

Exploring the Ideas of the Faculty of Sport Sciences Students on the Concept  
of E-Sports

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**Abstract**

This research was planned to analyze the opinions of the students of the faculty of sports sciences about e-sports games. The research was designed in a “qualitative research pattern” in order to examine in depth what e-sports games are, the sources of motivation in playing e-sports games, social development, psychomotor development and virtual reality perceptions. The data of the study were collected through semi-structured interviews with 12 students selected by criterion sampling method. The obtained data were coded, divided into categories and evaluated with content analysis. In the research findings; it was determined that the participants adopted the view that e-sports has negative effects in terms of social, physical and psychological aspects, and that it has positive contributions in terms of economic and leisure activities. Considering the nature of sports, modern sports theory and also the cultural and historical definitions, it can be said that e-sports games will not have a significant physiological contribution to the players since they are played by the computers in an inactive way. On the contrary some social and psychological contributions could be considered.

**Keywords:** E-sports, Faculty of Sport Sciences, Case Study.

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**Spor Bilimleri Fakültesi Öğrencilerinin E-Spor  
Kavramına Yönelik Düşüncelerini Keşfetmek**

**Öz**

Bu araştırma spor bilimleri fakültesi öğrencilerinin e-spor oyunlarına ilişkin görüşlerini analiz etmek amacıyla planlanmıştır. Araştırma, e-spor oyunlarının ne olduğu, e-spor oyunu oynama da motivasyon kaynaklarını, sosyal gelişimi, psikomotor gelişimi ve sanal gerçeklik algılarını derinlemesine inceleyebilmek adına temel nitel araştırma deseninde tasarlanmıştır. Araştırmanın verileri, ölçüt örneklem yöntemiyle seçilen 12 öğrenci ile yarı yapılandırılmış görüşmeler aracılığıyla toplanmıştır. Elde edilen veriler kodlanarak kategorilere ayrılmış ve içerik analizi ile değerlendirilmiştir. Araştırma bulgularında; katılımcıların e-sporun, sosyal, fiziksel ve psikolojik yönden olumsuz etkilerinin olduğu, ekonomik yönden ve boş zaman faaliyetleri yönünden olumlu katkıları olduğu görüşünü benimsedikleri tespit edilmiştir. Sporun doğası, kültürel ve tarihsel tanımları ve modern spor teorisi düşünüldüğünde, E-spor oyunlarının hareketsiz bir biçimde bilgisayar karşısında oynandığı için fizyolojik olarak oyunculara önemli bir katkısının olmayacağı bunun yanı sıra bazı sosyal ve psikolojik katkıları olabileceği söylenebilir.

**Anahtar kelimeler:** E-spor, Spor Bilimleri Fakültesi, Durum Çalışması.

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## Introduction

Technological advancements have had an impact on sports as well as other aspects of life, and technology has begun to dominate sports. Technology, which is also used to make modern sports more effective, has caused the sport to be structured and a new version to emerge.

With the growing acceptance of digital games as sports, the notion that digital games can be called sports has gained traction (Llorens, 2017). The availability of internet access in every home in the 1990s increased the popularity of digital games (Sakar, 2021). It is seen that concepts such as being able to challenge, winning a significant number of victories, expanding the fields of competence, influence, and self-efficacy can be accepted as motivational tools in the tendency of individuals to play digital games (Klimmt and Hartmann, 2006). The concept of e-sports, which is played in a virtual environment where amateur or professional players compete against each other via computer or game consoles, emerged as a result of the process (Jenny Manning, Keiper and Olrich, 2017). With the rise in popularity of computers, advancements in the field of the internet, and an increase in digital consumption literacy (Seo, 2013), e-sports activities began to take place on university campuses in the 1980s (Yılmaz, 2020), and the online players association was founded in 1999. In the press release, the term "e-sports" was used for the first time (Ayar, 2018).

According to Wagner (2006), E-Sports is a sports activity in which people develop and train their mental or physical abilities through the use of information and communication technologies. He stated that it is a sport that requires both physical and mental effort, and that it allows people from all over the world to meet and play games through large electronic sports organizations. E-sports can be defined as a sports branch that takes place in a digital environment with players, organizers, sponsors, and viewers present, where competition is prioritized, and where organizations for these games are organized (Yükçü and Kaplıanoğlu, 2018). Today, e-Sports has become a phenomenon that allows people to relax spiritually, appeals to people of all ages and audiences, and opens up new business opportunities (Alioğlu and Algül, 2021).

