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TÍTULO: Las preferencias de los adolescentes iraníes en videojuegos y juegos en línea: un estudio cualitativo.

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RESUMEN: El presente estudio tuvo como objetivo identificar las preferencias y gustos de los adolescentes iraníes con respecto a los videojuegos. Este estudio fue una investigación cualitativa que adoptó el análisis de contenido contractual. La población estadística consistió en adolescentes de 13 a 15 años. Se utilizaron entrevistas semiestructuradas y los datos se analizaron según el método de Graneheim y Lundman. Finalmente, se formaron 10 categorías con el Juego como parte integral de la vida, Métodos de acceso, Juego con entusiasmo y placer, Encanto visual en la atracción del jugador, y el Juego interactivo como factor para atraer jugadores.

PALABRAS CLAVES: preferencias de los adolescentes, juegos, videojuegos, investigación cualitativa, Irán.

TITLE: The preferences of Iranian teens in online and video games: A qualitative study.

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ABSTRACT: The present study aimed to identify Iranian adolescents' preferences and tastes regarding video games. This study was a qualitative research adopting contractual content analysis. The statistical population consisted of adolescents aged 13-15. Semi-structured interviews were used and the data were analyzed based on Graneheim and Lundman's method. 10 categories were finally formed such as Game as an integral part of life, Access methods, Game with excitement and pleasure, Visual charm in player attraction, Interactive game as a factor for attracting players. Iranian adolescents have some special interests and paying attention to the preferences of this group can be effective in attracting them to domestic production and make these products more popular.

KEY WORDS: Teenagers' preferences, games, video games, qualitative research, Iran.

INTRODUCTION.

Adolescence is the transitional period from childhood to adulthood, in which the adolescent is engaged in developing a personal identity. When teenagers experiment with different behaviors, interests, and worldviews, they attempt to integrate their self-image with that of others, thereby improving their personality (Etkinson & Hiligard, 1999).

Adolescents belong to an age and social group that shapes the future of societies, affecting diverse social, cultural, economic, and educational dimensions. Due to the difficulty of dealing with identity crisis of this period, adolescents have been regarded as unique audience and users in the domain of

media as well. Although there are no specific user patterns in their media consumption, they behave differently compared to other age groups. Therefore, because of the importance of adolescence in determining the person's worldview and life, policy-making is crucial for the adoption and application of technology by teens (Jordan, Trentacoste, Henderson, Manganello, & Fishbein, 2007). The third millennium is termed the era of information, computer, and digital revolution. The modern era, entitled the *Third Wave* by Toffler, has introduced a new way of life based on a new concept that can be called an *electronic hut*. This digital revolution is expanding in the contemporary world with an increasing speed, transforming all aspects of human life in different forms. One such advanced technology is video-computer games played for entertainment and leisure (Afkhami Aqda, Kamali Zarchi, & & Shokohraveh, 2012; Heydari, Modanloo, Niaz Azari, & Jafari Galouche, 2010).

Video games are interactive tools introducing players to a new lifestyle via audiovisual and cyberspace features (Kowsari, 2010). It is said that a large number of children and adolescents spend long hours playing games; for example, in 2019, it was estimated that 164 million adolescents in the United States are video and computer game users ((ESA), 2019). Moreover, in Iran, about 46 million (7%-40%), out of a population of 75 million, are familiar with the game industry and about 54% are computer/video game users. Of these, 60% are boys and 40% are girls, spending an average of two hours a day playing computer games (Shojaei C, 2012). For many children and adolescents, games are the first step towards the world of technology, mass media, and acquisition of computer skills. Thus, they have received considerable attention from social, psychological, and educational perspectives (Kirsh, 1998).

Extensive access to games, their remarkable appeal, and lack of proper planning by the government and families to fill the adolescents' leisure time have made the game industry one of the most profitable domains of economy and commerce, leading to an explosion in computer/video-game research. Researchers have focused on this tool in recent years due to the size and scope of this

industry, the popularity of video-computer games among different age groups, and their role as a human-computer interaction tool (HCI) (Newman, 2012).

