

Cost Benefit Analysis of Higher Education by Educated Women in Iran: The Tale of Self Fulfilling Prophecy and Low Labor Force Participation

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Abstract: *The number of women with professional degrees, occupying high-end jobs and positions has been increasing all over the world. The fact that the number of Iranian women in universities and colleges in the country has been increasing steadily during the past 10 years and more than 60% of all those admitted to the universities and colleges in Iran are women, has caused noticeable increase in labor force participation and professional and high end jobs and positions for Iranian women. This is basically due to cultural, legal and structural obstacles towards women's employment in Iran, which in turn leads to self fulfilling prophecy of negative outcome in their cost benefit analysis of time, energy and resources spent. This, in turn, debilitates and discourages them to get involved in professional arenas. A national representative sample of 908 university educated Iranian women responded to questions about their experience after their graduation. The results showed a self fulfilling prophecy at work that led them to believe that the time, energy and costs involved were not compensated and they didn't think that getting a higher professional degree had been a profitable investment for them.*

Key Words: *Professional education; employment; work orientation.*

Introduction

During the last two decades Iran has been experiencing dramatic social changes in various political, economic and social arenas including women's higher education. Despite such a noticeable increase in higher education enrollment of women, it has not translated itself into a noticeable improvement in labor force participation and economic activities. According to UN human development report the female economic activity rate is only 52% of male economic activity rate, which is much less than 64% for developing countries (Human Development index, 2007/2008). How do the Iranian educated women deal with this apparent inconstancy between their success in achieving ever increasing higher levels of education and professional degrees and the chronic low labor force participation and low economic activity rate.

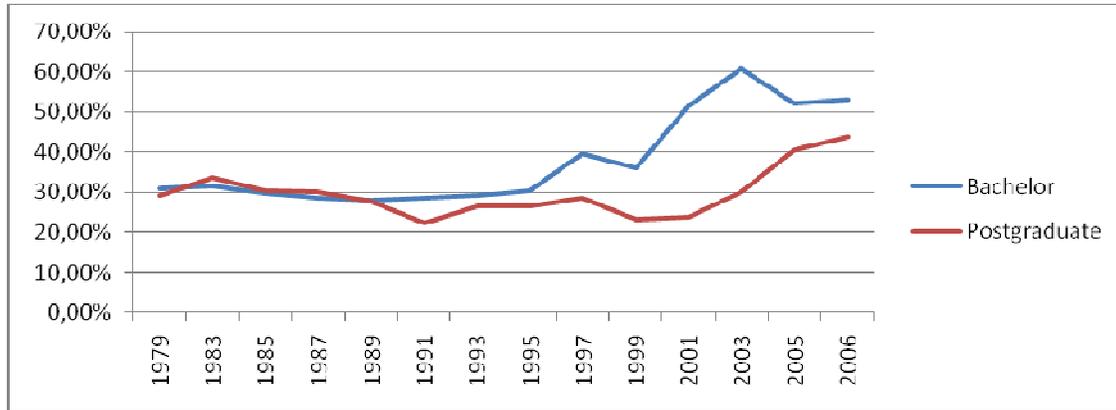
Literature Review

The first modern education school for girls in Iran was established about 80 years ago. According to Shaditalab (2002), while in 1922 there were only 7239 females enrolled in modern schools, this number was about 35000 for males. While the gap in literacy rates of men and women have persisted during the last 70 years but it has been decreasing dramatically. During these years, literacy rate increased from 7.3 to 62 for females and from 22 to 81 percent for males (Shaditalab; 2002). In 1983, only 42 percent of university entrance examinees were women and just 32 percent of the total accepted was women (Ministry of Science, Researches and Technology, 1998). In addition to some legal and procedural limitations that prevented females from studying in certain fields of study, the overall chance of being admitted to the university were 8% and %12 of the total applicants for men and women respectively. Between 1983 and 1992 while the number of applicants for university entrance exam didn't change significantly, the gap in acceptance chance between men and women continuously decreased. In 1994, the legal and procedural clues limiting women's participation in all fields of professional education were removed. In 1995 more than 40 percent of accepted students for bachelor education were women, in 1998, women occupied more than half of university classes. Upward trend continued and 62 percent of total accepted students for university entrance were female in 2002. As it is evident from the chart

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bellow by the year 2001 more than half of the total university students in bachelor's degree were female, and within the next two years it reached to more than 60 percent. Number of women in post graduate studies also kept increasing and by the year 2006 more than 42% of post graduate students were women.

Table 1- Percentage of Female University Students in Bachelor and Postgraduate



Source: Ministry of Science, Research and Technology; 1998, 1999, 2001, 2003, 2005 and 2006

As it is evident from Table 1, the Percentage of women to men in all fields of study has been increasing steadily since 1987. By the year 2006, more than 61 percent total students in humanities, 68.65% of students in science, 73.21% of students in medicine and more than sixty percent of students in art. Although, percentage of women in engineering, farming and veterinary has also increased, but the percentage of women in these fields has been significantly lower. The percentage of female students in engineering and farming and veterinary has reached to 26.01% and 46.65% in 2006.

