

## Studying the effectiveness of economic-social status on rate of ICT usage among students of Islamic Azad University and Payameh Noor University of Khoy

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### ABSTRACT

The current research was done in order to study the effectiveness of economic-social status over amount of ICT usage among students of Islamic Azad and Payameh Noor University of Khoy during 2011-12 school years. The methodology of this study was sectional descriptive-measurement. The sampling used a categorical accidental approach and questionnaires in order to meet collecting information instruments. The population of the present study was whole of Humanity Science students studying in Islamic Azad and Payameh Noor University of Khoy during 2011-12 school years; the whole participants included in this study were 2824 and sampling included only ten percent of them i.e., 311 students out of 3110. The analytical procedure of data was based on descriptive and deductive statistics (Pearson Correlation and independent t-test) which was done by means of SPSS software. According to the results, it showed that there was a significant correlation between economic status and ICT usage among Islamic Azad and Payameh Noor University of Khoy. However, there was no significant correlation between social status and ICT usage among students of Islamic Azad and Payameh Noor University of Khoy.

**KEYWORDS:** Economic-Social Status, ICT, Students

### INTRODUCTION

Information technology has been spread out in all areas such as training and education as well as higher education. Today, new technologies have increased the tendency for education and various means of presenting knowledge. Nowadays, the education based on technology is available in universities of progressed communities. Smart schools have done a big step toward virtual learning, we can name online and distance learning as new ways of education [1].

Economic system is one of the critical issues of present communities and today it has a superb impact. Due to this fact, the countries have been divided according to their economy toward advanced level, progressing and backward levels. The importance of this fact is so high that only economic aspect has been considered as the criteria of measurement of civilizations. There upon economy is effective directly or indirectly in scientific, industrial, and even moral lives of people [2]. These days, communications constitute the core life of humans and rapid transit of a huge amount of information from one place to another is one of other necessities of communities. Connection among scholars, students, and scientists is one of the important elements on progress and production of information and communications [3]. Therefore, application areas of information technology and communication with their increasing speed have affected the education dramatically in many ways. The importance of education and training which it should be proportionate with personal and society needs itself is very essential more than before, and it is due the fact that the world which is linked with information networks requires human forces who should know how to apply technology as a mean of creativity, progress and efficiency.

Universities in information explosion era have to go with the tide of rapid progress of information. In other words, the importance of this study is to observe the positive effects of information technology and communication especially the internet on university activities such as education and research, and it has repeatedly been shown as one of advantages of using information technology and communication [4]. Students who are one of cornerstones in higher education make use of information technology and communication especially the internet should be deemed by policy makers of higher education.

#### The Purpose of Study

Comparing the effectiveness of economic-social status over amount of ICT usage among humanity science students of Islamic Azad University and Payameh Noor University of Khoy.

#### Research Questions

1. Is there a significant correlation between economic-social status and ICT usage among humanity science students of Islamic Azad University?
2. Is there a significant correlation between economic-social status and ICT usage among humanity science students of Payameh Noor University?

#### ICT Conception

ICT is the combination of the initial letters of Information, Communication and Technology whose purpose is to facilitate and hasten the access to information via communication instruments and techniques. Information and

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Communication Technology is defined as a collection of hardware, software, network and communicative facilities in order to get access to information. Not only is ICT growing by itself and tries to renew, but it is able to open room in the field of science and action for itself which has led to indefinable changes as well. Perhaps, ICT, more than everything affects cultural, social and educational backgrounds of countries and these changes are so high and considerable that we cannot neglect them anymore. Simply, it is said that ICT like one of the latest technologies made by human has the capability for collecting, organizing, storing, and feed backing information in the form of sound, written and numerical texts which are realized through using computerized and telecommunication instruments [5].

### Studies Conducted in Iran

Majidpoor[6] found the following results: there was a significant correlation between social status (parents' education) and educational achievement. There was a significant correlation between economic status (parents' income) and educational achievement. There was not a significant correlation between social status of students (habitat) and educational achievement.

