ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

Gender and Racial Stereotypes of Video Game Characters in (MMO)RPGs

(MMO)RPG Video Oyun Karakterlerinin Cinsiyet ve Etnik Stereotipleri

Uğur BAKAN[*] ID
Ufuk BAKAN[**] ID

Abstract

Internet and related new communication environments have also caused many changes in social and cultural structures. Games which are a mass communication medium, provide a space where players can easily obtain images, ideas, and evaluations to determine their own behavioral schedules. There are a number of studies that have included a variety of methodologies and data sources to determine whether or not video games, are also a direct influence on people's thoughts and behaviors such as traditional media environments that address millions of people. Today, MMORPGs are becoming more and more difficult with increasingly difficult tasks and wars. Different types of media such as visual and print media are the platforms that people can meet different stereotypes. Stereotypes are common thoughts that they are not private and carried on by sharing within the same community. While stereotype has a more uniform quality, prejudice can encompass a large number of stereotypes (ex, race, religion, sex stereotypes). This study aims to determine whether or not there is a relationship between gender and racial stereotypes of video game characters and variables such as race, gender, body types, and sexual portrayal-attire. Of the 107 RPG games that were examined, there were a total of 273 (46.2%) male characters and 318 (53.8%) female characters. Results of the chi-square analysis indicated that there were significant distribution differences between dependent and independent variables.

Keywords: Video Games, Character, Race Representation, Gender Stereotype, BSRI.

Öz

Oyunlar yalnız bireyler üzerinde doğrudan etkili olmakla kalmayıp, toplumun kültürü, bilgi birikimi, normlarını ve değerlerini de etkilemektedir. Milyonlarca kişiye hitap eden geleneksel medya ortamları gibi video oyunlarının da kişilerin düşünce ve davranışları üzerinde yönlendirici etkisi olup olmadığına

*   Assoc. Prof., İzmir Kâtip Çelebi University, Faculty of Art and Design, Turkey, E-mail: ugur.bakan@ikc.edu.tr.

**   Asst. Prof., İzmir Kâtip Çelebi University, Faculty of Art and Design, Turkey, E-mail: ufuk.bakan@ikc.edu.tr.

yönelik çeşitli metodolojiler ve veri kaynaklarını içine alan birçok araştırma bulunmaktadır. Günümüzde MMORPG tarzı oyunlar gittikçe daha zor görev ve savaşlar hale gelmektedir. Görsel ve yazılı medya gibi farklı medya türleri, farklı stenotipteki insanları buluşturabilen platformlardır. Stereotipler, kişisel olmayan ve aynı topluluk içinde paylaşılarak sürdürülen ortak düşüncelerdir. Stereotipler daha homojen bir yapıya sahipken, önyargılar ise çok sayıda stereotipi (örneğin, ırk, din, cinsiyet klişeleri) kapsayabilmektedir. Bu çalışma, video oyunu karakterlerinin cinsiyet ve etnik stereotipileri ile ırk, cinsiyet, vücut tipleri, cinsel tasvir, kıyafetleri gibi değişkenler arasında bir ilişki olup olmadığını belirlemeyi amaçlamaktadır. 107 RPG oyunda yer alan toplam 273 (% 46,2) erkek ve 318 (% 53,8) bayan karakter incelenmiştir. Ki-kare analizinin sonuçları, bağımlı ve bağımsız değişkenler arasında anlamlı farklılık olduğunu göstermiştir.
Anahtar Kelimeler: Video Oyunlar, Karakter, Etnik Temsil, Cinsiyet Stereotipi, BSRI.

Introduction

Along with advances in information and communication technologies, video games initially played only on personal computers or game consoles have enabled persons residing in different regions to participate online as a result of an increase in bandwidth and internet connection speed. This has been decisive in the emergence of Massive Multiplayer Online (MMO) class within the video game world. This type of player can create hundreds of fantastic characters in any manner they wish. Massively multiplayer online role-playing games (MMORPGs) are based on RPG games that are played online by many players at the same time control a character from on high and tell them to use certain abilities or spells (e.g. World of Warcraft, Guild Wars, Star Wars Galaxies). The role-playing game (RPGs) is the most dominant and ambitious game genre in which each participant players take on the role of different characters in a fictional scene (e.g., South Park, Pokémon Yellow, Super Mario). In MMORPGs, players usually start to explore the imaginary universe of the game as a member of certain groups or tribes after logging into the game. World of Warcraft is the most famous MMO game and has long been the front-running MMORPG. There are many others, including games that are not RPGs, but none have been as successful as WOW. Today, MMORPGs are becoming more and more difficult with increasingly difficult tasks and wars. To ensure that the gaming experience develops, MMORPGs allow players to create alliances, interact within the game, customize their own avatars, and even create game content.