South Korea was the first to institutionalize e-Sports. With the formation of the International E-Sports Federation (IESF) in 2008, 46 member countries came together to recognize e-sports as a sport. The establishment of the Turkish E-Sports Federation (TESFED) in 2018, under the General Directorate of Sports, resulted in the institutionalization of Turkish e-sports in order to work for the growth of Turkish e-sports and the development of the Turkish E-Sports Federation brand. Many official and private e-sports tournaments are now organized at the international level, and electronic sports federations are attempting to complete the formation process (Argan et al., 2006).

As a component of modern sports, e-sports, which organizes many organizations by establishing federations, is controversial. In addition to studies arguing that e-sports are related to physical activity (Gümüşdağ et al., 2021; Witkowski, 2012) there are various studies that argue that the level of

physical activity in e-sports will not be enough to be referred to as a sports branch (DiFrancisco-Donoghue and Balentine, 2018; Jenny et al., 2017; Suits, 2007; Parry, 2018) are available. There are studies in the literature that argue that e-sports, which have federations and are even being discussed in international important sports organizations, are far from having the qualities that real sports should have (Arslan and Bulut, 2021). When the differences between the concepts of sports and e-sports are considered, it is argued that while all activities take place in the virtual world in one, all activities take place in the real world with physical objects in the other, and they are separated in these aspects (Hamari and Sjöblom, 2017).

The purpose of our study is accompanied by all of this information; the opinions of students studying in faculties of sports sciences about e-sports, which aim to train teachers, managers, trainers, and recreation leaders who can monitor and evaluate the social effects of sports, recognize the structure and functioning of sports institutions, develop sports skills, and direct the regular and continuous participation of individuals of all ages and levels in sports activities. The prevalence of digital games, which are played intensively by generation Z in particular, is increasing day by day. It is thought that the findings of the study will contribute to the literature due to the impact of the development in the field of technology and the Internet on games.

## **Method**

This part includes information about the research model, study group, data collection tool and data analysis process.

### ***Research Model***

The study used qualitative research techniques to determine the perspectives of sports science faculty students on e-sports. The reason for choosing the qualitative method is; to reveal the experiences and suppressed voices of the participants about e-sports, to question causality and to make their thoughts visible. Qualitative research is defined as a study in which qualitative data collection methods such as interviews, observation, and document analysis are used, and a qualitative process is followed to reveal perceptions and events in a natural environment in a realistic and holistic manner (Yıldırım and Şimşek, 2018). The case study design was used in the study. Case studies are a type of research design that is used in many areas, including evaluation processes, in which the researcher analyzes a situation, usually a program, event, action, process, or one or more individuals (Creswell, 2014).

### **Study Group**

The purposeful sampling method, one of the criterion sampling methods, was used in this study. In this regard, the study includes 12 volunteer students from a state university's sports sciences faculty who have an interest in the concept of e-sports. The interviews lasted 40 to 50 minutes. It was discovered that the students who took part in the interview frequently played digital games. It has been determined that the games played by the participants are digital sports games. It was determined that the participants in the study ranged in age from 18 to 24. Names of the participants in the study were assigned by coding.

<b>Participant</b>	<b>Age</b>	<b>Gender</b>	<b>Faculty</b>
A1	19	Male	Sport Science Faculty
A2	19	Female	Sport Science Faculty
A3	20	Male	Sport Science Faculty
A4	22	Male	Sport Science Faculty
A5	19	Male	Sport Science Faculty
A6	19	Female	Sport Science Faculty
A7	18	Male	Sport Science Faculty
A8	23	Male	Sport Science Faculty
A9	22	Male	Sport Science Faculty
A10	19	Female	Sport Science Faculty
A11	24	Male	Sport Science Faculty
A12	20	Female	Sport Science Faculty

### **Data Collection Tools**

A semi-structured “Ideas About the Concept of E-Sports Interview Form” with six questions developed by the researcher was used in the study. It was stated by Büyüköztürk et al. (2013) in the creation of the “Ideas on the Concept of E-Sports Interview Form”; The stages of “defining the problem”, “writing the items”, “receiving expert opinion”, “making the preliminary application and giving the final shape to the form” were followed. In qualitative research, one of the most common data collection methods is the interview. This is because it is effective at revealing the emotions, thoughts, and experiences of the participants based on the speech (Yıldırım and Şimşek, 2018). The interview guide includes semi-structured interview questions in the semi-structured interview method. The questions are open-ended, and specific information is usually gathered from each participant. There are no predetermined statements or responses given to questions (Merriam, 2015). In order to ensure the validity and reliability of the interview form used in our study; A question pool was created in line with the relevant literature. Expert opinions were taken during the process of forming the questions and determining the questions to be used. Afterwards, the determined questions were subjected to pre-application and necessary arrangements were made on the questions to make them more understandable. After the questions that should be included in the interview form were

determined, the opinions of a Turkish language expert were taken and the necessary corrections were made on the questions and the interview form was made ready for application. The research questions are as follows;

What are your views on what e-sports games are?

