



## The relationship between attachment styles and social self-efficacy with internet addiction in Iranian Students

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### ABSTRACT

*The main purpose of the present study was to investigate the relationship between the attachment styles, social self-efficacy and internet addiction in Iranian college students. 161 graduate students (40% males and 60% females) from Tehran research and Sciences university were selected to participate in this study. The participants completed the Adult Attachment Inventory, the Social Self-efficacy Scale, and the Internet Addiction Test. Data were analyzed by Pearson correlation coefficient and linear regression analysis. The findings indicated that (1) anxious and avoidant attachment styles were significantly correlated with and predicted internet addiction, whereas the secure attachment style was not significantly correlated to internet addiction; (2) All the secure and insecure attachment styles were significantly correlated with social self-efficacy, but social self-efficacy only was predicted by secure and avoidant attachment styles; and (3) the correlation between social self-efficacy and internet addiction was not significant at all.*

**Keywords:** Attachment styles, Social self-efficacy, Internet addiction

### INTRODUCTION

The internet is one of the most recent advanced accomplishments of humankind that covers an extensive and boundless network of multiple links, and its appearance time is traced back to the late 1960s and early 1970s. Nowadays in different social, economic, cultural and political arena, we are inevitably meant to make use of this emerging technology. Therefore, it is undoubtedly evident that we would face growing demands in this area. Over the recent years, the use of the internet has become a life necessity, and this accomplishment has conveniently joined the continents and different people in various places to each other, and has transformed the world into the global village. Following a report, the number of internet users has announced 665 million by 2002 [1]. Researches indicated that the use of internet among the youth and teenagers is more than the other age groups [7]. According to the latest researches, most of the internet users are the youth and 35% of them in chat rooms, 28% internet games, 30% checking email and 25% of them are busy surfing the global network [1]. Although using the internet has so many positive features, such as easy access, 24-hour accessibility, being user-friendly, high volume of information in different contexts, and being entertainer, it could also have a negative and harmful side. One of the harms that we will address within this study is internet addiction.

Seeing internet addiction as a disorder was first introduced by Goldberg in 1995 and drew more attention following Young's researches [14]. In general, this disorder can be defined as a kind of use of the internet which poses psychological, social, educational, or occupational difficulties in the individual's life. Varied factors could relate to the method of internet usage and its consequences. One of the variables related to internet addiction could be individuals' attachment style.

The origin of attachment theory was directly linked to Bowlby. Attachment is a strong emotional connection made by anyone with special individuals [6].

Ainsworth and colleagues [6] divided attachment patterns into secure attachment, avoidant insecure and ambivalent insecure. People possessing secure attachment consider themselves to be capable and worth of love and others to be reliable and well-intentioned; therefore, they are comfortable with both mutual independence and mutual dependence. Secure attachment style is associated with more commitment, trust, intimacy, enthusiasm, satisfaction, consistency, and sustainability in relationships.

Attachment anxiety refers to an individuals' excessive need for the approval of others and a fear of abandonment and rejection from others. Conversely, attachment avoidance characterizes an excessively self-reliant individual who fears depending on others [23].

Several researches demonstrated that initial attachment experiences with caregivers could steer feelings, thoughts and behaviour towards the next relationships [11, 15, 21, 24].

The relationship between attachment styles and internet addiction has been studied in some research, for example, Lin et al [19] indicated that internet addiction had a negative correlation with secure attachment style and a positive one with insecure attachment style.

We will consider social self-efficacy as our second independent variable and we hypothesize that it could be related to internet addiction. Social self-efficacy involves the beliefs that an individual has, to the effect that she can begin new social relationships and make new friendships out of those initial relationships. Individuals who have a deficiency in social self-efficacy structure believe that personal close relationships are a happenstance or are attributed to other factors out of their own control [27]. These individuals do not have a positive belief in their social skills and have a defect in one-to-one relationships. We could assume that such individuals compared to the ones who have a higher social self-efficacy, by reason of virtual identity and being anonymous on the internet will be highly exposed to the possibility of contracting internet addiction. Recently, some research focused on exploring underlying factors of internet addiction, and our research is one of the first that aims to evaluate this issue in Iranian sample.