People take advantage of mass communication tools in order to meet specific needs such as; free themselves of the troubles created by the intensive work schedule and have fun as well as make use of their leisure time. Studies on gender are conducted in connection with these games focus on gender roles, appearances and behaviors of characters (McQuail, 2010). Within these studies which continue to constitute a classic within the mass communication field, are built on the assumption that users take an active role in the selection of the media type and content within the context of the objective as well as orientation. The gratification theory places more focus on the consumer, or audience, instead of the actual message itself by asking "what people do with media" rather than "what media does to people" (McQuail and Windahl, 1994, p.166). In general, players are satisfied by reflecting their social and psychological needs in their everyday lives to the game content. Therefore, the sociological and psychological dimensions of gaming experiences provide important information about players.

In this study, the gender roles of the video game characters are analyzed in terms of their bodies and physical attributes.

Video Games

The video game is "an electronic game that involves human interaction with a user interface to generate visual feedback on a video device which is any type of display device that can produce two – or three-dimensional images (Jacksonet and Games, 2015, p.14). There are a number of studies that have included a variety of methodologies and data sources to determine whether or not video games, are also a direct influence on people's thoughts and behaviors such as traditional media environments that address millions of people. According to a report published by the Entertainment Software Association in 2017, it has been observed that the average age of users who play video games was thirty-five, while when looking at the gender distribution of this average, that the average age of male players was 33 while female players were 37. It is understandable that men began to be interested in their games from a young age, and that this interest continued to exist in later ages, and that women also began to be interested in video games in this male-dominated market. There are many studies to determine the influence of mass media on human relations as well as on the attitudes and behaviors of individuals. Previous studies have indicated that traditional communication theories such as "the magic bullet" and "the hypodermic needle theory" point out that individuals have the power to directly influence the individuals' feelings and thoughts and that those individuals who are exposed to such tools are shown as either passive or inactive. Video games of different genres have become a subject of research based on aesthetics, moral and sociocultural representations and technical aspects (Jahn-Sudmann and Stockmann, 2008). In-game studies suggest that rewards and punishments may be influential in shaping the behavior of individuals and that people may be able to take on new behavior without being directly exposed to these processes or even by experiencing a personal experience. Modeling and imitation are similar to each other, but many points are also separated. Since imitation and behavior are copied one by one, the cognitive processes are pushed to the background whereas, in the process of modeling, the model is more complicated and cognitive in the sense of adapting the behavior to its own life. A large number of studies have been conducted on the impact of violent content on aggressive attitudes and behaviors (Arriaga, Esteves, Cameiro, and Monteiro, 2006; Anderson, 2004; Sherry, 2001). Games are not only directly influential on individuals but also affect the culture, knowledge, norms, and values of the society. Games that are mass communication mediums provide a space where players can easily obtain images, ideas, and evaluations to determine their own behavioral schedules. This view shows that mass communication has the power to change the attitudes, behaviors, and thoughts of the people. Arguably, societal issues, cultural norms, and gender roles translate themselves into the social online gaming world (Malpas, 2009, p.138). Video games are classified in order to reduce the negative impact on children. The main development that forced the US government to rate video games based on the level of violence was first seen in 1993 through the launch of the video game "Mortal Kombat" (Kondrat, 2015, p. 171). This development in the history of video games made it necessary to establish a structure for determining which age group the content is geared towards and the amount of sexuality, violence,

aggressiveness it may contain. In addition to violence and aggressive behavior, the effects on gender roles also need to be examined.