What are the sources of motivation for playing e-sports games?

What are your views on the effects of e-sports games on the social development of people?

Do e-sports games cause violence and psychological problems?

What are your views on the relationship between e-sports games and real life?

What are your views on the psycho-motor and physiological effects of e-sports games on people?

### ***Analysis of Data***

The content analysis technique was used to analyze the data obtained from the faculty of sports sciences students' opinions on e-sports. Data is attempted to be defined through content analysis, and facts that may be hidden in the data are attempted to be revealed. 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 (Yıldırım and Şimşek, 2018). The codes extracted from the students' answers to the semi-structured opinion form were used to categorize the students' opinions as codes. The data were transferred to a computer environment and the codes created were given to an expert in the field for evaluation in order to determine the reliability of the codes created. After analyzing the interview transcripts, the researcher decided to the data into six major category by coding it.

### **Findings**

In this section of the study, students from the faculty of sports sciences consider what e-sports games are and whether they have played an e-sports game at some point in their lives, what people who play e-sports games see as a source of motivation, and how e-sports games affect people's social development. Answers that are given to questions such as how e-sports games affect people psycho-motor and physiologically, as well as their opinions about the relationship between e-sports games and their connection with sports and real life, were examined in this study.

### ***Opinions of sports science faculty students about what e-sports games are***

As a result of the answers given by the participants, Table 1 shows what e-sports games are.

Table 1

E-sports Game Definitions

Category	Codes
E-Sports Games	* Information and Technology * Cognitive Skill * Virtual World * Competition

“Could you tell us about your thoughts on what e-sports games are and whether you played an e-sports-related game at a certain time in your life?” When their answers to the question are examined;

(A1) *"We can describe e-sports as games played in virtual environments in which people compete against each other via computers and game consoles, even if they are not physically together. I've never played an e-sports game in my life, but there were people around me who did."* (A2) *"E-sports are games in which people use their mental abilities to compete using information and technology. I tried to play e-sports for a while based on what I heard in the media and on the internet, but I didn't try again because I wasn't very good at it."* (A3) *"E-sports games are sports games played by people who meet in the virtual world. Because I believe that sports will be done in the real world, I have never played an e-sports game and have made no effort to do so."* (A4) *"The games that people meet and play through the internet, even if they are not close to each other, are called e-sports games. I was interested in e-sports for a while, but I had some health problems because I spent a lot of time in front of the computer, so I stopped playing e-sports."* (A5) *"E-sports games are games that people play in virtual environments without physically coming together by using technological opportunities. Until now, I have not played any esports-related game in virtual environments."* (A6) *"E-sport is a kind of game in which interested people meet and compete on the internet, even though it is at one end of the world. I haven't played a game about esports games."* (A7) *"E-sports are games that people play in a virtual environment by using their mental skills via the internet. I played a few esports-related games for a while, but I stopped playing many games, including e-sports, when I started spending the time I should have spent in front of the computer and my classes started to go bad."* (A8) *"E-sports is a kind of game that is played in the virtual environment thanks to the internet and computer. I have not played any e-sports game in the virtual environment until now, but I can say that I have information about e-sports because of my environment and the media"* (A9) *"E-sports is the games played on the computer without meeting in a real sense. I played e-sports for a while with the influence of my environment and the thought that I would provide a financial expectation,*

*and because I could not reach any of my expectations, I stopped playing the e-sports game.” (A10)*  
*“E-sports are game activities that people play for various purposes by meeting online even if they are far away, regardless of whether they know each other or not. I haven't played any esports-related game type until now.” (A11)* *"E-sports are computer games with multiple purposes, such as entertainment, that are played on a computer via the Internet. I've never played an esports game."*  
*(A12) "E-sports are games that players play about sports without physically coming together from long distances. Despite having some knowledge of e-sports due to the advancement of communication tools in the age of technology, I have not personally approved an e-sports game.”*

In the statements of the students, it was concluded that e-sports are games that people play with their mental abilities by using information and technologies, and games that have many purposes such as entertainment played on the computer via the internet are called e-sports.

**The opinions of the students of the faculty of sports sciences about the sources of motivation for playing e-sports games**

As a result of the answers given by the participants, the motivation sources of those who play e-sports games are given in Table 2.