Table 2- Percentage of Women Student at Universities to Men in Different Fields of Study

Majors Years	Human Study	Science	Farming and Veterinary	Engineering	Medicine	Art
1987	40.00%	30.95%	4.27%	3.97%	43.55%	32.21%
1989	35.85%	34.25%	2.55%	4.35%	42.04%	33.66%
1991	32.36%	35.26%	3.15%	4.97%	43.28%	28.07%
1993	30.38%	36.34%	3.21%	5.66%	45.78%	36.61%
1995	35.42%	39.22%	17.78%	9.38%	49.70%	46.37%
1997	44.22%	45.70%	31.36%	10.79%	53.57%	54.78%
1999	46.68%	49.18%	36.58%	12.64%	56.30%	58.83%
2001	56.66%	59.19%	46.46%	18.93%	63.53%	63.28%
2003	64.82%	64.51%	56.33%	27.25%	61.76%	60.53%
2005	61.54%	70.77%	43.74%	23.25%	74.98%	67.82%
2006	61.23%	68.65%	46.65%	26.01%	73.21%	60.04%

Source: Ministry of Science, Research and Technology; 1998, 1999, 2001, 2003, 2005 and 2006

This is despite the fact that women's employment rate has been less than satisfactory. Female employment rate during 1976 to 1986 decreased from 13.8 to 8.9 percent. During the second decade of Islamic revolution, efforts were made to increase women employment and decrease population growth and fertility rate (Shadi Talab, 2002) and the employment rate for women increased from 8.9 percent in 1986 to 12.1 percent in 1996, and after 10 years it has only reached to 13.2% in 2008.

Table 3- Unemployment and Employment Rate in Iran

	Total unemployment rate	Men unemployment rate	Women unemployment rate	Proportion of the employment among women
1966	-	-	-	13.2
1976	10.2	9.1	16.4	13.8
1986	14.2	12.9	25.4	8.9
1991	11.1	9.5	24.4	9.4
1996	9.	8.5	13.4	12.1
2008	10.2*	8.6*	17.7*	13.2*

Source: Statistical Center of Iran; 2000

*Statistical Center of Iran 2008

How can this apparent discrepancy between employment and education be explained? One common explanation is the Islamic context. There are some who believe that in Islamic context, priority for women's responsibilities within and outside home is essential in explaining Islamic women's employment patterns (Foroutan, 2009). In such context, women's work outside home is a second priority. This means that women's work outside home is appropriate as long as it is consistent with their first expected priority (i.e. household duties as wife or mother). It is also believed that 'while Muslim women are encouraged to study and work if they wish and especially if the family finances permit or require their greater role, but the one not to be compromised, is the motherhood' (Omar and Allen 1996, p. 17). Furthermore it is assumed that women's patterns of employment with respect to men also exacerbate patterns of women's over-representation in lower-skilled or lower-status occupations, their restriction to familial and domestic work, and their lack of political and cultural participation in society (Bradley et al. 2000; Heery and Salmon; 2000). Foroutan (2009) also refers to conditions such as high illiteracy and low education level of women and more importantly, an exceptionally high level of fertility in Islamic nations as crucial and main obstacles to women's employment participation.

A closely similar explanation but with reference to a totally different social and cultural context is given by rational choice theorists about employment patterns of women in western societies. Rational choice theory as an economic theoretical paradigm applied in social arena attempts to bridge the micro and macro link between individual and social processes. Using this theoretical frame work Hakim (1998, 2000, 2002) asserts that in contrast to feminist assertions, participation of women in labor market is the consequence and reflection of women's choice. She argues that women decide about their employment in a different paradigm and based on different value system than men. She argues that feminist's characterization of women as mere victims of their disadvantaged situation is overtly political and not necessarily true. She asserts that such argument characterizes women as victims that have little or no responsibility with regard to their situation. In the twenty-first century in most developed industrial societies, lifestyle and choices regarding work and the family had become a matter of individual preference, and that social characteristics, such as social class and gender, imposes no or only minor constraints on women and men. According to Hakim most women in developed countries had unconstrained choices between a home-career and a work-career, and their preferences determined their home life and career paths. She points out women express themselves as highly satisfied, while they have low-level and poorly paid employment, because employment is secondary to their domestic involvement (Hakim, 1996).

In response to Hakim, Crompton and Harris (1998), while acknowledging the role of rationality and choice in women's employment argue that the reasons for these choices lie in the exigencies of context and structural constraints which Hakim effectively disregards. To be sure, women can and do make choices-although in aggregate, their relative lack of power and resources relative to men mean that both today and in the past, they have been less able to do so than the opposite sex. Women- and men- can choose but are also constrained by structural and cultural contexts surrounding them. As Blossfeld (1998) points out, social interactions are intrinsically symbolic relationships that have a meaning and can therefore not be understood without reference to cultural settings but in most cases this influence is likely to be mediated through the intentional actions of individuals. The complex linkage between social structures and manner in which women interpreted are important to understanding gender differences in women employment patterns and preferences (Crompton and Harris; 1998).