Iran has 23 million gamers who play at least one hour a week with a smartphone, tablet, console, or personal computer (PC); 63% of Iranian players are boys and 37% are girls aged 12 to 19 years (Adineh, 2016). Video games in Iran typically address two aspects: economic and commercial potentials, and entertaining and teaching potentials.

There are several studies on the effects of video games on Iranian teenagers (Allahverdipour, Bazargan, Farhadinasab, & Moeini, 2010; Farahi, Goudarzi, Tabibi, & Yazdi, 2017; Jafari, 2014; Shojaee, Dehdari, Douran, Noori, & Shojaee, 2017; Shojaei, Dehdari, Noori Jelyani, & Dowran, 2013). To date, however, no research has investigated players' preferences and interests with regard to video games. Thus, the present study aimed to identify Iranian adolescents' preferences and tastes regarding video games.

The findings of this study can offer a clear vision to game policy-makers and developers in Iran, assisting them in developing games that are more compatible with the interests of Iranian teen players in terms of their demographic, cultural, social, and personality characteristics.

DEVELOPMENT.

Studies have been conducted on the impact of this tool on children and teens, specifying its short- and long-term effects (Allahverdipour et al., 2010; Anderson, Gentile, & Dill, 2012; Drummond & Sauer, 2014; D. A. Gentile, 2011; Granic, Lobel, & Engels, 2014).

Recent studies have indicated that video games are more than an entertaining tool and can have positive effects as well, such as improving both professional and personal skills, enhancing teaching and learning methods for understanding complex concepts, serving as a physical and professional tool for physiotherapy and occupational therapy, teaching and learning health issues, and improving

visual-spatial skills (Gorbanev et al., 2018; Green & Bavelier, 2007; Greitemeyer, Osswald, & Brauer, 2010; Griffiths, 1998; White, Lewis, & McCoy, 2018).

Some studies have also enumerated negative aspects, including violent thoughts and behaviors, anger, psychological arousal, reduction of violence sensitivity in the real world, reduction of classroom attention, sleep deprivation, and game addiction (Anderson & Bushman, 2001; Bushman & Huesmann, 2006; D. Gentile, 2009; Möller & Krahé, 2009; Porter & Starcevic, 2007).

According to the literature, research on this tool and its target group can help us focus on the promotion of its positive effects while reducing its negative impacts. In this regard, educational games, i.e. games with a specific goal transferring scientific concepts by using game elements, have received considerable attention from game developers and researchers. The positive influences of educational games, e.g. enhancing teaching and learning skills, increasing student participation, promoting motivation, increasing problem-solving skills, observation, and creativity, have previously been identified and studied (Hamari et al., 2016; Hou & Li, 2014; Li, Ma, & Ma, 2012; Liu & Chen, 2013; Ronimus, Kujala, Tolvanen, & Lyytinen, 2014).

Methodology.

This study was a qualitative research adopting contractual content analysis. The statistical population consisted of adolescents aged 13-15 years old, studying in public high-schools in Tehran.

The interviewer (Ph.D. student and second author of this article) obtained an ethical code from Iran University of Medical Sciences (IR.IUMS.REC.1396.9421623001) and the approval letter of the Ministry of Education (131075/64 on 24/9/2017) to attend the high-school and conduct the research. The sample was selected from the target group of girls and boys in public high-schools in Tehran but, according to the limitations set by the Ministry of Education in the selection of districts, only three districts were randomly selected from the 22 districts of Tehran. In each district, one high-school for

boys and one for girls were randomly selected, and purposeful sampling was performed according to the objectives of the study. The inclusion criteria were spending an average of 15 to 20 hours per week playing electronic games (computers, mobile phones, or consoles).

A consent form and an information sheet were presented to the parents of students, and the research objectives as well as its benefits and risks were explained to participants and their parents. The participants were also informed that they could withdraw from the research at any time, and that their data would remain confidential. The interviews were conducted on even days of the week during the break time (between 10 and 11 a.m.) at the school-designated site, with the presence of a participant, a researcher (S.A.), and an instructor.