Table 2  
 Motivation Sources of E-Sports Players

Category	Codes
Motivation Resource	* Happiness * Money * Having fun *Leisure Time Activity *Virtual Reality

When participants' answers to the question are examined “Can you tell us your thoughts on what people who play e-sports games see as a source of motivation?”;

*(A1) "I believe that, even in virtual environments, people who play e-sports games can satisfy their feelings such as defeat and defeat, and I believe that they see the feeling of being happy when they play e-sports as a source of motivation for playing e-sports."* *(A2) "I believe that people who play e-sports make use of their free time, and the excitement they experience during the process of playing games encourages them to play e-sports games and also gives opportunity to play at other times too."*  
*(A3) "I guess they play e-sports games because they believe they will make money as a result of the news they see and hear on television and the internet, and they see these financial gains as a source of motivation to play e-sports games."* *(A4) "I used to be interested in e-sports." While playing e-sports games, I was able to satisfy my desires to accomplish something while also having fun; these desires motivated me to participate in this sport. I believe that people who do not participate in e-sports, like me, see the sense of accomplishment and fun as motivators to play these games."* *(A5)"I*

*can admit that people who play e-sports games use their spare time to improve themselves in computer games, which contributes to their motivation to play e-sports games." (A6) "I believe that the motivation sources for e-sports players to participate in these games can be both having fun and making money through this entertainment." (A7) "I played a few e-sports games for a while. There were many reasons that motivated me to play the games while playing them; I believe that many factors, such as achieving sports success, passion for gaming, and having fun, provide motivation sources for people who play other e-sports games like me." (A8) "I believe that e-sports players are motivated to participate in these games because their sources of motivation provide sporting success." (A9) "For a while, I was playing the e-sports game with the influence of my environment and the thought that I would provide a financial expectation, and this was my source of motivation, as well as the desire of other e-sports players to gain financial gain as a source of motivation, such as being able to achieve sportive successes in the virtual environment that they could not achieve in real life." I think the features motivate the players." (A10) "I feel that humans who play e-sports games see this as the most motivating factor, because they realize what they cannot do in a real environment while playing e-sports games in a virtual environment." (A11) "I did not play an e-sports game, but I believe that the motivation sources for my friends who do may be the thought that they get away from their troubles and stress by playing these games in their spare time." (A12) "I assume that e-sports players who see it as fun and enjoy it a lot are effective at motivating people to play these games."*

When the statements of the students are observed, as a source of motivation for people playing e-sports games; it has been stated that they see the game as a source of entertainment, the element of financial gain, and the success of the virtual environment.

**The opinions of the students of the faculty of sports sciences on the effects of e-sports games on the social development of individuals**

As a result of the answers given by the participants, the effects of e-sports games on the social development of individuals are given in Table 3.

Table 3  
Effects of E-Sports Players on Social Development

Category	Codes
Social Development	* Loneliness
	* Different Friendships
	* Avoidance from environment
	* Different Cultures
	* Communication Channels



The students of the faculty of sports sciences asked the question “How do e-sports games affect the social development of people; can you tell us your opinions on this subject?” When their answers to the question are examined;

(A1) *"I don't presume that those who play e-sports games have a positive impact on their social development; on the contrary, I believe that it pushes people away from real environments and into loneliness."* (A2) *"I believe that such games can have a positive impact on the social lives of the players."* *"I believe that in virtual environments where there is no distance, distance, or closeness, people can broaden their circle of friends by meeting new people."* (A3) *"I do not believe that computer games such as e-sports have no benefit or will be of any benefit to people's social development."* (A4) *"As e-sports games provide the opportunity to meet people from different cultures and environments in virtual environments, I can say that it can positively contribute to the people who play this game to be more social."* (A5) *"Such games played in virtual environments can affect people socially positively or negatively, people can meet more people by having the opportunity to meet new people."* (A6) *"E-sports games can be played even with people from one end of the world, dialogue can be established with people from many different cultures, so I think that such games can contribute positively to socialization."* (A7) *"If the person spends too much time on the computer with games such as e-sports, he may lose his sociality by moving away from the environment he lives in, and when the players are constantly interested in the game, when they do not go out of their rooms, they can also lose contact with their friends."* (A8) *"If the players spend their time playing e-sports games on the computer alone, it may prevent people from socializing in this case, but I think that such games will not do any harm to socialization if attention is paid to the playing time."* (A9) *"I think that e-sports will not contribute to the socialization of the players since they are not physically together in virtual games such as e-sports."* (A10) *"I can say that such games can make a positive contribution to the socialization of people, as they allow people to meet more people in different games such as e-sports, as they offer the opportunity to meet people on the internet and meet different people in very different places and at very long distances."* (A11) *"He can contribute to his socialization by meeting other people while playing this type of game if he does not stay away from his environment, does not play e-sports games all the time, and establishes a good dialogue with the people he meets in the virtual environment."* (A12) *"Because e-sports is a game played in a virtual environment, I believe that people who play these games can have a positive or negative impact on their socialization, depending on how they balance the time and environment they spend on the games."*

As monitored in the statements of the students, it has been concluded that e-sports games will not contribute to the socialization of people by pushing people away from real environments and to

loneliness, but if they establish a good dialogue with the people they meet in the virtual environment, they can contribute to their socialization by meeting other people while playing this type of game.

