

Examine How Students Use Information and Communication Technology in their Leisure Time?

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ABSTRACT

The main objective of the present study was to examine how the use of information and communication technology in leisure time of junior school male students of Qarchak area. This research is a descriptive - practical study that was conducted in a survey. Population of the study composed of all guidance school male students and 64 individuals of them were selected using a stratified random sampling method. Data were collected using the researcher made questionnaire which its reliability and validity had been approved. Nonparametric Chi-square, Wilcoxon and Friedman test was used to analyze the data. Research results indicated that the student are welcome to information and communication technologies to spend their leisure time and in the meantime, the use of television, mobile phone has the highest rate of use and radio and satellite has the lowest rates. Also, the results showed the students know partially the tools of information and communication technology, but knowledge of information and communication technology tools has not found yet properly its position and importance and the families don't aware of position of this technology in the development of their children in the field of their education and growth character. About usage during the academic year and during the summer, there is a significant relationship between the use of computers, television, satellite, mobile phones and mobile audio and video devices (MP4-MP3), and the use rate of tools of computer, TV, Satellite TV, Telephone mobile and mobile audio and video devices (MP4-MP3) increases during summer more than during academic year. Also, most students had fun using information and communication technology tools and next the training use has been mentioned, and students for leisure time are interested more in computers, televisions and mobile phones. At the end it became clear that information and communication technologies could create some favorable changes in people.

KEYWORDS: Communication Technology Tools, Students, Education

1. INTRODUCTION

One of the important things which is very important in the all people life and besides work and daily activities is how spends the time of unemployment. In the past decade scholars of social problems argue further about "filling time of leisure time", but now is discussed about "giving richness" and leisure time management [1]. Thus, in the opinion of many educational and social scholars and scientists, leisure time and how leisure time is an effective tool for nurturing the mind, body, ethics faculties. Innovative character of the people, is an important thing to avoid social deviant that if neglected, may cause instability of character, diversion and thus waste their active force, so for correct directing of take advantage of this time and meet the physical and psychological needs and considering of it in the programs is an effective step to having a healthy and vibrant community [2]. So according to Pier, entity and culture originality on the basis of opportunities and leisure time of the people who live in it and community establish. Francis Douge [3] stated that "tell me how you spend leisure time to tell who you are and how you train your kids Tagour says "human civilizations are immortal capital that has been appearing from correct planting and harvesting, leisure time" [3]. Henry Teri [4] believes that the most favorable and the most valuable moment of culture, is the moment where people can relax, lounge and watch. An educated nation is a nation that knows how to take rest and in this regard which tools to use. Thus, we can conclude that today leisure time has intrinsic value [4] and due to the noble and moral functions, flourishing activity and mental health is very important so that most communities take advantage of all to optimize it. Other leisure time is not allocated to the privileged classes and all categories of the society plan for it and allocate a part of their income to it [5].

Terms of leisure times are combined of two words of times and leisure time that times literally mean sum of word of time, moment, days and hours [6]. But leisure time is derived from a Latin word *Licere* [7] means "permitted" or being free [7]. In the information and communication technology of "liter", leisure time indicates the opportunity and time which remains for a person after to accomplish the daily work and job [8]. In the information and communication technology of Amid (p 761) it means (peace and tranquility) and usually used in regard to the daily jobs and engagements which typically cause fatigue, (Information and communication

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technology Amid, p 761). According to the information and communication technology of Moein, leisure time has four meanings: 1) addressing the wrappers 2) comfort, relaxation, peace and tranquility 3) scorn, philosophy 4) opportunity, chance (information and communication technology of Moein).

Leisure time has been considered as a holistic concept of process or a value from different perspectives including leisure time in perspective of time, leisure time as activities, leisure time as a substantive goal, a state of being and leisure time. Furthermore, since the type of culture and values and beliefs foundations, principles and especial perspectives of the sciences have been leisure time and group and community about (youngsters, youth, women, teachers and students) experts of various science, various definitions of leisure time have been expressed [9] in this regard now is pointed out several definitions of leisure time that has been expressed by several experts.

Anderson believes leisure time is a not sold time that is belongs to a person. When a person used it with his linking, sees a spontaneous activity and selective freedom [10]. Dumazieh [11] stated that Leisure time is expression of the full range of human aspirations, which seeks new happiness in a relationship with a new responsibility, ethics, politics and cultures. According to the several expressed definitions can be concluded that the most important and most obvious feature of leisure time are separate leisure time from other responsibilities. Existence of the preference desire and activity and ultimately having arbitrary choices and lack of motivation and economic benefit. Dumazieh [11] French sociologist in this field believes that the release of the tasks, objectives and lack of material direction and satisfaction and gratification are three important features of leisure time.

