



**CYBER VICTIMIZATION, PERCEIVED SOCIAL SUPPORT AND INTERPERSONAL  
TRUST AMONG UNIVERSITY STUDENTS**

A thesis  
Presented to Professional Psychology Department,  
Bahria University, Islamabad Campus

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In Partial Fulfillment  
of the Requirement for the  
Degree of Bachelor of Sciences  
(BS) Psychology

By  
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&  
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*Supervised By*  
**Ayesha Aziz**

JUNE, 2022

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Samiya Ismaeel Abbasi

Syeda Manaal Babur

## **DEDICATION**

We dedicate our research work to our supervisor, Dr. Ayesha Aziz who has lead us through the valley of darkness with light of hope and support. A special feeling of gratitude to our supervisor whose words of encouragement and force for determination ring in our ears. We give special thanks to her for always being available for us throughout the entire process.

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## **List of Abbreviations**

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<b>Abbreviations</b>	<b>Full form</b>
RCBI	Revised Cyberbullying Inventory
ITS	Interpersonal Trust Scale
MSPSS	Multidimensional Scale of Perceived Social Support
NUST	National University of Sciences and Technology
NDU	National Defence University

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## List of Symbols

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<b>Symbols</b>	<b>Definitions</b>
$\alpha$	Cronbach's index of internal consistency
f	Frequency
N	Total sample
M	Mean
S.D	Standard Deviation
%	Percentage
p	Significance Value
$\Delta R^2$	R square change value
B	Unstandardized Beta
$\beta$	Standardized Beta
LL	Lower Limit
UL	Upper Limit
IV	Independent Variable
DV	Dependent Variable

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## Abstract

The current research aims to assess the relationship between cyber victimization, perceived social support and interpersonal trust among university students. A Correlational research design has been used. A sample of (N=251) university students (Male=93, female=153) of ages 18 to 25 ( $M_{age} = 21.3$ ,  $SD = 1.45$ ) were taken from four universities in Islamabad, through convenience sampling. It was hypothesized that there is likely a relationship between cyber victimization and interpersonal trust. Also, perceived social support would serve as a moderator. Data was collected using Revised Cyberbullying Inventory II (RCBI-II), Rotter's Interpersonal Trust Scale and Multidimensional Scale of Perceived Social Support (MSPSS). The analysis was employed using IBM SPSS Statistics 25. The descriptive statistics was employed for demographic characteristics of participants and reliability analysis for psychometric properties. Partial Correlation was employed to assess correlation between study variables. Furthermore, Hierarchical Linear Regression was employed to assess prediction between study variables. Moderation was done using Process by Hayes to assess moderating effect of perceived social support on the relationship between cyber victimization and interpersonal trust. Results revealed that the correlation between cyber victimization and interpersonal trust was positive, when controlling gender. Perceived social support and cyber victimization were significant predictors of interpersonal trust. Moderation was not proved. Independent sample T-test was run to evaluate differences in gender and categories of age. Implications of the results have relevance to society, general public, as well as concerned authorities. It was concluded that females possess more Interpersonal Trust than males. Moreover, results further reveal that ages 22 to 25 have high interpersonal trust as compared to other studied age groups. Implications of the results have relevance to society, public, as well as concerned authorities.

*Keywords:* Cyberbullying, Cyber victimization, Interpersonal Trust, Locus of control,  
University Students

**Introduction****Cyber Victimization**

Cyber victimization comes from being a victim of cyberbullying, which is a modern adaptation of bullying where the bully harms or coerces the victim through online forums. It is a rapidly expanding, active global affair (Ades, 2021). The main reason for the increase in cyberbullying is due to the advancement of electronic media and communication tools (Hendricks et al., 2012). It is quite evident that the rapid growth of the Internet and additional social communication tools have providing convenience in educational, recreational, and work-related domains has a positive impact on our lives (Musharraf et al, 2018). It can also be observed, from research, that young individuals use internet and communication tools most frequently, and they are the first generation to have access to such a significant extent (Weber & Pelfrey, 2014).