Kohan[7] achieved these results:

1. There is a correlation between educational achievement and parents' economic status (father's income).
2. There is a correlation between educational achievement and parents' social status (education).
3. The most impressive effect is related to fathers' level of education and the less impressive effect is related to mothers' level of education.

Yaghoti[8] obtained these findings:

1. There is a negative correlation between complexity of attitudes toward Internet and usage of it.
2. There is no correlation between compatibility of attitudes toward Internet and usage of it.
3. There is a correlation between advantage of attitudes toward Internet and usage of it.
4. There is a correlation between testability of attitudes toward Internet in research activities and usage of it.
5. Familiarity with English language is effective in usage of Internet.

In another study Dadras [9] found these results:

1. M.A students use Internet more than B.A students and their teachers.
2. University teachers never make use of Internet in the classroom.
3. University teachers spend no time for teaching Internet to their students.
4. Lack of motivation and inaccessibility are two main factors for usage of Internet.
5. All of students have a high amount of motivation for learning Internet.
6. The most frequently used applications are search engines such as YAHOO and then E-MAIL services.

In Shaabani's conclusion [10], the analysis of students' structure is the process of educational activities which confirms the fact that having a traditional view toward education and training cannot meet the needs of young generation in information era and this disability makes development of training programs inventible.

Naderali[11] showed that there was no significant correlation among age, gender, and computer use. There was correlation between social and economic status as well as computer use. In addition, there was a significant correlation between computer use and different fields of study.

Khoshbakh[12] found these result, there is a difference between students and internet use. Furthermore, social and economic status of students is one of effective factors in ICT. On the other hand, gender and type of educational department are both less effective and no effective factors, respectively. Asadi[1] explained that there is no significant correlation between universities of AllamehTabatabaib and Tabriz in ICT use. In the former, there was no significant correlation among gender, research background, as well as access point to computer and internet and ICT usage in universities. However, there was a significant correlation between last university degree and teaching record and age. In Tabriz University, there was no significant correlation between last degree, teaching record, age, access point to computer and internet and ICT usage while there was a significant correlation for age.

Bahrami[13] found the following results:

1. There is a significant correlation between age and ICT usage among Payameh Noor University students.
2. Economic status of students is effective in ICT usage.
3. There is no correlation between social status of students in computer use. However, there is a significant correlation between social status of students and Internet use. Gender is deemed to be as one of less effective factors and field of study is ineffective factor in ICT use. Jafarzag[2] in a study found these results: social and economic status affects ICT usage in leisure time. Both males and females make use of ICT same amount. Ghaffari[14] in a study achieved these results: there was a significant correlation between computer use and economic status. Meanwhile, social status and age were less effective factors and field of study was an effective factor in computer use. Safaai[15] illustrated that educational achievement of students who have added architecture course through electronic way is more than those who have passed that subject through traditional way. Also, teaching electronically reduces the amount of time spent on learning. He found that teaching electronically does not lead to students' satisfaction from leaning.

### Studies Conducted Abroad

In Hesseet al., [16] study, it was shown that scientists who create more works are in touch with data networks more often. Kalman et al., [17] in their study came into conclusion there is a strong correlation between social and economic status of students and their educational achievement. Obst[18] concluded that using classes and training

courses are effective in a better use of Internet. In a study done by Tuller and Oblinger[19], it was showed that Internet has made access to information universal in which students can acquire information in various and ways and sources. Other geographical, administrative and political limitations cannot put a barrier against higher education. In these situations, universities have to provide needs of seekers of knowledge by distance learning which will have a deep effect over structure and function of higher education in the world.

Shields and Behman[20] said that in their study which was administrated on a national scale, kids between ages from two to seventeen spend approximately thirty-four minutes of their daily time to work with computer at home and consequently it will lead them to learn working with computer very fast in the future. Furthermore, not only *are* kids more successful in getting higher grades in learning and experiment of traditional behaviors and things that their parents teach them but also they have a better progress in reading comprehension, using grammar, math, and lessons related to computer technology. Tan [21] illustrated that process of learning take effects in higher education from ICT and students use this technology in their lessons and studies.