#### **Attachment style and internet addiction**

In the Lin, Hua Wang & Huei Wu's research [20], it has been demonstrated that internet addiction has a negative relationship with secure attachment style and a positive one with anxious and avoidant attachment styles; and anxious attachment style could predict internet addiction more than the other two attachment styles could.

Oldmeadow, Quinn & Kowert [26] through carrying out their study on adults took the use of Facebook into consideration from the perspective of adult attachment theory; and observed a relationship between anxious and avoidant attachment style using Facebook. Their study findings demonstrated that people with a high anxious attachment style use Facebook more and they also use it more when experiencing negative emotions and would feel worried about how others think of them on Facebook. In their research, people with a great avoidant attachment would use Facebook less and have positive attitudes and less receptivity towards it. They achieved these results through controlling the social skills variable. Anderson [6] following a research also proposed that people suffering from internet addiction possess insecure attachment styles and suffer disruptions in personal and social relationships.

#### **Social competence and internet addiction:**

Caplan [8] was the first who illustrated an explanatory theory on internet addiction citing a lack of social skills. His theory assumes that the Internet provides a greater opportunity to imitate, Exaggerate and intensify the positive aspects of individuals; as a result, the internet represents a place to some people where they can have a control over others' perceptions of them. Caplan [9] undertook a study in order to test his theory and observed that people who perceive themselves as a person lacking assertiveness skills are more likely to think of online social interactions as more suitable than face-to-face interactions; and it was then clarified that internet addiction and the negative results related to the use of internet addiction could be predicted. Liu & Kuo [18] undertook a study using the theoretical foundations of interpersonal theory which is a theory similar to attachment theory so as to understand how parent-child relationship is associated to social anxiety and the prediction for internet addiction. The findings indicated that parent-child relationship, interpersonal relationships and social anxiety are all meaningful predictions for internet addiction.

Bahri et al [3], based on internet addiction status and its relationship with the students' general health in the Medical Science University of Gonabad, proved that there is no meaningful relationship between social dysfunction (as one of the dimensions of public health) and different levels of internet addiction.

#### **Attachment styles and social competence:**

Wei et al [30] reported that anxious-avoidant attachments had a correlation with deficiency patterns in interpersonal relationships and a tendency not to understand others in a team environment. Wei et al [30] proved that social self-efficacy has a mediation effect on the relation between anxious attachment, a feeling of loneliness and second depression syndrome. While self-revealing had a mediation effect on the correlation between avoidant attachment and loneliness/depression. The results suggest that students with anxious or avoidant attachment have differences and deficiencies in their social competence which is influential in their psychological well-being.

## MATERIALS AND METHODS

Our research aims to consider the relationship between attachment styles and social self-efficacy with internet addiction and it is a correlation study.

### Statistical model and sampling procedure:

The sample group consisted of 161 students studying in the school of social and human sciences of Islamic Azad University of Science and Research branch of Tehran, at graduate and doctoral level, academic year 2012-13. We chose our sample group with using haphazard sampling. Their participation was voluntarily, and they answered to a demographic form and three questionnaires.

### Data collection tools:

Data gathering tools in this research are comprised of internet addiction Test [32], adult attachment scale [4], and self-efficacy scale for social situations [13].

### Adult Attachment Inventory:

Adult attachment style inventory which has been built based on the Hazan and Shaver's attachment scale [16], is a 15-items exam and measures three attachment styles, that are secure, avoidant insecure and ambivalent insecure styles on a 5-point Likert scale. Cronbach's alpha for the AAI was 0/84 in Besharat's study [3], and it was 0/90 in current study.

