The Relationship between Duration of Playing Computer Games and Socials Skills

Mohammad Hossein Bahirayee[1] and Zahra Akbari[2*]

[1.] PhD of Allegorical Education, Faculty of Islamic Azad University, South Tehran branch, Tehran, Iran.
[2.] M.A Student of Educational Sciences, Educational Technology Branch, Islamic Azad University, South Tehran Branch, Tehran, Iran.

*Corresponding author's Email: baran864567@yahoo.com

ABSTRACT: Computer games as an emerging phenomenon have encompassed extensive aspects of children's life that social skills are considered as one of the most important aspects. This study was conducted aiming at evaluation of the relationship between the duration of playing computer games (DPCG) and social skills. The study was a descriptive - correlation type. The statistical population of research included all the students in fifth grade of primary schools in Karaj in the academic year of 2013-2014 with a sample size of 363 subjects (n=363), which were selected using the clustering – multi-stage sampling method. The study showed a significant relationship between social skills and DPCG (P<0.01). Also among the subscales of social skills, there were significant correlations between the subscales of cooperation and self-restraint and the DPCG (P<0.01), while self-assertiveness and empathy subscales had no significant correlation with the DPCG. This study illustrates that with increased DPCG, the children's social skills would decrease.

Keywords: Computer Games, Social Skills, Duration of Playing

INTRODUCTION

Vygotsky, the Russian psychologist, puts it bluntly: "Playing is not a prominent feature of kids, but a solution factor of development". Modern scholars believe that playing games is of utmost importance and crucial for development and growth of characteristics associated with cognitive and social development. In recent years, the form of games has changed along with the universal growing of modern and noble technologies. In this regard, computer games can referred be, which are considered a form of interactive entertainment that are done using a device equipped with processors or microcontrollers (Crawford, 2003).

As technology development makes many things possible and feasible, it also leads to fundamental wanted and unwanted changes in people's everyday lives. In the area of cultural and modern industries competitions, computer games have come to the focus of consideration of countries and governments as an emerging phenomenon with a tremendous growth in only a limited period of time. These games, as a quiet and high- effective media have affected all aspects of our lives; children, adolescents and adults are drawn interestedly towards them and receive their overt and hidden messages (Mehrabi et al., 2012).

Parents and teachers may be concerned about the growing impact of computer games, virtual realities and the internet in the lives of their children who use such things. It is obvious that

We have to be concerned about the nature and underlying values of things that our kids are interacting with them (Gotts et al., 2003).

People who have a personal computer significantly spend more time alone and less time with their family and friends. Computer games attract people and make them busy so badly that they do not understand the passage of time at all, and they will recognize when many hours of their time have been spent on these games. In other words, they are not willing to let the computers go because of these games, looking to engage more social and exhilarating activities. Therefore, the children who are constantly involved with such games would become introverted and isolated from the society, and sometimes incapable of communicating with others. Such a seclusiveness mode and spirit separates the child from the peer group, which in turn can be the beginning for incidence of other abnormalities (Morrison and Krugman, 2001).

Since childhood is one of the most sensitive and crucial of life stages, pathological study of the consequences of using such game seems to be necessary. Some of the consequences of dependency to computer games can occur in the area of children social skills. Social skills are defined as acceptable learned behaviors that enable individuals to have effective relationships with others and avoid social unreasonable reactions, which include the four elements of collaboration, assertiveness or

expression, self-control and empathy (Gresham and Elliott, 1990).

Social isolation or seclusiveness in childhood may lead to serious long-term consequences on mental health of the person in adulthood. Thus, helping the excluded and seclusive people to overcome such problems is necessary. Fortunately, there is ample evidence indicating that social behaviors, which can help in establishment of positive interpersonal relationships with others can be taught and trained. This training can have abide and sustainable effects (Levitt et al., 1993).

This study aimed to determine the relationship between the duration of playing computer games and social skills in children.

MATERIAL AND METHODS

This was a descriptive - correlational study. The target population consisted of students in fifth grade of primary schools in Karaj in the academic year of 2013-2014, which were reported as 26,020 students according to statistics from the General Administration of Education Alborz Province. In the present study, the sample size was estimated as 363 subjects using Cochran's formula and considering the population of the community. In the next step, the statistics of boys' primary schools (daily) of every district of the city of Karaj were obtained from the General Administration of Education Alborz Province. Then, using clustering – multistage sampling method, 3 schools were randomly selected from each of the four districts in the city of Karaj, and one class was chosen from each school. Finally, the questions were distributed among the students of mentioned classes.

