



GENERAL ARTICLE

E-Sports Education and Development in a Global World

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Abstract

The concepts of “technology” and “information” occupy an important place among the concepts that reveal or accelerate globalization. With the rapid development of technology, computer and internet concepts have also started to enter our lives. Extraordinary developments in the field of technology have led to new developments in sports as in every field, and many new branches have been added to the field of sports from past to present. Another of these developments is the concept of E-Sports, also known as competitive or professional video player. This study aims to talk about the definition of E-Sports concept, its development process, its place in our country, to reveal the different aspects of traditional sports and E-Sports by giving information about whether E-Sports is a sport or a game, pandemic. To contribute to the academic studies E-sports filed by evaluating the effect of the process on digital games.

Introduction:

Globalization involves the disappearance of national borders and the increasing integration of countries (Özel, 2011). According to another definition, globalization brings to mind the world, which has become a big market economically, information and communication technologies, popular culture, and similar developments and affects all life (Ekmekçi *et al.*, 2013). The concepts of ‘technology’ and ‘information’ have a critical place among the concepts that reveal or accelerate the concept of globalization (Yilmaz & Horzum, 2005). Technology is all the information that people use to change the environment they live in to make them more beneficial (Eren, 1982).

With the rapid development of technology, computer and internet concepts have begun to enter our lives. Since the 2010s, with the widespread use of internet providers and being economically accessible to everyone, 50% of individuals living in the world have become able to use the internet. These developments in the field of technology have affected the entire field of our lives and the sports field, bringing many new developments. In addition to sports developments, the most crucial factor accelerating the globalization of sports is technology. Technology usage in sports and new programs specific to sports have been developed, sports have been introduced to people more widely thanks to technology, and various positive changes have been achieved for sports (Kocadag, 2017).

The terms computer games and video games can be used interchangeably (Kilci, 2020) because the tools used in

both are the same. Many tools can be used to play digital games. These can be listed as tablets, computers, mobile devices, and game consoles. Game consoles, which turned into a multimedia entertainment and communication tool, also developed gaming (Kilci, 2020). With the start of playing digital games via a screen on the internet and the development of visual effects depending on the technology, sports fields’ details have been digitally experienced on the screen environment. It is as if the sports fields have moved to the homes, and individuals have started to feel much more vivid in sports activities both physically and mentally. Personal computers’ development has increased computers’ usage characteristics in parallel by providing the emergence and diversification of new games (Magerko *et al.*, 2000).

Three factors keep e-sports from past to present: the proliferation of the internet, LAN (local network), the emergence of cafes, and competitive games (Argan & Akin, 2007). Today, the concept of E-Sports shows a significant improvement. With the increase in the global competition level, the production of knowledge started to replace the competition between countries. As a result, the concept of sports and athlete criteria has also changed. As a result of this change, the concept of E-Sports, known as professional video acting, has become a type of sport.

Objective of the Study:

The article is to discuss on the definition of E-Sports concept, its development process, and its place in our country, to

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reveal the different aspects of traditional sports and E-Sports by giving information about whether E-Sports is a sport or a game, to evaluate the effect of the pandemic process on digital games and contribute to academic research in the field of E-Sports. In obtaining and interpreting the data in the research, the document analysis method, which is among the qualitative research methods, was used. Document analysis can be defined as the systematic handling of both printed and web-based information and documents (Bowen, 2009).

Theoretical Framework:

Concept of E-sports: E-sports is a concept that emerged as a result of globalization and has been involved in many changes. This concept, which first started to show itself with arcade games in the '70s and '80s and has been continuously changing, has become E-Sports. Kilci (2019) defines E-Sports as an online sports branch with components such as sponsors, spectators, broadcasters, often played in professional leagues or tournaments as a team, and has a sense of superiority over the rival team by using the cognitive skills of the players. Today, personal computers and mobile phones are easily transported, and individuals play competitive video games by establishing network connections whenever and wherever they want, indicating that E-Sports has gained a place of its own in the developing world. In this way, e-athletes can do E-Sports training whenever and wherever they want, and they can meet their need for entertainment and leisure time. The effects and visuals of the games played in E-Sports help to increase the interest in this field even more. The pandemic process has affected every aspect of our lives as well as the field of sports. Sports competitions were postponed to a later date, and some competitions started to be played without spectators. However, during this period, E-Sports tournaments continued uninterrupted, the number of athletes within the Turkish E-Sports Federation increased, and at the same time, the rate of playing E-Sports games started to increase. The main reason for the rise is that individuals who have closed their homes during the pandemic period turn to E-Sports to benefit from their free time and meet their need for socialization. While E-Sports tournaments were broadcasted on some internet channels in the past, they are featured on television channels today, indicating that this area can quickly adapt to our times. With e-Sports keeping up with the global world, it is thought that it will come to much better places in the future. With this research, it aims to contribute to the academic studies in the field of E-Sports and guide the studies to be done.

