Studying the Relationship between Internet Addiction and Emotional Intelligence, Sensation Seeking and Metacognition among those Who Referred to Cafes

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ABSTRACT: multiple applications of internet and its attractions causes a phenomenon named “internet addiction” is emerging in recent years. There is a significant relationship between internet addiction and personality traits, emotional intelligence and mood disorders. The aim of the present study is to review the relationship between internet addiction and metacognition variables, emotional intelligence and sensations seeking. research method is analytical-descriptive. Its statistical community includes all those who referred to internet cafes of Zahedan and Zanjan cities. Statistical sample includes 129 people referred to cafes who have been chosen as available sampling (70 ones from Zahedan and 59 ones from Zanjan). Research tools in this study include internet addiction, metacognition, sensation seeking and emotional intelligence. The tests used in this study are descriptive indicators, Chi-square test, Pearson correlation coefficient and T test for comparing the mean of independent groups and regression. the results showed that there is no significant relationship between sensation seeking (r=0.07) and between internet addiction and emotional intelligence (r=0.028). However, a significant relationship was observed between internet addiction and metacognition (r=0.38). Also, positive belief (0.562) and cognitive belief (0.278) can increase internet addiction. various studies showed that internet addiction is a multifactorial injury and several factors cause this injury is emerged, and one of the most important factors in shaping this injury is the issue of personality traits in the propensity towards using internet. Of the personality traits that play a main role are emotional intelligence, metacognition and sensation seeking that the role of these factors in various injuries such as alcohol addiction has also been reviewed. internet addiction, emotional intelligence, metacognition, sensation seeking

INTRODUCTION

Internet access is a phenomenon that is increasing rapidly and more people are among the internet users each day. Internet is everywhere, at home, school, university, etc. The number of internet users is surprisingly increasing and it has been reported that this figure was 665 million people round the world until December 2002. This statistics is a little different in Iran. The number of internet users in Iran has been increased more than 3100% between the years 2000-2006 and this figure is now more than 11.5 million people. According to the research, the highest number of internet users is the youth. Therefore, a danger can be felt despite these statistics for all internet users do not observe all the standards in using internet (Jamili, 2005). This may bring on irreparable damages to our national capital i.e. youths. Therefore, doing research in this regard and making people aware of these dangers can abate the depths of this disaster to some extent. Internet addiction as an emerging phenomenon has some consequences such as excessive dependency to use internet and its attractions in recent years. According to Fallah Mane (2008), internet addiction is defined with the terms as the disorder resulting from excessive, unreasonable and pathological use of internet. This phenomenon sometimes is called virtual addiction. Internet addiction includes being addicted to chat rooms and pornography that may provide the degradation of one’s mental health and feelings. Dell (2005) maintains that internet, as other technologies that cause physical laziness, strengths lack of exercise and reduces the effort to establish relationship with others in the real world and is consequently led to social isolation. Obviously, this would in turn be followed by many other harmful consequences.
Sensation seeking is a personality trait that is recognized by the desires to new and diverse stimuli and experiences. These experiences may include participation in physical activity (such as mounting), the activities that are potentially addictive (such as aerial jumping and skiing), new police and philosophical beliefs (such as gambling and using drugs) (Hinter et al: 2006).

Sensation seeking is proposed by Zuckerman, a biological theorist who was influenced from Aizeng's attitude (Witten, 1989). Zuckerman believed that sensation seeking is a feature that describes the intentions to seek new, complex and severe sensations and experiences. Also, physical and social seeking is only led to attitude (Witten, 1989). Zuckerman believed that sensation seeking is a feature that describes the intentions to seek new, complex and severe sensations and experiences. Also, physical and social seeking is only led to attitude (Witten, 1989).

Emotional intelligence is the ability to recognize one's emotions and those of others as well as emotion regulation in social situations (Kezwara & Boloke: 2009) that tries to explain and interpret the position of emotions in human capabilities so that individuals are reached to self-awareness-based self-control (Kahef Elahi and Doostar, 2003). Moreover, it has been suggested that people acquired with emotional capabilities face with life challenges who regulate emotions more effectively as well as have better mental health and social relations (Bier, 2001; Khosrojavid, 2002 & Esmaili, Ahadi, Delavar and Shafabadi, 2007). In this regard, it has been shown in research that emotional intelligence has an effect over improving one's various performances.