**The opinions of the students related to e-sports games which can cause violence and psychological negativities.**

As a result of the answers given by the participants, their views on the fact that e-sports games can cause violence and psychological negativities are given in Table 4.

Table 4  
Violence and Psychological Effects of E-Sports Players

Category	Codes
Violence and Psychological Dimension	* Virtual Violence * Degradation * Stress-Anger

When participants' answers to the question are examined “Could you please indicate your opinion on the question that e-sports games can cause violence and psychological negativities?”;

(A1) *"We hang out with friends on a football field, etc." We use violence against each other and have abusive speech from time to time during our sports activities, but we pay a little more attention due to the reactions that may occur from the environment. However, because e-sports games are played on the internet and on computers, I believe they can have abusive conversations without hesitation and resort to violence in real life as a result of the games.*" (A2) *"I do not believe that e-sports games will result in violence and abusive speech; rather, I believe that elements such as violence and profanity are related to one's life."* (A3) *"If people are playing e-sports games by swearing, if they are interested in games based on violence, if this becomes a habit, I can say that they can maintain such bad habits in their real lives."* (A4) *"The more people use violence and profanity in sports played under normal conditions, the more they will use these negativities in sports such as e-sports, beyond that, I don't think e-sports will cause more profanity and violence."* (A5) *"Play games similar to e-sports. People can generally speak freely and play games with whatever content they want because they do like that on the computer in their rooms, which can lead to abusive speech and violence."* (A6) *"It depends on the content of the e-sports games and the person's upbringing, but I do not believe that e-sports games will lead to violence and abusive speech on their own."* (A7) *"Some people can be more comfortable in e-sports games played in front of a computer in a single room, speaking abusively and playing violent games, which may lead to such abusive speech in the other life of the person."* (A8) *"As far as I have observed around me, people resort to profanity and violence while doing sports. In sports such as e-sports, people can speak abusive and play games based on violence, and I think there may be a possibility of transferring this to real life."* (A9) *"Because of*

*feelings of defeat and defeat, people may become enraged and use foul language while participating in sports." (A10) "In comparison to other sports, I don't believe esports will cause violence and profanity." (A11) "If played alone in a room, games like e-sports can make people feel more comfortable, and they may speak abusive words where no one can hear them anyway, which can affect their normal life." (A12) "If the players speak abusively and resort to violence in their everyday lives, they can also speak abusively and resort to violence while playing e-sports games."*

As seen in the students' statements, it is thought that e-sports games can cause violence and psychological negativities, as much as people use violence and profanity in sports played under normal conditions, they also use these negativities in sports such as e-sports, beyond that, e-sports will not cause more profanity and violence.

**The views of the students of the faculty of sports sciences about the relationship between e-sports games and sports and its connection with real life;**

As a result of the answers given by the participants, their views on both the relationship of e-sports games with sports and its connection with real life are given in Table 5.

Table 5  
Virtual Reality Perceptions Of E-Sports Players

Category	Codes
Virtual Reality	* Poverty of Physical Environment * Cognitive Strategy * Immobility * Imagination

When participants' answers to the question are examined “Can you explain in detail your views on the relationship of e-sports games with sports and its connection with real life?”;

*(A1) "Sports are physical activities in which people come together with the goal of winning and having fun. Running, for example, requires a physical effort to participate in these activities. E-sports games, in my opinion, have no real relationship with sports because they lack such functions. (A2) "Even though e-sports is played on the computer, there should be an effort to beat the opponent and mental strategies should be created, an effort should be made to overcome the opponent in sports that are performed together physically, in this respect, e-sports I also see games as sports. I think it's relevant to real life, as e-sports games improve players' hand-eye coordination." (A3) "Since sports are played by running and sweating in the real environment, I do not think that e-sports games have anything to do with real sports, I think that games played in virtual environments cannot be connected with real life." (A4) "In order to be successful in e-sports games, there must be effort and talent. In order to win in real reciprocal sports, there must be mental ability and effort. In this respect, I see e-sports games as normal sports. I think that the efforts and mental activities while playing e-sports*