Semi-structured interviews were used to collect data. The pre-determined guiding questions were posed, and the participants freely provided their answers. At the beginning of each interview, the researcher asked some questions in order to become familiarized with the participants and create an intimate atmosphere; these questions included “How much time do you spend playing games in a day?”, “ What do you play with (mobile phones, consoles, PC, or tablets)”, and “what are the names of the games you've completed recently?”. Some interview questions were: “How do you like playing the games, individual or multiplayer?”, “Which platform do you prefer?” “Which one do you prefer, mission games, open-world, or level games?”, “Do you care about dialogs between characters?”, “Do sound and music affect the game?”.

The interviewer also asked probing questions (e.g. “Can you explain more? Would you like to add something else?”). The average time of each interview was 30-45 minutes, and interviews lasted until data saturation. Participants' responses were recorded by an audio device during the interview process, and the interviewer took field notes of all the observations made during each interview.

The data were analyzed in MAXQDA software (version 10) based on Graneheim and Lundman's method (Graneheim & Lundman, 2004). Briefly, data analysis commenced by repeatedly reading all the interviews, so that the researcher would be immersed in the data and gains an overall understanding. Then, the data were read word by word to extract codes that contained the key concepts and ideas. The codes were subsequently categorized according to their similarity and relevance within the subcategories. These subcategories were used to organize codes into meaningful clusters, and were grouped within the main category based on their similarity and homogeneity.

The criteria proposed by Lincoln and Guba (1985) were adopted to ensure the reliability of the data (Lincoln, 1985). These criteria included credibility, dependability, conformability, and transferability.

Credibility refers to the truth of the findings and their compatibility with the purpose of the research. To ensure credibility, the researchers spent a long time interviewing the participants, and presented the findings to the participants to review the data based on their previous statements (member check). Prolonged engagement and in-depth contact with the qualitative data were also taken into consideration by the research team.

To achieve dependability, researchers used peer cheek. For conformability, all the steps and processes of the research were recorded and reported as accurately as possible (audit trial). To guarantee transferability, attempts were made to have maximum variation in the education, family, and economic status of participants. In addition to acceptability, it also contributes to the transferability of the findings. Finally, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was applied to ensure that all the stages of the qualitative research and the resulting report were accurate.

Results.

The demographic information of the participants is presented in Table 1.

Table 1. Demographic Information of Participants.

Students	Girl	Number	Age	Degree	Maximum gaming experience per day/hour
		8	13-15	Seventh to ninth grade of high school	6
	Boy	10	13-15	Seventh to ninth grade of high school	9

In this study, 132 codes were retrieved from 18 interviews. After a continuous analysis of the codes, 10 categories were finally formed, as shown in Table 2.

Subcategory	Category
Game addiction Game flow Time distortion	Game as an integral part of life
Hours difference between boys and girls Boys enchanted with the game Gender role in videogame performance	
The impact of economics on access In-app payment as a powerful factor contributing to player payment Playing for free as an attractor factor for access	Accessing games
Platform diversity PC master gaming	
New technologies to facilitate gameplay Software/hardware restriction in the selection of platforms Platform technical support from the player	
Excitement flow Sensation seeking	Games with excitement and pleasure
Perceived pleasure Replay value (replayability)	
Feedback and interaction as factors in continuing gameplay Completing the mission with player interaction (Co-discovery)	
Applying color theory to improve visual effects Color as a factor for identification of game world	Visual charm in player attraction

Graphics for believability Game atmospheric transition with high graphics	
Educational game Serious fun	Iranian games isolated from the commercial caravan
Lack of technical quality Iranian games being prescriptive	
Power and authority in the game Collaboration as a factor to promote players' group learning	Interactive games as a factor for attracting players
Social networks encouraging online players Virtual competitors Virtual challenges	
Game excitement spectrum Viewing angle of the game	Genre types as a factor for attracting players
Diversity in the game genre Emotional drain by choosing the right genre	
Cinematography Image power	Camera position as a concept transfer factor in games
Navigation between games and movies Assistance for game perception	
Player identity effective in avatar selection Avatar representing power and gender	Avatar as the actor's identity representation
Gender stereotypes Difference in body, mind, and intelligence between girls and boys Gender issue as an avatar selection factor	
Motion mechanics in games Type of kinetic mechanics in avatar selection	
Play as a narrative Game scenario	Attractive scenario as an attractive factor
Demonstrations of game avatar Dialogue text Dialog as a game concept transfer factor	
Transmission of game mood with music Audible understanding with music from the game environment	
Exploration interest Autonomy in discovering the game environment Visualization of the favorite fantasy world	

Game as an integral part of life.

