



A study of cyber bullying, cyber victimization and depression among rural and urban college students

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Abstract

Background: Cyber bullying is an issue that has arisen as a result of existing technological advancements. It is a new kind of peer aggression where one or more persons use a technical medium to threaten another. College students are at greater risk of cyber bullying as this age is characterized by autonomy, few responsibilities and more liberty.

Aim: This study investigates the difference and relationship between cyber bullying, cyber victimization and depression among urban and rural college students of Jammu district, J&K. It consists of total 200 students, 100(urban) and 100(rural). Incidental sampling technique was used for data collection.

Methods: Independent t-test and Pearson correlation were applied for carrying out differences and relationship.

Results: The findings of the study are showing a significant difference between rural and urban students on the variables of cyber bullying, victimization & depression. Correlation analysis revealed a significant positive correlation between cyber bullying and depression. A relationship between cyber victimization and depression is also found among urban students, whereas non-significant positive correlation was found among rural students on the variables of cyber bullying, cyber victimization and depression.

Conclusion: Mean score of rural students on the variables of cyber bullying, victimization and depression is more than urban college students. This can be suggested that the rural students are more prone to depression than urban students.

Keywords: cyber bullying, victimization, depression, college students, t-test, correlation analysis

Introduction

The term Cyber bullying is coined by Canadian Bill Belsey (2008) [15]. Cyber bullying is an act of aggression that is often repeated over time and occurs among individuals with power imbalance (Kowalski *et al.*, 2008) [18]. Most common methods of cyber bullying include use of instant messaging, chat rooms, e-mail, and blogging (Hinduja & Patchin, 2008) [16]. In order to be classified an act of cyber bullying, it must meet up three conditions i.e. the act must be replicated, second, it must include psychological mistreatment, and third, it must be done intentionally (Patchin, & Hinduja, 2006) [27]. With the advent of new technologies, such as the internet and digital media, youth has been exposed to online risks (pornography, cyber bullying and internet addiction) and health risks (depression and suicide), which in turn have increased the rates of diseases and death among youth, studies have shown association of internet addiction with increasing cyber bullying problems among youth that can cause mental, physical and social harm (Chang *et al.*, 2013). The modern elements of cyber bullying are the use of electronic forms of communication, e.g. the internet or mobile phones (Smith *et al.*, 2008). It is a constant and deliberate act done with the purpose of harming another person through digital media such as e-mail, social networking web sites, chat rooms, and instant messaging which can be carried by a single individual or a group of people (Bhat, 2008; Patchin & Hinduja, 2006). It has been related with numbers of maladaptive, emotional, psychological and behavioral problems, and social networking sites are most commonly used for cyber bullying among college students (MacDonald & Robert-Pittman, 2010). According to Peter & Petermann (2018) cyber bullying is using information and communication technologies frequently and purposefully to damage, harass, hurt, and disgrace a target.

Cyber bullying and Depression

Depression is recurring and serious illness about how we feel, the way we think or take action and cause feeling of despair and loss of interest in day to day activities (Didden *et al.*, 2009). One of the symptoms of depression includes depressed mood without any basis, it can cause number of physical and emotional problems and declines a person's ability to function, people with depression symptoms report that they have lost interest in their life and other thoughts includes feelings of worthlessness, guilt, and have trouble concentrating and making decisions (Nolen-Hoeksema, 2011). Research studies have found that victims of cyber bullying were at greater

risk of psychiatric disorders such as anxiety, panic, and agoraphobia than their non-victim. Significantly higher risk of suicidal thoughts and depression was found among the victims of bullying (Copeland *et al.*, 2013). Prior researchers have found a link between cyber bullying and depression and have also shown the severity of depression and the degree of cyber bullying (Aoyama *et al.*, 2011; Betts, 2016). Young people have taken internet as self-assurance by using different social networking sites like face book, what's app or any other site which invade their lives in terms of time and the importance young people has given to social media have a major impact on their mental health (Schultze-Krumbholz, 2012; Lloyd, 2014). Stress-generation model of depression suggests that individuals with depressive symptoms may contribute to the creation of extra stress in their life, including victimization (Gibb & Hanley, 2010). In prior study of cyber bullying, researchers continued to reflect on the incidence, leading factors, and psychological effects on victims (Yang, 2018). However, it have also been established that the occurrence of cyber bullying may comprises of severe psychological impact for bullies, for instance sleeping troubles, depression, suicide, and drug abuse (Donoghue & Meltzer, 2018; Reed *et al.*, 2015). Studies have suggested that cyber bullies and cyber bullying victims undergo rigorous depressive symptoms (Kota, & Selkie, 2018; Tian *et al.*, 2018).