The research has shown that leisure time influences mental health, meeting physical health, cognitive skills development, develop creativity, excellence of character and dissemination of culture but the effects of leisure time depends on how it is used. If it be used favorably, it has the desired appropriate and effective effects, and if it be used unfavorably would be devastating and would have undesirable consequences. Dumazieh [11] believes that one of the goals and outcomes of leisure time activities is to emerging talents and creativity of the individual, and information and communication technology gives people the opportunity to free their energy and to achieve creativity and self-actualization [12]. Hence, the issue of new information and communication technologies is considered as a fundamental tool in filling leisure time. Studies show that information technology such as the Internet, CD, TV, VCR have been find a significant position in personal life. Internet users have been increased from 39 million in 1995 to over one billion people in 2010. It in our country has been reached from 11 million and 260 thousands users in the 2007 to 33 million and 200 thousands users in 2010 [13]. Satellite, television, computer, Internet and video all play a vital role in how people, especially students fill leisure time. Computer game has become not just a tool for entertainment and recreation, but also one of the largest industries in the world of IT Communication. Studies also show that the penetration of information and communication technology tools in the lives of people, especially children and young people is growing (Ibid). So, today, despite the advantages of information and communication technologies, it has created a number of serious challenges in how to use it [14] such as moral, social, cultural and medical damages, and unfortunately lack of attention to leisure time among the adolescent population, tend them to abnormal behaviors and attitudes contrary to social and cultural norms of society, and today inappropriate methods of spending leisure time has been become one of the problems of third world countries [15].

The research results in this area are different. Yutesomi and Youshio [16] in their study concluded that information and communication technology can be used to enhance learning, knowledge and the creativity force and those who can provide these tools, effectively benefit from the advantages. While the results of Tsai and Lin [17] revealed that Internet is considered as a toy mostly and young girls is regarded it as a technology or tool for web browser. suggest that girls believe that outdoor environments such as parks for leisure time is unsafe and unsuitable and spend most of their time at home and for the use of information and communication technology. Hence with regard to adolescents and youth welcome the new information and communication technologies [1] and also information and communication technology gradual entry into the educational center of the country, the problem of how to use these technologies, the share of Iranian students in this field specifies the use of these resources, and can help policy makers and planners of the education effectively to makes so careful planning in order to enrich their leisure time with effective utilization of information and communication technologies. Hence, this study aims to investigate how to use information and communication technology in leisure time by asking questions of male students of the junior schools in Qarchak region, and determine what kind of information and communication technology the male students of the junior schools in Qarchak region use in their leisure time? How is their awareness of the tools used? How much they use these communication tools? How much information and communication technology is important on filling students' leisure time? How much students are dependent on information and communication technology about leisure time? And ultimately, what favorable changes are created by using the outcome of information and communication technology in leisure time of students?

2. MATERIALS AND METHODS

Population, sample and sampling

Considering that the aim of this study was to examine how the use of information and communication technology in leisure time of male students of the junior school in the Qarchak region, the research methods is descriptive- applied that was conducted through a survey. The study sample consisted of all male students of the

junior schools in the Qarchak area (800 students) was employed in the academic year 2009 – 2010. To select appropriate statistical samples, according to the study population consisted of male students in primary, secondary and tertiary grade of the junior school and their views should be properly reflected in the sample, a stratified random sampling method was used, and using the Morgan table, 364 students was selected as the sample.

Research tools and methods of data collection

To collect data in this study, a 77- questions researcher made questionnaire was used, the questionnaire has three parts (Introduction, demographic variables of the study and the research questions) and six subscales (tools, time, knowledge, leisure time, independence and favorable changes) which has been set based on a 5-point Likert. Validity of the used instruments were approved by formal validity and to ensure the reliability of the instrument, Cronbach Alfa was used and the amount of alpha for different parts of the questionnaire has been reported between ($\alpha = 0.72$ to 0.84).

3. RESULTS

According to Table 1 number of participants in this study was 364 people. The age range of the sample is between 12 and 17 years. The mean age distribution is 13.83 with a standard deviation 0.88. In the part of inferential statistics to answer the research questions, the nonparametric tests of chi-square, Wilcoxon and Friedman have been used and the results reported in the following tables.