Concept of E-athlete: we can call the athletes who participate in official or private tournaments at the amateur or professional level in any E-Sports branch.

Professional athlete: to be qualified as a professional, he

must participate in official and private tournaments and represent his country at the national team level. In our country, E-Sportsmen licenses are issued by the Turkish Republic Ministry of Youth and Sports General Directorate of Sports.

Amateur Athlete: athletes who participate in E-Sports tournaments as amateurs and who also play games with their friends over the computer in their free time are considered amateur athletes in the E-Sports category.

Features of e-athletes: according to Argan & Akin (2007), for E-Athletes to be successful, they must have certain qualities such as controlling the game, controlling the player, using game tools and equipment, concentration, and adapting newly learned tactics and skills to the game. All these features give the E-athlete the ability to intervene immediately against the series of games that require strategic thinking (Akin, 2008). Besides, in order to ensure the continuity of these acquired qualities, athletes train at specific intervals. The environment in which the e-athletes train is usually a computer environment and requires a specific network connection.

Digitalization of Sports and E-Sports: all of the physical activities that can be done based on individual or team struggle and have a set of rules are defined as sports. In terms of its structure, sports contain physical activity elements and continuously change from the past to the present. Digitalization is one of the innovations that will not harm the essence and nature of sports but will make it suitable for modern life (Akgöl, 2018). Along with globalization and technological developments, some innovations have occurred in the field of sports. One of the innovations in sports is the concept of electronic sports (Demir & Sertbas, 2020).

E-Sports, Sports or Game?

E-athletes need coordination and slight motor movements, and advanced concentration while using a mouse, joystick, and keyboard tools. (Crawford & Gosling, 2009). Recently, there has been an increasing tendency to consider gaming as a kind of sport, and eventually, all events, organized tournaments, have shown that this activity can indeed be evaluated in this way (Llorens, 2017). Because E-Sports games, which are performed as a team, are performed as a seasonal competition/tournament as in traditional sports (Kilci & Yalçiner, 2020: 3642). According to Demir and Sertbas (2020), in the debate on whether E-Sports is a sport or not, there are two sharp groups:

- ◆ E-Sports is suitable for the definition of sport, and it is a sport.
- ◆ E-Sports does not meet the requirements of the definition of sport, and it is not a sport.

Guttmann (1978) and Suits (2007) attribute that any activity can be described as a sport with the following seven basic features.

a. Play: These are voluntary activities carried out for entertainment

GENERAL ARTICLE

and learning. From this point of view, the participants play the video games they play to have fun and voluntarily and fulfill this feature of the sport.

- b. Organization: Sports, in terms of its structure, contains specific rules and includes targeted activities. When viewed from this aspect, e-Sports includes video game activities organized and played within the framework of a series of rules.
- c. Competition: All sports branches include the phenomenon of competition in terms of structure. As in every sports branch, some athletes win or lose at the end of an E-Sports tournament. When E-Sports is analyzed from this point of view, athletes struggle against each other to be successful in competitive games in the tournament.
- d. Skill / Ability: Sports include games that require a skill. During a professional tournament, E-Athletes need coordination to be successful, game logic, and strategic thinking skills to solve the game they play. To successfully manage their avatars, players customize the tools and equipment they use in the game according to their abilities.
- e. Physicality: Physicality is an important feature that distinguishes sports from games. The sport requires skill, and skills include physicality. For this reason, in order for the game to be seen as a sport, it must contain physical skills. For games that have desktop variety, the athlete must use their physical skills. Similarly, the athlete must use physical skills to direct his avatar during the game effectively.
- f. Broad audience: A sport needs to go beyond just a game that is glamour or intriguing and has a broad audience (Suits, 2007). When the data of e-sports viewers are examined, it is seen that the number of fans in 2017 was 191 million, and this number reached 385 million with the occasional E-Sports viewers. This number is increasing exponentially with each passing year. (Mustafaoğlu, 2018: 92).
- g. Institutionalization: International bodies such as the International E-Sports Federation, Korean E-Sports Association, and World Cyber Games, Cyberathlete set rules for the E-Sports ecosystem and shape institutionalization by working in sync with country federations (Demir & Sertbaş, 2020).
- h. Education: E-sports has recently become widespread, especially in universities, with the effect of the pandemic process in our country as in the world. The recognition of e-sports in higher education institutions in our country and the increase in young people's interest brought new searches in this sport's publication. Recently, E-sports has become a club, especially in higher education institutions and institutions affiliated to the Ministry of National Education. Students studying at the undergraduate level at our universities can choose E-sports courses and receive e-sports scholarships for their students in some universities. E-Sports is also considered as a social formation (Ditmarsch, 2013). In the definitions made by those who accept e-sports as an actual sports branch, there are opinions that competitions are organized by blending information and communication technologies with physical and mental elements (Cambrand, 2014).