### Self-efficacy Scale for Social Situations:

Social self-efficacy scale has been designed for social positions [13] which consists of 9 items. The testable questions measure each item based on a 10-degree Likert scale. Troublesome items are scored inversely. Higher scores demonstrate a higher self-efficacy for social situations. Cronbach's alpha for the SSES was 0/81 in Gaudiano and Herbet's study [13], and it was 0/83 in current study.

### Internet Addiction Test:

This questionnaire was designed by Kimberly Young in 1998. It's one of the most credible questionnaires in the area of evaluating internet addiction. This questionnaire consists of 20 Statements and is scored by means of Likert's 5-degree. Cronbach's alpha for the IAT was 0/90 in Yoo et al.'s study [31], and it was 0/77 in current study.

### The data analysis method:

We used SPSS software to examine our hypothesis. The data were analysed using Pearson's correlation coefficient, MANOVA, and multiple linear regression.

## RESULTS

Table 1 shows the results of correlation among all the variables.

**Table 1.** Correlation coefficients among all the variables.

Variables		1	2	3	4	5
1. avoidant style						
2. secure style		<b>-.300**</b>				
3. anxious style		<b>.270**</b>	<b>.099</b>			
4. social self-efficacy	$r_{XY}$	<b>-.354**</b>	<b>.281**</b>	<b>-.160*</b>		
(total)	$t_{(df=159)}$	3.311	3.692	2.044		
5. internet addiction	$r_{XY}$	<b>.264**</b>	<b>.020</b>	<b>.300**</b>	<b>-.003</b>	
	$t_{(df=159)}$	3.451	.252	3.966	.038	

\* $p < .05$ ; \*\* $p < .01$ .

Estimated t-tests (in avoidant insecure attachment style: 3/451, and in anxious insecure attachment style: 3/966) was higher than level of significance for two-tailed tests. Therefore, it is confirmed that there are significant positive relationships between insecure and anxious attachment styles with internet addiction ( $P < 0/01$ ).

Table 1, also shows there are significant relationship between social self-efficacy and attachment style (avoidant insecure, secure and anxious insecure).

Given that estimated t-test for social self-efficacy (0/038) was lower than level of significance for two-tailed tests (1/960), therefore there is no relationship between social self-efficacy and internet addiction ( $P < 0/05$ ).

We used multiple regression analysis for evaluating the prediction roles of attachment styles on internet addiction (see table 2 and 3).

Table 2. Regression analysis

Model	R	R Square	Degree of freedom	F
1	.360	.130	3, 157	7.797**

\*\* $p < .01$

Table 3. Regression coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	33.266	3.114		10.681**	.000
avoidant style	3.826	1.435	.219	2.667**	.008
secure style	1.113	1.405	.063	.792	.429
anxious style	4.304	1.445	.235	2.978**	.003

Dependent Variable: internet addiction

\*\*p < .01

According to table 3, avoidant and anxious style positively predicted internet addiction, whereas secure style didn't have a significant role in predicting our dependent variable.

## DISCUSSION

The results of this research indicated a positive significant correlation between avoidant attachment style and internet addiction, and between anxious attachment style and internet addiction in students. The findings also showed that there is no significant correlation between secure attachment style and internet addiction. The results of the present study are consistent with previous similar studies. For example, Lei & Wu [18], and Lin, Ko & Wu [19] have also demonstrated the positive meaningful relationship between anxious, avoidant styles and internet addiction; Using multiple regression analysis, The findings suggested that avoidant and anxious attachment styles could be significant predictors for internet addiction. These findings were also consistent with Şenormancı [27]. According to the attachment theory a possible explanation could be the case that individuals with more anxious attachment consider the internet as a way to gain attention, approval and reassurance from others. These people reduce their psychological need for approval by recourse to the social aspects of internet, their fear of abandonment by means of the availability of the internet and the ease of interacting with others using this way. Through online relationships, they may feel more that others like them and because of their presence, they are present, too. However, internet does not amply supply them with the feeling of security and satisfaction caused by the feeling of insecurity and worthlessness. Therefore, internet can turn into the source of the other's disturbance in communication tools for these people. People with more avoidant attachment, by reason of their tendency to keep the distance from others, are attracted to anonymity on the internet, risk and less responsibility existing in internet interactions; and they see the internet as less threatening in social interactions. The Internet provides distant relationships for people to interact with others rather than face-to-face relationship contact which is consonant with inter-individual priorities and their passive strategy. The results indicated that there is no relationship between social self-efficacy and internet addiction, which is inconsistent with Caplan [9], and Kim LaRose and Peng [17]. Our result may be caused by the participants' conditions and/or small sample size.

