

## Comparison of Mental Health in Male Adolescents with and without Internet Addiction

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**Abstract:** In presented study, mental health of male adolescents with and without Internet Addiction is compared.. Participants included 114 male adolescents, selected by purposive sampling method from Internet cafe` of Bandar Abbas which 55 individuals in group with Internet Addiction and 59 individuals in group without Internet Addiction were assigned. Data collecting tools of the research were including Young's Internet Addiction Test (IAT), and General Health Questionnaire (GHQ-28). The Independent Samples T Test was used to analyze test research hypothesis. Results indicated that adolescents with Internet Addiction in the overall mental health and Somatic symptoms, Anxiety/insomnia, Social dysfunction and severe depression experience had more problems significantly. Findings and implications for health adolescents are discussed. [Abbas Ebrahimi, Zoleikha Sadeghi. **Comparison of Mental Health in Male Adolescents with and without Internet Addiction.** Life Science Journal. 2011;8(4):609-612] (ISSN:1097-8135). <http://www.lifesciencesite.com>.

**Keywords:** Internet Addiction Disorder (IAD), Mental Health, Adolescents.

### 1. Introduction

Sine 1976 which internet has born in has become one of the most advanced technologies of today's world. People's simple access to this technology and being anonymous in this vast world are the distinctive characteristics that transformed this tech to one of the most commonly used technologies of the world.

Internet can be used in field of learning, educating, research project, human relation and personal interest. However, these characteristics which are the advantages of this technology can become the reason of trauma and mental problems in case of excessive usage (Greenfield, 2004). Internet pathological use causes some behavioral problems which are alike the symptoms of other addiction disorders (O'Reilly et al., 1996). In recent years with increasing the access to internet in Asian countries and of course in Iran, dependency and addiction to excessive internet use has increased and cause trauma and lots of mental disorder in users (Chou and Hsiao, 2000). Internet addiction is a modern addiction which is the outcome of easy access to the computers and online information. Peoples who suffer this kind of addiction can have signs and symptoms of those who are addicted to alcohol, gambling, drugs, or other Obsessive – compulsive behaviors. A way to describe the people who suffer this kind of disorder is, for such people virtual environments are more attractive than the real world. This addiction has affected millions of Americans and their families in different aspect of their lives such as school, family, work and social relations (Young, 1998).

Conducted studies have reported the prevalence of 0.3% to 22% (Vizeshfar, 2005; Kim et

al., 2006). The relation of internet addiction and mental health disorders has studied in different research (Yen et al., 2007; Mythily et al., 2008). According to one of these studies, internet addictions are usually alone, isolated and shy and suffer symptoms of depression (Niemz et al., 2005).

Other studies have shown that there is a relation between internet addiction and symptoms of depression, low self-confidence, anxiety, sociophobia, and having problem in education and work of the users. Park and Song have also linked internet addiction with number of friends, momentums, sensitivity in their relation with others and self efficiency (Park and Song, 2002). Lee et al. (2001) reported that anxiety, depression, self-effacement in internet addicts. Whang et al. (2003) have also implied compulsive behavior, depressed mood and sense of loneliness in internet addicts. Therefore according to available evidence from researches, the purpose of present study is surveying the mental problems and traumas among internet addicts in comparison with non-addicts. For this purpose a comparison has been made in a research between two groups about the Somatic symptoms, anxiety/insomnia, social dysfunction, and severe depression. On this basis, research hypothesis are:

- There was a significant difference in general health between internet addicts and non addicts.
- There was a significant difference in Somatic symptoms between internet addicts and non addicts.
- There was a significant difference in level of anxiety/insomnia between internet addicts and non addicts.

- There was a significant difference about Social dysfunction between internet addicts and non addicts.
- There was a significant difference of severe depression between internet addicts and non addicts.

## 2. Material and Methods

This is a comparative study which all of the information has collected with survey method. The study sample is a group of 114 male adolescent from Bandar-Abbas (southern city of Iran which home Bandar Abbas port) which has chosen with purposive sampling method. The ranges of samples age were between 17 to 24 years old with the Mean age of 19 and standard deviation of 2.6. we went to internet café for selecting samples and after describing the purpose of research for the participants and explaining their right to probable withdrawal and the privacy policy of the research, the questionnaire of internet addiction was distributed between the youngster users of the internet and after obtaining scores of the samples, they were classified into internet addicts and non-addicts. Accordingly 55 individuals (48.2%) were addicted and 59 (51.8%) were not addicted to internet. for gathering the data about internet addiction, Young's Internet Addiction Test, was used (Young, 2004). This questionnaire had 20 items and its answering scale was 5 degree Likert which scored from 1 (rarely) to 5 (always). The score range was between 20 to 100 and higher scorers indicate more dependency to the internet. In order to divide the samples into 2 groups of addicts and non-addicts, the cut-off point of 49 was choosed. Yoo et al. (2004) used Cronbach's alpha method and have reported the reliability coefficient of this test equal to 0.90. In present study the reliability coefficient of the test was 0.86 according to Cronbach's alpha method. For evaluation of mental health, the Scaled General Health Questionnaire-28 (GHQ-28) was used (Goldberg and Hillier, 1979). The questions of this questionnaire were analyzing the mental condition of participant in the last 1 month and include symptoms of abnormal thoughts and feeling and aspects of observable behavior and stresses on the situation of here and now. This questionnaire consists of four sub-scales and each sub-scale consists of 7 questions. Questions 1 to 7 were related to physical symptoms sub-scale, 8 to 14 were related to anxiety/insomnia sub-scale, 15 to 21 were related to social dysfunction sub-scale and 22 to 28 were related to severe depression sub-scale. The method of answering the questions was according to 4 degree Likert which varies from 0 to 3. There are two kind of scoring for this questionnaire. In The first method, questions are graded as 0,0,1,1. In this

