The Effect of Virtual Social Networks on Educational Performance of Students

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#### Abstract

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The purpose of this study was to investigate the effect of virtual social networks on the educational performance of students. This research is a descriptive-survey method. The statistical population of this study was 90 students of Evaz Health School. Due to the limited statistical population and the opinion of the supervisor, a census method has been used to select the sample size. Data were gathered by using two standard questionnaires of Virtual Social Networks of Rasti (2015) and Pham and Taylor (1999). Content validity was used to obtain the desirable validity of the questionnaires. For the social networking questionnaire, the reliability coefficient was 0.819 for Cronbach's alpha and 0.740 for the educational performance questionnaire. For data analysis, descriptive statistics methods were used at the first level and inferential statistics methods (Kolmogorov-Smirnov test, linear regression analysis, independent t-test, one-way analysis of variance and Friedman test) were used. After analyzing the data, it was revealed that virtual social networks have a significant effect on educational performance of students in Evaz Health School. Finally, based on the Friedman test, it was found that there is a significant difference between the average ranks of dimensions of virtual social networks. The lowest average rating from the dimensions of virtual social networks is related to "recreational use" and the highest average rating is related to "artistic use".

*Key Words:* Virtual Social Networks, Educational Performance, Evaluation, Students.

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## Introduction

The social network is in fact a structure composed social of groups (usually individual or organizational) that are linked by one or more specific types of dependencies such as ideas and financial exchanges, friends. kinship, and so on. The form and structure of a social network is helpful in determining the utility of the network for its network members. Cyberspace allows for the formation of new communities of users that the type of user relationship in cyberspace is of a kind of relationship with the intermediary, and not face to face. Many internet readers tend to use the term "community" to refer to aggregate. Social networks are particularly popular amongst different classes, especially young people. Because of the various positive and negative aspects of these networks, it is necessary to have a complete study of their effects on students (Mojarradi et al., 2014). There are very different quotes and comments in the nature and history of the formation of social networks. Some of the emergence and emergence of these networks are quite natural and in the context of the evolution of the subject of communication and information, but many also believe that, behind the launch of these networks, especially from the United States of America, there are economic. commercial. and political interests and there is a lot of security (Lieberman et al, 2006). Education has long been the focus of attention, but its significance has increased in recent years, and it

imposes a huge burden on the state and households (Lefcourt, 2014). The academic performance index can be used to assess the efficiency effectiveness of students' and educational process. The term "educational performance" is defined as all the activities and efforts that a person is pursuing in order to acquire knowledge and knowledge of passing the various educational levels and bases in the educational centers (Imrie et al., 2014). Student academic performance can be described as a success rate in end-of-term exams in the form of a score of 0 to 20. which is an important goal of the educational system (Van Doren et al., 2015). Among the factors influencing educational performance, one can mention the cultural conditions, psychological conditions, and the type of choice of friends, communication with peers through social networks, education and activities outside the university as well as teacher teaching methods (Harbison & Hannousc, 1992). Therefore, in this study, students of Evaz Health School were selected as the target group and the effects of these networks on their educational performance examined. were Therefore, considering the necessitv of educational performance educational in organizations, the present study seeks to investigate the question of how virtual social networks affect the educational performance of students at Evaz Health School.

Theoretical Basics of Research

The use of multimedia media. such as the Internet and the attractiveness of these global media, is indicative of their special significance. Today, more than half a billion people (580 million people) worldwide have access to the Internet and use that year's equivalent growth 100 percent (Farahmand, 2008). Accessibility to information and communication technologies is calculated using the digital access index, with Korea ranked 0.82, the United States with the index of 0.78 in the eleventh rank, the United Arab Emirates with the index of 0.64 in the thirty Fourth and Iran with the index of 0.43 is in the seventh place. world Therefore. in the of information technology, there is also a kind of digital divide that is the distance between people who benefit from this technology and those who have access to it. The digital elderly disagreement also points to the extent to which young people and seniors access the service there is a big difference between the Internets (Koo, 2005). On the one hand, these digital literacy inequalities, on the one hand, create information loss and backwardness of day science in developing countries, and on the other hand, it makes the media not only accessible to information technology owners, but also leads to information feudalism. In this case, only a handful of people can be involved in Internet nutrition, and as a result, the gap between the developing so-called and developed countries will increase further. Currently, the largest number of occupied space on the

