RESEARCH ABOUT THE EFFECT OF GENDER FACTOR IN DIGITAL GAME PREFERENCE [1]

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ABSTRACT

Digital games have become an area that is considered and discussed in the social and cultural field with the economic incomes. Hence the criteria and evaluations preferred by individuals in choosing digital games have gained importance. Based on this idea, the aim of the study was determined as to reveal what kind of effects the gender factor creates in the digital game preference of individuals. In this study, a scale based on field study was developed and the effects of the gender factor in the preferences of the participants in digital games were examined. The quota random sampling technique was used in the study covering the X, Y and Z generations in the 14-54 age group. The people selected according to the sample structure in question were determined as n240 and the k=03 design factor was used. As a result of the study, the data obtained show that gender and age as a supportive factor are important in choosing digital games. On the other hand, it has been concluded that the gender element in the digital game preference of individuals is effective in the choice of the game type and the creation of the character profile.

Keywords: *Digital Games, Gender, Age, Preference.*

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DİJİTAL OYUN TERCİHİNDE CİNSİYET FAKTÖRÜNÜN ETKİSİ ÜZERİNE ARAŞTIRMA

ÖZ

Dijital oyunlar son yıllarda elde ettiği ekonomik gelirler ile sosyal ve kültürel alanda üzerine düşünülen ve tartışılan bir alan haline gelmiştir. Bu bağlamda bireylerin dijital oyun seçiminde tercih ettiği kıstaslar ve değerlendirmeler önem kazanmıştır. Bu düşünceden hareketle çalışmanın amacı bireylerin dijital oyun tercihinde cinsiyet unsurunun ne tür etkiler oluşturduğunu ortaya çıkarmak olarak belirlenmiştir. Çalışmada alan araştırmasına dayalı ölçek geliştirilerek katılımcıların dijital oyunlardaki tercihlerinde cinsiyet unsurunun ne tür etkiler oluşturduğu irdelenmiştir. 14-54 yaş grubu içinde yer alan X, Y ve Z kuşaklarını kapsayan çalışmada kotalandırılmış tesadüfi örnekleme tekniği kullanılmıştır. Söz konusu örneklem yapısına göre seçilen kişiler n240 olarak belirlenmiştir ve k=03 tasarım faktöründen faydalanılmıştır. Çalışma sonucunda elde edilen veriler ışığında dijital oyun tercihinde cinsiyet ve destekleyici unsur olarak yaş kıstasının önemli olduğu görülmektedir. Bireylerin dijital oyun tercihinde cinsiyet unsurunun oyun türü tercihi ve karakter profilinin oluşturulmasında etkili olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: *Dijital Oyun, Cinsiyet, Yaş, Tercih.*

INTRODUCTION

Digital games are one of the important flagships of the entertainment industry with their economic successes. As a result of the download statistics of digital games and the data revealed by the purchasing platforms, it is expected that the games will reach larger revenues in the coming years. According to the researches, it is expected that the revenues of video games will reach 197.40 billion dollars in 2022, and the number of users will exceed 3 million by 2027. Figures in Türkiye say that digital games will reach a growth rate of 14.2% from 2021 to 2026, taking their place in strong growth together with music and cinema (URL-1). In addition to these figures, Türkiye has achieved an income scale that has increased from 880 million dollars to 1 billion 200 million dollars in one year in the digital game industry. The number of players has reached 42 million from 36 million (URL-2). Türkiye ranked 18th in the world with these data (Samur, 2022).

These successes of digital games in the economic field reveal the question of what kind of purchases users make and for what purpose. For this reason, the effect of factors such as age and gender has gained importance in users' digital game preference. The question of the study is "What is the importance of the gender element in the digital game preference of individuals in Türkiye?" and the aim of

the study was determined as "To find out what kind of effects the gender factor creates in the digital game preference of individuals in Türkiye". The results of the statistical data were effective in the preparation of the study in line with this purpose. Because, according to the report prepared by TÜİK (Turkish Statistical Institute), which is one of the official publication agency of the state, which ensures the compilation of data information and the preparation and publication of necessary statistics, 66.1% of children in the age group of 6-15 in Türkiye play games and engage in activities carried out via the Internet (URL-3). It is seen that they include game download activities. When evaluated from this point of view, it was concluded that there is a significant relationship between the gender of the students and their digital game preferences (Pala & Erdem, 2011).

For the purpose of the study, previous studies on the relationship between digital games and gender will be examined in the literature section and the theories put forward in the literature will be examined. In particular, it will be examined that the genders affect the choice of games and the factors according to which the users prefer the games. After that the scale will be developed and survey questions will be asked to the participants, and the effects of gender in digital games will be examined in line with their answers.