Because of the appeal of this tool to players, they often forget about time and spend too much time completing a level or acquiring a point or skill in a game. This category comprised two sub-categories: the duration of play and gender differences in playing time. In terms of the duration of play,

Interviewee 12 (boy) said, "I come back from school and I play games until I fall asleep." With regard to gender differences, Interviewee 9 (girl) expressed, "I play two hours a day."

Access methods.

This category included the method of accessing games, the type of platform, and reasons for the popularity of a platform. In terms of accessibility, according to the conditions of Iran, sanctions, and exchange rate fluctuations, Interviewee 4 (girl) mentioned, "I download the games freely from Bazaar (e-market) and do not buy them, but in the game, I spend money buying avatars or elements." In terms of platform, Interviewee 15 (girl) stated, "I like consoles and computers." Regarding the reason for choosing a platform, Interviewee 9 (boy) noted, "I love consoles and mobile phones very much. The mobile phone is with me everywhere I go."

Game with excitement and pleasure.

What attracts the player to the game is motivation and excitement, and there are many factors that can contribute to it, including competition, prize, feedback, unknown environment, and the element of surprise in games. Excitement and a sense of fun make players return to games and play repeatedly. There are three sub-categories, including excitement flow, replay value, and feedback/co-discovery. In excitement flow, Interviewee 7 (boy) stated, "I love multiplayer games; they’re exciting and I get to know what others want to do and learn something new.” As for replay value, Interviewee 15 said, "I played [the game] many times because it was so cool. I was always surprised by it and loved it." In terms of feedback, Interviewee 16 (boy) noted, "Games should have levels, because I want to know how much I develop in each level compared to the previous one".

Visual charm in player attraction.

Visual effects are important in attracting the player and creating a sense of being overwhelmed. This makes graphics and color theory important in games. In this regard, two sub-categories emerged:

color and graphics in games. Regarding color, Interviewee 11 said, "I like the high graphics and bright color in games, and totally dark colors make me tired in games." As for graphics, Interviewee 10 (girl) said, "I like the high graphics; I think games are credited with their graphics."

Iranian games isolated from the commercial caravan.

While playing the game, the player hypothesizes, discovers an unknown world, and learns whatever the designer intends to convey (basic concept).

In Iran, educational games have received attention in recent years, but the important question remains that to what extent Iranian designers and researchers succeed in developing and attracting players to educational games. The participants' responses were divided into two categories, educational games and low technical quality of games.

In terms of educational play, Interviewee 6 (boy) said, "I played an educational game like Quiz of Kings a little; I remembered that it was effective and I learned a lot." In terms of lack of technical quality, Interviewee 15 (girl) stated, "I played the Quiz of Kings. I realized that only content was important. The color and the graphics didn't matter and I wasn’t attracted to them".

Interactive game as a factor for attracting players.

Video and computer games allow players to experience the game in the single or multiplayer form. Advances in technology and cyberspace have influenced games such that they are not only released offline but also available online.

On the basis of the interviewees’ responses, two sub-categories were obtained, collaboration and virtual competition. As for learning collaboration, Interviewee 7 (boy) said, "I love multiplayer games. They are exciting, you realize what others want to do, and learn something new". In terms of virtual competition, Interviewee 1 (boy) said, "I like to play online multiplayer games and I love not to know my competitors. In this way, games become exciting."

Genre types as a factor for attracting players.

As an important factor in game selection, knowing the genre of games is related to gameplay and how players interact with games. The participants were asked about their favorite genre of video games, and two aspect of genres, excitement and diversity, emerged for this category, emotions Spectrum and diversity.

In terms of game excitement, Interviewee 9 (girl) recounted, "I love exciting and adventure genres. I like excitement in general". For genre diversity, Interviewee 1 (boy) said, "I like horror and shooting games in general".