Cyber victimization is a predominant event in university students. There is an increase in access to the internet among university students, which makes them more vulnerable and provides them an opportunity to experience the events of cyber victimization (Lenhart et al., 2010). Use of social networking sites has significantly risen among both teenagers and young, however there are changes and some reduction in the proportion of teenagers using numerous features in social networking sites. Young adults use wireless internet at high rates, and university students have preferred laptops as the choice of computers and replaced the desktop computers.

With reference to Pakistan, Kemp (2018) highlighted the young adults' preferences of electronic media in the Pakistani community, as the global community 51.5% young adults use mobile internet including 3.29 billion uses social media forums. 3.02 billion People use mobile

phones to access social media. In the light of the survey 1500 million social media users use WhatsApp surveyed by 225 million use Snapchat. In the second quarter of 2018, Facebook tops with 2234 million internet users suggested by statistical poll.

There is no doubt that the internet has paved a way into our lives (Madden et al., 2013), but it is so that it is considered “the most significant and pervasive issue” (Robinson & Patherick, 2017). The internet has been used by the university students as a primary source of communication in their day-to-day routines (Ellison et al., 2007). With the influx of internet use and access, cyberbullying continues to stay on the rise (Israa, 2020). The youth has been exposed to damaging and distressing interactions. The unlimited access to internet and online services adds to the general concern. Slonje and Smith (2008) indicated that cyberbullying (and thus, in turn cyber victimization) is germinating worldwide.

Modern technology and mode of life requires individuals to work using online platforms which make them more susceptible to cyber victimization. University students, for one, are trending in light of the issue of cyberbullying victimization because of easy approach to the internet and modern scientific devices such as smartphones and laptops (Ellison et al., 2007). There is an increased number of instances of cyberbullying among the university student population (Zalaquett et al., 2014; Faucher & Chatters, 2014). Frequent use of technology results in young adults, especially, having access to more information and communicating like so (Martínez-Monteagudo, 2020) and thus leading to the misuse of information and mishandling of this access. Furthermore, cyber victimization can be experienced by an individual at anywhere and at any time, which may lead to the negative consequences and becomes a challenge for victims of cyber bullying to escape from the situation (Smith & Slonje, 2010). And so, it becomes important to use this population in the research.

Digital Rights Foundation (DRF) reports the escalation of cyberbullying in recent years. There are numerous forums by which cyberbullying persists. The highest quantity of complaints with respect to cyberbullying in Pakistan were reported on WhatsApp (Jamal, 2020). Other forums include Instagram messages, Facebook, Twitter, Tik Tok etc.

Cyberbullying occurs in many ways including, but not limited to, tyrannizing in the comments, in the form of calls or emails, fat-shaming, disclosing private pictures, spreading false information and impersonation. Tokunaga (2010) describes Cyber victimization as the target planned harm that is imposed via electronic media such as text messaging, chatrooms, e-mail, direct messaging, and webpages against which victims cannot effectively fight themselves. The report states that 57 percent of the complaints are from women and that the majority of the victims were from Punjab at 57 percent, with Sindh being second at 15 percent. Most cases were of individuals aged between 21 and 25 years. And the group most prone to cyber victimization was women. Moreover, men have reported cyberbullying others to a larger extent than women did (Erdur-Baker & Kavut, 2007).

Research establishes that there is greater negative impact from cyber bullying than traditional face to face bullying (Bonanno & Hymel, 2013). This could be for a number of reasons, such as the bully remaining anonymous behind a screen, or them not watching the immediate reactions of the victims which can spark empathy in the bully, larger audience, a 24/7 access to the internet etc., (Musharraf et al., 2018).

### **Interpersonal Trust**

Interpersonal Trust allows individuals to perform in a complex world characterized by several risks because individual trust that these hazards will not leads to the negative outcomes. Interpersonal Trust is stated as risk-taking and is supposed to be based on numerous factors (Mayer et al., 1995). Firstly, the trustworthiness of trustee must be considered by trustor; this honesty is based on the perceived ability, generosity, and

truthfulness of trustee. Secondly, the generalized tendency of trustor to trust influences the changes of these factors into trust. Lastly, the perceived risk also contributes to the decision made about trust.