Difference between E-Sports and Traditional Sports:

There are specific differences in some fundamental points in addition to traditional sports and E-Sports' everyday

aspects.

If we will mention the difference of E-Sports from traditional sports;

1. It can be mentioned that E-sports players and their audience have had the same experiences, unlike traditional athletes. In other words, the fans who have already watched the game as viewers have experienced the game intensely (Taylor, 2012).
2. At the same time, together with the game's effectiveness and the variability of professionals' success, it is observed that E-Sports fans have much less loyalty than traditional sports fans (Karakus, 2015).
3. In e-Sports, teams are often linked to an organization with subgroups for different games, similar to traditional sports, and many professional teams stand out as real employers who pay monthly wages to their players.
4. The training areas of traditional athletes and E-Athletes also differ, while traditional athletes train in halls and fields suitable for their branches, while E-Athletes continue their training in a computer environment (Argan et al., 2006).

Comparison of E-Sports and Some Basic Features of Traditional Sports: when both sports branches are examined comparatively, the main difference between E-Sports and traditional sports is that electronic sports can be performed in a virtual environment. However, it is one of the most critical features of E-Sports that it can be done without requiring a considerable financial resource and with its tools and equipment. On the other hand, traditional sports are performed in a real environment, depending on financial resources and branch-specific tools and equipment. While E-Sports requires intellectual effort, traditional sports require intellectual and physical effort. It is one of the common aspects that both sports can be done individually and as a team.

e-sports tournaments, attention is paid to the visual effects, sound quality, and game sectors' games to be close to real life. The main reason for selecting games close to real life is to prepare E-Athletes or individuals who play the selected games for real life and enable them to quickly produce solutions for situations and events that they may encounter in life. E-Athletes participate in tournaments in two categories, individual and team categories.

Individual Category Athletes: athletes who participate individually in E-Sports tournaments compete individually for their country or for the team they compete for.

Team category athletes: each athlete who participates in E-Sports tournaments as a team athlete has specific duties during the tournament. While the athletes try to fulfill the task assigned to them during the game, they also aim to be successful as a team.

Conditions for Computer / Digital Games to be Considered as E-Sports: as per Özkurt (2019), for computer / digital games to be considered in the E-Sports category, they must meet all of the following conditions.

- Preparing the game in a format suitable for the challenge,

- A high number of players,
- Supporting the game by the game developer,
- The rules of the game are straightforward,
- The difficulty of the game at a certain level is another defining feature.

Benefits and Harm of Digital Games: digital games have both positive and negative effects. These adverse effects increase even more when games played by children and young people turn into an addiction. Also, according to a study, it was found that the concentration, attention, and manual skills of individuals who play computer games are developed, and their professional work skills are higher than those who do not play computer games (McKinley *et al.*, 2011). While talking about the positive aspects of digital games, using digital games as an educational material can help provide foreign language learning and development, contribute to hand-mind coordination, increase technological knowledge, skills, harmony in teamwork, strategic thinking, effective communication, and leadership skills. The negative aspects are that individuals affected by the games have difficulty distinguishing between virtuality and reality, the appearance of aggressive behaviors in individuals with some violent elements, their negative effects on academic achievement, and retardation in language development and maintaining an asocial life. It is essential here to analyze the positive and negative aspects of digital games well and ensure that the games are played in a controlled manner.

E-sports in Turkey:

Turkey is one of the top 3 countries to act on federation in the field of e-Sports. While E-Sports was included in the Developing Sports Branches in Turkey in 2011, with the Turkish E-Sports Federation's establishment in 2018, E-Sports started to be accepted as a sports branch. Founded in 2003, the "Dark Passage" team is Turkey's first known E-Sports team. Besides, the teams named "SuperMassive," "HWA Gaming" and "Dark Passage" are also among the famous teams that create E-Sports awareness in our country (Üçoglu *et al.*, 2017). The emergence of the first video game consoles in the '80s and attracting much attention created a new understanding of gaming in the world (Kilci & Yalçiner, 2020).