Based on results of Table 2, it can be said that the students during their leisure time, most use of TV and mobile phone and there is no interest in using the Internet, satellite and radio. The results in Table 3 show that given the used range in tools that covers of 1 to 5. Totally, the average of duration of sample of information and communication technology tools is 2.78 which can be considered it as average. In addition, 95% confidence interval around the mean indicates that the average is between 2.73 to 2.83. Accordingly, it can be said that the use rate of the people of these tools is relatively moderate.

Table 1. Descriptive statistics of the study sample

Sample	Average	Standard deviation	Lowest	More
364	13.83	0.88	12	17

Table 2. The daily use of individuals of IT tools

Row	Tools	Chi- square	Degrees of freedom	Significant	Option with the highest frequency
1	PC	19.819	4	0.001	3
2	TV	78.665	4	0.0005	5
3	Radio	253.555	4	0.0005	1
4	Satellite	75.258	4	0.0005	1
5	Mobile	59.132	4	0.0005	5
6	Internet	79.022	4	0.0005	1
7	Audio or video devices	75.478	4	0.0005	2
8	Household Audio and Video	28.967	4	0.0005	3
9	Newspapers and magazines	76.879	4	0.0005	2

Table 3. Descriptive and inferential statistics for the use time of information and communication technology tools

Mean	Standard deviation	95% confidence interval around the mean	The minimum score	The maximum score
2.78	0.53	2.73 to 2.83	1.61	4.17

Wilcoxon nonparametric test results (Table 4) show that there is a significant difference between the use of tools of computer, television, satellite, audio and video mobile phones and mobile devices (MP4 - MP3) during the school year and during the summer, while in other cases, the difference is not significant. Accordingly, it can be said that the use of tools of computer, television, satellite, audio and video mobile phones and mobile devices (MP4 - MP3) in the summer is more than during the school year.

Friedman non-parametric test results (Table 5) show that there is no significant differences between the amount of daily use during the school year and during the summer of radio, satellite, mobile devices, audio and video (MP4-MP3) and newspapers and magazines. In other words, these tools are used in each state to the same extent. While there is a meaningful difference between amounts of tools use of computer, TV, mobile, Internet and device home audio and video in all three states. Based on the average related to the mean of ranks it can be said that totally the use of these tools has been a significant increase in comparison with the other two conditions in the summer.

Results in Table 6 show that the average rate of the students' understanding and knowledge of information and communication technology tools are approximately 2.78. As well, confidence interval of this mean locates in 2.70 to 2.86 that on this basis it can be said that the students have some knowledge of information and communication technology tools.

Table 4. Results of the Wilcoxon test to compare time using different tools for different technologies

Row	Tools	Location	Average rating	Z	P
1	PC	During the academic school	107.65	- 7.861	0.0005
		During the vacations	128.84		
2	TV	During the academic school	107.8	- 9.921	0.0003
		During the vacations	13.108		
3	Radio	During the academic school	72.72	- 1.441	0.15
		During the vacations	76.87		
4	Satellite	During the academic school	72.79	- 2.143	0.032
		During the vacations	75.7		
5	Mobile	During the academic school	88.07	- 2.642	0.008
		During the vacations	88.78		
6	Internet	During the academic school	88.75	- 1.173	0.241
		During the vacations	75.62		
7	Audio or video devices (MP4-MP3)	During the academic school	93.68	- 2.088	0.037
		During the vacations	102.27		
8	Household audio and video devices (Video, DVD, etc.)	During the academic school	102.35	- 1.88	0.06
		During the vacations	92.58		
9	Newspapers and magazines	During the academic school	81.63	- 0.123	0.902
		During the vacations	83.37		

Table 5. Friedman test result to compare the time use of different Technologies

Row	Tools	Location	Average rating	Chi- square	Degrees of freedom	P
1	PC	During the academic school	1.76	61.73	2	0.0001
		During the vacations	2.25			
		Daily	1.98			
2	TV	During the academic school	1.91	10.349	2	0.006
		During the vacations	1.2			
		Daily	1.98			
3	Radio	During the academic school	1.94	5.581	2	0.061
		During the vacations	2.01			
		Daily	2.05			
4	Satellite	During the academic school	1.95	4.512	2	0.105
		During the vacations	2.06			
		Daily	1.99			
5	Mobile	During the academic school	1.88	14.652	2	0.001
		During the vacations	2.03			
		Daily	2.09			
6	Internet	During the academic school	2	513/16	2	0.0001
		During the vacations	2.11			
		Daily	1.89			
7	Audio or video devices (MP4-MP3)	During the academic school	1.97	3.745	2	0.154
		During the vacations	2.06			
		Daily	1.97			
8	Household audio and video devices (Video, DVD, etc.)	During the academic school	1.94	8.905	2	0.012
		During the vacations	1.2			
		Daily	1.96			
9	Newspapers and magazines	During the academic school	2.04	5.616	2	0.06
		During the vacations	2.04			
		Daily	1.92			

