The Relationship between Psychological Hardiness with Addiction to Internet in Female High School Students of Ahvaz

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Abstract

The aim of the present study was examining the relationship between psychological hardiness with addiction to internet in female high school students of Ahvaz. 377 female high school students consisted the participants of this study that were assigned through multi-stage cluster sampling method. The design of the study was descriptive and correlational. Ahvaz Psychological Hardiness Questionnaire (AHI) and Young’s Addiction to Internet Questionnaire were used in this study. All questionnaires are of acceptable validity and reliability. Data were analyzed using Pearson’s correlation coefficient and multiple regression coefficients at the significance level of 0.05 for testing the assumptions. The results showed there is a significant relationship between psychological hardiness with addiction to internet. According to the results of regression analysis with step by step method, psychological hardiness are predictors of addiction to internet in students.

Keywords: Psychological hardiness, Addiction to internet, students.
Introduction
It is more than four decades that internet has appeared and it is about twenty years that people use it. During last twenty years it has significantly increased so that by 2010 the number of internet sites become more than the people in the world. Figures indicate that people spend time on using internet more than televisions and satellite channels. The title of ‘magic box’ is not befitting for television anymore because it has given its place to computer and internet. Each new progression has some advantages and disadvantages. Internet is not excluded from this issue. New problems and damages appeared with the appearance of internet in our country. Some of these problems caused concern for the world, too. For example, in recent years, dozens of books have been published about the internet injuries. Many countries have founded several research projects to examine the effects of the internet and established specialized centers for treating internet injuries, centers such as drug addiction centers(Brokeman, 2011). Addiction to internet can bring about various injuries to individuals such as psychological (anxiety, depression, loneliness, etc.), physical (sleep disorder and nutrition problems), family (decreasing family relationships and increasing the distance between family members), occupational (lack of efficiency of work and dismissal from work) and academic injuries (drop in school grades)(Kaar, 2010).

Young’s study in 1998 showed that 80 percent of the respondents that were addicted to the internet, spend 38 hours in a week on non-official and non-occupational goals. Learning self-regulation is a self-beginning activity that includes setting goals, setting the efforts to reach the goal, self-regulation (metacognition), time management and regulating social and physical environment. Self-regulated learners are those that participate in their own learning process by metacognition, they are motivated and active(Kadivar, 2001).

Psychological hardiness is a characteristic that acts as a source of resistance and shield when individuals face stressful events of life. Hardiness is a combination of beliefs about oneself and the world, that is consisted of 3 components including commitment, control and fighting. Yet, it is unit and is composed of coordination of these 3 components(Kubasa, 1982). Psychological hardiness acts as a moderator of the relationship between tense and psychological and physical diseases. Individuals who have strong psychological hardiness are less probable to catch physical or psychological injuries in response to tension, compared to those who have low psychological hardiness. Also, empirical findings admit the mediator role of psychological hardiness compared to the side pressures of tension. Other findings indicate that there is not a significant difference between two sexes in terms of psychological hardiness(Sharifi, Arizi and Namdari, 2005). Coobasa considers resistance as a personality trait that acts as a source of persistence and protective shield facing stressful events of life. In addition to modifying the negative effects of life stresses, resistance acts as one of the effective factors on appearance of improvement and creativity(Coobasa, 1979).

As it is clear, psychological hardiness, as an important characteristic in individuals’ personality structure, can protect them of various environmental pressures. Considering what is reported and the growing use of internet, the present study aims to answer the question whether there is a relationship between psychological hardiness with addiction to internet or not.
Methods:
The aim of the present study is examining the relationship between psychological hardiness with addiction to internet in female high school students of Ahvaz. The design of the study was descriptive and correlational. To select the samples, multistage cluster sampling method was used. Among 4 educational regions of Ahvaz, one region was selected. Some schools were selected of that region and some classes were selected of those schools. Ahvaz Psychological Hardiness Questionnaire (AHI) and Young's Addiction to Internet Questionnaire were distributed among students. The statistical population of the present study includes all female high school students of Ahvaz in academic year of 2015. 377 students were selected randomly based on Morgan's Table. Data were analyzed using descriptive statistic including frequency, frequency percentage, mean, Pearson's correlation coefficient and standard deviation and inferential statistics including Pearson's correlation coefficient and multiple regression coefficient.

