

# The Links between Attachment and Cyberaddiction

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**Abstract:** The growing importance of the new technologies raises the question of the relationship between the individual and the digital world. One of the main motivations of internet usage is social communication. Among the few studies concerning internet usage and the attachment, most suggest a predisposition of insecure people to the excessive internet usage. All participants completed two self-administered questionnaires: RSQ (relationship scale questionnaire) and IAT (internet addiction test). The self-administered questionnaires were put online: The link to the form was distributed by emails and social networks. Our results show a link between attachment anxiety and problematic internet usage. Internet could provide people having an attachment anxiety style a more reassuring environment to interact with others. The attachment preoccupation is a factor related to the problematic Internet usage. A management that takes into account the motivations related to attachment may reduce recourse to the virtual world.

**Key words:** Attachment insecurity, addiction, problematic internet usage, social interaction.

## 1. Introduction

For Bowlby [1], attachment theory was relevant throughout life. The attachment quality among the adult is defined in particular by the subject equilibrium between knowing to look for help when in distress or vulnerable from certain figures and relying on its own resources to overcome a challenge or a crisis. Attachment quality plays a vulnerability role or a protection factor in the development throughout life [1, 2].

A certain number of arrangements translate among the subject the security or the insecurity in his/her relationship with particular figures named attachment figures or in his/her general manner to consider the fact of looking for help or to fend for himself/herself [2].

The first form of dependence is that of the infant to his/her mother. It is in this context that will develop the feeling of control, the emotional regulation capacities, and more generally a relation to the world. But these factors play an important role in the protection against addictions even though they are not frozen.

Although the instances on which an individual is exposed can significantly increase the risk of addiction, nowadays we consider that some people are more likely than others to develop this disorder. Among the cited factors, we realize that attachment determines the foundations on which the individual is going to rely in the management of his/her internal states. The absence of such basis may predispose an individual to addictive behaviours [3].

The growing importance of the new technologies raises the question of the relationship between the individual and the digital world. One of the main motivations of internet usage is social communication.

Among the few studies concerning internet usage and the attachment, most suggest a predisposition of insecure people to the excessive internet usage.

The objective of this article is a better understanding of the link between attachment and pathological Internet usage.

## 2. Methods

### 2.1 Subjects and Procedure

All participants completed two self-administered questionnaires: RSQ (relationship scale questionnaire)

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and IAT (internet addiction test). The self-administered questionnaires were put online: The link to the form was distributed by emails and social networks (Facebook and Twitter).

2.2 Instruments

2.2.1 The Relationship Scales Questionnaire

The RSQ is a self-administered questionnaire of 30 items developed from the RQ (relationship questionnaire) [2] and from the AAS (adult attachment scale) from Collins and Read [4]. Items are grouped into four subscales that define four attachment prototypes:

- the subscale “secure” (S);
- the subscale “fearful” (F);
- the subscale “preoccupied” (P);
- the subscale “detached” (D).

The subject mark each item on a five-point Likert scale, based on the degree to which the description of the item applies to him/her [5].

2.2.2 The Internet Addiction Test

The IAT (internet addiction test) is composed of 20 items created by Young [6], corresponding to the criteria for pathological gambling presented in the DSM-IV. The minimum score that can be obtained is 20, whereas the maximum is 100. Persons within the range of 20~39 points are considered not at risk of Internet addiction, respondents who are at risk for Internet addiction have scores ranging from 40 points to 69 points, scores 70~100 points indicate internet addiction [6, 7].

2.3 Statistics

Entry and data analysis were performed using

SPSS.11 software. The analysis consisted of generating frequencies and means and comparing them with connections between two quantitative variables which were studied by the Pearson’s correlation coefficient and verified by Spearman’s ranks correlation coefficient. The comparisons of two means on independent series were performed using Student’s *t*-test. Comparisons of several (> 2) means on independent series were made using Snedecor’s *F*-test for parametric variance analysis (one-way ANOVA). The retained significance level of *P* was less than or equal to 0.05.

3. Results

3.1 Sociodemographic Characteristics of the Study Sample

We listed 63 completed questionnaires for a total of 141 clicks on the link.

Table 1 presents the demographic and economic characteristics of the sample. The mean age of the participants was from 38.08 ± 9.9 years with extremes going from 18 years to 61 years.

