

EVALUATION OF THE RELATIONSHIP BETWEEN PERSONALITY TRAITS AND ATTACHMENT STYLES WITH INTERNET ADDICTION

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ABSTRACT

The purpose of this study was evaluation of the relationship between personality traits and attachment styles with addiction to the internet. Study statistical population included all high school students in the city of Ilam in the 2014-2015 school year. Participants were selected by multi-stage random sampling which included 300 individuals (170 girls and 130 boys). Data collection was performed using Shaver and Hazen's attachment style questionnaire, five factor questionnaire and Young's internet addiction scale (IAT). For statistical analysis, correlation coefficients and regression were used. Results showed that correlation exists between personality traits, attachment styles and internet addiction. Regression analysis showed that secure attachment, extroversion, ambivalent attachment and flexibility predicted addiction to internet in the students. It can be concluded that personality traits and attachment styles are influential factors on internet addiction.

KEY WORDS: Personality traits, attachment styles, internet addiction, students

INTRODUCTION

Internet addiction is an expansive term that includes a wide variety of behaviors and problems related to control of obsession and motivation. Similar to all other types of addiction, internet addiction is a kind of psycho-social disorder and deregulation with characteristics such as action (need for increased time needed for acquirement of the desired compared to initial times), signs of withdrawal (particularly anxiety and listlessness), emotional disorders (depression, aggression, bad temper) and disruption of social relations and connections (decrease or lack of social relations with regards to quantity or quality) (Omidvar and Saremi, 2002). In recent years, studies have reported the prevalence of internet addiction to be 0/3 to 22% (Kim et al, 2009). In principle, the main problem is why some individuals get dependent to the internet and this dependency takes the form of addiction? What predisposes and makes an individual vulnerable to this disorder? It seems that one of the factors that can have a role in internet dependency is personality trait. Results of studies (Yang et al, 2007; Chebbi et al, 2000) show that individuals addicted to the internet are tired and bored, lonely and depressed and suffer from social anxiety and have higher social withholding and phobia. People who use the internet more keep their friendships less, spend less time with their relatives, experience increased stress inducing factors and feel more lonely and depressed (Sadeghian, 2005).

Based on the findings of Psychic and Lava, individuals who score low on the quality of conscientiousness use the internet more (Tsai et al, 2009). Hardy and Yitsee showed that positive and meaningful correlation exists between neuroticism and internet addiction and a negative and meaningful correlation exists between extroversion and internet addiction (Butt & Philips, 2008).

In a study by Hardie and Tee (2007) with participation of 93 individuals (49 women and 44 men) in the age range of 18-72 years in Australia, results showed positive and meaningful correlation between neuroticism and internet addiction and negative and meaningful correlation between extroversion and internet addiction. Attachment styles determine emotional and cognitive principles and strategies that guide affectionate reactions in individuals and interpersonal relationships. Secure, avoidant and ambivalent individuals use different strategies for affection regulation and processing of emotional information (Shaver et al, 1996). Individuals with secure attachment style in order to regulate emotions use strategies that minimize tension and activate positive emotions (Mikulincer, 2001). Individuals with insecure attachment styles use emotional regulation strategies based on negative affections. They suppress affectionate experiences (avoidant individuals) and experience situations as more tension inducing (ambivalent individuals). Researchers believe that regulation of emotions in the framework of adult attachment behaves as a "vein like" process (Fuendeling, 1998). Results of the study by Moiid Far and colleagues (2007) showed that one of the

effects of internet addiction is that dependent individuals have insecure attachment style and spend less time with their family. Signs of this are withdrawal, need for loneliness and forgetting family responsibilities.

Lin and colleagues (2011) in a study showed that addiction to internet has negative correlation with secure attachment style and negative correlation with insecure attachment style. Ingles and colleagues (2005) also in their study showed there is dysfunction in the relationship of internet addicts with their parents. Considering the importance of the issue and its background, the purpose of this study was evaluation of the relationship between personality traits and attachment styles with internet addiction in high school students in the city of Ilam.

MATERIALS AND METHODS

Study method, statistical population and sample: This study was correlational. Statistical population consisted of all students in the city of Ilam in the 2014-2015 school year. Multi-staged random cluster sampling was performed by which 300 individuals (170 girls and 130 boys) were selected. Inclusion criteria were use of internet in the past year and individuals who had little experience in internet use were excluded. Data was analyzed using the SPSS 20 software using regression analysis.