Considering what was said about the educational achievements of women in Iran coupled with dramatic decrease in fertility rate and marriage age-rate increase during recent decades, neither the Islamic context explanation, put forward by Foroutan (2009), nor Hakim's rational choice explanation alone can sufficiently

explain the apparent gap between Iranian women's education and employment status. As Abbasi-Shavazi (2001) reports, the total fertility rate (TFR) of 5.9 for Iranian women in 1977 reached 5.7 in 1987 and has been on steady and rapid decline to 2.5 in 1997 and approaching 1.9 and even lower in 2006 (Abbasi-Shavazi & Norollahi, 2008). Such decrease is accompanied with noticeable and steady increase in first marriage average age from 25 and 18.4 for males and females in 1966 to 26.2 and 23.2 respectively in 2006 (Statistical Center of Iran, 2008). These dramatic changes indicate that the Iranian women are not mere followers of the traditional schemas of division labor so strongly put forward by the Islamic culture and society, and choices and preferences do play an important role in their choice of work, employment and motherhood. However, such choices and preferences are made within a highly constrained and value loaded social, cultural and political context. To further elaborate on the role choices and preferences in Iranian university educated women and their educational and career choices, 1749 nationally representative sample of women aged between 18 to 39 with high school or higher educational degrees were asked to reflect on the worthiness of their choices and preferences with regard to higher education and employment.

Result

According to Table 4, 68% of diploma, 56.0% of bachelor and 43.1% of postgraduate women were unemployed. While more university educated women had higher employment rate compared to high school graduates, unemployment rate in all categories were exceptionally high. Overall, 61% (677) of women were not employed at the time of interview. Table 5 shows the cross tabulation of attitude of university educated women towards university education as investment. While 23.6% of women believed that their education was a profitable investment, 42.8% of them believed that their education was not a profitable investment and 33.6% of them declared that their education was somewhat a good investment. There was no significant difference between those who had bachelor's degree and those with post graduate degrees in this regard, however women with bachelor's degrees were more likely to rate their investment as less profitable.

Table 6 shows the cross tabulation of the main reason for leaving the job level of education. As it is evident there were 159 women who left their job. The popular answer to the main reason leaving the job was low income; inappropriate surrounding of work place and uninterestedness to work were other important reasons. Women with bachelor's degree were more likely to leaving their job, compared to postgraduate degree holders, although the difference was not statically significant. Just 7.5% of 150 women left their job due to child bearing. Husband's disagreement, child bearing and perusing higher degrees were not considered as important reasons for leaving jobs.

University educated women with jobs in their appraisal of costs and benefits of their university education are presented in Table 7. As it is evident, 42% believed that the costs of their education were somehow compensated by their salary; 19% of them said only small part of the costs was compensated and 18% of them declared that just a tiny portion of their costs were compensated with their work. However, only 6% and 15% believed that they were very much or greatly compensated for the costs of their university education in their jobs. There were no significant differences between women with bachelor's and post graduate degrees in this regard.

Table 8 shows the attitude of university graduated women to their university education in case they would have had the chance to have a decent job or to get married with their high school diploma. About 86% to 89% of respondents declared that they would have continued their university education if they had a decent job or they had the opportunity to get married.

Table 9 indicates that majority of university educated women believed that women should have access to all kinds of job like men do and a large proportion of them considered financial independence as the most important desire of Iranian women.

Table 10 reports that full time employed women have more job satisfaction in comparison to part time; about 41% of employed women had part time jobs.

Discussion

The result shows that considerable proportion of university educates are unemployed and education costs would not be compensated for majority of employed ones. Those who have part time job are less satisfied in comparison with fulltime employed and they complain about their position in labor market. In addition most university graduates, both employed and unemployed assert that they preferred to continue their education while they had both good job and good position for marriage when they finished high school period and child bearing and husband are not obstacles in their employment.

While some important gender indexes have improved in Iran, such as decrease fertility rate, age of marriage and women education, labor market in favor of women has not moved in the same pattern. It seems that insufficient economic infrastructure and young population structure explain gender differences in labor market rather than women choice. But why women study at universities while the costs would not be compensated and

education is not profitable investment? Rational choice theory explains that women make decision with regard to rationality requirements; their ranges of open alternative choices, consequence and future stats of each choices (“satisfactions” and “goal attainment”), the preference ordering among pay-offs. Young women have two mainly open choices; marriage and education. Evaluation of costs and benefits of open possible alternatives depends on the social and economic constrains and opportunities that women face with. Education opportunity as a new worthwhile achievement helps women to participate in social communication and increase the likelihood of independency. The likelihood of finding decent job for educated women is more in comparison with unskilled women, increase at age of marriage and women education shows that they preference the second alternative option to hope any change in their status; they prefer use their time and money in university entrance exam because this would be the best chose of them. So in case of Iran, individual preferences would be more conducted by structural constrains and limit opportunities rather than developed countries.