Emotional intelligence refers true understanding of the environment, self-motivation, recognition and controlling the feeling of oneself and those of others (as this process can facilitate the process of thought and communications) (Salovey and Mayer). Salovey and Mayer (1997) proposed tetrahedral model for emotional intelligence. This model shows a group of skills that is set from simple to complex. These skills include 1) perception, appraisal and expression of emotion, 2) facilitating personal emotion, 3) recognizing and analyzing information related to emotion and applying emotional knowledge, 4) regulating emotion.

The term metacognition refers our knowledge regarding our cognitive processes and how to use it optimally to reach learning goals (Byler and Snowman, 1993). In other words, metacognition is one's knowledge or awareness out of one's cognitive system or to know how to learn. Metacognitive knowledge helps us consider our progression at the time of knowing and learning.

Metacognition is a multifaceted concept. This concept includes knowledge, processes and strategies that evaluate, supervise and control cognition. Most theorists (Moderich) make a distinction between the two aspects of metacognition i.e. metacognitive beliefs and metacognitive supervision. Metacognitive knowledge is the information that people have concerning their own cognition and learning strategies in that these strategies influence them. Metacognitive supervision refers a range of executive functions such as attention, control, planning and errors detection in one's performance. The emergence of cognitive theories in psychopathology is led to increased interest in cognition characteristics and its regulation. Wells and Mateusz's Self-Regulation Execution Function (S-REF) is the first theory that has conceptualized the role of metacognition in the etiology and maintenance of psychiatric disorders (Brendrich, 2001).

In a study regarding the role of cognition on internet usage over 97 unievrsity students, Benjamin, Spada and Monta (2008) found that there is a significant positive relationship between internet addiction and all aspects of metacognition. Also, this study revealed that there is a significant relationship between internet addiction and negative feelings.

In a study concerning the relationship between personality traits and impulsiveness and addiction on 332 students at California schools, Merkerk, Ajenden and Franken (2010) showed that internet addiction can be one of the predictors of impulsivity. Also, the results of this study showed that there is a significant relationship between internet addiction and mental health.

In a review regarding the relationship between internet addiction and computer games with emotional intelligence over 209 adolescents age 13-15 years old and 458 youths age 16-18 years, Parker, Taylor and Laura Wed (2008) reckoned that emotional intelligence in each age range can be a good prediction of the rate of internet addiction and computer games. Emotional intelligence can predict internet addiction among adolescents as much as 76% and this value was in 56% at the age range of 16-18 years old.

In a study regarding the factors that cause internet addiction among university students, Henderson, Hinisi and Martin (2006) came to this conclusion that factors such as masculinity, low social support and neurotic personality trait can be the predictors of internet addiction.

In their study concerning the relationship between 5 personality traits and internet addiction, Landers and Lansbury (2006) found that internet addiction has an effect on personality and social traits such as conscientiousness, extraverion, optimism, occupation and violence.

In their review on the effects of internet and mobile phone on emotional intelligence, Brenly, Aubrist and Karbonel (2009) found that improper use of internet and mobile phones cause the intransigence in emotional
intelligence. In addition, more psychiatric disorders was observed among the people who are affected to internet and mobile phone addiction.

According to the above-mentioned materials, the main aim of doing this study was to investigate the relationship between internet addiction and metacognitive variables, sensation seeking and emotional intelligence among those who referred internet cafes in Zahedan and Zanjan cities.

Choosing two cities of Zahedan and Zanjan as data collection place can show the role of culture in the quality of the probable relationship between the variables under study.

Research Hypotheses

There is a significant relationship between metacognition and Internet addiction.
There is a significant relationship between sensation seeking and Internet addiction.
There is a significant relationship between emotional intelligence and Internet addiction.
There is a significant difference between those who referred internet cafes in Zahedan and Zanjan cities in terms of internet addiction.

Metacognition, sensation seeking, emotional intelligence and place of residence variables are significant predictors of internet addiction.