## CONCLUSION

The aim of the present research was considering the relationship between attachment styles, social self-efficacy and internet addiction in students. Taken together, research findings showed that there is a positive significant correlation between avoidant style and internet addiction, and between anxious style and internet addiction in students. In addition, anxious and avoidant styles were significant predictors for internet addiction in students. Adult attachment is an emotional bond that an adult makes with another one or other ones, those who have the capability to ensure physical and psychological safety for people. Internal working model that people have in their mind of themselves and others is influential in their perception about their relations and social interactions. Individuals who possess secure attachment style have internalized positive models of themselves and others, and find themselves being worthy of kindness and others being responsible and trustworthy. Secure individuals are interested in socializing, interact freely with other people, and commitment in relationships is one of their qualities. If these people face defeats, they will not be likely to turn to isolation and addictive and destructive behaviors. People with secure attachment do not keep away from interpersonal relationships because of having a high confidence in it, and they lead their social life feeling fairly satisfied. Thus these people probably have fewer tendencies to establish virtual relationships than face-to-face ones. These people probably manage how to use the internet as well, in a way that it would not harm different aspects of their life. But people with insecure attachment styles in interpersonal relationships feel fear, distrust and a sense of insecurity. People with avoidant style are more likely to fear friendliness and dependence; these people have negative

mental models towards people. As a result, since insecure avoidant individuals avoid face-to-face relations because they see others as unreliable and will be likely to be inclined to virtual life and relations which do not require more emotional investing. People with anxious attachment often are worried about being rejected by others they also don't believe that they are worthy enough to gain attention and kindness of others. Consequently, internet can be both a shelter so as to escape from real life and its contentment and failures.