Table 4- Cross tabulation of employment status by level of education

Education Degrees		Employment Status		Total
		Unemployed	Employed	
Diploma	Count	571	270	841
	% within Education Degree	67.9%	32.1%	100.0%
Bachelor	Count	476	374	850
	% within Education Degree	56.0%	44.0%	100.0%
Postgraduate	Count	25	33	58
	% within Education Degree	43.1%	56.9%	100.0%
Total	Count	1072	677	1749
	% within Education Degree	61.3%	38.7%	100.0%

Chi-Square= 33.57 Sig= 0,000

Table 5- Cross tabulation of attitude of university educated women toward education as an Investment

Education degrees		Do you think your education was profitable investment?			Total
		Yes	No	Some how	
Bachelor	Count	177	334	260	771
	% within Education degree	23.0%	43.3%	33.7%	100.0%
Post graduate	Count	18	20	18	56
	% within Education degree	32.1%	35.7%	32.1%	100.0%
Total	Count	195	354	278	827
	% within Education degree	23.6%	42.8%	33.6%	100.0%

Chi-Square=2.16 Sig=0.27

Table 6- Cross tabulation of the main reason for leaving the job and the level of education

Education Degrees		The main reason for leaving job						Total
		Low income	Inappropriate surroundings	Uninterested	Husband's disagreement	Child bearing	Pursuing higher degree	
Diploma	Count	30	18	8	7	5	1	69
	% within Education Degrees	43.5%	26.1%	11.6%	10.1%	7.2%	1.4%	100.0%
Bachelor	Count	40	16	14	2	7	4	83
	% within Education Degrees	48.2%	19.3%	16.9%	2.4%	8.4%	4.8%	100.0%
Post graduation	Count	4	0	1	1	0	1	7
	% within Education Degrees	57.1%	.0%	14.3%	14.3%	.0%	14.3%	100.0%
Total	Count	74	34	23	10	12	6	159
	% within Education Degrees	46.5%	21.4%	14.5%	6.3%	7.5%	3.8%	100.0%

Chi-Square= 11.96 Sig=0.30

Table 7- Cross tabulation of cost benefit appraisal of employed university educated and compensation for the costs of education

Education degrees		How much does your job compensate your costs of education?					Total
		Just a tiny	Small	Some how	Much	So Much	
Bachelor	Count	66	71	151	54	23	365
	% within Education degree	18.1%	19.5%	41.4%	14.8%	6.3%	100.0%
Post Graduate	Count	5	6	16	5	1	33
	% within Education degree	15.2%	18.2%	48.5%	15.2%	3.0%	100.0%
Total	Count	71	77	167	59	24	398
	% within Education degree	17.8%	19.3%	42.0%	14.8%	6.0%	100.0%

Chi-Square= 1.076 Sig=0.89

Table 8- Cross tabulation of attitude of university graduated women toward their university education

Respondents Attitude	Considering what you know would you have persuade university education if you had decent job opportunity with your high school diploma?		Considering what you know would you have persuade university education if you had good marriage opportunity with your high school diploma?	
	Frequency	Percent	Frequency	Percent
Yes	716	86.3	738	89.2
No	114	13.7	89	10.8
Total	830	100.0	827	100.0

Table 9- Cross tabulation of attitude of university graduate toward gender equality

Respondents Attitude	Women should access to all jobs which men have such as judge.		One of the most important of Iranian women's desire is financial independence.	
	Frequency	Percent	Frequency	Percent
So little	17	2.0	8	1.1
Little	104	11.5	44	5.0
Some How	170	18.8	128	14.1
Much	238	26.2	304	33.3
So Much	377	41.5	425	46.5
Total	906	100.0	909	100.0

Table 10- Job satisfaction Index among Employed University Educated Women

Employment Condition		Job Satisfaction Index			Total
		Low	Medium	High	
Full time	Count	18	82	50	150
	% within Employment Status	12.0%	54.7%	33.3%	100.0%
Part Time	Count	12	78	14	104
	% within Employment Status	11.5%	75.0%	13.5%	100.0%
Total	Count	30	160	64	254
	% within Employment Status	11.8%	63.0%	25.2%	100.0%

Chi-Square =13.66 Sig=0.01

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Investigating the Phenomenon of the Internet Addictive Usage Among Adolescents and Youth (15-25 years of age) in the City of Tehran¹

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Abstract: *The present paper is an investigation into the phenomenon of the internet addiction as a social problem facing the information and communications age. The phenomenon of the internet addiction has recently emerged in the developed nations as a consequence of the increasing expansion in the network of the electronic communications. Such a phenomenon proves to have already involved a myriad of dysfunctions for the individual, the family, and the society. This paper is an adapted version of a survey research conducted in 2006 on the Situation of the Internet Addiction in Iran. The statistical population consists of the adolescent and the youth between 15 to 25 years of age, who have access to the internet connection. The sample size equals 800 subjects. The findings indicate that the phenomenon of the internet addiction does exist in Iran, too. Although the usage is attributed to most of the adolescent, young users are determined to be normal. Moreover, based on the present research findings, the addictive use of the internet among some of the adolescent and the youth is associated with problems such as evading social responsibility, social isolation, lack of social support, and inefficient job and educational performances. The above-mentioned problems bear direct relationship with the internet addiction, while the latter has an adverse effect on the feeling of self-worthiness.*