Tools
Young's Addiction to Internet Questionnaire: This questionnaire was made by Kimberly Young and is one of the most prestigious questionnaires in the field of addiction to internet. This questionnaire has 20 items and is self-implemented. 20-item Young Internet Addiction Diagnostic test faced the lack of consensus on the diagnostic criteria of internet addiction, so researchers have developed and use various questionnaires to assess it. Among various scales, 8-item questionnaire of Young is applied in most researches. 20-item questionnaire of Young is in the second place in case of application (Omidvar and Saremi, 2002). In addiction to internet test, the participant should answer 20 items on a five-point Likert scale including Never, Hardly ever, Sometimes, Often and Always. The change range of this test is 0 to 100. The highest score shows more dependency to internet and the severity of the problems that is developed for the individual because of extreme use of internet. To evaluate the score, Young's instructions were used. It means that the scores 20 to 49 are the indicator of a normal user, scores 50 to 79 are the indicator of at risk user and score 80 to 100 are indicator of addicted user (Omidvar and Saremi, 2002). In a study conducted by Young et al. the internal reliability of the questionnaire was reported higher than 0.92 and the reliability using test-retest was reported significant (Murally and George, 2007). Vidiani and Mac conducted a study entitled ‘examining the psychometric properties of Young's Addiction to Internet Questionnaire’ and reported a very high, 0.82, formal reliability for this questionnaire. Also, a study was conducted in Iran entitled ‘examining the psychometric properties of Young's Addiction to Internet Questionnaire among university students of Isfahan’. The reliability of the test using Chronbach’s alpha was reported 0.88 that shows the pleasant reliability of the test. This result is consistent with the result of Young and can be used in psychological and psychiatric researches to screen internet users (Omidvar and Saremi, 2002).

Ahvaz Psychological Hardiness Questionnaire: This questionnaire was made by Kiamarsi, Najarian and Mehrabizadeh Honarmand (1998) in Shahid Chamran University of Ahvaz and was validated. This questionnaire has 27 items based on 4-degree Likert scale. The scoring is from 0 to 3 (Never=0 and Most of the time=3). The range of the score in this questionnaire is 0 to 81. Getting high score in this questionnaire indicates high psychological hardiness in individuals. The reliability of it was calculated using concurrent reliability method with three criterion of
General Anxiety Scale, Depression Questionnaire and Self-actualization Questionnaire by Maslow. The obtained coefficient were 0.65, 0.67 and 0.62, respectively and all coefficients were significant at the level of P< 0.001. The concurrent reliability with defining the structure of psychological hardiness was calculated and was acceptable.

Findings:
Table 1 shows the descriptive data including mean, standard deviation, and the minimum and maximum of the scores related to the variables of psychological hardiness and addiction to internet in participants.

Table 1 . data including mean, standard deviation, and the minimum and maximum of the scores related to the variables of psychological hardiness and addiction to internet in participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>The lowest score</th>
<th>The highest score</th>
<th>Standard deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychological hardiness</td>
<td>73</td>
<td>19</td>
<td>9.87</td>
<td>48.82</td>
</tr>
<tr>
<td>addiction to internet</td>
<td>100</td>
<td>20</td>
<td>17.92</td>
<td>43.80</td>
</tr>
</tbody>
</table>

Based on Table 1, the mean and standard deviation of psychological hardiness are 48.82 and 9.87, respectively, and the mean and standard deviation of addiction to internet are 43.80 and 17.92, respectively.

Table 2 shows the correlation coefficient between psychological hardiness and its components with addiction to internet in all participants.

Table 2 . the correlation coefficient between psychological hardiness and its components with addiction to internet in all participants.