Cyber bullying and gender differences

In terms of gender differences in cyber bullying varied result have been found, majority of studies have revealed that females are more probable to be victim of cyber bullying than males (Dehue *et al.*, 2008; Ortega *et al.*, 2009). In contrast to this, significant frequency of cyber victimization among male students has been found and males are more likely to be victims of cyber bullying than females (Saleem, & Khan, 2021). Recent study confirms that individuals with high levels of depression were more probable to be victims and those with less depression were more likely to be non-victims (Grigore, & Maftai, 2020). In addition the findings revealed that gender had a statistically significant impact on the degree of depression among youngsters as female students have a higher mean score for depression severity than male ones (Akpunne *et al.*, 2020).

Cyber bullying and areas

Although there is little literature on cyber bullying victimization among rural and urban populations (Kowalski *et al.*, 2017) ^[19], however an intriguing study done to determine the link between cyber bullying victimization and locations, such as urban and rural, found a favorable relationship. According to the study, urban females are more likely to be cyber victimized than rural females, while males show no significant difference (Ronis, & Slaunwhite, 2019).

Objectives

To find out the differences on the domain of cyber bullying, cyber victimization and depression among urban and rural college students

To examine the relationship between cyber bullying and depression among urban and rural college students

To explore the relationship between cyber victimization and depression among urban and rural college students

Hypotheses

Rural and urban students differ significantly on cyber bullying, cyber victimization and depression

There is a significant positive relationship of cyber bullying with depression among urban and rural college students.

There is a significant positive relationship of cyber victimization with depression among urban and rural college students.

Methodology

Sample

A sample of 200 students was collected for stating the relationship of cyber bullying, cyber victimization and depression among rural and urban college students with 100 rural (50%) and 100 urban (50%). Participants were in the age group of 18 to 22 years with mean age of 19.68. The incidental sampling technique was employed for the data collection.

Procedure: Before collecting the data permission was taken from the authority of colleges. Before administering the test, the participants were given detailed description of the test and students were instructed to fill the questionnaire. The participants were asked about the confidentiality of data.

Measures

Cyber Bullying & Cyber Victimization Experience Questionnaire CBVEQ (Antoniadou, *et al.*, 2016)

It consists of total 24 items with two parts i.e. 12 items for cyber bullying and 12 for cyber victimization for assessing cyber bullying and victimization respectively. It is a five point frequency scale.

Teate Depression Inventory (Balsamo *et al.*, 2014)

It is a 21-items self-report instrument. Each item is rated on a 5-point Likert-type scale ranging from 4 (always) to 0 (never). The total score ranges from 0-84, with higher scores indicating more severe depressive symptoms.

Statistical Tools

To find out the differences between rural and urban students on the domain of cyber bullying, victimization and depression t-test is used. Correlation analysis is used to find out the relationship between cyber bullying, victimization and depression among urban and rural students.

Results and Discussion

Table 1: t-ratios of Cyber bullying, Victimization and Depression among Urban and Rural College Students

Variables	Urban College Students (N=100)		Rural College Students (N=100)		
	Mean	SD	Mean	SD	T
Cyber-bullying	20.63	5.63	23.36	7.60	2.89**
Cyber-victimization	21.52	5.04	23.03	7.14	1.72
Depression	28.68	10.94	35.42	10.12	4.52**