THEORETICAL BACKGROUND

With the release of Spacewar, the first interactive game in 1962, the digital game industry took the first steps of the big changes that will take place in the following years. After this game, traditional gender roles started to be reproduced in the early games. Because the first games largely reflected masculine entertainment such as hunting (Duck Hunt, 1969) and racing (Grand Prix, 1969) (Drenten, Harrison & Pendarvis, 2019: 29). Thus, the concept of gender has come to the fore as an important element in the choice of digital games. Digital games, considered gender technologies, have often led to the exclusion and perception of female subjects as "boys", and this process has been linked to the conservatism of the North American industry after nearly bankruptcy in the early 1980s (Harvey & Shepherd, 2017). As a result of this situation, gender has been used as an important discrimination tool in the preference of digital games and women have been more distant from the games in certain periods. For example, Subrahmanyam and Greenfield (1998: 51) state in their study that women do not find violence attractive and therefore they stay away from games to a certain extent. In addition, it is thought that adult women spend less time on digital games because they are not very enthusiastic (Kafai, 2008) and spend their free time with other activities (Winn & Heeter, 2009: 1). Another study shows that men spend much more time on video games than women, as the reason for the low rate of women playing games (Bonanno & Kommers, 2005: 16).

Another factor that draws attention in terms of the preferability of digital games in the context of gender is the gendered, cultural and social practices that emerge depending on the concept of gender. Studies claim that women experience "double stereotyping" when entering the game culture and state that sexist discourses are effective in their game preferences (Vermeulen & Van Looy, 2016: 288). For this reason, women participate less in digital games, especially in public spaces. Only in young age groups, participation in games is measured slightly more (Bryce, Rutter & Sullivan, 2006: 200). From this point of view, the differences in taste between male and female players reflect the access and consumption patterns of games arising from sexist, cultural and social practices (Carr, 2005: 6).

Gender stereotypes accepted by the majority in society can be effective in the use of mass media and digital technologies, which have an important place in society (Çağlan Bilsel, 2021: 33). The rapid development of digital technologies day by day shapes social life seriously. With the development of digital technologies, communication tools have entered our lives more with their added functions, and their frequency of use has increased. Widespread and intensive use of new communication technologies has started to be used frequently in the process of establishing and maintaining interpersonal relationships. Some studies have shown that the use of mobile technology usage and digital game playing habits differs depending on gender (Özmen & Çağlan Bilsel, 2022: 97).

As a result of all these evaluations, the main hypothesis of the study, "Genders of individuals affect the selection of genres in digital games" is important. Because the main reason for the expectation in this hypothesis is to reveal what kind of games individuals tend to play in the context of gender effect in their digital game preferences. The auxiliary hypothesis "The age group of individuals influences the choice of genre of digital games" will help to discuss what kind of effects the age group will have on the process, depending on gender.

METHOD

In the study, a scale based on field research was developed and the effects of the gender factor in the preferences of the participants in digital games were examined. The study includes X, Y and Z generations in the 14-54 age group. In terms of gender, age, attitude, behavior and preferences of these generations, many studies have benefited from previous and next generations (Sarıtaş & Barutçu, 2016**;** Çetin & Karalar, 2016; Erer, 2020**;** Ünal & Deniz, 2020). With the scale developed in the study discussed, the sample structure was created based on criteria such as the gender, age distribution, education level, marital status, and place of residence (city center/rural) of the participants. After presenting the socio-demographic information with multiple-choice items in the development of the scale, the participants were asked through multiple-choice questions,

interpretation questions, and listing questions on personality traits, digital game habits, awareness level of digital games, motivations and frequency of playing games. After these questions, questions were asked about the data that were suitable for the purpose of the study and shown in the tables in the study. "Do you play digital games?" as the filter question in the selection of the participants in the study.

The research was continued with the participants who answered yes to the question. In many studies, it is stated that it will be sufficient to prepare and express appropriate questions, to obtain information from a sufficient number of individuals, and to have the group size between 2 and 10 times the number of items (Büyüköztürk, 2005; Arıkan, 2015). In this context, the number of participants was designed as 240 people. Data were obtained through face-to-face interviews conducted for a week in 39 districts of Istanbul. The study was carried out during the Covid-19 pandemic, which affected the whole world, and was carried out with the expectation of being a pioneering study in the field. This is another reason why the number of participants was determined as 240. In the study, quota random sampling technique was used. The people selected according to the sample structure in question were determined as n240 and the k=03 design factor was used. On the other hand, a pilot application was made before the study was carried out, and as a result of the data obtained, the next stage was started.

RESULTS

In the study, 120 of the participants were male and 120 were female, and when evaluated as a percentage, 50% of the participants were male and 50% were female. The fact that the number of participants in both gender groups is the same indicates that there is an equal distribution by gender. Data on gender distribution are as in Table 1.

Table 1. Gender Distribution of Participants

Gender	%
Male	50
Female	50

25% of the participants are in the 14-18 age group, 25% are in the 19-23 age group, 25% are in the 24-44 age group, and 25% are in the 45-54 age group. As a result of these data, it is concluded that people from every generation are reached and the study is applied to almost every age group. Data on age distribution are as in Table 2.