We have noted the predominance of female subjects (*n* = 40) thus 63% of cases. The sex ratio was 0.57.

The level of education was quite high as 76% of participants were university educated. In contrast, a majority of subjects were single (*n* = 39) representing 63% of cases.

3.2 IAT Score

In all studied groups, 23.8% of participants (*n* = 15) met the criteria of Internet addiction, while 26.9% of respondents (*n* = 17) were at risk of developing this

**Table 1 Sociodemographic characteristics of the study sample.**

Variable		Number	Percentage (%)
Age		38.08 ± 9.9 years	
Gender	Men	23	37
	Women	40	63
Level of education	High school	15	24
	University	48	76
Marital status	Singles	39	61
	Married	24	39

**Table 2** Number of participants addicted to the internet or at risk of addiction to the internet, identified on the basis of IAT results.

Internet usage	Number	Percentage (%)
Addiction	15	23.8
Risk of developing an addiction	17	26.9

**Table 3** Comparison by gender of the obtained results in the IAT.

IAT score	Mean	Standard deviation	<i>P</i>
Total score	32	11.4	-
Men	31.8	11.6	0.09
Women	33	10.8	-

**Table 4** Correlations of the obtained scores in the IAT and attachment style to RSQ.

RSQ	IAT	<i>P</i>
Secure	-0.89	-
Detached	0.05	Sig.
Preoccupied	0.72	-
Fearful	0.042	Sig.

addiction (Table 2).

Total IAT score was  $32 \pm 11.4$ . It was  $31.8 \pm 11.6$  for men and  $33 \pm 10.8$  for women.

There was no significant difference in the intensity of Internet addiction symptoms measured by the IAT general scale of Young [7] by gender (Table 3).

### 3.3 Correlations of the Obtained Scores in the IAT and Attachment Style to RSQ

In our work, we have found a significant relation between problematic internet usage and detached attachment style ( $P = 0.05$ ) and also fearful attachment style ( $P = 0.042$ ).

Furthermore, we did not notice any statistically significant relationship between problematic internet usage and secure attachment style nor the preoccupied attachment style (Table 4).

## 4. Discussion

In the literature, the insecure attachment has been linked to various psychopathologies [8]. Among psychiatric disorders related to attachment insecurity we find predominantly addictions [9].

Digital technologies are changing the communication, interpersonal interactions and how to collect information.

One of the main motivations of internet usage is social communication. Certain people may search the internet for another way to be in a relationship.

Indeed Internet usage may reflect individual attachment representations. But Internet could also offer the possibility to replay the problems related to attachment [10].

Several studies have shown that people with an anxious attachment tend to use social networks as a source of comfort [11].

In our work, we have found a link between insecure attachment and IAT score.

Indeed socially anxious people are more comfortable and confident on internet interactions than in face-to-face [12]. Moreover, Jenkins-Guarnieri et al. [13] have shown that there is an influence of attachment styles on the internet use intensity [13].

In our patients, we observed a significant relationship between the problematic Internet use and detached attachment style ( $P = 0.05$ ). But also a significant link between problematic internet usage and fearful attachment style ( $P = 0.042$ ) was noted.

The internet is used by people with preoccupied and fearful attachment style as a base to security. These people are more revealed when interacting online than in the real world [14].

The anonymity and the absence of synchrony in the exchanges could explain this ease. Besides the ease of Internet access is an aid to find proximity with others and support [15].

Fearful people can find what they lack in “real” life. Indeed, the digital world allows accessible relationships “without an availability condition”. Hence the sense of control that can be comforting and offers a safe environment. Besides, Oldmeadow and Fiske [16] have demonstrated that the internet use allows the reduction of the loneliness feeling [16, 17].

Some authors have even found a link between attachment insecurity associated with problematic use of online games. However, the number of researches on this topic remains limited to three [17].

In these studies, people with preoccupied and fearful attachment style are seeking social interactions. Online games may facilitate these interactions.

From a method point of view, the main limitations of this study were the reduced nature of the sample that was 63 patients and the use of self-administered questionnaires which may constitute bias in some studies.

## 5. Conclusions

The attachment insecurity is a factor related to the problematic internet usage. A management that takes into account the motivations related to attachment may reduce recourse to the virtual world.

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