i.e. the sites Internet, are respectively American, Japanese, English and other developed countries, and up to 20th place no country is seen from a set of developing countries (Friedman, 2008). Therefore. todav the Internet is not just dedicated to the specialized layers of societies, but it enters the everyday lives of individuals, and all age groups use it as needed. One of these groups is the youth who have a large number of Internet users around the world.

# Social networking sites

Some believe that dating sites the first Internet social are networks. The first dating sites began when Internet usage was almost overwhelming. These sites allowed users to subscribe to and make calls to other members. Online speeches have also played important an role in the advancement and development of social networks (Besharati, 2011).

But the concept of modern Internet social networks was first introduced in 1960 at the University of Illinois in the United States. After that, the first modern social networking platform was launched in six years. This site allowed users to subscribe to other members. At this site, users were first created to create profiles or connect with friends (classmates), but only the site with these two features (six degrees). So it became known as the first social network. The site attracted a lot of users by improving its facilities and was gradually becoming a trading tool. But closed in 2000 and after 3 years of activity (was sold in 2000

and shut down in 2000), the most important reason was the misuse of users, causing multiple complaints from the site (Omidvar et.al, 2002).

A social network service can outsource others in two ways. Services provided to the user anduser community at the base. Any service offering better services is over. Networks like Facebook educate individuals to provide services on this site. The reasons for Facebook's success can be summarized as follows:

1. Technology-driven strategy: Facebook instead publishes local releases for local markets. tools publishing that enable translation of Facebook content into any language. In this way, the need for a local office in each country is eliminated and saved a lot of cost. Meanwhile, users can customize these tools to make translations more accurate.

2. Simplicity: Use its capabilities.

Private Privilege: It has been left to the user to manage their personal information and set them up so that certain people can access specific information.

3. Create space for software development: Facebook creates conditions that users can provide and use software on the site.

4. Create an album and upload a photo: Facebook has created an almost unlimited space for creating photo albums and photo uploads.

5. Easy platform for posting comments from blogs and sites to Facebook: Facebook has the ability for users to transfer and display anywhere from any kind of information they want to their Facebook page. Meanwhile, many sites are now enabled to connect to Facebook on their own site.

6. Facebook Access via Mobile: By providing mobile version for access to Facebook, access to the site is easier for the audience. And many users prefer to connect to the Internet with their mobile phones (Besharati, 2011).

## Educational performance

The issue of success and failure in studying is one of the most important concerns of anv educational system. The success and improvement of educational performance in each community reflects the success of the educational system in reaching the target and paying attention to individual needs. In fact, students' academic performance is one of the most important and critical criteria for examining and evaluating the efficiency and effectiveness of educational systems, and all efforts and efforts of this system are considered to be effective in this regard. Educational performance is refers to the amount of individual learning that is provided by the various examinations Measured.

## **Research background**

- Mellazie et al. (2017) has conducted a research on the role of virtual social networks on the students' educational and research capabilities. Researchers have come to the conclusion that: Using virtual social networks is effective on aspects all of students' educational and research capability. Also, the separate effect of using virtual social networks on

students' academic and research capabilities was significant.

- Islam and Jahangir (2017) have done research on the study of social networks, psychological and cultural pathology in the family. The researchers came to the conclusion that: Despite the determination of the community to keep the family center as the most fundamental institution in society, unfortunately, cyberspace, the Internet. and below, social networking virtual disrupted many family functions and has caused many psychological and cultural harm to the family and has also in profound resulted and changes fundamental the in cultural values of the family and relationships among family members and endangering the foundation of the family.

