure, I just play to spend my free time, to discharge, so I don't feel any responsibility on me." Differently (V4) he said: "When I'm playing with my friends or in a ranked game, there is pressure not to lose points. Digital gaming is indispensable for me because I can't find a playmate outside, but I have friends in games." (V5) said; "I never feel pressure when playing digital games. Digital gaming is a great distraction for me." (V6) said: "Because I play as a team, I try to win for the team and there is pressure. Digital gaming is stress relief and spending time for me." Similarly (V7) stated as follows; "It creates incredible pressure, I always experience that pressure until the end of the game. Digital gaming means success, it's my job to succeed." Differently (V8) said, "I don't feel a lot of pressure, but I do feel some pressure. Digital gaming means fun and spending time with my friends." Similarly (V9) emphasized that; "No, I don't feel it. It is a good option for me to spend time with myself and my friends." (V10) included the following sentences; "Yes, I feel, I try to fulfill the responsibilities necessary to win. Digital gaming is an exciting activity for me that I spend in my daily life, in my spare time and with my friends." (V11) stated as follows; "Yes, I feel pressure. Because the game has a purpose and I am trying to reach that goal. For me, I play digital games to make use of my free time, to evaluate the times when I am bored, and to have a pleasant time with my friends." Similarly (V12) said: "Yes, I feel pressure, although I experience stress and anger while playing digital games, I also experience happiness and the feeling of pleasure when I win. After a while, my mind is always on the game. I usually try to fill my free time with games." (V13) He stated as follows; "When I play alone, I don't feel pressure, but

if it's a team game, I usually feel pressure to raise the team higher. I can usually say that games are a form of relaxation for me." (V14) emphasized differently as follows; "I don't feel pressure when I play, because I play to distract myself. For me, gaming is a way of avoiding stress." Similarly (V15) said: "I don't feel stress and pressure in something that is a hobby for me, even though I spend a lot of time, I am aware that it is not real life. Digital gaming is just a tool for me to make free time fun."

**Do instant decisions worry you while playing digital games?**

As a result of the answers given by the students, their views on instant decisions while playing digital games are given in Figure 6.

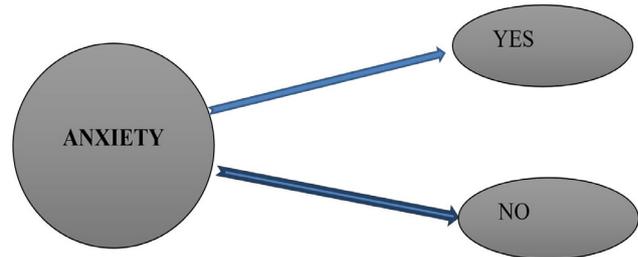


Figure 6. Instant decisions and anxiety while playing digital games

**Do instant decisions worry you while playing digital games? When their answers to the question examined;**

(V1) said; "It doesn't worry me because I'm always aware that it's a game". Similarly, (V2) mentioned; "It doesn't worry me, on the contrary, it prevents me from being indecisive and eating myself up, I don't make instant decisions." (V3) stated that; "Since the digital games I play are generally strategic, I have to make instant decisions all the time, so I'm used to instant decisions and I don't worry." Differently (V4) included the following sentences; "Yes, instant decisions change the course of the game, sometimes they lose while they win, that's why I'm worried." Differently (V5) expressed as follows; "Immediate decisions taken while playing digital games do not affect me, I do not worry." (V6) said; "I can't say I'm worried too much, but I can say I'm a little bit worried." (V7) said; "While playing a game, I never make a decision without being sure, I always make my decision after being sure, and this does not cause me anxiety." Similarly, (V8) emphasized that; "It doesn't make you feel any anxiety." (V9) said: "No, because I am used to making sudden decisions." (V10) expressed as follows; He said, "It's not worrying, I'm familiar with digital gaming and instant decisions." Differently (V11) he said; "Yes,

*it worries me, I wonder if I made a wrong decision. If I am in a team game, I consult my teammates to avoid making mistakes." Similarly (V12) stated that; "Depending on the digital game I play, I can say yes because unplanned snap decisions cause me anxiety." (V13) emphasized that; "Yes, instant decisions may worry me depending on the current state of the game." Differently (V14) he said; "No, snap decisions don't worry me because I'm careful to make decisions that can do as little harm as possible." (V15) stated as follows; since I am not worried about winning or losing, I try to follow the decisions made and focus on my game instead of worrying."*