Almatrifin 2009 found the following results:

1. Men use more Internet than women.
2. M.A students and Ph.D. students use Internet more than B.A students.

Mahmood[22] found that in addition to computerized analysis and educational conditions of criterion such as gender, age, having personal computer, geographical locations, computer training course have contributed to this technology.

Mohammadi and Hasoomi(2010) discovered the following statistics:

Nearly seventy-three percent of students have expressed that they use Internet more than library. More than seventy-nine percent stated that Internet has a significant impact on their scientific information. Eighty-seven percent have told that their communication with teachers is via E-mail. Five percent expressed that they use chat service for communication with teachers. Chang [23] demonstrated that rapid development of multimedia networks such as Internet, E-mail, data computer and etc. have effective role in learning environment and educational activities.

ZaraiiZavaraki[24] has reported that there is a considerable difference among university teachers, traditional education and distance learning in the application rate of these technologies. ZaraiiZavaraki[24] in another study showed that there was a significant correlation between application rate of network communication tools i.e., Internet and computer by university teachers and students' learning efficiencies. In the electronic magazine of Educonnection-Quarterly [25], an article bearing the title " measure of success in electronic learning and students' educational achievement " came into conclusion that e-learning has more satisfying experience for students than traditional and face to face learning. It also offers them more time for critical thinking learning in which grades get better and it has an increase in level of learning. In the second section of article, it has been concluded that e-learning decreases the process of learning for about fifteen percent. Educational achievement rate in face to face or traditional learning is between three to six percent, it is three to four percent in synthetic education and six to eight percent in e-learning.

### **Population**

The population of the present study was whole of Humanity Science students studying in Islamic Azad and Payameh Noor University of Khoy during 2011-2012 school years who were 3110 altogether.

### **Sampling**

Sampling included only ten percent of population i.e., 311 students out of 3110.

### **Sampling Procedure**

In the current study, a categorical accidental approach was used for sampling. The whole humanity science students of Islamic Azad University and Payameh Noor University were 3110 in which 1212 were studying at Islamic Azad University and 1898 were at Payameh Noor University. In order administrate sampling, first of all B.A humanity science students of both universities were selected accidentally (914 students at Islamic Azad University and 1677 students at Payameh Noor University) who were 2343 altogether. Then, twelve percent of population (100 students from Islamic Azad University and 211 students from Payameh Noor University) 311 students were selected regardless of their gender.

## **METHODOLOGY**

The methodology of this study was sectional descriptive-measurement.

### **Data Collection Instruments**

The questionnaire used in this study was implemented by a researcher had thirty questions. It composed of six sections which had general, economical, and social questions.

### **Reliability of Measurement Instrument**

In order to acquire reliability of this questionnaire, eight questionnaires including four questionnaires among Islamic Azad University students and four questionnaires among Payameh Noor University students were distributed and we achieved alpha coefficient  $r = .83$ .

### Data Analysis Approach

After the questionnaire was administrated, data were analyzed through Pearson correlation coefficient and independent t-test.

### RESULTS

Frequency of participants in the level of age, gender, marital status and place of education are presented in table 1. According to it, the population of female participants (204) was more than males (107) and the number of single participants (202) was more than married ones (109). In addition, the percentage of students in ages between 21-23 was more than other groups and the percentage of Payameh Noor University students was more than Islamic Azad University students.

**Table 1.** Frequency of Age Levels, Gender, Marital Status and Place of Education

Frequency Percentage	Frequency		Gender
34.40	107	Male	Gender
65.59	204	Female	
64.95	202	Single	Marital Status
35.04	109	Married	
22.50	70	18-20	Age Levels
41.80	130	21-23	
18.97	59	24-26	
9.64	30	27-29	
7.07	22	Above 30	
32.15	100	Islamic Azad Uni.	Place of Education
67.84	211	Payameh Noor Uni.	

Table 2 shows the mean and standard deviation of students' social and economic status and rate of ICT use among students of both universities. As it is represented, the mean of economic status for Payameh Noor University students is more than the ones in Islamic Azad University. While it was found that the social status of Islamic Azad University students was higher than students of Payameh Noor University. In addition, rate of ICT use among students Islamic Azad University (14.09) was more than Payameh Noor University students (11.269).