Different consequences are drawn from trusting others other people. Positive consequences are expected to increase trustee's perceived trustworthiness and overall tendency of trustor to trust, the opposite is expected for negative results.

Stemming from being a victim of cyberbullying, the individual learns to be less trusting of others. Youth who have been cyberbullied face more social difficulties and stress in comparison to those who have not been bullied (Nixon, 2014). Interpersonal Trust focuses on the perception that another person is not to harm your interest and openness to the idea of vulnerability to that person (William, 2014). The nature of the relationship between stress and trust is influenced by perceived social support. People who have higher levels of trust viewed their family and friends to be more supportive than those who have lower levels of trust (Grace & Schill, 1986). Interpersonal Trust is based upon the expectation of positive intentions and behaviors of those around us (Guo, 2017). It is quite evident that perceived understanding of social support and anticipation of such mainstay helps maintain trust in individuals. Thus, social support becomes an important factor when assessing levels of trust.

### **Perceived Social Support**

Perceived Social support is different from received social support. It is stated that perceived social support is understood in terms of how an individual appraises their situation, which is not necessarily a true reflection of the support actually received (Eagle et al., 2019). According to Lin (1986) social support is perceived instrumental or/and expressive provisions that are supplied by the people around us.

Though cyber victimization experiences may increase the risk of developing low interpersonal trust. Various theoretical models identify perceived social support as a primary



defensive factor for individuals who are more vulnerable to risk factors such as cyber victimization (Cohen & Wills, 1985; Swearer & Doll, 2001). Basically, perceived social support is a confidence of an individual that satisfactory support from others will be available when needed (Barrera, 1986). Understanding the role of perceived social support to defend cyber victims from the adverse consequences of the events is vital and so researching correlation between these two becomes crucial. It can assist individuals handle unpleasant events of life by inducing a sense of feeling appreciated and supported and by encouraging suitable responses of coping (Cohen & Wills, 1985) such as maintaining an optimal level of interpersonal trust after being cyber victimized.

Perceived social support buffer the relationship in two ways. Firstly, it can decrease the insight of danger or risk of being harm evaluated in a certain situation. Secondly, it can offer opportunities to an individuals to handle and cope with the stressful events effectively (Cohen & Willis, 1985).

## **Literature Review**

The following section included a literature review on the indigenous studies and international research.

### ***Cyber Victimization and Interpersonal Trust***

Previous researches highlighted the association between cyber victimization and interpersonal trust. The research was conducted in Pakistan to explore the role of cyberbullying, and cyber victimization in self-esteem and interpersonal trust among 200 university students in the age range of 18 to 20 from Beaconhouse National University Lahore. RCBI-II, Rotter scale of Interpersonal Trust and Rosenberg Self-esteem Scale was used to collect data from the participants. Pearson correlation, multiple linear regression, and an independent sample t-test was primary analysis used to run analysis. According to the results, significant positive correlation was discovered among cyberbullying and cyber

victimization in the study. In addition, interpersonal trust was significantly positively predicted by cyber victimization. Significant differences in gender were also observed in the study that shows that the males were more engaged in cyberbullying as compared to females. Cyber victimization and interpersonal trust showed no significant gender differences between males and females. It was also reported that both cyberbullies, and cyber victims rated WhatsApp as the first choice as their online medium preference. In addition, both of them rated snapchat and Facebook as their second and third preference respectively and the forum with most unwanted contact (Butt et al., 2019).

A study was conducted in Pakistan to explore causes and effects of cyberbullying among female student in their university campuses. For the study, the data was gathered from 120 female university students from four universities in the Sindh province. The results revealed that the rate of threatening and blackmailing was prevalent in female university students in their campuses. Additionally, it was also observed that the female university students remained silent and did not communicate such incidents of bullying to their families and higher authorities because of being considered immoral. Furthermore, the female students showed lack of trust in the law prosecution agencies and were unfamiliar to the existing laws against cyber harassment (Magsi et al., 2017).