Tool

Adult Attachment Questionnaire (AAQ):

The new version of Hazen and Shaver's attachment questionnaire was formulated in 2014. This questionnaire evaluates secure and insecure attachments. It has two parts. In the first part (AAQ1), participants respond to three paragraphs designed in descriptive statements in a 7 degree scale. In the second part (AAQ2), the same descriptions are designed; but this time participants mark one of them and in this way describe their similarity with one of the descriptions. The second part of the questionnaire is based on categorization and results are used to classify respondents' attachment styles. Reliability coefficient for internal consistency was obtained by calculation of Cronbach's alpha and test-retest reliability coefficient which have been reported as 0/79 and 0/72 respectively. The reliability coefficient for the Adult Attachment Questionnaire is acceptable and meaningful (Crowell et al, 1999). In the study by Besharat (2000), for evaluating the reliability of the AAQ, the test-retest method was used where the correlation coefficient between the results of the test performed at two time points was $r=0/92$.

The long five factor questionnaire (Costa and McCraw, 1989) has 240 items and evaluates five major personality axes. The short form of this questionnaire has 60 items in which 12 items measure each of five major personality axes. The score for each factor is calculated separately and eventually 5 scores are obtained which are related to the five personality axes (neuroticism, extroversion, openness, agreeableness and conscientiousness). Kiamehr (2002) has evaluated the psychometry of the short form of this questionnaire with participation of a sample of 380 students in the humanities sciences college of Tehran University. Additionally, in the study by Kiamehr, concurrent validity and factor analysis were used for determining the validity of the five factor questionnaire. The correlation coefficient resulting from concurrent validity determination between the short and long forms of the questionnaire has been obtained at 0/41 to 0/71.

To evaluate the reliability of the short form of the mentioned questionnaire, the test-retest method was used where the correlation coefficient between the two executions of the study was found to be between 0/65 to 0/86. The coefficient resulting from internal consistency of this questionnaire by way of Cronbach's alpha determination was obtained to be between 0/54 and 0/79.

Young's Internet Addiction Scale (IAT):

It contains 20 items each of which has a 5 point scale scored between 1 and 5. Eventually, individual scores are divided into two groups of equal to and below 49 and above 50 which show that the participants' situation is normal or addicted respectively. Ghasemzadeh and colleagues (2007) found reliability for the questionnaire based on Cronbach's alpha coefficient equal to 0/88.

RESULTS

Initially, descriptive statistics for mean and standard deviation of personality traits and attachment styles with internet addiction for the entire sample has been shown (Table 1).

Table 1: Mean and standard deviation for study variables.

Variable	Number	Mean	Standard Deviation
Neuroticism	300	17/27	4/79
Extroversion	300	37/45	4/60
Agreeableness	300	30/23	4/94
Flexibility	300	31/26	6/27
Conscientiousness	300	29/26	8/32
Secure	300	25/86	8/79
Avoidant	300	17/54	8/33
Ambivalent	300	16/87	7/06
Internet Addiction	300	41/15	14/39

To evaluate the relationship between personality traits and attachment styles with internet addiction among participants in the study, correlational matrix was used. Based on the results of Table 2, it can be seen that the correlation coefficient between the scores for neuroticism and internet addiction was 0/30 which is meaningful in a direct way at a $P=0/001$ level. Additionally, the correlation coefficients between extroversion, agreeableness, flexibility and conscientiousness with internet addiction were -0/45, -0/39, -0/20 and -0/28 respectively which is meaningful in reverse with $P=0/001$. The correlation coefficient of secure attachment with internet addiction was -0/52 which is meaningful in a reverse way at $P=0/001$.

Additionally, correlation coefficients between avoidant and ambivalent styles with internet addiction shows a direct relationship at a $P=0/001$ level. Additionally, since there is a meaningful correlation between each predicting variable (personality traits and attachment styles) and the criteria variable (internet addiction), regression analysis for prediction can be used. To evaluate the predicting role of personality traits and attachment styles in internet addiction multi-variate step by step regression was used. As shown in Table 3, results of regression show that secure and ambivalent attachment styles and extrovert and flexible personality traits have the ability to predict addiction to the internet.