Video Game and Gender Stereotyping

Different types of media such as visual and print media are the platforms that people can meet different stereotypes. In mass media, compared to female characters, male characters appear more frequently, talk significantly more, and engage in noted behaviors more, such as achieving and showing leadership (Thompson and Zerbinos, 1995, p. 655; Stankiewicz and Rosselli, 2008). There are many different definitions in the field of social sciences for the concept of "stereotype" which is formed by centralizing the differences in race and sexual orientation of an individual or group. Stereotypes are shared knowledge structures about particular social groups that may or may not accurately reflect group characteristics (Devine, 1989, p.7). Through this data, an individual may make positive or negative conclusions about an event or situation. Stereotypes consist of information related to the capability, appearance, attitudes, interests, traits, social status, occupation, and behaviors of social groups (Golombok and Fivush, 1994). It can also be seen in previous studies that the number of female characters in the video game world is limited compared to men or that female characters are not represented as the main heroes of the story.

Video games like Donkey Kong, released in 1981, and Super Mario Brothers, developed in 1985, largely portrayed females as damsels in distress; women were never the center of the action (Knight, 2010, p.16). Generally, the heroes that are in the role of the strong and the saviors in the games are males. The first major change in the representation of female characters in games over the years has been seen through the 1996 action-adventure video game Tomb Raider, which was based on the adventures of Lara Croft. For the first time in the video game market where the main heroes are usually males, the main character being a female represents a major transformation in this market. The current studies on the portrayal of women in the media have found that women are often portrayed as sex objects (Lavine, Sweeney and Wagner, 1999; Hamilton, Mintz and Kashubeck-West, 2007). Tracy L. Dietz's (1998) study on gender, role attitudes or stereotypical images of men and women in video games is among the pioneering works in this field. This study examined the use of the theme of violence in women's portraits and games in 33 popular Sega Genesis and Nintendo games using the content analysis method. In the data obtained, results show that 41% of the games have no female characters and that only 15% of the games have depicted women as heroes or action characters (pp. 433-434). When these games are examined, four possible female stereotypes based on appearance and behavior have been identified; as sex objects, women as rewards, women in the victim role, women in the hero or active role, women in the foreground as feminine roles (Mou and Peng, 2008, p. 923). In addition, it has been examined that violence and aggressiveness were factors present in some part of the game strategy in almost 80% of the games and that in 28% of the games where women characters are present, the physical appearances of women are brought to the forefront, displaying them as sex objects (Dietz, 1998). A similar study was conducted by Berrin Beasley and Tracy Collins Standley (2002) based on the attire worn by the characters within the games as one of the main indicators of sexuality within video games. They identified three categories of clothing

as the sleeve length, the neckline and the lower body clothing (p.284). The sample size of the study included 47 randomly selected games on the Nintendo 64 and PlayStation consoles analyzed through the content analysis method. Out of the 597 characters within the 47 games which were coded in order to create the sampling dimension of the study; it can be seen that 427 or 71.52% of these characters are male and that 82 or 13.74% are female (p.289). As a result of the evaluations made, it was seen that there were significant differences in the number of characters in the games and the way of dressing these characters. This situation reinforces the belief that there is an important sexual prejudice against female characters. In addition, male characters are given more content within the video games and that almost half of the women characters, 41% are depicted as having large breasts in order to create an unrealistic image of women in people's minds.

Another research on the emergence of stereotypes of violence, sexuality, and gender found in video games was conducted by Robinson et al. (2009). The list of popular games collected from the website named GameSpot.com between 2005-2006 is the sample size of the study. The coding of the games listed on this website is basically based on two variables. First of all, while those who appeared more than once in the description of the game and its story were classified as the main characters while those which appeared in at least two scenes and helped develop the story of the game were classified as minority characters. The sexuality of each character was coded in terms of the character's cleavage (female characters only), type of clothing worn, body size, and overall sexuality (Robinson et al., 2009). In determining the factors which constituted violence in the games, the coders basically encode the games taking into consideration three basic parameters such as the number of acts of violence, the number of weapons and the amount of blood seen on the website. Examination of the characters in the sample size of this study showed that 648 characters were human, 163 characters were humanoid while 28 characters did not have any human elements (Robinson et al., 2009). For example, in the Robinson et al. 2009 study, when the distribution of the characters in the games through gender is examined, the number of male characters was 577 while the number of female characters was 196. By looking at the numbers through a proportional perspective, it can be understood that the number of male characters was more dominant through a ratio of 3 to 1.