METHOD

Statistical Community of this study is all those who referred internet cafes at Zahedan and Zanjan cities. The statistical sample includes 129 people (70 ones from Zahedan and 59 ones from Zanjan) of those who referred to internet cafes who have been selected as available sampling. The current research method is descriptive-correlational. To analyze data, descriptive indicators such as frequency, mean, standard deviation, match statistical Chi-square test, Pearson correlation coefficients as well as t test to compare the mean of independent samples. Research tools include Internet Addiction, Sensation Seeking, Emotional Intelligence and Metacognition Questionnaires.

Internet Addiction Questionnaire (Young, 1996): this questionnaire includes 20 questions with five-point Likert response format (rarely, sometimes, often, very often and always) in that the rate of internet addiction after application and scoring for the subjects was in this way that the score between 20-39 was medium and the ones between 40-69 was high and 70-100 was severe. Getting a higher score in this questionnaire indicate more addiction to internet. Score range in this questionnaire was between 20-100.

Sensation Seeking Questionnaire (Zuckerman, 1997): it has two short and long forms in that the former one is used in this study. The short form of this questionnaire includes 14 two-option questions. The score ranges was between 0-14 and the higher score indicates higher sensation seeking. After performing and scoring, getting the scores between 3-5 shows very low sensation seeking, 4-5 shows low sensation seeking, 6-9 shows moderate sensation seeking and 10-14 shows very high sensation seeking.

Emotional Intelligence Questionnaire (Shoot et.al, 1998): it is made based on Salovey and Mayer's model of emotional intelligence (1990) which contains 33 self-report five-option sentences in Likert scale (strongly disagree, somewhat disagree, indifferent, somewhat agree and strongly agree). After performing and scoring, for the interpretation, the score lower than 97 is evaluated as low emotional intelligence, 97-114 as low emotional intelligence, 115-131 as moderate emotional intelligence, 132-148 as high emotional intelligence and the score higher than 148 as very high emotional intelligence (Javid, 2002).

Metacognition Questionnaire (Wright, Haten and Welles, 1997): it has two short and long forms in that the latter one (30-quistion format) has been used in this study. The subject specifies his/ her response to each question using four-point Likert scale (disagree, slightly agree, somewhat agree and totally agree). In the scoring criteria, the scores 3, 2, 1 and 4 have been considered for the chosen options, respectively. This questionnaire has five subscales entitled positive beliefs, negative beliefs, uncontrollable beliefs, self-awareness and cognitive ability-related beliefs. The range of validity coefficients of this questionnaire and its subscales has been reported 72% to 89% by Chronbach’s alpha method and 76% to 89% using retest method (Barkley, 1998).

RESULTS AND DISCUSSION

According to the obtained results and based on five main hypotheses in this research, the results of this study can be interpreted as follows: according to the hypothesis one, there is a significant relationship between internet addiction and metacognitive components in that the results of this study showed that there is a significant positive relationship between internet addiction and cognitive trust, there is a significant positive relationship
between internet addiction and positive belief, there is a significant positive relationship between internet addiction and negative belief, there is no significant relationship between internet addiction and self-awareness and there is a significant positive relationship between internet addiction and cognitive ability-related beliefs. Therefore, hypothesis one of this study was observed in a significant form.

The second hypothesis of this study was whether there is a significant relationship between sensation seeking and internet addiction. The results of the study showed that there is no significant relationship between internet addiction and sensation seeking. Therefore, second hypothesis is not confirmed.

The third hypothesis was reviewing the relationship between internet addiction and emotional intelligence in that the results of the study showed that there is no significant relationship between internet addiction and emotional intelligence. Therefore, the third hypothesis is not confirmed.

In hypothesis 4, the difference in rate of internet addiction among those who referred to internet cafes between Zahedan and Zanjan cities was reviewed in that the results of the study showed that no significant difference was observed in the rate of internet addiction among those who referred to internet cafes between Zahedan and Zanjan cities and the 4th hypothesis is therefore not confirmed. The 5th hypothesis aims to specify the best predictor of internet addiction put of metacognitive, sensation seeking and emotional intelligence elements in Zahedan and Zanjan cities in that the results of the study showed that the best prediction of internet addiction in Zahedan city is the positive belief and the best predictor of internet addiction in Zanjan city is cognitive trust in that both of them were metacognitive components.