In the first step, secure attachment style with R^2 of 0/27 can predict 27% of the variance of internet addiction ($P<0/001$) and in the second step, extroversion with R^2 of 31% can alongside and together with secure attachment predict 34% of the variance of internet addiction ($P<0/006$) and in the third step, ambivalent attachment with R^2 of 0/34 can alongside with secure attachment and extroversion predict 36% of the variance of internet addiction ($P<0/001$) and in the fourth step, flexibility with R^2 of 0/36 alongside with secure attachment, extroversion and ambivalent attachment can predict 36% of the variance of internet addiction.

Table 2: Correlation matrix for scores of indices of evaluation of the relationship between personality traits, attachment styles and internet addiction

Variables	1	2	3	4	5	6	7	9
Neuroticism	1							
Extroversion	-0/39**	1						
Agreeableness	-0/40**	0/49**	1					
Flexibility	-0/21**	0/22**	0/23**	1				
Conscientiousness	-0/18**	0/30**	0/22**	0/03	1			
Secure	-0/31**	0/52**	0/37**	0/22**	0/40**	1		
Avoidant	0/12*	0/04	-	-0/11*	-0/14*	0/12*	1	
			0/18**					
Ambivalent	0/12*	-	-	-0/01	-	-	0/29**	1
		0/21**	0/18**		0/26**	0/22**		
Internet Addiction		0/30**	-	-	-	-	-	0/29**
			0/45**	0/39**	0/20**	0/28**	0/52**	

**=p<0/001

*=p<0/01

Table 3: Results of multi-variate step by step regression analysis of personality traits and attachment styles with internet addiction

Predicting variable	R	R ²	B	Beta	t	P
Secure	0/52	0/27	-0/55	0/34	-6/08	0/001
Extrovert	0/56	0/31	-0/52	-0/16	-2/79	0/006
Ambivalent	0/58	0/34	0/33	-0/16	3/33	0/001
Flexible	0/60	0/36	-0/44	-0/15	-2/80	0/005

CONCLUSION

This study was performed with the purpose of evaluating the relationship between personality traits and attachment styles with internet addiction. Results showed that correlation exists between personality traits and attachment styles with internet addiction. Additionally, results of regression analysis showed that secure attachment, extroversion and ambivalent attachment and flexibility have the ability to predict internet addiction. The latter agrees with the findings of Mofid Far and colleagues (2007), Lin and colleagues (2011) and Ingles and colleagues (2005). Extrovert individuals have a warm, people liking, brave, active behavior and are in search of excitement and have positive emotions. These characteristics well show the reason for negative correlation between extroversion and internet addiction. It appears that introverts due to lack of much interest in group living and preference of loneliness have higher tendency toward internet addiction compared to extroverts. Spending a lot of time with the internet requires distance from human relations which is not in agreement with characteristics of extrovert individuals (Khanjani & Akbari, 2011). Warm hearted, kind, simplistic and well mannered are among the characteristics of the agreeableness factor. Additionally, agreeableness has correlation with the concept of social interest by Alfred Adler. He defines social interest as an intrinsic predilection of an individual for cooperation with others for reaching personal and social goals. As a result, since long hours of internet usage does not agree with these characteristics, it is natural that they have negative correlation with internet addiction (Khanjani and Akbari, 2011).

Attachment is regulation of emotional experiences in interpersonal relations. People with secure attachment when faced with emotional tensions seek social support. On the other hand, individuals with insecure attachment style for emotional regulation take refuge to use of illegal substances and excessive use of internet. In interpretation of the results of this research, it can also be stated that individuals with secure attachment style have closer and better

relationships with others. They have better interpersonal relationships. They have higher trust in themselves and when faced with an obstacle, they gravitate less to addictive behaviors. Yet, individuals with insecure attachment style because of feeling insecure, anxious and less trusting of self and others when faced with failure in establishment of connection with others, prefer withdrawal and loneliness more. The latter leads them to have higher gravitation to the internet (Bahadori Khosroshahi and Hashemi Nosrat, 2011). For prevention of spread of addiction to the internet, the results of this study can be provided for parents, education personnel, clinical specialists and interested researchers in these fields. Among limitations of this study was that it was cross sectional. The quality of the correlation in this study makes it difficult to make extended conclusions from the results which have been obtained from self-evaluation instruments. Additionally, considering the limitation of the statistical population to high school students in the city of Ilam, caution should be used in extending the results to other groups.

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