*games will contribute to real life and contribute to the further development of people.” (A5) “E-sports are games played together in a virtual environment, so I don't think it's like sports in real environment. I can say that an e-sports game that is not played in real environment cannot be connected with reality.” (A6) “As e-sports games are games played at the table without getting out of breath, I don't think they are related to sports, I don't think that the games made in virtual environments will have a contribution and connection to the real environment.” (A7) “E-sports games are played on the computer and via the internet and require skills such as mental ability and hand-eye coordination. Physical sports include such abilities, in this respect, e-sports is like other sports, and I believe that it can make other activities easier in real life, which requires the use of hand-eye coordination and mental skills to win games.” (A8) “I don't agree that e-sports games played in a virtual environment in a room on the internet without each other can be associated with sports in a real sense, I do not think that such games can have a connection with real life.” (A9) “E-sports games are also games played to beat have fun and even earn income. In this respect, I see it as other sports played together in a physical sense, to get angry, rejoice, etc. during the game. Since these feelings can be experienced in real life, I think that normal life and e-sports games have common points in terms of these feelings.” (A10) “I do not say that e-games played in a virtual environment can be comparable to games played in a physical environment, and I do not believe that games like e-sports have anything to do with real life.” (A11) “I don't believe that e-sports games that aren't played against each other in a real sense can be compared to other sports that are physically tiring and necessitate a certain level of fitness and strength.” “I'm not sure how esports games relate to real life.” (A12) “I don't see e-sports games where people play from long distances in a virtual environment without touching each other, like other sports that require physical effort and contact; I also don't see e-sports games being related to real life.”*

As it is observed in the statements of the students, when we look at the relationship of e-sports games with sports and real life, physical sports contain talents. In this respect, it has been concluded that e-sports, like other sports, can make it easier to perform other activities in real life, which require the use of hand-eye coordination and mental skills to win games.

### **The opinions of the students of the faculty of sports sciences about the psycho-motor and physiological effects of e-sports games;**

As a result of the answers given by the participants, their views on how e-sports games affect people psycho-motor and physiologically are presented in Table 6.

Table 6

Physiological Effects of E-Sports Players

Category	Codes
Physiological Dimension	* Hand-eye Coordination * Reaction * Obesity * Posture disorders * Ineffective

When participants' answers to the question are examined “How do e-sports games affect people psycho-motor and physiologically?”;

(A1) *"I do not believe that e-sports games have any psychomotor or physiological impact. People's psychomotor and physiological states will not change at the end of games that do not take place on sports fields, do not come into contact with soil, grass, or the hall, and do not sweat from the body."*

(A2) *"Regardless of how many e-sports games are played at the table, it can contribute to the development of the people who play's hand skills because playing with game consoles can contribute to the development of these skills, and I believe that this can benefit people's psychomotor development."* (A3) *"I think that games played in virtual environments that are not played in real terms will not contribute to either the psychomotor development or physiology of people."* (A4)

*"Since e-sports games are played constantly in front of a computer while sitting on a chair, they do not have a positive psychomotor and physiological contribution, on the contrary, I think that sitting constantly will damage the spine, waist and neck of the players, as well as cause people to gain excessive weight due to inactivity."* (A5) *"I have not had any experience with e-sports games before, but since I know that these games are played in a virtual environment and without much movement, I do not think that these games will have an effect on people's psychomotor and physiology."* (A6) *"I do not think that e-sports games, which are virtual games played at the computer, will have a positive or negative effect on the players psychomotor and physiologically."* (A7) *"Since e-sports is played in a virtual environment by using people's mental skills via the internet, I do not think that such sports games will affect people's psychomotor and physiological elements."* (A8) *"For it to have a psychomotor effect, it is necessary to move while playing e-sports games, but while playing e-sports games, they do not move in any way, on the contrary, they are constantly sitting, so I think that e-sports games will not have an effect on the psychomotor and physiological systems of those playing this game."* (A9) *"For Game consoles and etc. I can say that e-sports games that are played with equipment can affect players psychomotor and physiologically, not directly but indirectly."* (A10)

*"People who play e-sports games move less because they are always in front of a screen, and thus there will be no psychomotor and physiological effects."* (A11) *"E-sports games played while sitting in front of a computer will have no psychomotor or physiological effect."* (A12) *"Virtual games that*

*lack physical activity and effort will have no effect on the psychomotor and physiological states of those who play them."*

As seen in the statements of the students; it has been concluded that e-sports games will not have any positive effects on influencing people in terms of psycho-motor and physiologically, since they are digital games, on the contrary, they may have negative effects.

## **Discussion**

This study, which focuses on understanding the opinions of students from the faculty of sports sciences on e-sports, was associated with a specific code by taking into account the reasons of the participants through one-on-one interviews.