Another study evaluating the sexuality of male and female characters in video games was conducted by Downs and Smith in 2005. The sample size of this study was analyzed from the contents of 60 games with the highest ratings on Nintendo GameCube, Sony PlayStation 2 and Microsoft Xbox game consoles. Six demographic variables were determined in the classification of the characters within the sixty games that have been chosen. The first is the type of description such as human, animal, robot and supernatural, while the second demographic is coded as biological gender (male, female, non-gender) while the third and fourth variables are deduced from race and image quality (sharpness, contrast). The fifth variable was sexual behavior, the sixth variable was the appropriateness of the clothing and the seventh variable was the breast size while the last variable was the width of the waist (Downs and Smith 2010, p.725). It is seen that the results of this study overlap on many points with results obtained from studies based on the level and manner in which men and women are depicted in video games. In comparison to male characters, females were significantly more likely to be shown partially nude, featured with an unrealistic body image, and

depicted wearing sexually revealing clothing and inappropriate attire as also predicted (Downs and Smith, 2010, p.721). When the distribution of the number of characters by gender in selected video games is examined, it turns out that the distribution of male and female characters varies greatly. Haninger and Thompson (2004) achieved similar results in previous randomly selected 81-teen-rated video games. Games were significantly more likely to depict females partially nude or engaged in sexual behaviors than males.

Similar to previous studies, a systematic content analysis method was used by Behm-Morawitz (2014) to determine the extent to which race and sexuality intersected in stereotyped character descriptions in video games in order to reach broad masses in different regions. 383 consoles, online and pc game ads in two popular gaming magazines over the span of six months constitute the sampling area for this study. Findings reveal that race intersects with gender in video game advertisement portrayals, and video game advertisements uphold some longstanding media stereotypes of racial/ethnic minorities and women (Behm-Morawitz, 2014, p.233). In this study, whites also accounted for 82% of all characters in defined characters while white male characters accounted for 60% of the entire sample. Similarly, Summer and Miller (2014) conducted a study examining how the representation of female characters in video game magazines has changed over the years. The sample size of the study was 223 female characters in total from 175 gaming magazine articles between 1988-2007. Results indicate a growing trend toward a decreased benevolent sexism portrayal and an increase in a hostile sexism portrayal over time (Summers and Miller, 2014).

This study attempts to determine whether or not there is a relationship between gender and racial stereotypes of video game characters and variables such as race, gender, body types, and sexual portrayal-attire. With the assumptions of the theory in mind, the following hypotheses and research questions are proposed:

RQ1: What is the gender representation of major characters in role-playing games (RPGs)?

RQ2: What is the race representation of major characters by gender stereotypes in role-playing games (RPGs)?

RQ3: What are the body types of major characters by gender stereotypes in role-playing games (RPGs)?

H1: There is a significant difference in the perceptions of gender roles among male and female game characters in relation to the scales of the Bern Sex-Role Inventory (BSRI).

H2: There is a significant difference between sexual portrayal-attire by male and female game characters.

H3: There is a significant difference between gender stereotypes and body types of major characters in role-playing games (RPGs)?

Methodology

For the purpose of this study, to determine gender role stereotyping based on the presence or absence of role-playing game (RPG) major characters content analysis was conducted. It is based on

the data of the internet-based Empire, Ranker and GamesRadar + platforms, where the best video game characters of all time are listed. In order to be able to define the characteristics of each character, the videos on the official sites of the games which introduce the characters have been utilized. In addition, data from Fandom (http://fandom.wikia.com), an international entertainment platform where detailed information about video game characters are present, has also been included. Many current content analysis methods can be an ideal technique for both qualitative and quantitative studies. Content analysis as a widely used qualitative research technique is used to interpret meaning from written data (Hsieh and Shannon, 2005; Weber, 1990). This study used content analysis techniques in the analysis of the video game characters (Xbox, PlayStation, and Nintendo). In this analysis was used the types of the body those characters, and sexual portrayal attire those characters were wearing in video games. The population of RPG video games consisted of randomly selected 107 games from the Xbox, PlayStation, and Nintendo. This sample is seen as a valid representation of the RPG video game population. Of the 107 RPG games that were examined, there were a total of 273 (46.2%) male characters and 318 (53.8%) female characters.