## REFERENCES

1. Alavi, S. S., Merasi, M. R., Janatifar, F., Eslami, M. (2010). Investigation of the relationship between psychological symptoms and internet addiction in the students of Isfahan University. The magazine of Medical Sciences and Health Care Service of Hamedan University. Volume 17, Number 2.
2. Anderson, K. J. (2001). Internet use among college students: An exploratory study. *Journal of American College Health*, 50(1), 21-26.
3. Bahri, N., Sadegh Moghadam, L., Khodadust, L., Mohammadzade, J., Banafshe, E. (2010). Internet addiction and its relationship with general health in students of university of medical science of Gonabad, Vol 8(3); p 166-173.
4. Besharat, M.A. (2004). Standardization of adult attachment scale, research reports. Tehran University.
5. Bigges, S. (2000). Global village or urban jungle: Culture, self-construal and the Internet. *Process Med Ecol*, 1, 28-36.
6. Bowlby, J. (1969). *Attachment and loss: Vol. I. Attachment*. New York, NY: Basic Books.
7. Bullen, P., Harre, N. (2000). *The Internet its effects on fatty and implication for adolescents*. Auckland: University of Auckland.
8. Caplan, S.E. (2002). Problematic Internet use and psychosocial well-being: Development of a theory-based cognitive-behavioral measurement instrument. *Computers in Human Behavior*, 18, 553-575.
9. Caplan, S.E. (2005). A social skill account of problematic Internet use. *Journal of Communication*, 55(4), 721-736.
10. Caplan, S.E. (2007). Relations among loneliness, social anxiety, and problematic Internet use. *CyberPsychology and Behavior*, 10(2), 234-242.
11. Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perception of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, 87, 363-383.
12. Feeney, B. C., & Collins, N. L. (2001). Predictors of care giving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, 80, 972-994.
13. Gaudiano, B. A., & Herbert, J. D. (2006). Self-efficacy for social situations in adolescents with generalized social anxiety disorder. *Behavioral and Cognitive Psychotherapy*, 35, 209-223.
14. Greenfield, D. N. (1999). Psychological characteristics of compulsive
15. Internet use: A preliminary analysis. *Cyber Psychology and Behavior*, 2, 403-412.
16. Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
17. Kim, J., LaRose, R., & Peng, W. (2009). Loneliness as the cause and the effect of problematic Internet use: The relationship between Internet use and psychological well-being. *Cyber Psychology and Behavior*, 12(4), 451-455.
18. Lei, L., & Wu, Y. (2007). Adolescents' parental attachment and Internet use. *Cyber Psychology and Behavior*, 10(5), 633-639.
19. Lin, C., Hua Wang, C., & Huei Wu, C. (2005). The influence of attachment style and Internet interpersonal interactions on Internet addiction. *Chinese Psychological Association*, 47(3), 309.
20. Lin, M. P., Ko, H. C., & Wu, J. Y. (2011). Prevalence and psychosocial risk factors associated with Internet addiction in a nationally representative sample of college students in Taiwan. *Cyber psychology behavior and Social Networking*, 8(2), 230-241.
21. Liu, C., & Kuo, F. (2007). A study of Internet addiction through the lens of the interpersonal theory. *Cyber-Psychology and Behavior*, 10(6), 799-804.
22. Lyons-Ruth and Karlen. (1996). Attachment relationships among children with aggressive behavior problems, *Journal of Consulting and Clinical Psychology*, 64(1), 64-73.
23. Mallinckrodt, B., Wei, M. (2005). Attachment, Social Competencies, Social Support and psychological distress. *Journal of Counseling Psychology*, Vol. 52, No. 2, 358-367.
24. Mikulincer, M., Gillath, O., & Shaver, P. R. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology*, 83(4), 881-895.
25. Pietromonaco, P. R., & Barrett, L. (2006). What can you do for me? Attachment style and motives underlying Attachment styles 373 esteem for partners. *Journal of Research in Personality*, 40, 313-338
26. Oldmeadow, J. A., Quinn, S. V., & Kowert, R. V. (2012). Attachment style, social skills and Facebook use amongst adults. *Computers in Human Behavior*, 29, 1142-1149.
27. Ömer Şenormancı, Güliz Şenormancı, Oya Güçlü, Ramazan Konkan. (2014). Attachment and family functioning in patients with Internet addiction. *General Hospital Psychiatry*, Volume 36, Issue 2, 203-207.
28. Sherer M., Maddux J. E., Mercadante B., Prentice-Dunn S., Jacobs B., & Rogers R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51, 663-671.
29. Sperling, M. B. & Berman, W. H. (1994). *Attachment in adults: clinical and developmental perspectives*. New York: The Guilford Press. 360pp.

30. Wei, M., Vogel, D. L., Ku, T., & Zakalik, R. A. (2005). Adult attachment, affect regulation, negative mood, and interpersonal problems: The mediating roles of emotional reactivity and emotional cutoff. *Journal of Counseling Psychology, 52*, 14-24.
31. Yoo, H. J., Cho, S. C., Ha, J., Yune, S. K., Kim, S. J., Hwang, J., Chung, A., Sung, Y. H., Lyoo, I. K. (2004). Attention deficit hyperactivity symptoms and internet addiction. *Psychiatry & Clinical Neurosciences, 58*, 487-494.
32. Young, K.S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology and Behavior, 1*(3), 237-244.