E-sports in Turkey:

At the end of 2019, a new type of coronavirus emerging in Wuhan, China, has been accepted as a "pandemic" all over the world (Koçak & Kaya, 2020). One of the most critical effects of Covid-19 is that it forces life into digitalization and includes sports into digitalization. The digitalization of sports, at a certain point, has taken E-Sports on the rise. During the epidemic period in e-sports, tournaments and competitions continued online, over the internet. Simultaneously, during the pandemic process, there has been a significant increase in the number of E-Athletes in Turkey. As of June 2019, there were 546 licensed E-

Sportsmen, 29 of which were women, 55 registered E-Sports clubs, while as of June 2020, the total number of athletes reached 1,848, including 159 licensed women E-Athletes and 1,689 men, and the number of clubs increased to 100 (Bas, 2020). According to the result of a study conducted by the financial audit, tax, and consultancy services provider, it is seen that with the rise of E-Sports during the pandemic period, game sales on the E-Sports side increased by 63% (Altan, 2020). The widespread use of distance education and online tournaments during the epidemic has shown that individuals can quickly adapt to the technology age they are in.

Discussion, Conclusion and Suggestions:

In this article, it was tried to give information about E-Sports and what E-sports are, the conditions of counting computer games as sports, the place of E-Sports in Turkey, and E-sports during the pandemic process. In this context, we discussed the effects of digitalization on E-Sports, the differences between E-Sports and traditional sports, whether E-Sports is a game or a sport. The change and interaction that started in the world as an effect of globalization also manifested itself in technology. However, changes and developments are experienced in the field of sports. With the development of globalization and technology, many new branches have been added to sports from past to present. One of them is E-Sport. In Turkey, with the inclusion of digital games, played for recreation as amateur or professional, in Developing Sports Branches by the Turkish Ministry of Youth and Sports in 2011 and the establishment of the E-Sports Federation in 2018, E-Sports has started to be seen as a sports branch. The fact that the struggle in e-sports is not similar to the methods of struggle in sports called traditional sports is one of the main criticisms. In a study by Donoghue and Balentine (2018), this criticism was stated as "sports is not an activity done by sitting in front of a computer screen." Mustafaoglu (2018) argues that if video games with a high amount of physical activity are added to E-Sports, it can provide confidence to be accepted as sports. For an E-Athlete to be successful during the tournament or in any game he/she performs, he/she must use his hand-eye coordination, reflex, and mental skills virtually (Witkowski, 2012). Cognitive, affective, psychological, physiological, and motor skills must be successful in e-Sports (Kilci & Yalçiner, 2020). Also, the fact that the E-athlete uses small muscle groups to manipulate his/her opponent due to the moves he/she has made during the game supports the view that E-Sports includes physicality. According to Gutmann (1978) and Suits (2007), when the necessary qualities that enable any activity to be evaluated as a sport are examined, it is thought that E-Sports provide the necessary conditions for evaluating them as sports. The important thing here is that digital games should be played in a controlled manner, and the games played should not reach the addiction level.

GENERAL ARTICLE

Digital games that are played in an uncontrolled way negatively affect individuals' psychological health (Irmak & Erdogan, 2016).

Consequently, with the development of globalization and technology, one of the innovations in sports is the concept of E-Sports. While E-Sports was included in the Developing Sports branches in Turkey in 2011, it was accepted as a sports branch by the Ministry of Youth and Sports in 2018 to establish the E-Sports federation. The primary and most crucial difference between E-Sports and traditional sports is that E-Sports can be done in digital environments. Although traditional sports competitions were canceled or taken to a later date during the pandemic period, the fact that E-Sports tournaments can be held online shows the digitalization of the E-sports branch and its ability to adapt to the conditions in the period. However, a severe increase in the number of Licensed E-athlete during the pandemic period, the increase in the rate of playing and purchasing E-Sports games, and the inclusion of E-Sports tournaments on some television channels have revealed the advantages of this branch.

Further Suggestions:

1. Awareness-raising activities should be carried out across the country regarding e-sports.
2. The studies into E-Sports should be supported and increased because research is needed in this field.
3. By expanding the platforms related to E-Sports, promoting the tournaments organized more intensively, giving more coverage to the tournaments organized in this field on local channels will contribute to the spread of E-Sports and enable individuals interested in E-Sports to learn about the games.

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