Research Tools

1. Social Skills Rating Scale (SSRS): Gresham and Elliot Social Skills Rating Scale is provided for three grades or periods of pre-school, primary school and secondary school, which includes three special forms for parents, teachers and the students. The students form consists of two specific forms for the third to sixth grades and seventh to twelfth grades (Gresham et al., 2004). Here, the form of the third to sixth grades was used for the primary school subjects. This form consists of 39 questions that each question has 3 options of "always", "sometimes" and "never". The scaling method was designed to consider score 0 for "never", score 1 for "sometimes" and the score 2 for "always". Based on the classification of each category, the answers scores are summed together to determine the subjects' scores on that specific scale; summing the scores, the student's total score can be obtained (Keshavarzi, 2009). The validity of "Social Skills Rating Scale" by Gresham and Elliott was measured in 1990 in a survey of American girls, which

was developed to assess social skills and used; accordingly, its validity was estimated as 0.84. In a research by Keshavarzi (2009), titled as "The impact of computer games on social skills, anxiety and academic achievement of girls and boys in fifth grade of primary school in Tehran", its validity was determined as 0.84. The internal reliability of the scale for teachers form was from 0.74 to 0.95 (Gresham and Elliott, 1990).

2. Researcher-made questionnaire: To estimate the using rate of computer games and gathering the required data, research-made a questionnaire was used that its questions was provided as an answer-package. In this questionnaire, the participants must first make clear that they play computer games or not, and in case of using, they need to mention the number of hours during the day spent to play these games. The range of answers to this question includes 1 H, 2 H, 3 H, 4 H and more than 4 hours. The obtained data was analyzed using descriptive statistical methods and Pearson correlation statistical test.

RESULTS

Table 1 shows the means and standard deviations of duration of playing computer games and social skills. In Table 2, the correlation coefficients between social skills and DPCG are shown. The information in Table 2 shows that there is a negative reverse and significant correlation between the duration of game play and social skills at confidence level of 0.01 (-0.161). Thus, by increasing the duration of playing games, the social skills of students will reduce, and vice versa, with reduced time of playing, the social skills of students would increase.

Also among the subscales of social skills, there is a negative, reverse and significant correlation between the cooperation subscale and play spent time at confidence level of 0.01(-0.241). This means with increased playing games time, the students' cooperation reduces working and conversely reduced playing games time, the students' cooperation will increase. There is no significant correlation between assertiveness or expression subscale and playtime at a confidence level of 0.429 (-0.009). This means the absence of any relationship between the expression of the students and the playing time. There is a negative, reverse and significant correlation between self-control subscale and playing time spent at confidence level of 0.01 (- 0.155). Thus, with higher duration of the game time, the students' self-control would be lower, and conversely, with lower time spent to play games, the self-control of students would increase. There is no significant correlation between the subscale of students' empathy and playtime spent at a confidence level of 0.143 (-0.056). This means the lack of

relationship between the students' sympathy and the duration of playing games.

Table1. The means and standard deviations of Social Skills and DPCG

variable	Subscales	N	Mean	St. D
DPCG	none	363	2.217	1.402
Social Skills	cooperation	363	1.610	0.257
	assertiveness	363	1.367	0.261
	self-control	363	1.307	0.311
	empathy	363	1.458	0.297

Table 2. The correlation coefficients between Social Skills and DPCG

variable	Subscales	N	DPCG	
			r	Sig
Social Skills	cooperation	363	-0.241*	0.01
	assertiveness	363	-0.009	0.429
	self-control	363	-0.155*	0.01
	empathy	363	-0.056	0.143
	Total	363	-0.161*	0.01

* Correlation is significant at the 0.01 level (1-tailed).

Also among the subscales of social skills, there is a negative, reverse and significant correlation between the cooperation subscale and play spent time at confidence level of 0.01(-0.241). This means with increased playing games time, the students' cooperation reduces working and conversely reduced playing games time, the students' cooperation will increase. There is no significant correlation between assertiveness or expression subscale and playtime at a confidence level of 0.429 (-0.009). This means the absence of any relationship between the expression of the students and the playing time. There is a negative, reverse and significant correlation between self-control subscale and playing time spent at confidence level of 0.01 (- 0.155). Thus, with higher duration of the game time, the students' self-control would be lower, and conversely, with lower time spent to play games, the self-control of students would increase. There is no significant correlation between the subscale of students' empathy and playtime spent at a confidence level of 0.143 (-0.056). This means the lack of relationship between the students' sympathy and the duration of playing games.