Key Words: The Internet addiction; Taking social responsibility; Social isolation; Job & educational inefficiency; Feeling of self-worthiness

Introduction

Access to the internet is on the rise, and everyday increasing numbers of people join in as users of the internet. It is becoming omnipresent: the internet can be found at home, school, and even at the neighborhood shopping center. One estimate indicates that 66 million Americans in 1981, had access to the internet, their number exceeded 83 million in 1999 (Biggs, 2000, p. 1). Among the internet users, the youth make the most use of it. The findings of the research conducted in the U.S.A showed that the internet use was prevalent among the youth more than any other age groups (Bullen & Harre, 2005, p. 5). Children are another age group that uses the internet extensively. In 2005, more than 77 million children entered the cyberspace (Ghamami, 2005, p. 45).

Parallel to the continuing occurrence of an increase in access of the internet, we are faced with a new type of addiction, the internet addiction, which is on the rise in the information age. Like any other addiction, the internet addiction is associated with certain symptoms such as anxiety, depression, peevishness, restlessness, obsessive-compulsive state, seclusion, emotional disorders, and disruptive social relationships. Moreover, as individuals' relations (those of children and the adolescent, in particular) are increased in the cyberspace, their relationships in the real world decrease, and there appears the likelihood of a fall in their educational performance (Samson and Keen, 2005, p. 2)

Through the internet addiction the individuals are transformed into "loose" beings. It drastically influences their social relationships. As a result of excessive use of the internet, the users' work productivity and efficiency fall. These internet users arrive late at work, and under act. Lack of physical activity and obesity accompanied by

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symptoms like back ache, and pain in vertebral muscles are other resultants of the same problem. Even upon withdrawing from the internet, these users experience symptoms of disorder (Seth, 2003, p. 1).

At any rate, the internet addiction becomes more epidemic as the access to online sources increases. The worldwide web is a useful informer which contains rich and entertaining sources. Nonetheless, for many internet addicts the benefits are being transformed into pathologies bringing losses, and psychological and behavioral abnormalities (Ferris, 2002, p. 1). Studies show that %14 of the internet users are pathological users, suffering symptoms of obsessive behavior, narcissism, depression and the like (Zahnister, 2000, p. 1).

The present paper aims to answer several basic questions: (1) whether the internet addiction exists in Iran? ; and (2) What implications addictive use of the internet bears upon individuals (children and the youth, in particular) in various social, cultural and educational settings?

Perspectives and Theories explaining the internet Addiction and its Consequences

What attracts people to the internet, and why do some individuals who enjoy it, experience difficulties and are exposed to risks like losing their jobs and/or becoming entangled in disruptive social relations and financial losses? In response to these questions a number of approaches have been developed. Studying addiction to the internet is an interdisciplinary subject, and its causes and consequences have been investigated, though from different viewpoints, by various sciences such as the medicine, communications, sociology, law, ethics, and psychology. In this section, we have mainly dealt with its psychological and social dimensions. The most important theories on reasons for addictive attraction of people to the internet are:

1. Psychodynamic and Personality Explanations
2. Social Control Theory
3. Behavioral Explanation
4. Biomedical Explanation
5. Cognitive Explanation
6. Cognitive-Behavioral Explanation

The addiction to the internet develops and grows in response to the previous psychological conditions. In most cases this overall pathological condition includes depression, social anxiety, and a variety of psychosis. When the individual is exposed to the use of the internet, the user's problematic utilization process begins. This background pathology is a predisposition or a tendency of some kind which generates stress. There are, of course, some other factors involved in the genesis and maintenance of the disorder:

First, there are some behavioral reinforcements which act as conditioning factors. The room, chair, touching the keyboard and the mouse, the sound by which the PC starts running, the bugle or ringing of a bell, are all included in this type of factors.

Second, the cognitive malevolence is also active here. This is so because the uncompromising perception concerning the self and the universe produces the main indices of such a disorder. Beliefs such as "no one likes me outside the internet", or that "the internet is the only place in which people truly reveal themselves", and that "everyone is somehow infected with the internet", are problematic cognitive thoughts concerning the "universe".

Third, the qualitative use of the internet depends on the supportive social web that the individual has access to. If all factors are present in the individual without any social support, then the chances are that he/she turns to the general internet addiction which is characterized by acts intended to attract social attention, impersonal behaviors and job negligence. But, if social factors are in place, it is likely that the person develops specific internet addiction in which he/she targets special domains such as games or pornography.

From the behavioral-cognitive point of view, symptoms of the disorder include obsessive thoughts about the internet, weakness in shock control, inability in stopping the use of the internet, and most importantly the belief that the internet is the individual's sole friend. In addition, when disconnected, the individual keeps thinking about the internet, prepares for the next connection, and spends much on buying the internet related items; these are symptoms of the disorder. Another main problem is separating the self from friends in favor of the internet friends, and ultimately he/she feels guilty about the use of the internet, and starts telling the friends lie about the time spent, and tries to keep it as a secret. These are other symptoms of the disorder. These individuals are aware that their action is not socially admired, yet they are unable to stop it. This is so because stopping it results in feeling of less self-worthiness, and consequently more symptomatic behavior will appear (Omidvar & Saremi, 2002, p. 52).