Camera position as a concept transfer factor in game.

The game camera is a tool through which the game can be viewed by the player. Although the selection of the right camera for games is not the only element contributing to the attractiveness of games, it can affect many items such as game design, controls design, and artistic design. The camera also offers another service called cutscene which stops gameplay using camera and graphics, and in which a story takes place, e.g. a dialog between two characters, receiving extra points, or death of a character. However, cutscenes are not interactive. The two subcategories are cinematography and movement between game and film.

In cinematography, Interviewee 18 said, "I prefer first-person because I feel that I myself do these actions." Also, in terms of movement between game and film, Interviewee 14 expressed, "I see cutscene because it's related to the game story. Cutscene genre is also important for me; if it has a horror genre, it will be exciting for me".

Avatar as actor's identity representation.

Avatar is a key element in games, game appearance, and mechanics for completing the mission. In some games, both genders are used as avatars and the player can choose one, while in others, the

avatar is selected by the game and in other games, it is possible to build an avatar (RPG). This category was divided into three subcategories, including avatar representing power and gender, gender stereotypes in avatar selection, and mechanics of movement.

As for avatar representing power and gender, Interviewee 8 (boy) mentioned, "The more an avatar suits the game, the more action can be done. Man or woman, it doesn't make any difference". As for gender stereotypes, Interviewee 2 (girl) stated, "I would like female avatars, especially a woman in combat." In terms of mechanics, Interviewee 6 stated (boy), "Fighting is my favorite movement. I want my avatar to know how to fight".

Attractive scenario as an attractive factor.

The game scenario has several sections that define the game's framework and offer the developer a general overview of the game.

By gradually adding details, a complete scenario is ultimately provided for the technical team. In this regard, four subcategories emerged, including story, dialog, music, and the environment. The story is one of the elements forming the basis of games. In essence, before starting anything, game developers create a story, extend and complete it during game development. There is no doubt that the more interesting the story, the more attractive is the game for the player. According to Interviewee 15 (girl), "The story must be fascinating, and I think it should fit the game genre".

There is always a dialog between the main character and others or even non-playable characters (NPC) which can be presented to players in cutscenes or during games. The dialog can be in the form of audio or text on the screen. They often help players discover the story, purpose, and performance of the game. According to Interviewee 5 (boy), "Dialogs should receive attention because they guide us in what we are supposed to do".

The game’s soundtrack, characters’ voices, effects, and any sound designed for the game can highly affect the attractiveness of the game for players and multiplayer players' excitement and enthusiasm to continue playing. Nevertheless, some players mute all game sounds in order to focus on the game. Interviewee 11 (boy) recounted, "I love music because you get into the mood of the game and you think you are in the game".

The environment in which the avatar is present and fulfills the mission, and where the entire story is formed, can differ across games. In other words, this environment can be abstract, urban, nature, or even imaginary. Players are sensitive to the features, design, color, and details of the environment. Interviewee 5 (boy) stated, "Game environment should be both urban and nature and close to reality."

CONCLUSIONS.

In the present study, after an in-depth analysis of codes and sub-categories, 10 main categories were obtained, presenting different aspects of games from the perspective of Iranian adolescents. These categories included duration, access methods, genre, visual effect, excitement, Iranian games, camera, avatar, scenario, and communication in the game.

Regarding the first category, it has been observed that Iranian teens spend more than five hours a day on video games. They devote too much time to playing, which makes them spend less time on other daily activities. These results are consistent with the findings of other studies (Lucas & Sherry, 2004; Rau, Peng, & Yang, 2006; Romrell, 2014; Winn & Heeter, 2009).

Some teens spend more time on games on holidays, which is consistent with the findings of Thorne et al. (Thorne, Smith, Morgan, Babic, & Lubans, 2014). According to the findings, gender is one of the factors contributing to spending time on games, with boys spending more time than girls, which is in line with findings reported by other studies (Lucas & Sherry, 2004; Romrell, 2014; Winn & Heeter, 2009).

