Effects of Computer Games on Primary School Children' Self-Esteem and Identity in the Department of Education of Shiraz (District III) in the 2012-2013 Academic Year

[1]Jahangir Mehr Afsha, [2]Maryam Tazarvi, [3]Firooz Rezaeeyan

[1]Department of Educational Sciences, Arsanjan Branch, Islamic Azad University, Arsanjan, Iran.
[2]M.A student of Behavioral Sciences (Preschool Education), Arsanjan Branch, Islamic Azad University, Arsanjan, Iran.
[3]Department of Educational Sciences, Arsanjan Branch, Islamic Azad University, Arsanjan, Iran.

ABSTRACT

Computer games are regarded as one of the major entertainment activities for children and adolescents. Given the importance of this issue, the aim of this study was to investigate the role and impact of computer games on primary school children's self-esteem and identity in the Department of Education of Shiraz (District III) in the 2012-2013 academic year. The present study was an applied research that was performed through a correlational-descriptive method. The instrument used to collect the data was a researcher made questionnaire with three components: (the habit of playing computer games, identity, and self-esteem) that contained a total of 44 items. The questionnaires were distributed among the participants and were filled in by them. The validity of the questionnaire was confirmed through the opinions of the professionals in the field. The reliability of the questionnaire was determined by the Cronbach's alpha coefficient as equal to 0.88. The results of the study indicated that there is no significant relationship between computer games and students' self-esteem and identity and computer games do not have a significant effect on the development or decline of identity and self-esteem among elementary school students in Shiraz (District III).

INTRODUCTION

Children and adolescence are now influenced strongly by computer games and given the significance of games in the social lives of this age group; computer games affect inevitably a major part of children and adolescents' actions and behaviors including some factors such as identity and self-esteem. Such factors are among the most important ones for the development of children and adolescents' personality as having a strong will, self-confidence, decision-making power, originality, creativity and innovation, mental health has a direct relationship with the level and the quality of an individual's self-esteem and identity (Ismaili, 2001). According to Ericson, it is the childhood and adolescence that makes an individual aware of his/her personality and forms a self that is of greater unity than of that in the past and is related to a group, age, gender, culture, and a religion. Accordingly, self-esteem as an important factor for the personality development can lead to the formation of personal identity (Baraheni, 1999). Games as one of the most significance tools for the emergence and development of physical, mental, and social skills, aptitude discovery, and the development and sublimity of children's personality are of special importance. In recent years computer games have received much attention by educators due to the presence of information and information processing systems into the global scene and consequently into children's lives so the popularity of computer and video games has made researchers pay considerable attention to this newly emerged field (Shaverdi, 2009). Some studies suggest that computer-video games will increase the rate of aggression and violent behaviors (Williams and Kiplinger, 2002). Given what was mentioned, media are replete with many examples of new forms of entertainment that are increasingly become more popular and have created a great concern for many individuals due to their high popularity. This also the case with computer games (Dorkin and Barber, 2002) as computer games as one of the entertainment activities for children, teenagers, young people and even adults in the new era are very exciting and full of tension that transfix children and teenagers in front of computer screens and take them from the world of reality into the world of the imagination. Such games have something to teach children or get something from them or

Corresponding Author: Jahangir Mehr Afsha, Department of Educational Sciences, Arsanjan Branch, Islamic Azad University, Arsanjan, Iran.

leave them alone in their endless fantasies. Such games, although beneficial, may have sometimes devastating physical and psychological effects on children and adolescents that may always be impossible to compensate for due to the subtlety their thoughts and minds. Given the importance of this issue, the present study aimed to investigate the role and impact of computer games on primary school children's self-esteem and identity in the Department of Education of Shiraz (District III) in the 2012-2013 academic years.

Research methodology:

The present study is an applied research that was conducted by the use of descriptive (correlational) method. The instrument used to collect the data was a researcher made questionnaire with three components: (the habit of playing computer games, identity, and self-esteem) that contained a total of 44 items. The population under study included 15600 elementary school students in Shiraz (District III) in the 2012-2013 academic year. The sample size was determined by Cochrane formula and included 250 students who were chosen by proportional stratified sampling method. Since the use of a parametric test requires to be ensured of normal distribution of data, Kolmogorov-Smirnov test was used. Then the collected data were analyzed by inferential statistics including Pearson correlation test and regression analysis test by the use of SPSS Software Package.

Results:

In addition to testing the research hypothesis, some other information was also obtained that seems useful in this study. Table 1 shows the number of years that the participants are familiar with and have been playing computer games.

Table 1: Frequency and percentage of years that participants are familiar with computer games.

Statistical index / Year	Frequency	Percentage (%)
Less than 1 year	0	0
1-2 years	116	46.4
2-3 years	112	44.8
More than 3 years	22	8.8
Total	250	100

As shown in Table 1, all participants have been playing computer games more than one. Besides, 46.4% of them have played computer games between 1 to 2 years and 44.8% for 2 to 3 years. Finally, 8.8% of the students are familiar with and have been playing computer games for more than 3 years.