According to the empirical evidences, trust is constructed on experiences, so that experiences of cyberbullying and cyber victimization might contribute to low trust. Moreover, high trust may cause high involvement in risky online behavior that leads to increased risk of both cyberbullying and cyber victimization. Pieschl and Porsch (2017) discovered the complex relationship concerning cyberbullying and trust using two cross-sectional researches. Data for both studies were collected using questionnaires regarding family problems, violence, negative cyber experience, trust, online self-revelation, and online privacy issues. Findings of explorative Study 1 with sample size 224 indicated that significant

negative problems related to family and cyberbullying/victimization experiences forecast lower generalized trust. Exploratory Study 2 with sample size 196, findings indicated that no significant obvious association was found between trust and cyberbullying, both studies show mixed evidence and determine a more complex relationship between cyberbullying and generalized trust than expected.

### ***Perceived Social Support and Interpersonal Trust***

Hamid and Lok (2000) explored the parameters of loneliness of adolescents in China and difference of social support and interpersonal trust. The scores of 542 college and university students including 145 lonely and 397 non-lonely between 13 to 19 years of age were compared. UCLA Loneliness Scale, Social Network Grid and Rotter's Interpersonal Trust was used. The results of the study revealed that adolescents who are alone had small social groups, had close few friends, and less support received from their peers in school. Usually, they had less satisfying interpersonal relationships external to the family, with close peers, and their connection was less satisfying only with their father within the family. Commonly, alone teenagers indicated much less level of interpersonal trust in comparison to non-lonely adolescents. They expressed less trust towards authority figures and less optimistic behavior about the honesty of others.

In the difficult period of life, searching and receiving social support from trusted others is essential to sustaining both psychological and physical health (Burleson, 2003; Cunningham & Barbee, 2000). Research was conducted to examine the differences in coping behavior and social support between 118 male undergraduate participants with high and low interpersonal trust in age bracket of 18 to 25 years. Data was collected through Rotter's Interpersonal Trust Scale, Inventory of Socially Supportive Behaviors, Perceived Social Support-Friends and Family Scales and Tanck and Robbins' list of specific coping behaviors. Independent t-test and correlation analysis was used to analyze the outcomes of the study.

Significant findings reported that the participants possessing high trust have the ability to cope with stress more effectively in comparison to those participants low in trust. Those high in trust perceived both family and friends as more supportive and involved in more social support-seeking behaviors as compared to those low in trust. In fact, a failure to gain from and employ social support effectively combined with a dysfunctional coping style make participants having low trust more susceptible to negative stressful events of life. (Grace & Schill, 1986).

### ***Cyber Victimization and Perceived Social Support***

Holfeld and Bati (2020) studied the social support and experiences of school environment as a moderator and mediator on the relationship among cyber victimization and internalizing symptoms among 1151 early male and female adolescents from nine middle schools in two cities of Midwestern. Cyber Victimization Scale, American School Climate Survey, MSPSS and Depression Anxiety Stress Scale (DASS) was used to gather data for the research. Regression model highlighted the buffering effects of social support and school environment which revealed strong association of more cyber victimization experiences with internalizing symptoms when less support from peers and more positive school climate was reported by adolescents. Structural mediation models revealed that more experiences of cyber victimization were accompanying with less peer and family support and poorer school environment experiences respectively.

Cross-sectional Study was conducted to find the variances in perceived social support from family and friends and to determine predictors of bullying victimization between adolescents in Jordan. This study used stratified random sampling to choose 436 sample of adolescents. For measurements, personal experiences checklist and Perceived social support scale was used. T -test, multiple linear regression and ANOVA were used for analysis of results. Results highlighted that bullying victimization predictors were gender, age, use of

electronic devices, father's education, and family support. More social support from friends was received by females as compared to males. High social support was received by adolescents between the age ranges of 14 to 16 years. Adolescents belonging to the high-income group started receiving more family support in comparison to middle and low - income groups (Shaheen et al., 2019).

