Shiraz E-Med J. 2020 November; 21(11):e99209. doi: 10.5812/semj.99209.

Published online 2020 April 29. **Research Article**

The Relationship Between Internet Addiction and Social Adjustment, and Test Anxiety of the Students of Ardabil University of Medical Sciences

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Received 2019 November 03; **Revised** 2020 January 12; **Accepted** 2020 January 17.

Abstract

Objectives: This study was conducted to determine the relationship between Internet addiction and social adjustment, and test anxiety among the female students of Ardabil University of Medical Sciences.
Methods: This descriptive correlational research was conducted on all female students of Ardabil University of Medical Sciences studying in the second semester of the academic year 2019. The sample consisted of 346 students who were selected by simple random sampling. Data were collected using three questionnaires assessing Internet addiction, social adjustment, and test anxiety. The obtained data were analyzed using Pearson correlation and regression analysis.
Results: The results showed that there was a significant positive correlation between Internet addiction and test anxiety. There is also an inverse correlation between social adjustment and test anxiety. The results of step-by-step regression analysis showed that among the variables under study, the Internet addiction variable predicts 0.32 and along with the social adjustment variable 0.37 variance of test anxiety.
Conclusions: It can be concluded that the level of test anxiety in students can be controlled through the necessary training to make better use of the Internet and prevent its addiction.

Keywords: Internet Addiction, Social Adjustment, Test Anxiety, Students of University

1. Background

Test anxiety is one of the most threatening events affecting students. Students with severe fears of poor performance on the tests will experience test anxiety. Test anxiety is a major contributor to a variety of negative outcomes, including psychological distress, failure to complete university education, and insecurity (1).

Test anxiety is a specific type of anxiety characterized by physical, cognitive, and behavioral symptoms while preparing for the exam and performing tests. It can become a problem when high levels of test anxiety interfere with getting ready to take a test (2).

Test anxiety occurs in students who know that their performance is being assessed or evaluated. This anxiety is a response to stress (3) and consists of three main cognitive, emotional, and behavioral components. Students who experience cognitive test anxiety are worried about the lack of confidence. They may develop negative thoughts and doubt about their scientific ability and intellectual competence (4). Also, when they are subjected to test, they are more likely to over-emphasize potential negative results and feel hopeless. Some students may feel that the test requires the correct answer to each question; when it doesn't happen they may think of their incompetence. Therefore, they provoke negative thoughts, like "I knew I would not pass this test", "I know I am in a poor grade", or "everyone knows I am not smart". For students to have the best opportunity for academic success, negative thoughts must be reduced and controlled. When students are unable to control their emotions, they may experience higher levels of stress leading to have more concentration problems (5).

Students' test anxiety leads to anxiety-related behavior due to procrastination, less-effective study strategies, and lack of test skills (6).

It creates problems for many students and can have a

negative impact on the academic ability of many people suffering from test anxiety (7). On the other hand, test anxiety may be related to the lack of organizational and study skills by the student. However, personal and professional growth can also be an obstacle (8). Students with a high level of test anxiety, both at the time of study and while taking the test, use their study and learning skills lower than their ability and knowledge (9). Anxiety reactions are common under threatening conditions. However, excessive anxiety may disable the individual and interfere with effective functioning (10). About 10% of the students suffer from test anxiety that justifies seeking treatment (11).

Therefore, helping people develop the social skills needed to live effectively, increase self-esteem and self-control in dealing with problems and solving them, as well as helping them develop the necessary emotions and social skills to successfully adapt to the social environment and effective life in the community seem essential (12).

Since human behavior is influenced by different factors, and social pressures have a great impact on one's behavior, flexibility is one of the traits of humans. He can adapt himself not only to the environment but also he can change the environment as desired (13).

Through the power of thoughts and learning beyond the initial instinctive reactions, man must learn everything, especially the activities making him adapt to the social environment.

Thus, human adaptation means that social adjustment and socialization is a process in which an individual learns and internalizes values, beliefs, attitudes, and customs of the community through communicating with others to adjust to the surrounding social environment. Social adjustment is a process, in which the individual can become absorbed into the group by learning the principles and practices accepted in the group or community, and also by aligning the needs and desires with the considered group. In general, social adjustment is a person's adjustment to the environment, which may be achieved by changing himself or the environment (14). Kim et al. (15) studied the effects of coping strategies on social adjustment and showed that coping styles are influenced by stress, aggression, social support, and cognitive levels, and there is a direct relationship between cognition and social support. Also, the results of Sapranaviciute et al. (16) research have shown that coping strategies significantly affect social domination. Pierceall and Keim (17) also found that coping with stress had a significant effect on social adjustment and self-sufficiency. On the other hand, new communication technologies enabling simultaneous and unlimited communication among people without spatial dependence have created a new world called the virtual world (18).

In recent years, the Internet has become the most important scientific and recreational tool for teenagers and adults around the world. The Internet has provided a quick and easy way to search for information and connect with others, and because of its multimedia and interactive nature, it has influenced a large part of today's human life. But what has been the source of the negative effects of the Internet on the functioning of daily life, family relationships, and emotional health is the lack of control over the use of this emerging technology and its pathological use (19, 20).