The results of this study were compatible with the one conducted by Benjamin, Espada and Monta (2008) and it is possible that the closeness of the two phenomena of internet addiction and metacognition cause a positive relationship is created between them.

The results of this study are not compatible with the ones conducted by Merkerk, Ajendan and Franken (2010) in that the relationship between personality traits and impulsivity with internet addiction was reviewed as well as the study conducted by Parker, Taylor and Laura Wed (2008) in that the relationship between internet addiction and computer games with emotional intelligence was reviewed.

In another study conducted by Martin Branley, Oubrist and Khavier Karbonel (2009), the effects of internet and mobile phone on the students' emotional intelligence in the students were reviewed in that the results of this study was not compatible with the current study. However, the hypotheses that can be mentioned for not compatibility of the present study with the similar foreign studies can be proposed in several parts in that the most important reason for this incompatibility is cultural differences. As is observed, most research performed on internet has been in western countries and cultural differences can be found even in a phenomenon like internet. Another reason that can be mentioned for this difference is again related to cultural differences. The tests that implemented in this study have often been created by western scholars and the phenomenon of cultural dependency can also be manifested here.

Of other differences can be the one in the type of sample, that is samples from all kinds of people are mentioned in this study, but samples from university student class is mentioned in the study of other researchers.

Findings

Table 1. Pearson correlation analysis regarding the relationship between internet addiction and metacognition dimensions

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. cognitive trust</td>
<td>0.39**</td>
<td>(two ranges): **P&lt;0.01 N=129</td>
</tr>
<tr>
<td>3. positive belief</td>
<td>0.38**</td>
<td>0.003</td>
</tr>
<tr>
<td>4. negative belief</td>
<td>0.25**</td>
<td>0.819</td>
</tr>
<tr>
<td>5. self-awareness</td>
<td>-0.02</td>
<td>0.014</td>
</tr>
<tr>
<td>6. cognitive ability-related beliefs</td>
<td>0.21**</td>
<td></td>
</tr>
</tbody>
</table>

As can be observed from the table above, there is a significant positive relationship between internet addiction and cognitive trust, there is a significant positive relationship between internet addiction and positive beliefs, there is a significant positive relationship between internet addiction and negative beliefs and finally there is a significant positive relationship between internet addiction and cognitive abilities-related beliefs.

Table 2. Pearson correlation analysis regarding the relationship between internet addiction and sensation seeking

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-sensation seeking</td>
<td>-0.07</td>
<td>0.419</td>
</tr>
</tbody>
</table>

**P<0.01 N=129(Two ranges)
As can be observed from Table 2, there is a significant relationship between internet addiction and sensation seeking.

Table 3. Pearson correlation analysis regarding the relationship between internet addiction and sensation seeking

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-emotional intelligence</td>
<td>-0.28**</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**P<0.01 (two ranges)  N=129

As can be observed from Table 3, there is a significant negative relationship between internet addiction and emotional intelligence.

Table 4 below specifies whether there is a significant difference for those who referred to internet cafes between Zahedan and Zanjan cities according to independent t test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet addiction</td>
<td></td>
<td>4.457</td>
<td>0.009</td>
</tr>
</tbody>
</table>

As can be observed in Table 4, there is no significant difference for those who referred to internet cafes between Zahedan and Zanjan cities in terms of internet addiction.

Table 5. Regression analysis to predict internet addiction out of metacognitive, sensation seeking and emotional intelligence components in Zahedan and Zanjan cities

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Determination coefficients</th>
<th>Total squares</th>
<th>Mediated determination coefficients</th>
<th>F</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 positive belief</td>
<td>0.562</td>
<td>0.316</td>
<td>0.306</td>
<td>31.394</td>
<td>0.000</td>
</tr>
<tr>
<td>1 cognitive trust</td>
<td>0.278</td>
<td>0.078</td>
<td>0.062</td>
<td>4.828</td>
<td>0.032</td>
</tr>
</tbody>
</table>

As can be observed from Table 5, only positive beliefs and cognitive trust are the metacognitive components that predict internet addiction.

REFERENCES


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