**Table 2.** Mean and Standard Deviation of Students' Social and Economic Status and Rate of ICT Use among Students of both Universities.

Standard Deviation	Mean	Number	Index	Group
			Source	
2.94	8.69	100	Economic Status	Islamic Azad Uni.
10.17	14.09	100	Rate of ICT Use	
6.5	32.77	100	Social Status	
10.17	14.09	100	Rate of ICT Use	
2.11	10.5	211	Economic Status	Payameh Noor Uni.
7.14	11.269	211	Rate of ICT Use	
7.9	30.4	211	Social Status	
7.11	11.269	211	Rate of ICT Use	

Table 3 shows the results of reliability analysis between economic-social status and rate of ICT usage among students of both universities. As it is shown, there is a significant correlation between economic status and ICT usage among students of Islamic Azad University (39%) and there is a significant correlation among students of Payameh Noor University (43%) but there is not a significant correlation between social status and rate of ICT usage among students of Islamic Azad University (0.78) and students of Payameh Noor University (0.9).

**Table 3.**Results of Reliability Analysis between Economic-Social Status and Rate of ICT Usage among Students of both Universities.

Standard Deviation	Mean	Number	Index Source	Group
%39	0.55	100	Economic Status and Rate of ICT Use	Islamic Azad Uni.
0.79	-%9	100	Social Status and Rate of ICT Use	
%43	0.54	211	Economic Status and Rate of ICT Use	Payameh Noor Uni.
0.9	-%8	211	Social Status and Rate of ICT Use	

Table 4 demonstrates results of t-test between two groups of students at Islamic Azad University and Payameh Noor University. As it is shown, there is no significant correlation between two groups of students in rate of ICT usage.

**Table 4.**Results of t-test in Comparison with Students of Two Universities Using ICT

Significance	df	t	Index Source
0.427	468	0.819	t-test

## RESULTS

The results of the present study revealed that there is a significant difference between economic status and rate of ICT usage among students of Islamic Azad University.

The results of findings by Majidpoor[6], Kohan[7], Dehgan [9], Bahrami[13], Khoshbakht[12], Jafarzad[2], Ghaffari[14], Kalman et al., [17] are consistent with results of our study. The results of study by Naderali[11] did not show a significant correlation between two variables.

According to our findings and other studies, we can conclude that an increase in the economic status of students' family will lead to an increase in their educational achievement and rate of ICT usage on the contrary a decrease in the economic status of students' family, will lead to a decrease in their educational achievement and rate of ICT. In addition, there was not a significant correlation between social status and rate of ICT usage among humanity science students of Islamic Azad University.

The result of the current study was inconsistent with results of the following results; Majidpoor[6], Naderali[11], Ghaffari[14], Bahrami[13]. In spite of various social statuses of students, we cannot expect students to use this technology. The reason of this inconsistency may be due to time, expansion and growing demand of students to this technology.

In this study, there was a significant correlation between economic status and rate of ICT usage by Payameh Noor University students

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In this study, there was not a significant correlation between social status and rate of ICT usage by humanity science students of Payameh Noor University.

The results of findings by Majidpoor[6],Naderali[11],Bahrami[13], Ghaffari[14], are consistent with results of our study. The results of findings by Dehgan[28],Kohan[7] did not show a significant correlation between two variables. In spite of various social statuses of students, we cannot expect students to use this technology. The reason of this inconsistency may be due to time, expansion and growing demand of students to this technology.

### Suggestions for Further Research

1. Since this study has been done about effectiveness of economic-social status over amount of ICT usage among humanity science students of Islamic Azad University and Payameh Noor University of Khoy, it is suggested that the present study can be done with different populations for example students of sciences and math.
2. It is better to do researches about attitudes toward ICT.
3. A study should take place in the context of ICT facilities in the country.
4. A study should take place with a similar title in several universities.

### Practical Suggestions

1. Assessing ability of humanity science students for training computer and internet.
2. Creating free spaces to have a better use of ICT among people who have low economic status.
3. Holding training courses about computer and Internet in order to increase students' computer literacy.
4. Expanding and developing ICT in rural areas for a better use by students.

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