A recent empirical study has emphasized differences regarding gender in the moderating effect of perceived social support with differences based on perceived support from family, friends, and teachers, in the association between cyber victimization and negative outcomes (Noret et al., 2018). Study was conducted by Noret et al. (2020) to examine the moderating role of perceived social support between the association among cyber victimization and mental health problems. Data was gathered from 3737 participants of 12 and 13 years of age using an online questionnaire. Correlation, Regression, and Moderation analysis was used to analyze the results of the study. Based on four models, findings showed that cyber victimization was significantly related to inferior mental health problems in females. Perceived support from others did not provide buffer in the relationship experiences of cyber victimization and mental health problems for both genders. Results also found substantial relationship among lack of perceived support perceived support from family and friends and problems with psychological health in only females.

Few studies have discovered the link between perceived social support and cyber victimization. A research was conducted to determine psychological insecurity as a mediator and perceived social support as a moderator between cyber victimization and depressive symptoms. 793 adolescents from China were assessed using a subscale of cyber victimization, insecurity questionnaire, depression inventory and perceived social support scale. The findings of moderation analysis found that perceived social support moderated the direct and indirect link between cyber victimization and symptoms of depression as well as

among cyber victimization and psychological insecurity in adolescents. Perceived social support may worsen as well as weaken the connection between cyber victimization and depression. Correlation analysis showed that adolescents experienced a high level of cyber victimization, there was a negative weak relationship among perceived social support and symptoms causing depression. As experiences of cyber victimization increased, the useful effect of perceived social support weakened (Li et al., 2018).

Cyberbullying victimization also leads to the involvement of individuals in other risk behaviors such as tobacco use. Wright (2016) carried out research on 867 adolescents from the Midwestern United States to explore the moderating outcome of perceived social support from teachers, friends, and parents on the relationship among cyber victimization and use of substance. The hypothesis was tested using a structural regression model and correlations analysis between all the variables. The results of the study reported strong social support buffering the positive relationship between cyber victimization, and substance or drug use. The relationship of cyber victimization to any variable of the substance use was not moderated by perceived social support from teachers. Though adolescents receive less perceived social support, they do not feel protected from their surrounding people, which makes them less secure about dealing with negative life events such as cyber victimization.

Mager (2015) examined the established links of cyber victimization with depression and social anxiety in a sample of 82 Eastern Illinois University students from 18 years of age and above using the latest developed measure. The research also explored the moderation of social support among cyber victimization and social anxiety and cyber victimization and depression. Participants were assessed using cyber victimization scale, center for epidemiological studies depression scale, social interaction anxiety scale and MSPSS. According to the findings, positive correlation of cyber victimization with symptoms of depression was found by correlation analysis. No relationship between social support and

cyber victimization was found. Social support did not have a moderating role to association between cyber victimization and depression as well as did not buffer the connection among cyber victimization and social anxiety.

Numerous studies support the claim that a relationship of cyber victimization with depression existed between younger populations. Tennant et al. (2015) explore the relationship between cyber victimization and depression, gender differences and buffering effect of social support between cyber victimization and depression. Data was collected from 267 university students with ages ranging from 18 to 24 years old by using Revised Olweus Bully/Victim Questionnaire, Behavior assessment scale for children and Child and adolescent social support scale to collect data. Findings of Independent t-test indicated no significant differences with respect to gender in perceived social support, depression, and cyber victimization. Different rates of cyber victimization were not reported by young females and males. Correlation analysis revealed significant positive relationships among cyber victimization and depression and significant negative relationship between social support and depression. Therefore, moderation analysis showed that social support did not potentially moderate the association between cyber victimization and depression.

Another study was conducted to explore the relations between cyber victimization, traditional victimization, social support, depression, and suicidal ideation in an adolescents. Finding revealed that more incidents of cyber victimization and traditional victimization increases depression among adolescents. The relation among traditional and cyber victimization and suicidal ideation was not mediated by depression. Findings also found that social support did not moderate the association between cyber victimization and depression (Fredrick, 2015).