- Keika et al. (2017) have conducted a research on the perceptions and experiences of elementary school students in the field of social networks and cyberspace and the culture of using it. The researchers came to the conclusion that: young children first get familiarized with social networks through family members and have a positive view of the dominant space in these networks, but as children themselves become social network users, the parents are not supervised. Lack of proper management and placement in cyberspace, and exposing them to photographs films, and inappropriate content, leads to finding a negative attitude towards social networks as a result of which we live in an age that the space around us is full of information produced by various media. In this space, we need to Media outreach to all people, especially children, young people and their parents, as well as reducing the threats in this space and adding opportunities.

- Masoumi Goodarzi et al. (2016) conducted a research on the impact of using virtual social the networks on academic performance of secondary school students Dorood. in The researchers achieved the following results: Students with lower grade and lower academic performance than students With higher performance and higher GPAs, use more virtual networks and have less study time.

Parchegani -Chowski and Azad Shirkhani (2016)have conducted a research on the of pathology virtual social networks and its effects on students 'and students' education. The researchers came to the conclusion that since the Internet has entered the life of man, to the present, despite all its advantages and benefits, it created a series of worries and concerns in the educational system. Today, many students and students in the lower secondary education have access to the Internet and the virtual networks without any restrictions and use it for various purposes. According to research and statistics published by official centers. virtual social networks are one of the most influential components of this study for students and students.

## **Research Methodology**

The present study is an applied target area and a descriptive survey approach. The statistical population of this study was 90 students of Evaz Health School. They have been surveyed by the census method of all individuals as a sample. The research tool was the Standard virtual Social Networks Questionnaire of Rasti (2015) and the standard questionnaire of Pham and Taylor (1999). For reliability questionnaire, the Cronbach's alpha coefficient was 0.819 and for the educational performance questionnaire 0.740, and in order to achieve the desirable validity of the questionnaires, the validity of the content through the content of the supervisor's opinion as well as the Bartlett test, which for the virtual social networking questionnaire was 0.862 and for the educational performance questionnaire was 0.812. They have a high reliability rating.

## **Research findings**

Main question: What is the impact of virtual social networks on the educational performance of Evaz Health School students?

Table 1: Analysis of l	inear regression relat	ed to the main res	earch question
Tuble It I mary 515 01 1	mean regression renat	cu co che mumi i co	caren question

	β	β	t	p-	R	$\mathbb{R}^2$	Signif	Ticance
		(standard)		value			-	t of
							regre	ession
							F	p-
								value
(constant)	23.1		2.63	0.000	-0.42	0.17	46.8	0.000
virtual social	-0.64	-0.42	-6.39	0.000				
networks								

Regarding the value of F (46.8)and its related p-value (0.000), which is less than 0.05, it can be concluded that the regression is significant at 0.05. It can be concluded that regression is significant and virtual social networking can predict student performance. Given the negative value of R, we find that this effect was inversely proportional. So, with the increasing use of virtual social networks among students, their educational performance has decreased. The coefficient of determination (R2) is 0.17, which indicates that 17% of the changes related to the student's educational performance variable are explained based on their use of virtual social networks.

First sub-question of research: How does the amount of recreational and entertainment use of virtual social networks affects the educational performance of Evaz Health School students?

Table 2: Analysis of linear regression related to the first sub-question of the

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							F	p- value
(constant) recreational and entertainment use	8.35 -1.08	-0.29	1.44 -4.28	$0.000 \\ 0.000$	-0.29	0.09	18.3	0.000

Regarding the value of F (18.3)and its p-value (0.000), which is less than 0.05, it can be concluded that the regression is significant at 0.05. It can be concluded that regression is meaningful and the amount recreational of and entertainment use of virtual social networks can predict students' educational performance. Given the negative value of R, we find that this effect was inversely proportional. As a result of the increase in recreational and entertainment use of virtual social networks among students, the educational performance of their has decreased. students The coefficient of determination  $(R^2)$  is 0.09, which indicates that 9% of changes related to the the educational performance of students are explained based on the recreational level of and entertainment use of their virtual social networks.