Table 2: Frequency and percentage of the responses on whether participants have computer game tools at home or not.

Statistical index / The use of game tools at home	Frequency	Percentage (%)
Yes	201	80.4
No	49	19.6
Total	250	100

As shown in Table 2, most participants (80.4%) have confirmed that they have a game tool at home. To find the type of the game tool, the participants were asked to specify the tool that they were playing with.

Table 3: Frequency and percentage of the types of games played by the participants.

Statistical index / Types of game tools	Frequency	Percentage (%)
Computer games	164	65.6
Play station games	31	15.4
X-Box	6	2.4
Total	201	100

Table 4: Frequency and percentage of interest in playing computer games.

Statistical index / Interest in computer games	Frequency	Percentage (%)
Highly interested	152	60.8
Moderately interested	67	26.8
Low interest	31	12.4
Total	250	100

As can be seen in Table 4, 60.8% of the participants were highly interested in computer games, 26.8% were partially interested in such games, and 12.4% showed little interest in computer games. Table 5 shows types of computer games that were of interest among the participants in the sample group.

Table 5: Frequency and percentage of the participants' favorite games.

Statistical index Types of games	Frequency	Percentage (%)
Action	141	56.4
Creative	5	2
Non-sport competitive	14	5.6
Sport competitive	90	36
Total	250	100

Table 6 shows frequency and percentage of the participants' interest in going to places other than the home to play computer games.

Table 6:

Statistical index Going to game nets	Frequency	Percentage (%)
Yes	153	61.2
No	97	38.8
Total	250	100

As shown in Table (6), most participants (61.2%) were very interested in going to places other than home to play computer games.

Table 7: Frequency and percentage of students with and without habit of playing computer games.

Statistical index Habit	Frequency	Percentage (%)
Accustomed	97	38.8
Not accustomed	153	61.2
Total	250	100

Table 7 shows that 61.2% of the participants who used to play computer games were not accustomed to or addicted to such games. In contrast, 38.8% of the participants were addicted to computer games.

Table 8: Results of Pearson correlation test for the habit of playing computer games among the participants and their identity.

α	Frequency	Sig.	Pearson correlation (r)	R-square (%)
0.05	250	0.358	0.058	0.003

Regression analysis test was used to estimate the predictive power of computer games in determining children's identity. Table 9 shows the model to address this issue.

Table 9: The results of the regression analysis for students' computer games students and their identity.

Statistical index Variables	B	Std.Error	Beta	T
Constant	3.514	0.141	-0.058	21.551
Computer games (X)	-0.036	0.039		-0.912

As can be seen in the above table, the independent variable of computer games has a negative coefficient of -0.036. This shows that an increase in the coefficient of the independent variable (the use of computer games) will slightly reduce the predicted value of the dependent variable (the participants' identity). In other words, a unit change in the independent variable (the use of computer games), the students' self-esteem will be reduced by -0.042/0. Besides, the fitted model of the linear regression will be as follows:

$Y = \beta_0 + \beta_1 X_1$
Identity = 3.514 + (-0.036) × (Computer games)

Where, R-square is 0.0003% which shows that 0.003 percent of identity changes of elementary school students in Shiraz can be justified in a linear relationship through computer games.

Conclusions:

Mass media have changed the social environments considerably through promoting different ideas and ways of life. They have managed to create a belief that a major of changes in recent decades in industrialized or developing countries have been made due to the influence of mass media. Magazines, newspapers, books, computers, and radio, television, and satellite programs have provided a world full of news, ideas, and images for human beings and have created changes that are much faster and greater than the previous changes such as the transition from the agricultural to industrial society (Olsen *et al*., 2000 cited in Amin *et al*., 2007: 190). The teen world is not also immune to these changes and one of the effects of such changes is variations in the types of hobbies and the way they spend their leisure times as it is evident in the emergence and development of

computer games. Contemporary to the prevalence of these games, there are curious and worried looks watching this phenomenon and exploring the effects and implications of computer and video games. The game that came to the market nearly four decades ago have forced a large number of children and adults to spend many hours of the day and night playing such games (Kirsch, 1998). Most participants in the present study (91.2%) have been familiar with and played such games for 1 to 3 years. In addition, 80.4% of the participants stated that they had game tools at home and 65.6% of them used computers to play games at home. It was also noted that 68.8% of the participants used to play computer games for 2 to 5 hours a day. Concerning the willingness to play different games, 60.8% of the participants were highly interested in computer games, 56.4% were interested in playing action games, and 36% liked to play sports and competition games. Most of the participants (61.2%) were very interested in going to places other than home to play computer games while 63.2% of the participants played such games at home.

The results of the present study, in general, suggested that computer games have little effect on students' self-esteem so that the increasing use of computer games will slightly reduce students' self-esteem. The results of this study are consistent with those found by Cal *et al*., (2000) but they are not in line with the results of Son *et al*., (2005). Overall, the results of this study indicated that there is no significant relationship between the computer games and students' identity and self-esteem of students and computer games do not have a considerable impact on growth or loss of identity and self-esteem among elementary school students in Shiraz (District III).

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