Literature Review

Growhole in an attempt to explain why people use the internet in an addictive manner believes that the reason for people's tendency toward the addictive use of the internet is that they want to avoid problems they face in their personal lives. In a sense, in order to evade the life-related problems people turn to the internet. The addicts often create a 'second life', or a hide-out place to forget their problems while being online, this is very similar to feel numb and drunk, as reported by alcoholics, while drinking (Sexuality Education Resource Centre, 2003, p. 3).

Kratt in his research, conducted in 1999, concluded that the youth withdrawing from social contacts use the internet as an instrument to evade the reality (Lim et al., 2004, p. 2). Other researches have indicated that one of the consequences of dependence on the internet is that the individuals spend less time with their family. Among symptoms of this dependency are seclusion, disorder in sleep pattern, feeling of a need to be alone, and forgetting the family responsibilities. On the other hand, one must admit that it is this factor of social isolation which intensifies the internet addiction among the individuals.

Jung (1996) in his researches also found that %58 of high school students, experienced rapid fall in their studying habits, and then their grades fell considerably and their absence from the school rose, following the excessive use of the internet. Despite its many capabilities, the internet is recognized as an excellent educational tool, alas the young students instead of performing creative activities often enter irrelevant sites, chat rooms, and spend time strolling inside the internet friendship services and dealing with its endless software programs accessing games. Birdi (1996) also found that the excessive use of the internet, making students to stay up, occupying the university's phone lines, has exposed the students to dangers of improper use of the internet, educational difficulties, and lack of participation in the curriculum, which in turn makes the problem of the internet addiction more acute among these individuals (<http://www.internetaddictoin.com>).

Orzak, in a study carried out in 1999 found that the individuals with the internet addiction are those who are abrasive, lonely, and shy, depressed and suffer a variety of other addictions (Chebbi et al., 2000, p. 1).

Seth also observes, in his research, that the internet addiction transforms humans into abandoned and loose individuals and it affects their relationships with others. The work productivity and efficiency of people who use the internet excessively are reduced. These individuals arrive late at work, and under act. Moreover, the individuals addicted to the internet chatting are engaged excessively in virtual relations and the chances of their involvement in unethical issues are high. The internet friendship quickly displaces the importance and status of the familial relationships and those held with the old friends (Fenichel, Michael, 2003).

In all, based on the previous research, other consequences of the internet addiction are: feebleness in social relationships with others, and the occurrence of disorder in real life skills (King, 1996, p. 7), disorder in professional and private life of the individual (Duran, 2003, p. 3), lack of control on conducts, distorting the time, and a reduction in modesty and decency (De Angelis, 2000, pp. 1), tearing away from the real life (Bullen & Harre, 2000, pp. 3).

Also based on the previous research, the most important reasons for the internet addiction are: A drastic change in the individual's psychological state and temperament (Chebbi et al., 2004, p. 2), evading the reality and withdrawing from contacting others in the society (Lim et al., 2004, p. 2).

Theoretical Framework of the Research

The theoretical framework of this research is a combination of some of the perspectives as discussed above, with the previous research. In studying the relationship of variables concerning evading social responsibility and the internet addiction, the Hirschi's social control theory is used. Based on this, the less committed the individual is towards others, the more likely his/her tendency toward deviant behavior, including the addictive internet use.

To study the relationship of self-worthiness with the internet addiction, we have utilized the cognitive-behavioral approach. The individual's belief that only within the internet he/she holds power, and is considered "somebody", and that it is "there" that he/she receives some sort of respect, is a source of the individual's tendency toward addictive use of the internet.

In examining the relationship of lack of social support with addiction to the internet, we, again, have used the cognitive-behavioral approach. The individual's belief that the internet constitutes his/her sole, sincere and special friend, increases his/her interest in virtual friends, while reducing his/her interest in real-life friends, resulting in social isolation.

As shown in the figure below, the phenomenon of addictive use of the internet has a bi-directional relationship with each of the variables of self-worthiness, lack of social support, social isolation, educational and job failure, and evading the social responsibility. In fact, these variables, while affecting the internet addiction, are also recognized as its consequences. This recognition, which points to the existence of a bi-directional relationship, is also acknowledged in the previous research.