Coding Scheme and Procedure

The coding scheme for this study was adopted from previous game research (Dill and Thill, 2007; Harrison, 2003; Donnelly and Twenge, 2016; Wohn, 2011; Sink and Mastro, 2016; Özkan and Lajunen, 2005; Vandenbosch et al., 2016; Neuendorf, 2010). Two independent raters coded each game character according to the coding scheme developed during the study. In the first stage, the characters of the games are coded according to four criteria by watching the promotional videos of the character on the website. In the second stage, the character information in the Xbox, PlayStation, and Nintendo sites is compared with the information in the Fandom platform created by the game fans. This information from three different sources is coded separately by two different researchers. Following the coding, the most preferred out of the six different values created for each category was accepted as the final result.

The major characters were coded into four categories: Race, gender, age, body type, sexual portrayal attire, and gender stereotypes. Major characters were defined as recurring, regular characters who were central to the storyline and consistently appeared on the show. The race was categorized with previous studies in mind (Nam, 2017, p.155). Races are Asian or Pacific Islander, Black or African American, Hispanic or Latino, Native American, White / Caucasian, Mixed Race, and Other. The game characters consist of many kinds of creatures such as human, animal, alien, hybrids, mutant, and unidentified (Qian and Clark, 2016). In this study, only human characters (male and female) are considered. As the age of the whole characters does not certainly know the age range was used as children, young adults, middle-aged, and elderly. The sexual portrayal attire is coded as for how revealing the clothing was "very revealing", "somewhat revealing", and "not revealing" based on Yi Mou and Wei Peng (2008).

The body types of video game characters categorized as thin, normal, curvy, muscular (Harrison, 2003, p.256). The gender stereotypes as personality attributes were measured by femininity and

masculinity. As most research widely used measures of gender-stereotyped personality traits, the Bern Sex-Role Inventory identifies indexes of masculine and feminine traits (Bem, 1974). In the 1970s Sandra Bem defined stereotypes as masculinity and femininity. The original Bern Sex-Role Inventory (BSRI) included total 60 dichotomous items/dimensions categorized into 3 subscales (20 masculine, 20 feminine, and 20 neutral). The reliability and validity coefficients of the Bern Sex Role Inventory (BSRI) were range from .75 to .90. The Turkish version of the BSRI 40 items (20 masculine and 20 feminine) was adopted by Kavuncu (1987). In the present study, gender stereotypes were measured using 40 items from the Turkish version of the BSRI. If the game characters displayed any gender role characteristic from the list of feminine traits from the BSRI, coders would check "yes," if they did not display checked "no," the same with masculinity. The two coders are the researchers of this study who received Ph.D. degrees in the field of communication science. Intercoder reliability was calculated using Krippendorff's alpha with reliability coefficients for each category ranged from .81 to .85, exceeding the widely accepted minimum threshold of .70.

Statistical Analysis

The data was compiled and analyzed in SPSS 24 for frequency, percentages and, Chi-square analyses. Chi-square and frequency analyses were appropriate for research questions and the hypothesis in this study. The dependent variable is the Bern Sex-Role Inventory (BSRI) score for each character. Race, gender, age, body type, and sexual portrayal attire were treated as independent variables. In the relational screening model, statistical analysis techniques are used to determine the relationships between dependent and independent variables.

Results

Of the 591 game characters that were examined, 46.2% (n=273) of the characters were male, and 53.8% (n=318) were female. Many of the video characters have unlimited power in a fantastic world. One of these characteristics is immortality or reincarnation and the return to life in a different body. It is not known exactly the ages of the characters, wherefore they were evaluated according to their appearance. When the distribution according to age groups, 72 characters (12.2%) are children, 165 characters (27.8%) are young adults, 255 characters (43.1%) are middle-aged, and 99 characters (16.8%) are elderly. Participants' ethnicities were 22.8% (n=135) Asian or Pacific Islander, 18.3% (n=108) Native American, 12.7% (n=75) Black or African American, 11.7% (n=69) Mixed race, 11.2% (n=66) White / Caucasian, 10.7% (n=63) Hispanic or Latino, and 12.7% (n=75) other.