method scores varies between 0 to 28 .Second method is the Likert Grading Method which a score of 0 to 3 is dedicated to each question and the score of test is varied between 0 to 84. In both of the grading methods, lower score indicate higher mental health and in this study second method has been used. Taghavi has mentioned the reliability of the test with 3 method of Test-Retest, Split-half and Cronbach's alpha method in Iran, 0.70, 0.93 and 0.90 respectively. The validity of the general health questionnaire in Iran also reported at the appropriate level by using 3 methods of Concurrent validity, sub test correlation with total score and Factor Analysis. (Taghavi, 2000) In present study in order to evaluating the reliability of test, Cronbach's alpha and Test-Retest have been used which reliability coefficient of this questionnaire with Cronbach's alpha coefficient is equal to 0.88 and by using the Test-Retest method it is equal to 0.89 . In the section of descriptive Statistics, indexes of mean and standard deviation were calculated and the Independent Samples T Test was used for testing the hypothesis of the study .The calculations was made by SPSS ver.16 statistic software.

## 3. Results

At first a statistical analysis was done to check the study's hypothesis. to do so , mean and standard deviation of each of variables was calculated which is presented in Table 1.

Table 1. Mean and standard deviation of the variables of the study

Variable	Group	N	Mean	Standard Deviation
Scores of IA questionnaire	With IA	55	78	4.78
	Without IA	59	28	3.21
Score of general health	With IA	55	60.38	6.94
	Without IA	59	26.05	5.84
Somatic symptoms	With IA	55	14.81	2.34
	Without IA	59	6.18	1.98
Anxiety/insomnia	With IA	55	15.49	2.48
	Without IA	59	5.86	1.46
Social dysfunction	With IA	55	14.89	2.43
	Without IA	59	7.35	2.46
Severe depression	With IA	55	15.18	2.22
	Without IA	59	6.64	2.51

IA= Internet addiction

As earlier mentioned Independent Samples T Test was used to test the hypothesis. First hypothesis of study was implied to a significant difference of scores in general health between two groups of internet addicts and non-addicts which for evaluating the hypothesis, T test value was equal to 28.62 with 112 degree of freedom in level of 0.001. Detailed findings have presented in Table 2

Table 2. Mean score comparison of two groups of internet addicts and non-addicts in general health

Group	N	Mean	Mean	T	DF	P
			Difference value			
With IA	55	60.38	34.33	28.62	112	0.001
Without IA	59	26.05				

IA= Internet addiction

Second hypothesis was implying to the significant difference of Mean scores of Somatic symptoms between two groups of internet addicts and non addicts which for evaluating the hypothesis, T test value was equal to 21.22 with 112 degree of freedom in level of 0.001. Detailed findings have presented in Table 3

Table 3. Mean score comparison of two groups of internet addicts and non-addicts in Somatic symptoms

Group	N	Mean	Mean	T	DF	P
			Difference value			
With IA	55	14.81	8.63	21.22	112	0.001
Without IA	59	6.18				

IA= Internet addiction

Third hypothesis was implying to the significant difference of Mean scores of anxiety/insomnia between two groups of internet addicts and non addicts which for evaluating the hypothesis, T test value was equal to 25.38 with 112 degree of freedom in level of 0.001. Detailed findings have presented in Table 4.

Table 4. Mean score comparison of two groups of internet addicts and non-addicts in anxiety/insomnia

Group	N	Mean	Mean	T	DF	P
			Difference value			
With IA	55	15.49	9.62	25.38	112	0.001
Without IA	59	5.86				

IA= Internet addiction

Fourth hypothesis was implying to the significant difference of Mean scores of social dysfunction between two groups of internet addicts and non addicts which for evaluating the hypothesis, T test value was equal to 16.40 with 112 degree of freedom in level of 0.001. Detailed findings have presented in Table 5.

Table 5. Mean score comparison of two groups of internet addicts and non-addicts in social dysfunction.

Group	N	Mean	Mean	T	DF	P
			Difference value			
With IA	55	14.89	7.53	16.40	112	0.001
Without IA	59	7.35				

IA= Internet addiction

Fifth hypothesis was implying to the significant difference of Mean scores of depression between two groups of internet addicts and non addicts which for evaluating the hypothesis, T test value was equal to 19.15 with 112 degree of freedom in level of 0.001. Detailed findings have presented in Table 6.

Table 6. Mean score comparison of two groups of internet addicts and non-addicts in depression

Group	N	Mean	Mean	T	DF	P
			Difference value			
With IA	55	15.18	8.53	19.15	112	0.001
Without IA	59	6.64				

IA= Internet addiction

#### 4. Discussion

Present study has been made with the purpose of analyzing and comparing the general health of those who are addicted to the internet and those who are not, and the final result was verified the hypothesis of the study. Accordingly in general health and also in indexes of Somatic symptoms, anxiety/insomnia, social dysfunction and depression ,those who were addicted to the internet get higher scores significantly, in other word internet addicts have more health problem in comparison with other group i.e. non-addicts. In four components of general health addicted group, suffer more health problems and The findings was consistent with the previous studies (Yen et al., 2007; Myhily et al., 2008; Lee et al., 2001; Morgan and Cotton, 2003).

Findings of the present study had useful practical implications for prevention and treatment of internet addiction for physicians, psychiatrists and counselors. Internet addiction is a modern addiction which we are getting to know it's dimensions more and more every day. Relationship of this variable with other variable like personality characteristics, identity styles and other kind of addictions could be appropriate subjects of research for future studies. In addition, before generalizations it has to be considered that sample group was limited to male sex and questionnaire was self-reporting.

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