Considering such a theoretical framework, the model used in this research for explaining the internet addiction is shown in the following figure:

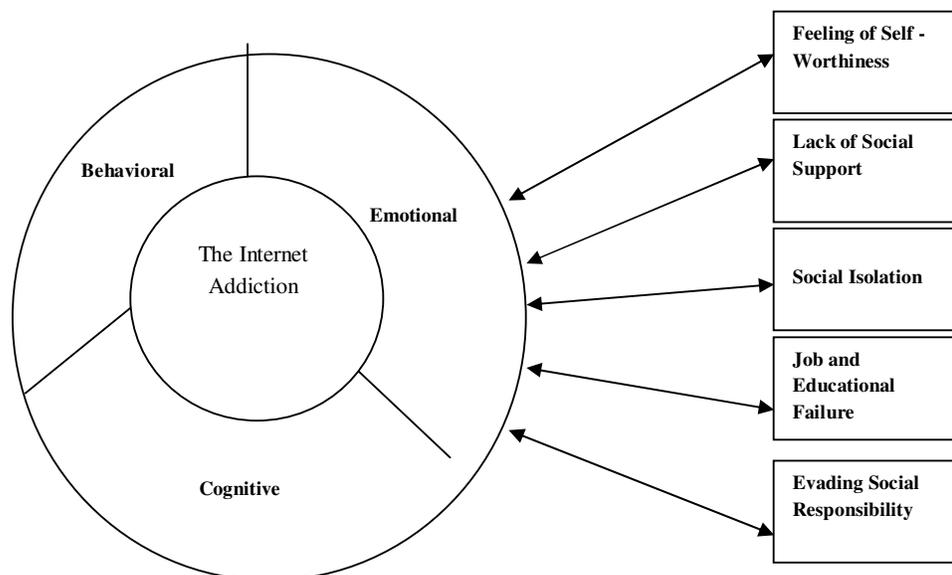


Figure 1: The Model of Relationship between the Addictive Usage of the Internet and Psycho-Social Problems.

Research Hypotheses

Considering the theoretical framework, expounded earlier, this research's hypotheses are:

- 1- There is relationship between the internet addiction and taking of social responsibilities.
- 2- There is relationship between the internet addiction and social isolation.
- 3- There is relationship between the internet addiction and job and educational failure.
- 4- There is relationship between the internet addiction and the lack of social support.
- 5- There is relationship between the internet addiction and feeling of self-worthiness.

Methodology

This is a survey method research. The statistical population consisted of adolescents and youth between the ages of 15-25 residing in Tehran, who had access to the internet. Among them, a sample of 800 persons was selected. The sampling was carried out through two methods. The first method used the cluster sampling (PPS), in which a total of 600 persons were selected by referring to the household. In the second method, a total of 200 users were considered through the random sampling among café nets in Tehran, whom were subsequently interviewed and who filled a questionnaire.

The questionnaire has been our main measuring instrument in this research. In order to measure the degrees and aspects of the internet addiction, a combination of the Davis Scale (comprising 20 questions), and Kaplan's Questionnaire (comprising 28 questions), with a thorough consideration of the Iranian socio-cultural setting, was used. Having prepared the preliminary questionnaire, a pre-test was administered on a 50-subject sample from the total sample to ensure the reliability of the items.

The Findings

Section One: Descriptive Findings

A) The frequency distribution of the respondents in terms of having a computer and access to the internet:

- 1- Out of all the subjects comprising the sample, %94.8 had a computer at home.
- 2- Among the sample population, %37 had been using computers for less than three years, and %76.8 of the respondents has been using a computer for less than six years.
- 3- Out of the sample population, %61.6 had been connected to the internet for less than three years. But, in all, the average of access to the internet within the sample was three years and 69 days.
- 4- Out of the sample population, %68.1 had access to the internet connection for 10 hours per week.
- 5- Out of the sample population, %72.5 connected to the internet for less than 2 hours per each connection.
- 6- Within the sample population, %44.3 of their internet use was defined as “education and work” related affairs.
- 7- On average, out of every 9 households referred to in Tehran city, there existed only one adolescent or youth between the ages of 15-25 who had access to the internet.
- 8- Within the sample population, only %76.4 of the individuals had access to the internet at home, and %9.5 used the connection through the café nets.

B) The frequency distribution of the respondents in terms of the degree of the internet addiction:

In this research, we study three aspects of the phenomenon of the internet addiction. These three aspects are emotional, behavioral, and cognitive. The results are as follows:

- 1- Out of the sample population, %25.8 were addicted to the internet emotionally.
- 2- Out of the sample population, %33 were addicted to the internet behaviorally.
- 3- Out of the sample population, %21.6 were addicted to the internet cognitively.
- 4- Combining the various aspects of the internet addiction, the results indicated that out of the sample population, %66.4 were not addicted to the internet, while %24.3 were addicted to the internet use.

C) The frequency distribution of the respondents in terms of psycho-social problems:

- 1- Out of the sample population, %60.2 had high-level feeling of taking social responsibility, while the rest showed medium and low levels of such a feeling.
- 2- Out of the sample population, %73 lacked social isolation, and %27 had high- and medium-levels of social isolation.
- 3- Out of the sample population, %73.7 suffered low-level job and educational failure, while %26.3 exhibited medium and high levels of such a failure.
- 4- Out of the sample population, %64.8 enjoyed high level of social support, while %35.2 showed medium and low levels of such a support.
- 5- Out of the sample population, %60.7 enjoyed high level of self-worth feeling, while %18.2 showed medium and low levels of such a feeling.

