

Cyberspace and Tendency toward Drug Addiction in Adolescents: The Central Role of Cyberbullying Victimization and Psychological Dysregulation

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Abstract

The purpose of this study was to explain tendency toward drug addiction in adolescents based on the cyberbullying victimization and psychological dysregulation. In this descriptive-correlational study 356 (197 boys and 159 girls) high school students of Miandoab city were selected during 2018-2019 academic year, by cluster- random sampling method and completed the Iranian Addiction Potential Scale, the Psychological Dysregulation Inventory, as well as the Cyber-Aggression and Cyber-Victimization Scale. Data were analyzed by Pearson's correlation coefficient as well as multiple linear regression. The results showed that there were significant correlations between cyber-aggression, cyber-victimization in the adolescents. Also, the cyberbullying victimization and psychological dysregulation could favorably predict the tendency toward drug addiction in the adolescents. Findings of this study showed the need to pay attention to cyberbullying victimization and psychological dysregulation as important etiological factors in the tendency towards drug addiction in adolescents.

Keywords: Adolescents, cyber-aggression, cyber-victimization, psychological dysregulation, substance-related disorders.

Introduction

Adolescence is one of the most important periods in tendency toward drug addiction and high-risk behaviors (Shader and Beauchaine, 2020), and studies need to examine the causes and

factors associated with these behaviors. Previous studies have shown that psychological distress and mental disorders are associated with victimization and cyberbullying in adolescents (Sjursø, et al., 2019; Cénat, et al., 2018), and some studies have examined the predictive role of drug addiction in traditional and cyber-bullying/victimization (Zsila, et al., 2018). But no studies have examined the role of psychological dysregulation with cyber-bullying/victimization in adolescence. Considering the high prevalence of cyberbullying in Iranian adolescents, and the importance of explaining the etiological factors associated with addiction in adolescents, the present study aims to explain the tendency toward drug addiction in adolescents based on the cyberbullying victimization and psychological dysregulation, and it was hypothesized that cyberbullying victimization and psychological dysregulation can predict adolescent addiction.

Methods

This was a cross-sectional study and statistical population included all high school students aged 14–18 years (Mean±SD=16.21±2.04 years) in Miandoab city (N=6295), West Azerbaijan Province, Iran during the academic year 2018-2019. Sample size was 361 students, calculated according to Krejcie and Morgan (1970), and 356 people were analyzed due to the incompleteness of a number of questionnaires. Samples were selected using a two-stage cluster sampling design (Districts of urban and schools). One from 2 districts, and 5 schools were randomly selected from 16 schools of this district. Participants were asked to complete the questionnaires. They were informed about the purpose of the research, confidentiality of their information, and possibility to leave the study at any stage. Inclusion criteria were being secondary high school student, continuous use of the Internet and social networking sites for the past six months, and none of the participants had a history of severe medical or psychiatric disorders. All participants were asked to complete Iranian Addiction Potential Scale, and the Psychological Dysregulation Inventory. Data were analyzed by descriptive statistics such as mean and standard deviation, Pearson's correlation coefficient and multiple linear regression.

Results

The results showed that there were significant and positive correlations between cyber-aggression ($r=0.52$, $P<0.01$), cyber-victimization ($r=0.56$, $P<0.01$), and psychological dysregulation ($r=0.48$, $P<0.01$) with tendency toward drug addiction in the adolescents. Also, the results of regression analysis to determine the contribution of cyber aggression and cyber victimization in prediction of the level of tendency toward drug addiction was statistically significant ($R^2 = 0.34$; $F = 91.08$; $P > 0.001$) and 34% of tendency toward drug addiction variance was explained based on the cyber aggression ($\beta = 0.22$) and cyber victimization ($\beta = 0.39$) (Table 1).

Table 1. Predicting tendency toward drug addiction based on cyber aggression and cyber victimization

Model	R	R ²	F	P	B	S.E	β	t	P
Constant					24.55	0.88	-	27.84	0.001
Cyber aggression	0.58	0.34	91.08	0.001	0.54	0.15	0.22	3.41	0.001
Cyber victimization					0.85	0.14	0.39	5.81	0.001

The results of regression analysis to determine the contribution of psychological dysregulation in prediction of the level of tendency toward drug addiction was statistically significant ($R^2 = 0.23$; $F = 35.14$; $P > 0.001$) and 23.1% of tendency toward drug addiction variance was explained based on the psychological dysregulation. Regression coefficients revealed that domains of behavioral ($\beta = 0.25$) and emotional ($\beta = 0.30$) of psychological dysregulation, significantly predicted variance in tendency toward drug addiction (Table 2).

Table 2. Predicting tendency toward drug addiction based on psychological dysregulation

Model	R	R ²	F	P	B	S.E	β	t	P
Constant					18.45	1.64	-	11.25	0.001
Behavioral dysregulation	0.48	0.23	35.14	0.001	0.64	0.13	0.25	4.89	0.001
Cognitive dysregulation					0.08	0.14	0.03	0.59	0.55
Emotional dysregulation					0.77	0.15	0.30	5.10	0.001

Discussion and conclusion

The results showed that there were significant correlations between cyber-aggression, cyber-victimization, and psychological dysregulation and tendency toward drug addiction in the adolescents. Also, the cyberbullying victimization and psychological dysregulation could favorably predict the tendency toward drug addiction in the adolescents. Our findings are consistent with the results of studies by Mallmann, et al. (2018), Zsila, et al. (2018), and Cénat, et al, (2018). In explaining these results, it can be stated that adolescents who have psychological dysregulation and are unable to properly regulate their emotions, behaviors, and cognitions are likely to be given the opportunity to have their impulses in cyberspace without restriction, express, and engage in pathological bullying and cyber-victimization behaviors (Mallmann, et al., 2018; Cénat, et al., 2018). Cyberbullying and victimization are also associated with psychological problems and distress (including depression, anxiety, stress, guilt, and shame), and adolescents use drugs as a maladaptive strategy to deal with distress and negative psychological states and become vulnerable to drug addiction. One of the limitations of this study was the study population, which was sampled only from high school students in Miandoab city, and the

differences and diversity of Iranian culture should be cautious in generalizing it to all Iranian adolescents. It was recommended that research variables be performed on larger samples and on clinical groups of adolescents involved in addiction and pathological cyber behaviors in order to obtain more accurate information in this regard.

Ethical Permissions

The researchers followed all the ethical codes related to human cases and obtained necessary permissions from the competent authorities.

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Funding & Conflicts of interest

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