Chi-square test results (Table 8) shows that in all cases the results were significant. Hence, the role level of communication technology tools in filling students' leisure time has been specified in the frequency part of the table in the form of numbers from 1 to 5. So that the numbers 1 to 5 mean were lowest and largest role, respectively. Also, in order to measure the students' dependence on information and communication technology tools, the chi-square test has been used and results are reported in Table 8. Chi-square test results in Table 8 shows that in all cases the results were significant. Hence, the rate of students' dependency on community technology in frequency part of the table has been determined in the form of numbers 1 to 5. At the end, number 1 and number 5 means lowest and highest dependency, respectively. Finally, the research question was examined that appropriate use of information and communication technology in their leisure time how much can causes to favorable changes in the students?

Chi-square test results (Table 9) show that the use of IT tools about decreased fatigue and malaise and as well as aggression not work and amount of Chi- square test is not significant, but in regard to other items, the use effect of information and communication technology was observed, and its effectiveness in terms of numbers 1 to 5 is specified in the part of frequency of the table. Thus the number 1 and number 5 mean the lowest and the highest rate of change, respectively.

Table 6. statistics relating to the recognition rate of information and communication technology tools

Mean	Standard deviation	95% confidence interval around the mean	The minimum score	The maximum score
2.78	0.75	2.70 to 2.86	1.07	4.57

Table 7. The role of communication technology tools in filling leisure time of students

Row	Tools and the use aspect	Chi- square	Degrees of freedom	Significant	Option with the highest frequency
1	Aspect of searching several sites of curiosity	53.610	4	0.0005	3
2	Aspect of education and lesson affair when use of the computer	64.681	4	0.0005	3
3	Aspect of entertainment and recreation when use of the computer	55.368	4	0.0005	4
4	Aspect of internet access when use of computers	38.885	4	0.0005	2
5	Aspect of searching for scientific and educational contents when use of the Internet	35.121	4	0.0005	3
6	Aspect of Entertainment and Leisure time when use of the Internet	28.885	4	0.0005	3
7	Aspect of knowing the news on the Internet	54.736	4	0.0005	3
8	scientific and educational aspect when use of television	63.405	4	0.0005	3
9	Aspect of entertainment when use of TV	65.313	4	0.0005	3
10	Aspect of becoming aware of news when use of TV	86.632	4	0.0005	3
11	Scientific and educational aspect when use of audio and video devices (video, DVD, etc.)	61.962	4	0.0005	3
12	Entertainment and recreational aspect use of audio and video devices (video, DVD, etc.)	44.049	4	0.0005	3
13	Scientific and educational aspect when use of the radio	138.5	4	0.0005	1
14	Entertainment and recreation aspect when use of the radio	132.951	4	0.0005	1
15	Aspect of becoming aware of the news when use of the radio	81.714	4	0.0005	1
16	Scientific and educational aspect when use of the newspapers and magazines	39.874	4	0.0005	3
17	Entertainment and recreation aspect when use of the newspapers, magazines	43.555	4	0.0005	3
18	Aspect of becoming aware of the news when use of the newspapers and magazines	49.874	4	0.0005	3
19	Scientific and educational aspect when use of the satellite	67.978	4	0.0005	1
20	Entertainment and recreation aspect when use of the satellite	18.005	4	0.0005	1
21	Aspect of becoming aware of the news when use of the satellite	47.896	4	0.0005	1
22	Aspect of sport game when use of computer games	82.236	4	0.0005	5
23	Aspect of horror game when use of computer games	43.047	4	0.0005	5
24	Aspect of action games when use of computer games	101	4	0.0005	5
25	Aspect of other excitements when use of computer games	129.516	4	0.0005	5

Table 8. The dependency level of individual to information and communication technology tools

Row	Tools	Chi- square	Degrees of freedom	Significant	Option with the highest frequency
1	Dependency on the Internet for spending leisure time	154.269	4	0.0005	1
2	Dependency on the Internet for entertainment	45.835	4	0.0005	1
3	Dependency on computers for entertainment	50.863	4	0.0005	5
4	Dependency on television for entertainment	44.352	4	0.0005	4
5	Dependency on satellites for entertainment	76.137	4	0.0005	1
6	Dependency on the radio for entertainment	263.363	4	0.0005	1
7	Dependency on mobile phones for entertainment	11.714	4	0.02	3
8	Dependency on audio or video devices (MP4-MP3) for entertainment	40.313	4	0.0005	2
9	Dependency on home audio and video devices (video, DVD Etc.) for entertainment	41.412	4	0.0005	3
10	Dependency on the Internet for education	11.22	4	0.024	3
11	Dependency on computers for education	342.14	4	0.0005	3