This phenomenon has been described as Internet addiction (21) and is considered as one of the forms of behavioral addictions (22).

In fact, Internet addiction is a concept that has been around since 1995, and gradually different types of addiction, such as chat addiction, online gambling, addiction to chat rooms and pornography, can destroy relationships, emotions, and so on. Finally, it provides the soul and psyche of people (23). Internet addiction is a physical and mental disorder that includes symptoms of tolerance, separation, emotional disorders, and social disorders (24).

The American Psychiatric Association defines Internet addiction as a pattern of Internet use that causes functional impairment and is associated with unpleasant internal conditions over a two-month period, and provides seven criteria for diagnosing it (at least three criteria during two). Months: (1) Symptoms of tolerance or reduced pleasure resulting from repeated use of the Internet; (2) The symptoms of quitting as a result of stopping (reducing) excessive and prolonged use of the Internet; (3) The time of using the Internet lasts longer than what the person initially intends; (4) Continuous tendency to control the use of the Internet; (5) Notable for Internet-related matters; (6) Reduction of social, occupational and recreational activities due to the use of the Internet; (7) Continuation of use despite awareness of its negative effects (25).

Internet addiction is an impulse control disorder, and the maladaptive pattern of Internet use can lead to significant discomfort or clinical disorders causing psychological, educational, and occupational problems in one's life (26-28). It has shown that the prevalence of Internet addiction among young people across societies and cultures ranges from 1.6% to 30%, and also, a rapid increase in the number of Internet users also has increased the prevalence of Internet addiction (29-31). Internet addiction can have

detrimental psychological and behavioral effects on people. Anxiety, depression, sleep disorders, mental illnesses, such as social phobia, attention deficit, hyperactivity disorder, bipolar disorder, as well as difficulties in interpersonal relationships, suicide, aggression, and high arousal are some of the identified consequences of Internet addiction.

On the other hand, some studies have examined some demographic characteristics as the predictors of Internet addiction, such as gender, age, unemployment, and marriage. Personality traits of the users is another factor that has been considered in some studies and includes characteristics, like shyness, impulsivity, loneliness, anxiety, depression, neurotic traits (anxiety, anger, and hatred, depressed mood, shame, impulsivity, vulnerability to stress (violence and aggression, intrinsic personality style, low self-esteem, unstable emotions, imagination, looking for novelty, avoiding injury, reducing dependency on rewards, extraversion, and openness) (32-35).

Much attention has been paid to Internet addiction in recent years. The mentioned features underlie the behavioral system of individuals; therefore, addressing this issue can clarify certain aspects of a person's performance. Since adaptation has an impact on different levels of social life, theoretical approaches attempt to explain the dimensions of adaptation in terms of confounding factors.

2. Objectives

Therefore, the present study aimed at investigating the role of Internet addiction and social adjustment in the test anxiety of the students of Ardabil University of Medical Sciences to reveal some of the ambiguities of this important psychological construct.

3. Methods

3.1. Study Population, Sample Size and Method of Calculation and Sampling Method

This research was a descriptive and correlational study based on its purpose and data collection method. The statistical population included 346 male and female students of Ardabil University of Medical Sciences in the academic year 2018 - 2019 selected using the Morgan table with 95% confidence. Samples were randomly selected from male and female students with different educational backgrounds.

3.2. Data Collection Method and Tools, Determining the Scale Validity and Reliability

3.2.1. Farahbakhsh Social Adjustment Questionnaire

This questionnaire is called the Student Assessment test (ASD) developed by Farahbakhsh (36) based on the theoretical foundations and studies on students' compatibility.

The part one of the test's questions were designed based on the Student Adaptation to College questionnaire (SACQ) developed by Becker and Sincer (1984), the second part based on the Anton and Reed SAC test (1991), and the third part was designed based on the observation of student responses at the beginning of the first semester of the academic year arranged by consultants. The selected questions for the third part were chosen from the SACQ after translation and adaptation to Iranian dialect and culture, and questions that were not relevant to the Iranian cultural and dialectical framework were excluded. Farahbakhsh (36) evaluated the reliability and validity of this questionnaire by administering it to 771 students of Isfahan University of Medical Sciences and reported the validity coefficient of 0.71 for the whole test and 0.58 - 0.82 for the subscales. Cronbach's alpha coefficient was used to calculate the reliability of the test, which was 0/94 for the whole test and 0.73 - 0.81 for the sub-tests indicating its desired validity and reliability for using on students (36).

3.2.2. Internet Addiction Test

Internet Addiction test (IAT) was designed by Young and is one of the most valid tests on Internet addiction. It is a 20-item test, which is self-administered and scored on a Likert scale. The test measures various aspects of Internet addiction and determines whether the overuse of the Internet affects different aspects of one's life. Young et al. reported the internal validity of the test higher than 0.92 and the significant validity using the test-retest method (35).

