The Role of History-Themed Non-Educational Computer Games on Primary School Children’ (at Grades 6th, 7th and 8th) Perceptions of History

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Abstract

As it is known, the computer games are occupying a large part of children's daily life. In this study, we primarily aimed to put a framework based on the gender variable, and additionally how many hours a day children spend on computer games, which historical games they play and how their attitudes are towards these games.

The main purpose of the study is to understand the role of the history-themed non-educational computer games on elementary students' perceptions of history. Participants of the study are primary school children at grades 6th, 7th and 8th, who attend the Information Technologies course in the academic year of 2011-2012. The data collected from the participants is analyzed quantitatively.

As a result, the role of history-themed non-educational computer games on students' perceptions of history is interpreted in terms of positive and negative aspects and suggestions are made regarding how these games could be adapted to history education in primary years.

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1. Introduction

Today, the computer games have become an important part of children's daily lives. However, on the other part, most of the educators and parents generally believe in that the non-educational computer games waste the time of children ineffectively and uselessly (Garris, Ahlers, and Driskell, 2002). And even, the non-educational computer games are thought to teach many harmful concepts such as “killing”
etc. (Prensky, 2002). However beyond these prejudices, today, the power of computer games on children is discovered and special games are designed for educational purposes and also, these games are integrated to the academic lives of children effectively (Tüzün, 2006). Especially in the field of Mathematics, and English, the power of computer games is quite evident (Demirbilek and Yücel, 2011). However, these computer games, which are planned and designed as a part of education, do not lead any decrease on children’s interest towards the non-educational computer games and therefore, the non-educational computer games continue to take part in daily lives of children.

In this respect the aim of the study is to demonstrate; the role of the history-themed non-educational computer games on perceptions of history of primary school children at grades 6th, 7th and 8th, and to discuss the beneficial and harmful aspects of the non-educational games.

To reach this purpose, primarily we tried to draw the general outline of the situation by determining which computer games in general and historical games in special do the students prefer to play, how much of their time do they spend on non-educational computer games. Following that, how their attitudes towards these games are, what the role of playing these history-themed non-educational games on the history perceptions of students in terms of preference to visit historical places and having an opinion of being knowledgeable on history when they see movies or documentaries on TV etc. is determined.

In conclusion, in the light of emerging data the role of history-themed non-educational computer games on students' perceptions of history is interpreted in terms of positive and negative aspects and suggestions are made regarding how these games could be adapted to history education in the future. In that way, this study is expected to be informative for both education specialists and computer game designers.

2. Method

2.1. Sample

The sample is consisted of 102 female (46.6 %), 117 male (53.4 %) in total 219 primary school children and the mean age of the sample is M=13.15 with standard deviation of SD=.97. The participants of the study attend to 6th (36.5 %), 7th (12.3 %), or 8th (46.1 %), grade levels (11 participants (5%) did not state the grade level) of a local primary school in Istanbul in 2011-2012 academic year.

2.2. Measures

A demographic information form and a 11 items questionnaire designed by the researcher, in order to gain information on the participants’ computer usage, computer game and history themed non-educational computer games preferences, is applied.

2.3. Procedure

In the study the participants are applied the measure in the 2011-2012 academic year spring semester. The data collected online during the Information Technologies Course the students attend. Statistical analyses are applied after the data collection phase.
3. Results

In this part, the statistical analyses related to the data gathered by means of the measures are reported. The mean and standard deviation of daily computer usage length of the sample are M = 2.55 hours, SD = 1.20 hour. When the students asked for the usual rivals in the games they play, they reported playing against computer (59.4 %), unknown online players (20.1 %), or a group of friend in the same internet cafe (16.9 %). Three point seven percent of the participants left this question unanswered.

The sample is also questioned on what would be their reaction whether their computer usage in terms of games is restricted. Besides, the results revealed that although 21% of the participants reported being restless and unhappy, 33.4 % of them stated less unhappiness but a bit miss of the game and most of the students (44.7 %) reported feeling nothing against being restricted.

When the students asked to report the computer games they play it is found that sports games like FIFA and war games like Call of Duty, which is about the Second World War, are very popular among the students. In addition Super Mario and Metin 2 seem very popular. On the other hand, when we asked specifically which history-themed games they play, the students mentioned the following games; Assasin’s Creed, Call of Duty and similar war themed games, Age of Mythology and Age of Empires.