Table 9. The favorable changes rates of students because appropriate use of IT tools

Row	Favorable changes	Chi- square	Degrees of freedom	sig	Option with the highest frequency
1	Presence of talents and creativities	64.462	4	0.0005	3
2	Reduce fatigue and malaise	6.632	4	0.157	-
3	Restore the spirit of happiness and joy	46.769	4	0.0005	3
4	Reduce Aggression	8.473	4	0.076	-
5	Strengthen thinking in oneself and world	64.956	4	0.0005	3
6	Increasing the knowledge and updating experiences	73.57	4	0.0005	5
7	Increasing the accountability	74.352	4	0.0005	3
8	Fertile field for communicate with normal people	62.264	4	0.0005	3
9	distance students from the tendency to delinquency	28.005	4	0.0005	3
10	Better identify students' strengths and weaknesses	36.467	4	0.0005	3
11	Reduce Loneliness	275/31	4	0.0005	3
12	Better use of time of avoidance of inconvenience to others.	51.522	4	0.0005	3
13	Sense of social and cultural values and respect for them	78.665	4	0.0005	3
14	Strengthen collaborative spirit	64.314	4	0.0005	3

4. DISCUSSION AND CONCLUSION

The results showed that students are welcome to information and communication technologies in spending their leisure time, and in the meantime, the use of television and mobile phone had the highest rate of use and radio and satellite had the lowest rate of use. Moreover, although the technology of computers and the Internet have entered into the country and despite vast information resources through these technologies are offered and even among segments of society have welcomed, but yet students don't accustom and have not been met how to use these technologies, that this result is consistent with the research results of [21, 22] and it is inconsistent with research findings of Yari Pour [23]. Also, the result indicates that the student knows somewhat tools of information and communication technology but yet knowledge of tools of information and communication technology has not been found its role and importance correctly and families are not aware of role of these technologies in the development of children's academic and personal growth. Lack of adequate and appropriate facilities for recreation and filling leisure time, constraints and lack of good communication with parents is neglected needs of students due to intellectual preoccupation, and these factors cause students use spare time sometimes too much of information and communication technology tools. Results showed the use rate of information and communications technology during the school year and during the summer, there is significant difference between the use of computers, television, satellite, audio and video mobile devices and mobile phones (MP4-MP3) and the extent of the use of computer, television, satellite, audio and video mobile devices and mobile phones (MP4 - MP3) tools will rise in the summer than during the school year, perhaps the reason for this is the lack of recreational and sports space and public library at city that the findings of the study of Rostami [20] who received the male students are more filling their leisure time with TV match, is consistent.

Moreover, the result indicates most use of students of information and communication technology tools has been for fun and next for educational use. Therefore it seems use of information and communication technology tools in educational aspect among students yet has been not implemented and planned or is not so rich and attractive to be able to attract the attention of students. The findings of the study is consistent with the research of Raberston [24] who received that the most use of the computer is for fun and each year there is increasing use of television, videos, computer inquiries. Also, students are not dependent so to use the Internet, satellite radio, mobile devices, audio and video (MP4-MP3) to spend their leisure time, and the greatest devotion is to the PC, television and mobile phone. In general, it seems in today's societies, because many parents are busy thinking, proper upbringing of their children and attention to the emotional needs of them are neglected somewhat. And children to address the emotional and physical needs look up the modern tool such as computer and television. This trend leads to increasing individualism and reducing collectivism which are a major factor to damage individual and family cohesion. The result of this question is consistent with research findings by [24]. Finally it was clear that information and communication technologies could create some favorable changes in people that this finding is consistent with research findings of Becta [25] and PaKdaman [26] who found that the use of information and communication technologies leads to improve learning. Hence, it is necessary due to the increasing universality of the technologies and its availability for the majority of students, at first step should in addition to hardware glance on information and communication technology and leisure time, firstly should be give insight into the students to know what information and communication technologies tools are and how to use them in leisure time. Our education system could with log in related subjects in technology for the students curriculum guide them in order to make good use of these tools at home and family space, and empower them at selection of tools and information communication requirements, this makes students often manages their official times normally, also can to manage their leisure time in a good way, so that students during leisure time activities that is a free optional practice addressing to the activities which they have talent to do it and interest it, while fun and recreation, their talents also be flourish.

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