DISCUSSION

According to the findings of this study, it was found there is a reverse and significant relationship between the duration of playing computer games and students' social skills. The findings are consistent with the Zareiee (2007) study, which showed that there is a reverse and significant relationship between the history of playing computer games, the duration time of playing computer games and the variables of computer games and social behaviors. Also, the results of the regression analysis of Abbasi study (1998) showed a that there are significant relationships between computer games, timing, type and history of the playing games with the ability to predict the mental health of the adolescents. It was noted in Morrison and Krugman (2001) research that the use of computer, which is a widely used tool for computer games, can lead to a loss of the individual social interaction so that the person spends more time alone and less time with family and friends. Therefore, he may lose the skills and fortitude to handle a social relationship in the real world or fail to learn it. In contrast to the above, some studies do not support the findings of this study. For example, Karimkhani (2007) pointed out in his study to the lack of a significant correlation between the duration of playing computer games and negative aspect of social skills. Doran et al .(2002) showed in their study that although the experience of playing computer games has an inverse relationship with social skills, but the relationship is not significant; instead, the presence of a significant relationship is focused on two axes of the place of playing games and the presence of others in the place of playing. Thus, the choice of staying at home or prefer to being alone in the place of playing games has an inverse and significant relationship with social skills. In studies conducted by Gibb et al. (1983), there was no evidence suggesting that children playing computer games become more aloof and isolated compared to other children, or show less willing to gregariousness or are less happy. In summary, one can say that usually people who have chosen home as the location for playing computer games or preferred being alone at the place of playing are among the best and heavy players of computer games, and these games are examples of individual activities. Increased levels of engagement with the computer games are consequently associated with reduced contact and interaction with others, which meanwhile killing the person's opportunities to learn effective and efficient social skills may lead to shrinkage of the individual previously learning and experiences, since social skills

are learned in ordinary relationships (Firoozbakht, 2003). Concluding all the above studies, it seems that the reason for different and sometimes conflicting research findings is based on the concept that if the use of computer games replaces the students social activities and the procedure in interacting with these game goes to an extreme in substituting the positive social interactions with family and peers, it can have devastating effects. Furthermore, the type and the age class of games used by students are also very important. A major reason for the lack of alignment of different studies can be related to the time of doing the research, since in the 70's and 80's, and even in early 90's, video and computer games and even having PCs were not much common.

In addition to the above, it should not be forgotten that today's world is the world of computer games. Playing computer games has been integrated and mixed with the life of kids and adolescents. Separating students from these types of games and their content is a responsibility falls on the parents, educators and the producers of such games. The task is to generate and select good games in order to use them as a tool for progress, growth and development of cognitive, mental and communicative skills of students. Also, games localization is an issue to be considered due to their broad impact on the lives of children and adolescents.

REFERENCES

Abbasi, G. (1998). The relationship between computer games and adolescent mental health, M.A. Thesis, Tehran University, Iran.

Crawford, C. (2003). Chris Crawford on game design. New Riders.

Doran, B., Azadfallah, P. & Ajehee, J. (2002). Investigate the relationship between computer games and social skills teenagers. Journal of Psychology, 6(1), 4-17.

Firoozbakht, M. (2003). Growth Psychology.

Gibb, G. D., Bailey, J. R., Lambirth, T. T., & Wilson, W. P. (1983). Personality differences between high and low electronic video game users. The Journal of psychology, 114(2): 159-165.

Gotts, N.M., Polhill, J.G., & Law, A.N.R. (2003). Agent-based simulation in the study of social dilemmas. Artificial Intelligence Review, 19(1): 3-92.

Gresham, F. M., & Elliott, S. N. (1990). Social skills rating system manual. Circle Pines, MN: American Guidance Service. Inc. (AGS).

Gresham, F. M., Cook, C.R., Crews, S.D. & Kern, L. (2004). Social Skills Training for Children and Youth with Emotional and Behavioral Disorders: Validity Considerations and Future Directions. Behavioral Disorders, 30(1).

Karimkhani, H. (2007). The effect of computer games on the academic performance and social skills in students of Roudehen, M.A. Thesis, Islamic Azad University of Roudehen, and Tehran, Iran.

Keshavarzi F. (2009). The impact of computer games on social skills, anxiety, and academic achievement of students in fifth grade boys and girls, M.A. Thesis, Azad Islamic University, and Tehran, Iran.

Levitt, M.J., Guacci-Franco, N. & Levitt, J.L. (1993). Convoys of social support in childhood and early adolescence: Structure and function. Developmental psychology, 29(5), 811.

Mehrabi, F. F., Mortazavi, H., & Lesani, M. (2012). Reviwing the types of computer games and the time spent on them and their relashionship with the student educational achievment in Kermans high schools (2009-2010).Curriculum planning knowledge.

Morrison, M. & Krugman, D.M. (2001). A look at mass and computer mediated technologies: Understanding the roles of television and computers in the home. Journal of Broadcasting & Electronic Media, 45(1), 135-161.

Zareiee, A. (2007). The relationship between computer games and social skills in high school students of Parsian city, M.A. Thesis, Tehran University, Iran.