Section Two: Analytical Findings

The analytical findings of this research are presented under the two categories of (1) The test of the relationship between the internet addiction and the influencing and consequential variables and, (2) The test of the difference and the spread of aspects of the internet addiction:

A) The test of the relationship between the internet addiction and psycho-social problems:

- 1- There existed a significant relationship between the two variables of the internet addiction and that of evading social responsibility ($R=0.38$ $F=0.01$). In other words, the higher the level of the internet addiction in an individual, the lower was the level of his/her taking social responsibility.
- 2- There was a significant relationship between the internet addiction and social isolation ($R=0.36$ $F=0.01$). That is, the level of social isolation rose as the degree of the individual's internet addiction was increased.
- 3- A significant relationship existed between the two variables of the internet addiction and job/educational failure ($R=0.34$ $F=0.01$). It means that the more intense the individual's addiction to the internet, the higher is the degree of his/her failure in job and education.

4- Between the two variables of the internet addiction and lack of social support, there existed a significant relationship ($R=0.28$ $F=0.01$). In other words, the more intense the individual's addiction to the internet, the lower is the amount of social support he/she receives.

5- There was a significant relationship between the two variables of the internet addiction and feeling of self-worthiness ($R=0.29$ $F=0.01$). It means that the lower the degree of the internet addiction, the higher is the individual's feeling of self-worthiness.

Discussion and Conclusion

The present paper dealt with a new social problem concerning the fruition of the internet technology in Iran. The internet was introduced in Iran in 1994. Ever since then, the number of its users has grown considerably each year. Based on a report by the Ministry of Communications and Information Technology of Iran, within the span of the past four years only, the number of the internet users has grown by 25 times as many. It is, therefore, an inevitable need to understand scientifically such a growing phenomenon in Iran, keeping an eye on its implications. This research has attempted a sociological investigation into the internet addiction and its consequences among the adolescent and the youth residing in Tehran city.

The research findings indicate that the respondents have an average internet access of 11 hours and 22 minutes per week. The average of connection duration of the respondents per each connection is one hour and 56 minutes. According to Holmes, when the amount of time spent on the internet use is below 19 hours per week, then that may be regarded as constituting a normal internet usage for the individual. Thus, in Holmes view, if an individual spends more than 19 hours per week on the internet, then he/she would be considered as an internet addict. Nonetheless, a "proper" definition of an internet addict, as Holmes maintains, is the one who spends at least 38 hours per week, or 8 hours per day, on the internet. In any case, regardless of quantity of the time spent on the internet, one can focus on symptoms of addiction to it.

Based on research findings, it can be argued that the amount of the time spent on the internet among adolescents and youth in Iran is normal, and it does not come close to an addictive usage threshold. In fact, out of the total sample population, 66.4% of the adolescent and the youth who enjoyed the internet connection was not addicted to it. Yet, considering current trend in the growth of the internet in Iran, the 24.3% percentage of addicts to the internet among adolescents and youth, is a matter to be taken into serious consideration. One may posit the question of whether we are, considering the growth of the internet gradual penetration ratio in Iran, to face the spread of the internet addiction in Iran in the near future. In other words, one may adopt the assumption followed by a question: that given the current rate of the internet growth, and the increase of its users in Iran, would such growth and increase be matched by a growth in the internet addiction in Iran?

As to the degrees of the spread of each aspect of the internet addiction, the findings showed that 25.8% of the respondents was emotionally, 33% was behaviorally, and 21.6% was cognitively addicted to the internet.

Based on the research findings, most of adolescents and youth under study showed high levels of social responsibility. Moreover, the majority of the respondents were not involved in social isolation situations, had high educational and job achievement levels, enjoyed high measures of social support, and finally, their feelings of self-worthiness were rather high.

But, again, based on the research findings, those individuals who used the internet in an addictive manner felt less responsibility as far as their society and surroundings were concerned, involved in more social isolation situations, experienced more cases of failure in terms of their job and education, enjoyed less social support, and had lower rates of self-worthiness.

With regard to the consequences of the internet addiction, it should be pointed out that the internet, by itself, is an impartial and neutral device. The importance is to be attached to the fact that how the internet is being used by the individuals. If the internet is used properly and positively, it is a medium which would contribute much to the societal development. Otherwise, it is fraught with numerous problems. In other words, the worldwide web is an instant information network containing countless sources, the improper and excessive use of which, by some individuals who may immerse themselves in the depths of computer world, while divorcing from the real one, may result in converting the benefits into losses. The current global situation bears testimony to such an improper usage by some of the users in many nations. This has brought about a modern type of addiction, that of the internet in the information age which has embraced the computer revolution. At any rate, the internet dependency and the addictive use of it is the source of disturbance and disorder which can be found at the individual and societal levels, bearing numerous implications for adolescents and youth, in particular.

Our research findings are indicative of problems such as: lack of social responsibility, absence of social support, the presence of social isolation, and prevalence of failure in job and in education, and the feeling of worthlessness. These constitute both the consequences and causes of the improper and addictive use of the internet. Those affected by these problems in the society, feel more attachment toward the internet and its virtual space, thus becoming addicted to it. Such an addiction, in turn, intensifies the ordeal that these kinds of users already find themselves in.

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