## RESULT AND DISCUSSION

In this research, which intends to disclose the perspectives of children who play digital games on the notion of digital games, a total of six semi-structured questions were asked to the children, and their responses were examined using inductive analysis. What feelings do you experience the most when you play digital games? When the responses to the question were studied, it was determined that the digital game elicited powerful feelings in youngsters such as ambition, melancholy, tension and happiness, joy and excitement. Spending more time than necessary on digital games has resulted in aggressive behaviors, lack of emotion, issues maturing, and damage to relationships with others (19). Mustafaoğlu and Yasacı (20) discovered that digital games played in moderation had a soothing impact on teenage emotional release and are useful in forecasting, decision-making, and analysis. Researchers investigating the negative impacts of digital gaming and focusing on addiction have concentrated on the uncontrolled and extended play of digital games and the influence on the individual's mood (21).

Do you feel oppressed when you play video games? What exactly is digital gaming to you, and what does it mean to you? When the children's responses to the question were reviewed, they revealed a variety of perspectives on the subject of pressure. Some kids reported feeling pressure, while others reported feeling no pressure and, on the opposite, experiencing inner ease. When asked what the digital game meant to them, they frequently responded with recreation activities, regeneration, and amusement. Esen and Gündodu (22) discovered a link between peer support and digital addiction. It is thought that this is due to intense peer pressure during this time period.

In what scenarios do you experience dread and anxiety while playing video games? When the responses to the question are evaluated, it is clear that the children's fears

and anxieties are unified in the notions of being alone during the game, losing the game, and accepting responsibility. According to Barut (23), adventure-thrill games are entertainment-type games that delight the user while also instilling anxiety and excitement in him. This category includes games like adventure, virtual or real vehicle racing, and bungee leaping. As a result, certain types of games might induce dread and anxiety in people.

Do you worry about making quick judgments when playing video games? When the responses to the question are evaluated, it is clear that there is no agreement. Some students reported that they felt anxious when making quick judgments, however other participants stated that they did not feel anxious during their conversation. Many researches have found that digital games are harmful to one's health. Romer, Bagdasarov, and More (24) found that heavy use of digital games causes depression in young and young adults regardless of the content, and this result is similar to the results of Lemmens, Valkenburg, and Peter (25) with German youth and Gentile et al (26) with American youth.

What would you say if you were to express your emotions while winning and losing in a digital game? When the answers to the question are examined, children stated that they felt anger, sadness, and anxiety during the loss of the digital game, but they felt happiness, joy, and excitement during the winning. Children who play digital games have bad sentiments and attitudes about themselves, have difficulty in their social relationships with others, and lose self-control. These issues are a serious problem that should not be overlooked in terms of cognitive, emotional and physiological development of children (27).

What are the distinctions between the times you play digital games and the times you do not play digital games for you? When the participants' responses to the question were reviewed, they stressed the dominance of the sensation of delight when playing the digital game and the feeling of restlessness when not playing the digital game. It has been suggested that many of the adolescents who play digital games play to get rid of stress and negative emotions (28). Irmak and Erdoğan (6) emphasized that digital gamers do not play these games despite their negative effects and feel psychologically deprived when they cannot play the game. Kowert et al. (29) found that people who play online games rather than offline games have a lower quality social environment.

Lemmens et al. (30) evaluated digital game addiction under seven criteria. The 4th and 6th criteria of these categories are as follows; Conflict: This refers to interpersonal conflicts that result from excessive gaming. These confrontations may be verbal, but they may also entail dishonesty and lying. Withdrawal: Unwanted emotional and physical repercussions that occur when the game is paused, even when the difficulty level is rapidly dropped. It is characterized by psychological symptoms such as introversion, anger, and trembling.

As a conclusion, when children's perspectives on the notion of digital games are analyzed, it is possible to conclude that digital games have both good and bad features for children. While happiness, anger, anxiety, and anxiety are felt when a player wins a game, sadness, anger, anxiety, and anxiety are felt when a player loses. As a result of the answers given by the children to the questions about this idea, it can be claimed that children playing digital games are exposed to the fear and anxiety caused by the virtual world when playing digital games.

