Brief Report

The Relationship Between Attachment Styles, Self-Monitoring and Cybercrime in Social Network Users

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Abstract

Background: The anonymity in the cyberspace environment, as well as the rapid advent of and improvements to online activities has increased cybercrime.

Objectives: The aim of this paper was to survey the relationship between attachment styles, self-monitoring and cybercrime in social network users.

Patients and Methods: The Collins and Read Adult Attachment Scale, and the Snyder self-monitoring and cybercrime scales were sent to 500 social network users. Of these, 203 users (103 men and 100 women) filled out the questionnaires.

Results: The results showed that women achieved higher scores in self-monitoring and the anxious attachment style, and men achieved higher scores in cybercrime and the anxious attachment style. There was a negative correlation between self-monitoring and cybercrime, and the anxious attachment style had a positive correlation with cybercrime and a negative correlation with self-monitoring. The secure attachment style had a positive correlation with self-monitoring and a negative correlation with cybercrime. The dependent attachment style had a positive correlation with self-monitoring and a negative correlation with cybercrime. All correlations were significant.

Conclusions: Attachment styles have significant relationships with both self-monitoring and cybercrime. Self-monitoring and attachment styles are significant predictors of cybercrimes.

Keywords: Aattachment, Self-Monitoring, Crime, Internet

1. Background

With the advancement of technology, one of the major concerns of governments is cyberspace security (1). Today, people perform many daily tasks using cyberspace. This new technology, despite its advantages, has created new forms of criminal and abnormal behaviors that are known as cybercrime. Cybercrime includes any illegal use of a computer or a network (1). These offenses could menace national safety and economic security. The emotional and financial damages caused by cybercrimes are considerable and different (2) than other crimes. Despite the growing threat of cybercrime, there is little information about its psychological causes.

Cybercrime is different from traditional crime. It is unstable in time and space and has broken geographic boundaries and changed the classic definition of crime (2). Few studies have been conducted to investigate the causes and the profile of cybercrime (2), though various theories

have been considered this criminal behavior, its reasons and risk factors. One of them is Bowlby's attachment theory (3). Attachment is defined as a profound and stable emotional connection that relates individuals to one another in time and place (3, 4). This bond includes special actions in children, such as a desire to join an attachment schema in unhappy or unsafe situations (4). This deep connection with mother, or her deputy, propels children to create an inner working pattern (3). An individual's relationship with their environment is shaped by experiences and memories from their inner pattern that provide guidelines for connections (5). The most important principle of attachment theory is that infants need to develop a close relationship with their mother or primary caregiver for successful social and emotional development and for learning to regulate feelings in an effective way (5). Bowlby recognized three types of attachment styles: secure, anxious and dependent (5). Studies on sexual offenders have shown that they have had inefficient and unsecure experi-

ences in attachment style (6); they often develop in unresponsive families (7). Bowlby believes the origin of criminal behavior is defective attachment (6, 8).

Another determinant that has an important role in criminal behavior is self-monitoring. Self-monitoring is an ability to see and rate individual behavior that allows a person to evaluate behavioral results versus standards. This ability develops over time (9). Self-monitoring is rooted in primary learning experiences during childhood in which parents evaluate a child's behaviors, recognize a child's abnormal behavior, show the child the consequences of the behavior and punish the false behavior (9). Defection in any of the stages leads to low self-monitoring. Low self-monitoring people are not concerned with social cues, are impulsive and cannot delay pleasure (10, 11). Studies have shown that imprisoned sexual offenders have low self-monitoring (6, 12). Low self-monitoring people are impulsive and focus on immediate and short-term benefits of behavior. They are risk seeking (13). There is a significant relationship between low self-monitoring and criminal activities (14).

2. Objectives

The aim of this study was to survey the relationship between attachment styles, self-monitoring and cybercrime in social network users.

3. Patients and Methods

The statistical population for this study consisted of all Facebook users during the years 2012 - 2013. The Collins and Read Adult Attachment Scale was filled out by 203 participants and Snyder's self-monitoring and cybercrime questionnaires were used in Snowball sampling. The Collins and Read attachment scale includes 18 questions. Each question rates and evaluates three types of attachment in adults: safe, anxious and dependent (15). The safe attachment style has high scores in intimacy and belonging items. The anxious attachment style has high scores in worrying items, and the dependent attachment style has lower scores in intimacy, belonging and worrying items. Cronbach's alpha coefficient, which indicates the validity of the scales were 0.69 for secure, 0.75 for dependent and 0.72 for anxious (15). The self-monitoring questionnaire measures the level at which a person manages nonverbal cues that are sent to others and the level to which a person is able to regulate their response to situational needs. The scale has 18 items with true and false selections and acceptable reliability and validity scores (9, 16).