Second sub-question of research: What is the impact of the scientific use of virtual social networks on the educational performance Evaz Health School students?

 Table 3: Analysis of linear regression related to the second sub-question of the

			re	search					
		β	β	t	p-	R	$\mathbb{R}^2$	Signif	icance
			(standard)		value			tes	t of
								regre	ession
								F	p-
									value
(cons	tant)	7.15		0.93	0.000	0.35	0.12	27.5	0.000
scienti	fic use	1.86	0.35	5.25	0.000	0.55	0.12	21.3	0.000

Regarding the value of F (27.5)and its related p-value (0.000) which is less than 0.05, it can be concluded that the regression is significant at 0.05. It can be concluded that regression is significant and the amount of scientific use of virtual social networks can predict student's performance. educational The of coefficient value the of

determination  $(\mathbb{R}^2)$  is 0.12, which indicates that 12% of the changes related to the student's educational performance variable are explained based on the state of scientific use of their virtual social networks.

Third sub-question of research: How does the degree of artistic use of virtual social networks affect the educational performance of Evaz Health School students?

Table 4: Analy	sis of linear	regress	sion related	to tl	he third	sub	questionnaire
	β	β	t	p-	R	$\mathbb{R}^2$	Significance

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		(standard)		value				t of ssion
							F	p- value
(constant) Artistic use	10.7 -1.97	-0.39	1.43 -5.83	$0.000 \\ 0.000$	- 0.39	0.15	33.9	0.000

Regarding the value of F (33.9)and its related p-value (0.000), which is less than 0.05, it can be concluded that the regression is significant at 0.05. It can be concluded that regression is significant and the amount of artistic use of virtual social networks can predict student performance. Given the negative value of R, we find that this effect was inversely proportional. So, with the increasing use of virtual social media among students, their students' educational performance has decreased. The coefficient of determination ( $\mathbb{R}^2$ ) is 0.15, which indicates that 15% of the changes related to the student's educational performance variable are explained based on the degree of artistic use of their virtual social networks.

The fourth sub-question of research: Is there a significant difference between the rate of use of social networks among students of Evaz Health School with regard to demographic variables (gender, age, and field of study)?

#### Gender

Independent t-test was used to compare the status of use of virtual social networks among female and male students of Evaz Health School.

virtual social networks among male and female students									
Variable	Gender	Average	t	P-value					
use of virtual social networks	Male	88.25	0.675	0.502					
use of virtual social networks	Female	87.09	0.075	0.503					

Table 5: Independent samples t-test results for comparing the rate of use of
virtual social networks among male and female students

Regarding the values of p-value obtained in the t- test, which is greater than 0.05, it can be concluded that the test is not significant. Therefore, there is no significant difference between the use of virtual social networks of male and female students.

## Field of Study

To compare the status of the use of virtual social networks among

students in different fields of study, one-way ANOVA was used.

 Table 6: The results of variance analysis to compare the use of virtual social networks among students in different academic fields

Variable	Classes	Frequency	Average	F	P- Value			
use of virtual	Public Health	20	89.92	2.317	0.101			
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social networks	Public Health - Family	10	88.46	
	Health	10	83.74	
	Public Health -	20	85.66	
	Fighting Diseases	20	87.70	
	Professional Health	10	88.40	
	Environmental Health			
	Nutrition			

With respect to the values of pvalue, which are all greater than 0.05, it can be concluded that the test is not meaningful in any case. Therefore, there is no significant difference between the rates of use of virtual social networks of students in different fields of study. *Age* 

One-way ANOVA was used to compare the status of the use of virtual social networks among students at different age levels.

 Table 8: The results of variance analysis to compare the status of the use of virtual social networks among students at different age levels

virtual social networks among students at uniter ent age revers									
Variable	Classes	Frequency	Average	F	P-Value				
	Less than 19								
	20to less	10	87.55						
A co(voor)	than 21	60	91.93	0 564	0.689				
Age(year)	21 to less	10	86.58	0.564	0.089				
	than 22	10	88.54						
	22more than								

With respect to the values of pvalue, which are all greater than 0.05, it can be concluded that the test is not meaningful in any case. Therefore, there is no significant difference between the rates of use of virtual social networks of students at different levels of age.