## REFERENCE

- Sormaz F and Yüksel H. Changing childhood, industrialization of games and toys and consumption culture. *Gaziantep University Social Sciences Journal*. 2012;11:985-1008.
- Türk Language Society. Great Turkish Dictionary; 2021. Access Date:17.03.2021 <http://www.tdk.gov.tr/index.php?>
- Lillard A S, Lerner M D, Hopkins E J, et al. The impact of pretend play on children's development: A review of the evidence. *Psychol Bull*. 2013;139:1-34.
- Durdu P, Tüfekçi A and Çağıltay K. Computer game playing habits and game preferences of university students: A comparative study between METU and Gazi University students. *Eurasian Journal of Educational Research*. 2005;19:66-76.
- Pala F and Erdem M. A Study on the Relationship between Digital Game Preference and Game Preference and Gender, Grade Level and Learning Style. *Ahi Evran University Education Faculty Journal*. 2011; 12:53-71.
- Irmak A Y and Erdoğan S. Ergen ve Genç Erişkinlerde Dijital Oyun Bağımlılığı: Güncel Bir Bakış. *Türk Psikiyatri Dergisi*. 2016:1-11.
- Dağ İ. Anxiety in the Light of Psychology. *East-West Thought Journal*. 1999;6:181-189.
- Budak S. *Psychology glossary*. (First press). Ankara: Science and Art Publications; 2000.
- Bicer T. *Peak Performance*, 3rd ed. Istanbul, Beyaz Publications; 1998.
- Ersevim İ. *Fundamentals of Freud and Psychoanalysis*. (Third edition). Istanbul: Assos Publications; 2005.
- Creswell J W. *Research Design Qualitative and Quantitative Approaches*. (2nd Ed.) Thousand Oaks, CA: Sage Publication; 2003.
- Miles M B and Huberman A M. *Qualitative data analysis*. (Second edition). California: Sage Publication; 1994.
- Sarantakos S. *Social Research* (3rd Ed.). New York: Palgra and Macmillan; 2005.
- Büyüköztürk Ş, Akgün Ö E, Karadeniz Ş, et al. *Scientific research methods*. (20th Press) Ankara: PegemA; 2016.
- Glesne C. *Introduction to qualitative research*. A. Ersoy and P. Yalçinoğlu (Trans. Ed.). Ankara: Anı; 2012.
- Kuş E. *Quantitative-qualitative research techniques*. (4th Press). Ankara: Anı; 2012.
- Patton M Q. *Qualitative research and evaluation methods*. Thousand Oaks California: Sage Publications; 2002.
- Yıldırım, H., & Şimşek, A. *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Seçkin Yayıncılık, 2018
- Çelik I, Şahin I and Eren F. Metaphorical perceptions of middle school students regarding computer games. *Journal of Social, Education, Economics and Management Engineering*. 2014;8:2552-2557.
- Mustafaoğlu R and Yasacı Z. The negative effects of playing digital games on the mental and physical health of children. *Journal of Addiction*. 2018;19:51-58.
- Choi C, Hums M and Bum C H. Impact of the family environment on juvenile mental health: E-Sports online game addiction and delinquency. *International Journal of Environmental Research and Public Health*. 2018;15:2850.
- Esen B K, and Gündoğdu M. The relationship between internet addiction, peer pressure, and perceived social support in adolescents. *The International Journal of Educational Researchers*. 2010;2:29-36.
- Barut B. Investigation of the relationship between digital game addiction level and perceived social support and emotion regulation in adolescents (Master's thesis, Hasan Kalyoncu University); 2019.
- Romer D, Bagdasarov Z and More E. Older versus newer media and the well-being of United States youth: results from a national longitudinal panel. *Journal of Adolescent Health*. 2013;52: 613-619.
- Lemmens J S, Valkenburg P M and Peter J. Psycho-social causes and consequences of pathological gaming. *Computers in Human Behavior*. 2011;27:144-152.
- Gentile D A, Choo H, Liau A, et al. Pathological video game use among youths: a two-year longitudinal study. *Pediatrics*. 2011;127:e319-e329.
- Dikeç G, Bektaş B, Turhan A, et al. Relationship between smartphone addiction and loneliness among adolescents. *Journal of Dependence*, 2017;18:103-111.
- Villani D, Carissoli C, Triberti S, et al. 80 Video games for emotion regulation: A systematic review. *Games for Health Journal*. 2018;7:85-99.
- Kowert R, Domahidi E, Festl R, et al. Social gaming, lonely life? The impact of digital gameplay on adolescents' social circles. *Computers in human behavior*. 2014;36:385-390.
- Lemmens J S, Valkenburg P M and Peter J. Development and Validation Of a G Game Addiction Scale For Adolescents. *Media Psychology*. 2009;12:77-95.