To measure cybercrime, we used an eight-item questionnaire. Each question was scored on a five-point Likert scale and examined cybercrime in the past 12 months. Scores for each question were from 0 to 4 (0 = never; 1 = one to two times; 2 = three to five times; 3 = six to nine times; 4 = ten times or more). The questionnaire was administered on a sample of 30 patients. Cronbach's alpha for internal consistency was 0.80, and the scale's validity was confirmed by experts in the fields of psychology and law.

4. Results

The mean and standard deviation, and t-test results of the variables are shown in Table 1.

The correlation coefficients between attachment styles, self-monitoring and cybercrime scores are presented in Table 2.

The regression results are presented in Tables 3 and 4.

5. Discussion

The results of this study showed a significant negative correlation between self-monitoring and cybercrime. This result is consistent with other studies (10). Low self-monitoring is related to risk-seeking behavior and impulsivity, as well as an inability to postpone immediate pleasure. These characteristics indicate a bad prognosis for crime behavior (9). There was a significant negative correlation between self-monitoring and the anxious attachment style. We did not find any research results that support our finding directly, however, some studies have shown a relationship between attachment styles and cognitive defects and mental disorders. Low self-monitoring is a cognitive defect that interferes with social functioning. We suggest that anxiety negatively affects all cognitive processes (17).

Other results show a significant positive relationship between the secure and dependent attachment styles with self-monitoring. When people's primary efforts to shape close relationships are successful, their inner working pattern helps them to remember the correct relationship procedures, and the safe attachment style creates a high level of self-monitoring (9, 18).

The anxious attachment style had a significant positive correlation with cybercrime. This finding is consistent with other studies that have shown that sex offenders have anxious attachment styles (19). The anxious attachment style creates poor social skills, low self-esteem, and feelings of inadequacy that prevent the establishment of a close emotional and satisfying bond. In this attachment

Table 1. Mean and Standard Deviation of Variables of Research Disaggregated by Gender

Variable	Women, Mean (SD)	Men, Mean (SD)	t	P	df
Self-monitoring	16.42 (2.99)	13.49 (2.04)	-5.624	0.001	201
Attachment					
Anxious	14.66 (4.71)	17.83 (4.54)	3.477	0.001	201
Secure	9.71 (4.74)	12.14 (3.91)	-2 833	0.001	201
Dependent	12.09 (2.96)	11.83 (3.11)	-1.783	0.001	201
Cybercrime	15.68 (8.01)	19.83 (5.67)	3.046	0.216	201

Table 2. Correlation Coefficient Between Cyber Crime and Attachment Styles[a]

Variables	S.M	C.C	Anxious Style	Secure Style	Dependent Style
S.M		-0/479[a]	-0/406[a]	0/337[a]	0/308[a]
C.C	-0/479[a]		0/853[a]	-0/693[a]	-0/482[a]

Abbreviations: S.M, self-monitoring; C.C, cybercrime.
[a]P < 0.01.

Table 3. Regression Results of Prediction of Cybercrime Based on Self-Monitoring and Attachment Styles

Criterion Variable	R Square	F	SE
Cybercrime	0.757	76.470	3. 61277

Table 4. Non Standardized and Standardized Coefficients of Regression Equation for Prediction of Cybercrime by Self-Monitoring and Attachment Styles

Model	Nonstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	β		
Constant	5.141	4.258		1.208	0.230
monitoring	-0.379	0.134	-0.155	-2.819	0.006
a	1.155	0.126	0.782	9.159	0
c	-0.015	0.142	-0.009	-0.105	0.917
d	-0.026	0.149	-0.011	-0.178	0.859

style, people prefer to commit crimes that resolve their security problem in a safe way such as in cyberspace (15).

There was a significant negative correlation between the secure and dependent attachment style and cybercrime. The secure attachment style is a good predictor of mental health (3). This style creates trust in interpersonal relationships and can shape normal social relationships (5). These people have mental health, are less aggressive and use rational ways of resolving their problems (5). In the dependent attachment style, people need an emotional relationship and act more rational than anxious people in the avoidance of loneliness (20).

Men and women were significantly different in self-monitoring. Other study findings about this result are inconsistent (9). The likely difference between men and women could be related to the different social expectations for men and women (14). Society expects men to be more rigid and decisive than women (14). These findings

could be due to the Iranian society's emphasis for women on dignity, being more cautious, delaying the demand for satisfaction and to control their verbal and emotional behavior, while being fearless, apathetic, and nonverbal to have men's approval and encouragement. The outcome of such norms will be higher self-monitoring for women than men.

In conclusion, the safe environment of cyberspace allows both genders to commit crimes and remain anonymous. Although self-monitoring can reduce the likelihood of cybercrime, attachment style can affect both self-monitoring and crime. Due to the novelty of the phenomenon, addressing the various risk factors has a great degree of importance.

Footnotes

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