## **Conclusions and suggestions**

Its attractiveness, capabilities and special features make it a virtual environment for social interaction. The virtual world is another form of real world. Therefore, these two worlds share common elements, and only the nature, gender and role of these elements are different. Therefore, the principles of the ruler and the technical and behavioral skills necessary to interact in these environments and will enter into this space by borrowing from the real space. Definitely not having a proper, normative, and, most importantly, ethical behavior, will challenge the relationship between individuals. Research on the Internet and the virtual space all indicate their many benefits in the current century, but their attractive and unique benefits should not people's disadvantages. ignore Girls and boys join the virtual network for recreation and entertainment and after a short time with Types of friend requests are encountered by users of these networks, although almost none of them know. The injuries to people in the virtual world have different

types of financial, emotional, spiritual and psychological. For this reason, it is imperative for everyone, including those involved in ICT and cybercrime experts, and more on fathers and mothers, to increase awareness of the threats and injuries caused by the Internet and the virtual environment, and measures It is necessary to carry out this work.

The dominant function of Internet chat and social networking in Iranian youth is its leisure and fun aspects. Press an dan (1995) based on Greenberg's research (1974), which uses the theory of use and pleasure to measure the amount of pleasure that People were using new media like the Internet, which showed that among teen Internet users many people use to spend their hobbies. forgetting spending time, problems, overcoming loneliness, and being entertained. Yang (1998), in his research, received half of the students' post-internet usage (social networking, chatting, etc.). Their study habits declined and their grades significantly decreased and the number of absences these students raised. Although the merits of the Internet put this tool as an ideal educational tool, students instead of creative work often visited in unrelated sites, chat rooms, friends' friends and game software. Therefore, the relationship between satisfaction satisfaction and through cybercrime is a direct and positive relationship; users in an attractive and diverse range of social networks that cater to the needs of young people for communication,

emotional representation and approval by members of virtual groups, and compliance. And they temporarily enjoy their time. They spend a lot of time and money on the Internet. It is a waste of time for students who need to spend time in setting up a curriculum and learning the content, and it will have no consequences at the level of their educational performance.

# Research suggestions applied suggestions

Based on the results of the research, the following suggestions are presented:

•The results of the study have been disseminated to the Ministry of Education officials to help them in the accurate planning of education and training of young people and to address the dimensions of personality changes due to their maturity in this period.

• Public media will develop appropriate training programs to control the use of unauthorized sites and anticipate programs and entertaining and fun programs for the youth to reduce their eagerness to use prohibited sites.

• Organizing training sessions for cultural affairs in the cities to familiarize with parents information about new technologies, especially the Internet virtual and social networks.

• Organizing educational classes in schools to inform young people about the benefits and disadvantages of new technologies and how to use them properly.

• Playing informative announcements from the Ministry

of Culture and Islamic Guidance on radio and television to raise awareness among families about the dangers of the Internet.

• Spending more time with children outside the home so that the children do not feel emotionally deprived, and do not seek refuge in the virtual environment to compensate for this shortage.

• Broadcasting short educational programs about the advantages and disadvantages of the Internet from the language of the popular athletes and artists who generally have their own youth. Our sample is not representative of the statistical community. During the research, we tried to identify different such variables as household economic power and family tricks. In fact, all families are selected from a corps that has the ability to provide financially enough Internet and cybercafe for their children and their children.

## **Research suggestions**

• Considering that in different societies and cultures, the level of family relationships and relations between parents and children and the identity of young people is different; therefore, it is suggested that this research be carried out in other cities and geographies.

• It is also suggested that future interviews and observations be used in similar research. And its data is compared with the present study.

• It is suggested that further research be conducted with guidance questions to determine the actual pattern of using unauthorized or malicious sites.

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