Table 1. Percentage of Major Characters Exhibiting Personality Traits by Sex

Personality Traits	Gender	
	Male	Female
Age		
Children	12.5% (9)	87.5% (63)
Elderly	87.9% (87)	12.1% (12)

Middle aged	37.6% (96)	62.4% (159)
Young adults	49.1% (81)	50.9% (84)
Body type		
Curvy	-	26.4% (84)
Muscular	35.2% (96)	18.2% (58)
Normal	64.8% (177)	40.3% (128)
Thin	-	15.1% (48)
Sexual portrayal—attire		
Not revealing	84.6% (231)	63.5% (202)
Somewhat revealing	15.4% (42)	23.3% (74)
Very revealing	-	13.2% (42)
Stereotype		
BSRI-M (Masculine)	60.4% (165)	41.5% (132)
BSRI – F (Feminine)	39.6% (108)	58.5% (186)

Research Question 1 was proposed to determine the gender representation of major characters in role-playing games (RPGs). According to the results of the Bern Sex Role Inventory (BSRI) through which the personality traits of the game characters in RPGs are measured, a significant difference has been found in the distribution of subscales by gender (Table 1). There was an association between gender and body type at the .05 significance level ($\chi2=146.67$, 3 *df*, $p < .05$). It was found that male characters (N=96, 35.2%) have muscular body type more than female characters (N=58, 18.2%). Similarly, female characters (N=84, 26.4%) was more have curvy body type more than male characters.

Role identities are seen as identifications labeled to the person who is expected to exhibit certain actions or behaviors in certain situations. As a part of the study, 60.4% (N = 165) of males were found to have Masculine and 39.6% (N = 108) were found to have Feminine stereotypes. When female characters were evaluated, it was determined that 41.5% (N = 132) had Masculine and 58.5% (N = 186) reflected feminine stereotyping. To test H1, a chi-square analysis was performed between gender and stereotype.

To test H1, a chi-square analysis was conducted between gender and stereotype. Results of chi-square analysis obtained that there were significant distribution differences between the groups ($\chi2=21.056$, 1 *df*, $p < .05$).

In stereotype studies, an analysis of whether or not sexuality was brought to the forefront was undertaken by looking at the attire of the sampling (Beasley and Standley, 2002). In making this assessment, it is necessary to take into account the regional and cultural values of the characters. This research tried to determine sexual portrayal attire based on the view of the characters' clothes. The distribution of the characters by sexual portrayal attire was "Not revealing" (n=443, 73.3%), "Somewhat revealing" (n=116, 19.6%), and "Very revealing" (n=42, 7.1%). When the distributions of the sexual portrayal-attire according to the sex in Table 1 were examined, it was seen that male characters' clothes (N=231, 84.6%) were "Not revealing" more than female characters' clothes

(N=202, 63.5%). Results of chi-square analysis indicated that there were significant distribution differences between gender and sexual portrayal—attire ($\chi2$=49.631, 2 *df*, *p* < .05).

Table 2. Percentage of Major Characters Exhibiting Personality Traits by Race

	Gender		Stereotype		Total
	Male	Female	Masculine	Feminine	
Asian or Pacific Islander	60 (44,4%)	75 (55,6%)	57 (42,2%)	78 (57,8%)	135
Black or African American	60 (80,0%)	15 (20,0%)	30 (40,0%)	45 (60,0%)	75
Hispanic or Latino	48 (76,2%)	15 (23,8%)	39 (61,9%)	24 (38,1%)	63
Mixed race	15 (21,7%)	54 (78,3%)	33 (47,8%)	36 (52,2%)	69
Native American	45 (41,7%)	63 (58,3%)	54 (50,0%)	54 (50,0%)	108
Other	15 (20,0%)	60 (80,0%)	60 (80,0%)	15 (20,0%)	75
White / Caucasian	30 (45,5%)	36 (54,5%)	24 (36,4%)	42 (63,6%)	66

An ethnic community must have certain characteristics that enable it to be identified by distinguishing it from the others. Table 2 shows the distribution of the sex and stereotypical characteristics of the characters according to race. When assessing the distribution according to races of the difference between the gender and stereotype of this character, the biggest difference was observed in Black or African American or Mix race characters. Research Question 2 asks whether there is a relationship between race roles of game characters and gender stereotypes of characters. According to the results of the chi-square analysis obtained that there were significant distribution differences between the groups ($\chi2$=41.863, 6 *df*, *p* < .05).