In terms of game access methods, factors such as sanctions and currency fluctuations have made teens less likely to buy games and made them obtain different games by downloading or exchanging them with other players. In choosing platforms, Iranian adolescents place more emphasis on computers and mobile phones because of the powerful computer hardware and availability of mobile phones. This finding is similar to that of other studies, suggesting that the PC platform has significantly higher graphics and audio power, whereas mobile phones are superior in terms of accessibility and lower cost (Prasetya, 2015; PS, 2015).

Another study found that accessibility and the sense of being overwhelmed are mostly found in consoles and their games (Kim et al., 2013), which is not consistent with the findings of our study. It was found in the present study that Iranian girls have a higher tendency than boys towards mobile phones, which is because mobile phones can always be with them and are also a type of social tools. Previous studies have reported that if players are women who pursue the game seriously, prefer the PC platform due to the complexity of the games, their preferred platform, however, is mobile phones (Gao G, 2018).

Iranian adolescents have repeatedly mentioned “excitement” associated with games. Excitement is what gives them motivation to continue games. In other studies, “excitement” and “pleasure” have been identified as key factors for attraction to and persistence in games (Banyte & Gadeikiene, 2015; Ferguson et al., 2008; Oswald, Prorock, & Murphy, 2014). However, some studies have found that only violent games are exciting for players, which merits further research (Engelhardt, Bartholow, & Saults, 2011; D. A. Gentile, Bender, & Anderson, 2017; Whitaker & Bushman, 2009) because, in this study, teens did not emphasize on a particular genre for excitement.

For Iranian adolescents, replay value is highly important, and the more the game can excite them or satisfy their curiosity, the more attractive it is. Replay value derived from fun and excitement has also been mentioned in other studies (GU, 2011; Pedersen, 2012; Thygesen, 2014).

Visual features, especially brand-new game graphics, are important for Iranian teenagers. The more realistic the graphics, the more popular the game will be among Iranian teens. Studies have also reported that graphics are more prominent than gameplay and storytelling among younger players (Gee & Dolah, 2016; Sherry, Lucas, Greenberg, & Holmstrom, 2013; Tatli, 2018).

Iranian educational games are not popular among Iranian teens. According to the interviews, most Iranian teens have educational game experience, but this experience is not attractive to them. Originally, Iranian educational games have failed to add elements such as high graphics or storytelling, and have only focused on educational concepts. In these games, fun and enjoyment receive less attention than the scientific content, as also reported by other studies (GRAESSER A, CHIPMAN P, & F, 2009; Iten & Petko, 2016; Lee, Luchini, Michael, Norris, & Soloway, 2004; Shen C, Wang H, & U, 2009; Wong et al., 2007).

The majority of Iranian adolescents, as mentioned by them, were interested in multiplayer games. Various studies have also shown that players have different experiences when playing in groups. According to these studies, in multiplayer games, there is a greater enthusiasm, higher motivation, less fatigue, more fun and challenge, and further participation (Berladean & Holte, 2016; Harteveld & Bekebrede, 2011; Ke & Grabowski, 2007; Korhonen & Koivisto, 2007; Mandryk & Inkpen, 2004; Wehbe & Nacke, 2015). Iranian adolescents participating in our study said to be interested in online games, which is consistent with other studies (Hainey, Connolly, Stansfield, & Boyle, 2011; Ng & Wiemer-Hastings, 2005; Smohai et al., 2017).

In this research, various genres have been mentioned by Iranian players. Genres help players gain sufficient knowledge of how to play the game (Gose, 2014). Several studies focusing on genres and their effects on adolescents (Lenhart et al., 2008; Peever, Johnson, & Gardner, 2012; Rehbein, Staudt, Hanslmaier, & Kliem, 2016), have reported that the first five favorite genres of Iranian adolescents

are horror, action, fiction, puzzle, combat, and sport, consistent with the preferences of other players in others studies.