*Regarding the definition of E-Sports in the category of E-Sports Games; Information and Technology, Mental Ability, Virtual World and Competition codes were obtained.*

When the participants' perspectives on the definition of e-sports games were examined, it was discovered that e-sports are games played on a computer via the internet in which people compete with each other through game consoles, which are realized in virtual environments, which are realized with the people's mental abilities. In the literature, e-sports are defined as sports activities that use information and communication technologies to develop and train people's mental and physical abilities (Wagner, 2006), as a sport that requires both physical and mental effort where people from all over the world can meet and play through large electronic sports organizations (Argan et al., 2006), and as a type of sports that mediates both the inputs of players and teams and the outputs of the e-sports system, a virtual platform where amateur or professional players compete against each other via computer or game consoles, according to (Hamari and Sjöblom, 2017). We monitor that it is defined as an environment (Jenny et al., 2017). According to these definitions, e-sports; Even though not in the same physical environment, it can be said that there are sports activities that develop and train people's mental and physical abilities via computers and the internet.

*In the category of Motivation Source; Happiness, Money, Fun, Leisure, Virtual Reality codes were obtained.*

Motivational elements such as satisfaction of emotions such as defeat and defeat, activity of making use of their free time, the excitement they experience in the process of playing games, the possibility of obtaining a financial gain, achieving sportive success, passion for games, having fun, getting away from boredom and stress, and liking games very much come into play when participants' opinions about what people who play e-sports games see as a source of motivation are gathered. As in modern sports, there are reasons that push athletes to do this activity in e-sports. When the literature is assessed in this context, Argan et al. (2006) concluded that while liking e-sports is at the top of the motivating factors that lead people interested in e-sports to such games, passion for games is second,

and the desire to make money is last. In their study, Mustafaoğlu, Zirek, and Yasacı (2018) specified that, unlike the results of this study, the passion for playing games was the first, having a career in the second place, and the leisure time was the last. In the literature, there are studies that deal with the effects of leisure activities on the development of children and young people, from physical and social perspectives (Aydın and Birol, 2019; Bozdağ, 2020). In another research, Akin (2008) determined that the most important motivating factor in e-sports is entertainment, followed by the passion of e-sports.

*In the Social Development category; The codes of Loneliness, Different Friendships, Away from the Environment, Different Cultures, Communication Channels were obtained.*

When the opinions of Sports Science students on how e-sports games affect the social development of individuals are examined; some participants stated that they did not think that it had a positive effect on their social development, on the contrary, they pushed people away from real environments and pushed them into loneliness, while some participants, on the contrary, stated that they thought that e-sports games could have a positive effect on the social lives of the players, and that they could expand their circle of friends by meeting new people in virtual environments where distance is not crucial. In addition to these different viewpoints, it has been stated that time spent in front of a computer can cause loneliness by isolating the individual from their surroundings. Technological advancements have resulted in the diversification of sports activities, as they have in many other areas of life, and the phenomenon of play, which is used for human leisure and socialization, also has benefited from this change. In this aspect, many of the games that were previously played in face-to-face communication with other people and thus have an educational function in terms of human relations have been replaced by digital games played online against software with digital intelligence and with people you have never coincided before (Özhan, 2011). Choi, Hums, and Bum (2018) stated that young people play online games to engage in social interaction. According to another study, people learn skills such as team building, negotiation, cooperation, strategic thinking, planning and execution, leadership, and quick decision making while playing multiplayer games (Federation of American Scientists, 2006). Online gamers are generally thought to be antisocial, but in most online games, players communicate with one another and form their own communities. Trust and leadership are important factors to consider when making game decisions (Gentile, 2009). According to the findings of our study, both positive and negative effects of e-sports on social development can be observed.

*In the category of Violence and Psychological Dimension; Virtual violence, Moral Corruption, Stress-Nervous codes were obtained.*

When the answers of the participants that e-sports games can cause negativities such as violence and abusive speech are evaluated; while e-sports games are played on the internet and on

the computer, opinions are expressed that negative dialogues can be experienced more comfortably without hesitation from anyone, and that violence can be resorted to in real life by being under the influence of the games; The belief that if players are negative in their everyday lives, they can have negative conversations while playing e-sports games and resort to violence under the influence of the game. Some of the positive effects of e-Sports include its use as an educational tool, its contribution to foreign language learning and development, and its improvement of quick decision making and various strategy development skills (Ministry of Youth and Sports Publications, 2018). E-sports' negative aspects include personality disorders and difficulties with emotion control, deterioration of the person's real and virtual perception, and various emotional and behavioral disorders such as aggression, anger, and violence due to the elements of violence (Ministry of Youth and Sports Publications, 2018). Toxic behavior is especially prevalent in e-sports communities. Harassment in competitive e-sports games can put obstacles in the way of players achieving high performance and may cause players to leave the game by reducing their enjoyment of the game (Adinolf and Turkey, 2018). As a consequence of these findings, it is believed that e-sports may cause a variety of negative behaviors such as rage, violence, and abusive speech if they contain elements of violence and are played in difficult-to-control environments.