Table 2. Age Distribution of Participants

Age	%
14-18	25
19-23	25
24-44	25
45-54	25

Looking at the genders preferred by the participants in the games, it is seen that 56% of them prefer the male, 34% of them are female, and 10% of them prefer the other gender.

Table 3. Gender Information Preferred by Participants in Games

Gender	%
Female	34
Male	56
Other	10

Table 4. Gender Preferences of the Participants in the Games

Gender Used	Total %	Male %	Female %	14-18 Age %	19-23 Age %	24-29 Age %	30-44 Age %
Female	34	19	48	43	37	38	17
Male	56	70	42	52	57	50	65
Other	10	11	10	5	7	12	18

When the gender preferences of the participants in the games are examined, it is seen that the target audience mostly uses male (56%) and young (88%) characters in the games they play. While 19% of male use female characters in games, the rate of using female characters in female increases to 48%. The tendency to use female characters rises in younger age groups and declines to 17% over the age of 30.

Table 5. Participants' Choice of Digital Game Type

Game Type	%
Action-Adventure	34
Strategy	31
Sport	13.5
Race	7.5
Role Playing	4.7
Puzzle etc.	3.7
Board Games (Rummikub etc.)	2.3
Card Games	2.3
Other	1

Considering the general percentage value of the games played, it is seen that action-adventure games are in the first place with 34%. Strategy games are in the second place with 31%. It is followed by sports with 13.5%, race with 7.5%, role playing with 4.7%, puzzles with 3.7%, etc. Board games with 2.3%, card games with 2.3% and other games with 1%.

The type of digital games played varies according to gender and age group. Action-adventure games are the most played game genre, with more female (65%) than male (52%). On the other hand, the rate of playing sports and role games is higher in male. While the rate of playing action-adventure games is higher between the ages of 14-18 (73%) and between the ages of 19-23 (62%), it declines over the age of 30 (42%), sports over the age of 30 (32%) and racing games (18%) play rate is higher than other age groups.

DISCUSSION

Digital games draw attention as an area that is related to many social science fields and attracts the attention of the academic world. While concepts such as social events, economic developments, culture, identity and gender constitute the main themes of digital games, they also offer important fields of study in the field. The aim of this study, which examines the effect of the gender factor on the digital game preference, was determined to reveal what kind of effects the gender factor creates in the digital game preference of individuals. The hypotheses of the study were determined as "Genders of individuals affect the selection of genres in digital games" and "The age group of individuals influences the genre selection of digital games".

When evaluated in the context of the hypotheses of the study, it is seen that there is a significant relationship in both gender and age group. When evaluated regardless of age and gender, it is seen that action-adventure games are in the first place with 34%, strategy games are in the second place with 31%, and sports games are in the third place with 13.5%. Considering the evaluations by age and gender, it is seen that action games are more preferred among female (65%) than male (52%). It is seen that the rate of playing sports and role games is higher in male. Looking at the action-adventure games, the rate is 14-18 (73%) and 19-23 (62%). If you are over the age of 30, the rate drops to 42 percent. The rate of playing sports (32%) and racing games (18%) over the age of 30 is higher compared to other age groups.

In the literature, it is seen that there are evaluations of individuals' digital game choices in the context of gender (Bryce, Rutter, Sullivan, 2006; Kafai, 2008; Bonanno & Kommers, 2005). As a result of the evaluations made in the method section of the study, important findings for the purpose of the study were obtained. Because it is seen that the gender factor in the choice of digital games affects the game preference of the individuals. In the study, it is basically seen that female tend to play action and adventure games more than male. On the other hand, the fact that action and adventure games are seen at a rate of 78% among the 14-18 age group reveals that the younger generation attaches more importance to this type of game. At the same time, 56% of individuals in their game preferences state that they choose their characters with female, 34% male and 10% other gender preference. The fact that the target audience chooses their characters mostly from the youth category in the games also emphasizes the age and gender in the preferences.

It is seen that some results were obtained that present new data at some points in addition to the literature studies investigated in the study. At the beginning of these are the gender roles that the participants use in the games. It is important that 10% of the participants name their characters in the gender group in the "other" category. Also, regardless of the age group of the participants, it draws attention as a data that needs to be considered.

On the other hand, male do not tend to female characters much while playing digital games. However, 52% of women choose male characters as an important data. Here, it is thought that the main motive for female to choose male characters is that they do not want to be disturbed in virtual environments. Because the tendency of female in the younger age group to tend towards male characters increases compared to other groups, and this rate decreases as the age progresses.

When gender-based analysis is made on the games played, it is seen that female are more inclined to action/adventure games. While the tendency for sports

games is higher in male, the fact that action games are more common in female, especially in lower age groups, stands out as another striking data. Because, in the group after the age of 30, this rate is greatly reduced.

Finally, it is seen that gender and age as a supportive factor are important in choosing digital games and answers given by the participants, it was concluded that the gender and age factor is seen as an important criterion in the choice of the game genre and the creation of the character profile. It is thought that these findings obtained in the study will provide important data for both game creators and users at the point of design and marketing of digital games in the future.

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