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>P</th>
<th>N</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychological hardiness</td>
<td>0.001</td>
<td>377</td>
<td>-0.030</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.541</td>
<td>377</td>
<td>-0.29</td>
</tr>
<tr>
<td>Control</td>
<td>0.001</td>
<td>377</td>
<td>-0.21</td>
</tr>
<tr>
<td>Fighting</td>
<td>0.001</td>
<td>377</td>
<td>-0.25</td>
</tr>
</tbody>
</table>

Table 2 shows there is a negative relationship between psychological hardiness and addiction to internet in all participants( r=0.30). Therefore, the second assumption is confirmed at the significance level of P< 0.05. Also, there is a relationship between commitment and addiction to internet in all participants(r=0.29). Therefore, the relationship between commitment and addiction to internet is confirmed at the significant level of P< 0.05. Also, there is relationship between control and addiction to internet in all participants(r=0.20). Therefore, the
relationship between control and addiction to internet is confirmed at the significance level of \(P<0.05\). Also, there is relationship between fighting and addiction to internet in all participants\((r=0.25)\). Therefore, the relationship between fighting and addiction to internet is confirmed at the significance level of \(P<0.05\).

Table 3 shows the results of multistage regression analysis related to psychological hardiness with addiction to internet with concurrent entry method.

Table 3 . the results of multistage regression analysis related to psychological hardiness with addiction to internet with concurrent entry method.

<table>
<thead>
<tr>
<th>Model</th>
<th>MS</th>
<th>Df</th>
<th>SS</th>
<th>(R^2)</th>
<th>MR</th>
<th>P</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5543.28</td>
<td>3</td>
<td>16629.48</td>
<td>0.138</td>
<td>0.371</td>
<td>0.001</td>
<td>19.58</td>
</tr>
<tr>
<td>Remaining</td>
<td>279.19</td>
<td>373</td>
<td>104138.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also, for identifying an appropriate predicting equation using the smallest probable set of the strongest combination of predicting variables, step by step regression was used.

Table 4 shows the results of multiple regression analysis related to the interaction of psychological hardiness with addiction to internet using stepwise method.

Table 4 . the results of multiple regression analysis related to the psychological hardiness with addiction to internet using stepwise method

<table>
<thead>
<tr>
<th>Statistical</th>
<th>Fixed number</th>
<th>Regression coefficients</th>
<th>(F) &amp; (p)</th>
<th>RS</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td>(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>variables</td>
<td></td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>psychological hardiness</td>
<td>70.74</td>
<td>-</td>
<td>-</td>
<td>B= -0.552</td>
<td>F=38.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(\beta=0.304)</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(t=-6.18)</td>
<td>p=0.001</td>
</tr>
</tbody>
</table>

As it is shown in Table 5, according to the results of regression analysis by stepwise method, psychological hardiness are the predictors of addiction to internet.

**Conclusion**

**The hypothesis**

There is a relationship between psychological hardiness and its components (commitment, control and fighting) with addiction to internet.

The results related to this assumption show that there is a relationship between psychological hardiness and its components (commitment, control and fighting) with addiction to internet. Therefore, the assumption is confirmed. This finding is consistent with the findings of studies by Salehinejad and Besharat(2010), Shekari et al. (2010), Closson Kervachak and Rajani(2008). Committed individuals feel commitment toward the environment around them and are engrossed in their activities and jobs and consider the events of life as meaningful experiences. These people believe in the importance and value of their activities and are able to find meaning in

what they do. They are also confident about their ability to change the experiences of life in an interesting and meaningful way, so instead of escaping from the life problems, they become engrossed in many of its aspects such as occupation, family and interpersonal relationships. Therefore, these people spend less time on internet and cyberspace. Control is one of the components of psychological hardiness that has relationship with addiction to internet. In explaining this finding it can be said that individuals who have high control believe in controlling their destiny and future. These people are able to penetrate and affect various life events. They make choices using knowledge, skill and power, can predict and control life events and when face problems consider themselves responsible, not the others. These kinds of people can have more control on their life and because of that are able to consider any activities pleasant and continue doing them and are able to stop the unpleasant activities. In general it can be stated that individuals who have high hardness, use more adaptive coping behaviors and less non-adaptive coping behaviors. They also apply points related to hygiene more and positively (Williams and Vibeh, 1992). Hardiness develops a special internal attitude that affects the individuals' way of coping with various life events. Finally, it should be noted that the results of the present study is representative of individuals in Ahvaz, therefore, generalizing the findings of the present study to other provinces must be deliberately. Therefore, considering the fast growth of users and the increase of addiction to the internet, psychologists are recommended to pay much attention to prevention, identification and diagnosis of this disorder that is newly appeared.
References