*In the Virtual Reality category; Physical Environment Deprivation, Mental Strategy, Inactivity, Imagination codes were obtained.*

When the participants' perspectives on the relationship between e-sports games and sports, as well as their connection to real life, are examined, e-sports games played in a virtual environment have no real relationship with sports because sports are physical activities that people do together, to be beaten or for entertainment purposes, and that there should be a physical effort to do these activities, whereas e-sports games are far from such functions. In addition to the view that it cannot be related to life, there are those who believe that mental strategies should be developed in e-sports activities, and that e-sports games can be considered modern sports in this regard. E-sports, in particular, are not considered a sport by many modern sports fans. In fact, because of the long hours spent in front of a computer game and staying still, e-sports can be perceived as the polar opposite of modern sports (Di Francisco et al., 2018). Physical fitness and activity levels of athletes are critical components of all sports activities. E-sports, on the other hand, is recognized as an official sport in some countries, including South Korea, China, Russia, Hungary, and Denmark (Jonasson and Thiborg, 2010). Furthermore, both e-sports and modern sports are performed individually or as a team. Individual skills are argued to be superior to those of competitors, and team players competing in a coordinated manner will result in success, so it is stated that both team and individual sports require mental effort (Akin, 2008). E-sports also shares similarities with modern sports, such as regular training, teamwork, or the flawless execution of pre-planned tactics (Hutchins, 2006), and



prominent e-sports players, as well as their fan bases, leagues, and jerseys. Jenny and colleagues (2017) Computer games of sports like football and basketball have been found to improve players' sports skills, knowledge, and ties to sports (Murphy, 2009), whereas a marathon runner and e-sports player have a heart rate of around 160-180 (Schütz, 2016). One of the most heated debates about whether e-sports can be classified as modern sports concerns physical activity. All e-games are played by players who are seated in front of a computer or console. The various responses to the questions, however, do not reveal a clear conclusion about the acceptance of e-sports as a modern sport. In this regard, it is possible to state that, as a result of our research and other studies, there is no agreement on the acceptance of e-sports as a modern sport.

*In the Physiological Dimension category; Hand-Eye Coordination, Reaction, Obesity, Posture Disorders and Ineffective codes were obtained.*

When the participants' answers about the psychomotor and physiological effects of e-sports games are examined; At the end of the games, which they think that e-sports games do not make any psychomotor and physiological contribution, that do not run in sports fields, do not meet with soil, grass and halls, and do not shed sweat from the body, people will not have any psychomotor and physiological contribution, on the contrary, staying in a sitting position all the time will affect the players' spine, waist and neck. They determined that as well as damage to their regions, it can cause people to gain excessive weight due to inactivity. Contrary to these views, it has been determined that e-sports games can contribute to the dexterity development of people who play, even if they are played at the table, and this can benefit the psychomotor development of the people. It is stated that while sports games played on the computer for a long time cause different problems, they provide cognitive, psychomotor and affective gains in individuals as long as they are played in a controlled manner (Cihan and İlgar 2019). Witkowski (2012), one of the authors who tried to answer through motor skills, which is a sub-factor of physical movement; argues that "e-sports players who do not mimic the movements of the characters in the game and have a well-balanced body with the use of the keyboard and mouse to manipulate their characters are physically engaged." Rudolf et al. (2016) in their studies; It has been determined that e-sports players are exposed to physiological stress and strain during competitions. Some studies have found an increase in the motor skills of individuals playing interactive video games (Murphy, 2009). Guttmann (1978) states that sports should consist of physical competitions, while according to Suits (2007), physicality is the most important feature that distinguishes sports from games. As a result, when the opinions of the participants and the findings of similar studies in the literature are considered, it can be stated that there are differing views on whether e-sports games can have positive or negative effects on people in terms of psychomotor and physiological effects.

New career paths have emerged in recent years, especially with the growing interest of the young population in e-sports and digital sports games. However, as evidenced by our findings and the findings of other studies, there is no consensus on the recognition and acceptance of e-sports as a modern sport. Although it is believed that e-sports contribute to individuals' physical, psychological, and social effects, its place cannot be fully positioned when compared to modern sports. For this reason, it is thought that it will be beneficial to develop projects in cooperation with the Ministry of Youth and Sports and the Higher Education Institution in order to increase the knowledge and awareness of university students about e-sports.

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