Several aspects of video games may be considered gendered, one of these being the body types of the game characters. The distribution of the characters by the body type was curvy (n=84, 14.2%), muscular (n=154, 26.1%), normal (n=303, 51.6%), and thin (n=48, 8.1%). Research Question 3 asks whether there is a relationship between body type of game characters and gender stereotypes. 60.7% of the curvy characters were described as masculine, 39.3% were described as feminine. However, 77.9% of the muscular characters were described as masculine, 21.1% were described as feminine. As shown above, there was a statistically significant difference between the body type of game characters from their results on the Bern Sex-Role Inventory ($\chi2$=109.081, 3 *df*, *p* < .05). In conclusion, the results supported the hypotheses; H1, H2, and H3.

Discussion

Mass communication tools perform many functions in social life, such as having information about various topics that concern the daily lives of people, creating public opinion, introducing goods and services, becoming a part of the community they live in. At the same time, in parallel with technological developments, the entertainment features of these vehicles have begun to come to the foreground. Video games have surpassed cinema and TV in the entertainment industry, becoming the leading medium. Nowadays, it is known that female characters are more preferred in gaming in the massively multiplayer online role-playing games (MMORPGs) class, where millions of people

gather in a network. Among the main factors that cause people to play video games in different venues are different reasons such as; having fun, making use of their free time, getting rid of adverse situations in daily life and interacting with different people.

As traditional media tools play an active role in directing real-world perceptions, video games, which have become a popular media medium today, create unrealistic images, value judgments, and ethical rules by directing people both in terms of clothing style and physical appearance. Whether it is an influence on the attitudes of those who are watching or playing this media forum is another area of study that researchers have focused on. In this study, gender roles (gender stereotypes) are discussed which are different from the descriptive characteristics of the game characters. The effects of games are being explored psychologically by using cognitive theories, through the internal processes of behavior, expectation, attitude, reaction, prototype, representation, reference and so on which constitutes the perception system of the individual in the network. Cultural symbols and practices provide important clues in determining the underlying causes of human behavior. Indicators are objects or facts in a variety of forms that can substitute for and evoke different things.

When considered in terms of traditional role attitudes, the male main character of the game is portrayed as a hero or savior while the female characters are portrayed in more passive roles, waiting to be rescued. Many research generally argued that women were only put forward as a sexual object, and this gender-oriented approach can change with the rise of strong female characters in the gaming industry. The discussions in the context of gender roles have provided a wealth of thought on the position and meaning of gender roles. Each social group and culture have expectations of value judgments and gender roles, these patterns may be very different from group to group. This research also aims to determine what kind of thoughts and attitudes of game characters have in the context of gender and how these thoughts and attitudes reflect on the gender roles and the separation of individuals on the basis of gender. In many cultures, experiences and perspectives of men are considered to be the norm.

The media is seen not only as transferring or disseminating gender roles but also as an area where gender inequality is reproduced. The analysis of the character in the games is very important in order to make sense of the reconstruction or partial transformation of social gender perception. In these analyzes, the elements such as gender roles, values, beliefs, behaviors and cultures, etc. of the characters are discussed. While the developments taking place in social life bring about improvements towards women's representation, it is seen that gender discrimination still keeps its place. Female characters are generally expected to behave in accordance with patterns determined by the social life in the television series and motion-picture films that create their own reality while feeding on society's value judgments.