As for the statistics related to the students computer game and history-themed non-educational computer game preferences, the results are as follows. There is a significant relationship between gender and students preference to play history-themed non-educational computer games (X² (1) = 12.374, p < .005). The male students are more likely to play history-themed non-educational computer games than do females.

Aside from the finding related to gender, students who reported to play history-themed non-educational computer games also found to be more enthusiastic to visit museums or other historical places (X² (1) = 15.241, p < .005). Additionally, they reported an opinion of being knowledgable on history when they see movies or documentaries on TV (X² (1) = 15.241, p < .005). These students more likely to think that these games assist to improve students’ knowledge on history (X² (1) = 20.448, p < .005).

A remarkable finding of the study is related to truthfulness of the knowledge given in these games. That is the truthfulness of the historical knowledge given in these non-educational computer games is found to be important for both the group of students who either play these games or not (X² (2) = 6.463, p > .005). That is the chi-square test failed to indicate a significant difference between these two groups of students.

4. Discussion

The existing literature about the non-educational computer games generally focuses on the hazardous effects of the games such as being time consuming and involving killing, violence (Anderson and Bushman, 2001; Bartholow and Anderson, 2002; Gentile, Lynch, Linder and Walsh, 2004) and on the other hand it usually overlooks the beneficial aspects of these games.

Firstly we can easily say that today the computer games are one of the most popular media tools. Then what makes them so popular? Being in competition and in challenge are stimulating for the players and
Thus computer games easily attract the players and makes them dependent to itself (Worderer, Bryant, Pieper and Weber, 2009). In the same line with this, in our survey we found out that children spend average 2.5 hours a day in playing computer games.

Starting from this point, we should move on by the assumption that computer games consists an inseparable part of children’s daily life. In accordance, it should be stated that non-educational computer games similar to TV or Internet, which are also easily reached information sources. Then the idea comes to mind that these games could become effective tools for teaching because of their covered effects on learning. In this respect, Gee (2004) makes an important comment by mentioning the similarities between computer games and education: “You cannot play a game if you cannot learn it. If noone play a game, it does not sell. Of course, designers could keep making the games shorter and simpler to facilitate learning. That’s often what schools do.”

Therefore, by taking these similarities in consideration, computer games can be utilized in education depending on their features as attracting attention and interest, and they can also be used for supplying true historical information related to their subject matters. Supporting this point of view, it is reported that computer games are more effective in learning than oral instruction alone and the resistance of the knowledge is higher in the case of computer games (Kavaklı, Akça, Thorne, 2004).

In our study, students are asked which computer games they play, in relation to that question they reported generally preferring sports, war and action games. As for the history-themed ones, they mostly play games such as Call of Duty, Age of Empires, Age of Mythology, Assassin's Creed. These games main themes are war and action. By playing these games the students stated that they gain knowledge on Mesopotamia, Rome, Eastern Culture, Byzantium, Ottoman and Silk Road. It is obvious that the themes students choose to play and the history-themed non-educational games overlaps in terms of being action and war oriented. This junction also leads us to think that non-educational games can be integrated to history education.

Besides, as for the students history themed non-educational game preferences, we distinguished that they play games which take place in the civilizations existed in Anatolia or near districts in history. This preference of children could also be utilized in designing an effective history curriculum, which is supported by use of computer games.

Overall, the analyses of the present study paint a picture of the roles of the non-educational computer games on student’s perceptions of history. Accordingly, the male students are more likely to play history themed non-educational computer games than do females. And the students who reported to play history themed non-educational computer games also found to be more enthusiastic to visit museums or other historical places. Additionally, they reported an opinion of being knowledgeable on history when they see movies or documentaries on likely to think that these games assist to improve students’ knowledge on history. And the most remarkable result of the truthfulness of the historical knowledge given in these non-educational computer games is found to be important for both the group of students who either play these games or not.

These findings can be interpreted in a way that the students are tend to accept the historical themes and characters as real. This tendency could be assumed as a power in terms of curriculum design, which is supported by computer games. That is the students are ready to learn history when the subject matter is presented in an enjoyable and attractive way. In doing so, the game designers could design games, which are away from racist perspectives, but instead supplying a historical understanding, which stand on realities, and designed in an entertaining fashion. In this respect, the game designers, educators and
Historians should cooperate in order to produce non-educational but historically real games. So the students could have a chance to learn history in a daily and enjoyable activity. Additionally, teachers should monitor their students’ computer game preferences and by doing so they may manipulate the interest and curiosity of the students in history. In accordance with that they can arrange visits to museums and other historical places related to the ancient civilizations taking part in the games.

References


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