Perceived social support can serve as a buffer between the relationship of cyber victimization and possible associates. Some empirical researches found family support as an

effective protector against cyber victimization and reduced family support may cause vulnerability towards cyber victimization (Martins et al., 2017). A research was conducted using longitudinal research design to examine possible risks and protective factors related with cyberbullying and cyber victimization by using a longitudinal research design. Target population collected comprised 1,416 adolescents from Cyprus and was assessed using Inventory of Callous-Unemotional Traits, MSPSS, SSBB-R and MVE. Findings revealed that strong perceived social support decreased cyber victimization in adolescents one year later. Family social support was negatively predicted for cyber-victimization, whereas those with low social support from friends were at heightened risk for future cyber victimization. Exposure to media violence was a serious cause for both cyberbullying and cyber-victimization, while for many adjustment problems, perceived social support act as a protecting factor. Adolescents reported less friend social support were more likely to experience cyber victimization when living with a single parent. Additionally, strong perceived support from family decreased the risk of cyber victimization experiences in adolescents particularly when they had lack of supportive friendships or when they were belonging to single-parent homes (Fanti et al., 2012).

Few studies have discovered social support in relation to cyber-victimization. Because cyber victimization predicted negative correlation of perceived social support with cyber victimization. Dilmac, (2009) investigated the associations between psychological needs and cyberbullying in a sample of 666 Turkish undergraduate students including 231 males and 435 females. Sample was selected using convenience sampling and accessed using questionnaires. Correlation, regression, GLM MANOVA and Bonferroni tests were used to analyze the data. Findings revealed that social support negatively predicted cyber-victimization. Cyberbullying engagement was reported by 22% students at least one time, and



at least once in lifetime 55.3% of the students described themselves as being victims of cyberbullying.

Some previous researches showed the moderating role of perceived social support in the relationship among cyber victimization and distress. A study was conducted to investigate the moderating effect of social support in relation between cyber victimization and internalizing distress in 355 school students and was assessed using child and adolescent social support scale and Reynolds bully-victimization scale. Multivariate analysis of variance, independent t test, correlational analyses and regression analysis was used for analysis of results. According to the findings, more social support from teachers, parents, and peers moderated the relationship among victimization and externalizing distress, such that the higher level of social support, the less internalizing distress was reported from bullying. For males, social support from teacher and peer groups, and for females, and social support from parents moderated the link among victimization and internalizing distress caused by bullying. Support from close friend support provides a buffer for the association between victimization and externalizing distress caused by bullying for females (Davidson & Demaray, 2007).

Williams and Guerra (2007) studied the prevalence and predictors of cyberbullying that was focused on social support might lessen involvement in cyberbullying for culprits and victims. The research aims to study whether significant predictors of verbal and physical bullying also predicted cyber bullying. Data was collected using surveys included measures of bullying enactment and victimization, perceptions of peer social support, standardizing beliefs about bullying, and perceptions of school climates. Logistic regression was used to run analysis on data collected from the participants. Findings revealed that when participants reported that they had kind and gentle friends, the chances of involvement in cyberbullying decreased. No gender differences were reported for cyberbullying in the study.

### *Cyber Victimization and Gender*

Cyber victimization has been explored in literature and mixed results have emerged regarding gender differences (Kowalski et al., 2019). Women were significantly more likely to be the victims of cyberbullying as compared to men (Kowalski et al., 2019; Wang et al., 2019; Holfeld et al., 2012). Previous research discovered the cyberbullying prevalence by categorizing between the three participant roles in cyberbullying and among university students in Pakistan. The study was carried out on 508 participants (348 female and 160 male) taken through convenience sampling technique, in the age bracket of 18-25 years from different Rawalpindi and Islamabad universities. Participants were measured using cyberbullying and cyber victimization scales, Warwick-Edinburgh mental well-being scale and the depression anxiety and stress scales. The primary analysis included ANOVA, post hoc and reliability analysis. The findings showed 67 percent involvement of students in cyberbullying including 25 percent self-reported victims of cyberbullying, cyber bullies were 4 percent and 39 percent reported being both bullies and victims. In addition, significant gender differences were also found as 34.8 percent females were significantly more likely to report themselves as victims of cyberbullying than males while 5.7 percent males reported their involvement in cyberbullying and 37.1 percent in cyberbullying/victims as compared to females (Musharraf et al., 2018).