The gaming industry, which evolved in the 1960s, contains many social and cultural codes within its own structure. In video games, where millions of people use them to have fun, spend their spare time or get new friends, it is seen that male characters are more than women in numbers and that the main characters of these games are mostly men. Even in two iconic games such as Super Mario (1983–) and The Legend of Zelda (1986–), one can see that the abducted female characters are

portrayed in a way that is expected to be liberated by male characters that are the main heroes of the games. Unlike gender-based stereotypes in video games, the roles and behaviors of men and women are being redefined. The inequality that is based on domination between men and women in society causes gender roles to be different. In the games, the social expression is replaced by expressions of individual perception and mentality and their disclosure by means of symbols and a mysterious, fantastic atmosphere has been created in the games through these expressions. In this context, one of the main objectives of the research is to discover the transformation of gender roles of the society in the game characters. When the outcomes of the research are examined, it has been observed that that female figures of the games, unlike real life, fight against their status and position in the patriarchal order. Contrary to common belief, women who feel compelled to be protected in this domain do not only pursue privacy but also try to establish relations with others and can willingly share information about themselves in the process of social interaction with others. There are some typologies that resist this structure and ensure their transformation against the femininity and masculinity typologies that contribute to the maintenance of the patriarchal structure. As is stated in Table 1, it is seen that women are also resistant to sexist exploitation and oppression, while they are maintaining their feminine qualities. In general sense, the reconstruction of traditional culture on the symbolic level takes place directly through the circulation of effective symbols that have been directly popularized by commercial culture industries and in particular by the media organizations in every field. In the research results, BSRI-M (Masculine) and BSRI-F (Feminine) traits of a character determine its position in the struggle for power. In other words, video games also object to patriarchal ideology in the reconstruction of gender roles of men and women. The game imposes the role of women as lonely, emotional, complementary and combative beyond the norm of the "mother". Men, however, attach more importance to the relationships that act more collective, which are relatively non-personal and that are based in the community. These signs indicate being more emotional, supportive and more open in women's relationships, while, for men, they pay special attention to relatively non-personal friendship and community relationships that focus more on requirements. In patriarchal ideologies, the characteristics attributed to men in gender-based hierarchies are always higher than those attributed to women. This struggle for power within the game does not only take place as the position of men against women but also woman's domination over other women. The fact that number of males working in the game industry is more than that of women could effective in determining the content that is being prepared. In this respect, game developers design female characters as dominant and violent prone ones that are struggling for power.

When the results of the research are examined, it is determined that the most number of characters is composed of middle-aged women. In the same way, it is observed that the majority of children and adolescent characters are women. When these results were taken under evaluation, differing from the literature on studies that have been previously conducted, it has been determined that women characters have been at the forefront (Knight, 2010: Dietz, 1998). According to the results of evaluations made based on the identity of the players, it has been determined that a large majority of them are Asian or Pacific Islanders. Stereotypes can be about different societies, or they can be about different groups or regions having different values within the same community. In

the majority of intercultural communication research studies, the systems, processes, and diagrams are created to understand and interpret various cultural practices and representations. Intercultural communication is the examination of the communication concept, a form of behavior and a specific idea or appearance in many cultures for comparison purposes. The ethnicity or ethnic category includes common characteristics such as racial, linguistic and cultural heritage that distinguish society from other collective structures. Particularly in games with adventure and action, characters belonging to this region which is known for its martial arts are more preferred.

The mind, in which behaviors are shaped, functions to learn by any means, such as receiving, storing, comparing old information and sensations, combining new information and creating new information. Research on sexualized representations of female characters has significant potential in shaping the future of games. Analyzes of characters according to their body type showed that half of the female characters have Curvy and Muscular lines. The Curvy-type female body brings sexuality to the foreground. Similarly, female characters with Muscular bodies are thought to be more of a challenger role within the video games. During the games exaggerated masculinity and femininity archetypes could be created in line with the demands of the target audience. In this way, shaping the entertainment-oriented culture products such as games according to the preferences of the fans in terms of marketing is called fan service (Barrett, 2006, p.112). However, what is missing with this is, analyzing the thoughts and experiences of the players regarding interactions based on social sexuality. More specifically, common themes and theories that reveal what sexism looks like in online games should be researched so that game developers can take steps to improve their game for all genders. The fact that especially women characters have Masculine Stereotypes has more to do with what kind of roles the players expect from the characters. Whatever the gender or race is, the behavior expected from the characters is to win the game by displaying an effective challenging role within the game. In this respect, gender roles are hidden in the background.

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