3.2.3. Sarason Test Anxiety Scale

The Sarason Test Anxiety scale was developed by Sarason in 1957. The test consists of 30 items of Yes/No type. Given the appropriate psychometric properties and standard cut-off scores for this scale, it is commonly used to measure test anxiety. It provides the opportunity to obtain the subject's mental states and physiological experiences before, after, and during the test using a self-report method. In this scale, the scores range from 0 to 37 (37). The cut-off points are as follows: mild anxiety (scores: ≤ 12), moderate anxiety (scores: 13 - 20), severe anxiety (scores: >

20). The validity and reliability of this scale have been evaluated in several studies with a Cronbach's alpha coefficient of 0.88, an internal consistency of 95%, and criterion validity of 0.72, which is generally acceptable and can be used in relevant studies (38).

3.2.4. Data Analysis Method

Data were analyzed using descriptive (mean and standard deviation) and inferential (Pearson correlation and regression analysis) statistical methods using SPSS version 25 software.

3.3. Ethical Considerations

Informed consent was obtained from all participants to participate in the study. They were also assured of the confidentiality of their information and the fact that the results would be published without mentioning participants' names. Necessary permissions were also obtained from the University Ethics Committee to conduct the study.

4. Results

To investigate the relationship between Internet addiction and social adjustment with test anxiety in students, Pearson correlation coefficient statistical method was used and the results obtained in Table 1 are shown.

Table 1. The correlation results of the research variables and test anxiety[a]

Variables	Test Anxiety
Internet Addiction	0.45[b]
Social Adjustment	- 0.205[b]

[a] N = 346.
[b] $P \leq 0.001$.

According to Jules I, there is a significant positive relationship between Internet addiction and student test anxiety ($P \leq 0.001$).

There is also a significant inverse relationship between student test anxiety and social adjustment ($P \leq 0.001$). That is, as social adjustment increases, students' test anxiety decreases.

A step-by-step regression statistical method was used to investigate which variables were a better predictor of students' test anxiety. Due to the fact that the Durbin-Watson Test had results between 1.5 to two and 2.5, this method is suitable. The summary of the results of the regression pattern is shown in Table 2.

Table 2 shows that in the first step, the Internet addiction variable predicts 0.32 of test anxiety changes. In the second step, with the entry of the social adjustment variable into the regression pattern, the prediction share increases by 0.05; that is, both variables (Internet addiction and social adjustment) predict a 0.37 change in test anxiety.

5. Discussion

The obtained results showed that the correlation between internet addiction, social adjustment, and test anxiety of female students was statistically significant ($P > 0.05$). According to the results of social adjustment with a standardized beta of 0.35 and internet addiction with a standardized beta of 0.60, they could predict students' test anxiety ($P > 0.05$). The results of this study are in line with the results of other relevant studies (39-48) in terms of the findings of the main research hypothesis suggesting a relationship between Internet addiction and social adjustment, and students' test anxiety. It can be stated that the standard use of new electronic tools, including mobile phones, sending SMS, videos, and photos, various entertainments, and gaming software can be helpful for people for purposes. However, excessive mobile phone use leads to a kind of dependence and addiction that can interfere with several behavioral factors, including communication, social skills, social adjustment, loneliness, and educational motivation.

For example, using a cell phone when feeling alone can be effective in communicating with friends; however, by excessive use, the person may face difficulty in social adjustment. Because communications making via mobile phones are not similar to the actual communications, they deprive the individual to consider the real variables affecting communication.

With the dramatic increase of Internet use in students, designing and implementing appropriate educational programs, and using Internet-based interventions are essential in promoting knowledge and improve healthy behaviors and social adjustment among students. Broadcast media, such as radio, television, and various publications should make people informed about the disadvantages of excessive mobile phone use and how to deal with such problem, because in a society like Iran, excessive use of these tools has created several problems affecting students' motivation and academic success. Social adjustment and Internet addiction and also their effects on educational motivation and test anxiety should be considered for prevention and solving educational problems.

Table 2. Summary of the results of regression pattern in predicting test anxiety

Variable	R	R^2	β	F	Durbin-Watson Test
Internet Addiction	0.60	0.32	0.60	67.3[a]	1.92
Social Adjustment Internet Addiction	0.65	0.37	0.35	14.6[a]	

[a] $P \leq 0.001$.

Footnotes

Authors' Contribution: Concept: MN. Research design: MN and AR. Supervision: AR and HZ. Financial resource: MN, AR, and HZ. Materials: MN and AR. Data collection and analysis: MN, AR, and HZ. Analysis and Interpretation of data: MN and HZ. Literature Search: MN and AR. Writing the manuscript: MN and HZ. Critical review: AR.

Conflict of Interests: No conflict of interest was declared by the authors.

Ethical Approval: The research was approved by the ethics committee of Ardabil University of Medical Sciences.

Funding/Support: The authors declared that this study received no financial support.

Informed Consent: The written informed consent was obtained from the patients who participated in this study.

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