Iranian adolescents prefer third-person camera angles because the view is wider and it is possible to scan the world around avatars. Many studies have examined the camera in terms of angle, location, and user preferences, although no consensus has been reached on player preferences (Baranowski & Hecht, 2018; Christie, Olivier, & Normand, 2008; Denisova & Cairns, 2015; Laurier & Reeves, 2014). As for cutscene, which is a technical sub- of the camera, many teens identified it as an attractive element in the game, and stated that it causes short breaks between games. Most cutscene fans in this study discussed the relationship between the genre of the cutscene and game story, which has been mentioned in other studies as well (Amerson, Kime, & Young, 2005; Girina, 2015; Majek, 2011).

Iranian teens have different preferences in choosing their avatars, but there is no shadow of doubt that they maintain a close relationship with avatars and embody themselves in the avatars. In this research study, Iranian female adolescents chose either a male avatar or female avatars in combat genre and generally choose a powerful avatar. On the other hand, boys only choose the male avatar and think that they will be defeated when using female avatars. Powerful avatars and immersion in the game character have been noted in many studies. Several studies have also mentioned the choice of powerful avatars and player-based character avatars (Bessière, Seay, & Kiesler, 2007; Dunkel, 2000; Manninen & Kujanpää, 2007).

Some studies have found that female avatars are often weak and victimized by players' ideas (especially those of boys), but male characters are strong and violent, which is consistent with the findings of the present study (Beasley & Collins Standley, 2002; Downs & Smith, 2010). A factor contributing to the choice of an avatar is its action and interaction in the game environment, which are essentially game mechanics. The findings of our interviews revealed different favorite movements

based on the teens' opinions, in line with the findings of other studies (Carvalho, AraÃējo, & Zagalo, 2014; Fabricatore, 2018). That choice of favorite mechanics is a personal matter which depends on game genre and player character.

There are several factors to consider in game scenario; the most important one is the story. Analysis of Iranian adolescents' preferences revealed that they paid attention to the game story, especially its beginning and ending. In many studies, storytelling has been emphasized in attracting players to games (Dubbelman, 2016; Hurme, 2016; Merabti et al., 2008).

One of the components of the story is its dialog, and Iranian adolescents found dialog to be a guide for proceeding the game. Some of these dialogs have been so appealing that the participants could recall them in detail. These findings are in line with those of several studies in literature (Brusk & Björk, 2009; Harviainen, 2012; Mäyrä, 2017; Sali et al., 2010).

Music and sound are the other subcategories that most Iranian teenagers found attractive and even some tried to download them. In some studies, music and sound have been regarded as the cause of emotional attention and arousal of players, enhancing participation and performance in games. These studies have suggested that the right music in the right scene can elucidate the purpose of the game (Ekman, 2005; Wolfson & Case, 2000; Wood, Griffiths, Chappell, & Davies, 2004).

Teens also mentioned different game environments in their interviews, and most of them emphasized the open world where the player can freely move and explore the environment. There has been little research on the game environment; however, two types of environments have been introduced: linear, i.e. a simple, straightforward path, more easily integrated with the game's story, and the non-linear environment, in which the player is allowed to have free movements to different parts of the environment. In these studies, most players have been interested in non-linear environments because they have more adventures there (Oravakangas, 2015; Vahlo, Kaakinen, Holm, & Koponen, 2017).

Iranian adolescents have some special interests while in many cases being similar to other player's worldwide, paying attention to the preferences of this group can be effective in attracting them to domestic production and make these products more popular. This context is appropriate for cultural, social, and educational activists to introduce their ideas and aims to the target group through Iranian storytelling and gameplay.

The findings of this study can assist Iranian game developers in developing games tailored to the interests and preferences of Iranian adolescents, thereby making these youngsters, who spend long hours on games, attracted to Iranian games that match their country's cultural and social characteristics. Furthermore, by identifying the Iranian adolescents' interests in games, a clearer insight is offered to researchers to examine this population from various psychological, sociological, and cultural dimensions and identify reasons for their interest in games or the specific features of the games. Young people are the human capital of every country, and knowing their characteristics is essential for planning their future and making decisions.

One limitation of this study was the lack of cooperation of some schools and their deans who believed games had no positive aspect. Moreover, it was not possible for participants to be interviewed alone, and a school staff member was present during the interviews, which may have influenced the responses and caused stress. In addition, the female researcher was not allowed to attend the boys' schools alone, so a male researcher had to accompany her.

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