Perusal of the table states that t-ratios have been used to find out the differences on the variables of cyber bullying, victimization and depression among the urban and rural college students. Observation from the table shows that there is a significant differences on the dimension of cyber bullying ($t(198) = 2.89, p < 0.01$). The mean score of urban college students ($\bar{x} = 20.63$) is less on cyber bullying than rural college students ($\bar{x} = 23.36$). It was further illustrated that non-significant difference is found among rural and urban college students on the dimension of cyber victimization ($t(198) = 1.72, p > 0.01$). The mean score of urban college students is ($\bar{x} = 21.52$) and rural college students is ($\bar{x} = 23.03$) on cyber victimization. Further revealed that a significant difference is found on the domain of depression ($t(198) = 4.52, p < 0.01$). The mean score of rural college students ($\bar{x} = 35.42$) and urban college students ($\bar{x} = 28.68$) respectively on the variable of depression. This can be said that urban college students are less vulnerable to depressive symptoms than rural college students. This can be possible due to their exposure to social skills and have better way of adjustment than their counterparts. It can be suggested from the results that urban college students get less bullied than rural college students. They are more aware of their social conditions and are more knowledgeable about cyber crimes than rural college students. It is evident from the previous studies that rural students had high prevalence of depression than urban college students (Meng *et al.*, 2013). The high depression rate among rural college students may be due to poor family environment and lower social status (Whyte, 2010). Another study suggested that depression is more common among rural population than urban population (Amoran *et al.*, 2007).

Table 2: Inter-correlation of Urban College Students

Variables	Depression
Cyber bullying	.33**
Cyber victimization	.38**

Correlation analysis has been used to examine the relationship between cyber bullying and cyber victimization with depression among urban college students. Values from table 2 show that there is significant positive relationship between cyber bullying and depression ($r = .33$). Positive relationship has also been found between victimization and depression ($r = .38$) among urban students. From this we can say that both bully and victim are likely to become depressed. According to previous literature young people are developing depressed symptoms as a result of cyber bullying. Furthermore, positive association has been revealed between cyber bullying and depression symptoms (Reed *et al.*, 2015).

Table 3: Inter-correlation of Rural College Students

Variables	Depression
Cyber bullying	.056
Cyber victimization	.151

Table 3 suggests non-significant positive relationship between cyber bullying and depression ($r = .05$). Similarly, non-significant positive relationship has also been revealed between cyber victimization and depression among rural college students ($r = .15$). Previous study has suggested that cyber bullying is related with depression and anxiety among victims (Schenk & Fremouw, 2012).

Study on college students has established that cyber bullying perpetrators have uncaring-detached behavior, and it was also reported that depressive symptoms have found in both bullies and victims (Kokkinos & Antoniadou, 2014).

But in our study non-significant difference is found, this might be due to their favorable family conditions that cyber bullying and cyber victimization is not related to depression among rural students. The rural life is more abound to collective culture. There might be some other factors that can be a relevant trigger of depression among rural college students.

Conclusion

It can be concluded from the results that there are significant differences on the dimension of cyber bullying ($t(198) = 2.89, p < 0.01$). The mean score of urban college students ($\bar{x} = 20.63$) is less on cyber bullying than rural college students ($\bar{x} = 23.36$). It was further illustrated that non-significant differences are found among rural and urban college students on the dimension of cyber victimization ($t(198) = 1.72, p > 0.01$). The mean score of urban college students is ($\bar{x} = 21.52$) and rural college students is ($\bar{x} = 23.03$) on cyber victimization. Further revealed that a significant difference is found on the domain of depression ($t(198) = 4.52, p < 0.01$). The mean score of rural college students ($\bar{x} = 35.42$) and urban college students ($\bar{x} = 28.68$) respectively on the variable of depression. It was also suggested that insignificant positive relationship between cyber bullying and depression ($r = .05$) is found. Similarly, non-significant positive relationship has also been revealed between cyber victimization and depression among rural college students ($r = .15$). Students who have reported cyber bullying act has shown numerous psychological problems such as depression, anxiety, and low self-esteem, they also report experience of negative emotions such as frustration, anger, hopelessness and sadness (Juvonen & Goss, 2008). Administration should intervene in cyber bullying instances, since failing to do so may expose student's capacity to succeed in academics.

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