In addition, Hashemi (2021) studied the prevalence of cyberbullying and cyber victimization in 629 Afghan university students. In this study, gender difference and most common social media platform, promoted cyberbullying and cyber victimization was also explored. Using descriptive and inferential statistics, findings showed high prevalence of cyberbullying and cyber victimization among students. The findings also indicated that Facebook plays dominant role in encouraging engagement in cyberbullying. It was also found that female students experienced cyber victimization more often than male university students.

Significant difference was found related to age of students and rate of internet usage in occurrence of Cyber victimization.

According to Wang et al. (2019) male students are more engaged in cyberbullying acts in comparison with female students. Sharma et al. (2017) found more cyber victimization experienced by males than females. Study conducted in India with 174 students of about 11-15 years of age studied in eight grade who are willing to complete a self-report survey. Wilcoxon rank sum test, Chi-square test and Spearman's rho were used to analyze the results. Results found that total 8 percent students are engaged in cyberbullying and 17 percent students experienced cyber victimization. Males were significantly more vulnerable to experience cyber victimization and victims of online and offline aggression.

Results of a few studies found no significant gender differences regarding cyber victimization. An influential research investigated the prevalence of cyberbullying and cyber victimization in eight different European countries on a sample of 4,847 students in the age bracket of 7 and 19 years to examine differences with respect to gender, using the Tabby online questionnaire. SPSS (version 21.0) was used to analyze the data collected. Findings of the study revealed that prevalence rate of cyberbullying and cyber victimization is high in two countries (Bulgaria and Hungary) and least prevalent in only one country (Spain). Independent sample T test showed that males were more engaged in cyberbullying as compared to females in all countries, but overall females were more often victims of cyberbullying in four countries. Similarly, males were also more often cyber victimized in four other countries. Therefore, no substantial differences in cyber victimization regarding gender was found (Sorrentino et al., 2019).

Previous research measured cyberbullying victimization amongst university students in terms of age, gender, socio-economic, languages, and digital divide variables in Pakistan. The sample for this study was 273 students aged between 18 to 25 years from six universities

in the Sindh province. Cyberbullying scale was used to collect data employing the multistage stratified sampling technique to get representative samples. Primary analysis included Frequency analysis, t-test, ANOVA, and Tukey's post-hoc. The results showed that there was a high prevalence of cyberbullying in university students with only 10% reporting to never been bullied at all. While 24.37 percent was the average score of cyberbullied and 42.85 percent of the students were above average. Significant differences were found with respect to access to the Internet, and socioeconomic status with small effect sizes but no substantial difference regarding age and gender was found, both male and female were equally experienced victimization (Saleem et al., 2021).

### ***Cyber Victimization and Birth Order***

A study conducted by Tharbe and Harun (2000) explores the role of birth order in personality types. The total population itself was a sample consisting of 161 from five students of Sek. Men. Bangsar, Kuala Lumpur. Data of fifteen personality traits was collected through the Sidek Personality Inventory (IPS) and analysis was done using SPSS. According to their findings, the first-born also displays a lower rate of endurance in this research. The last born is more aggressive. And the middle one is the least aggressive and least concerned with having control which implies that they have an approachable personality type. Thus, in this research we can recognize which birth order leads to cyberbullying, and which leads to cyber victimization.

### **Theoretical Framework**

**Stress-buffering Model.** Stress-buffering model provides a suitable explanatory theoretical framework. It has been theorized that perceived social support serves as moderator between a stressor (cyber victimization in this case) and negative outcome (e.g., atypical decrease in interpersonal trust) using the stress-buffer model and reverse stress-buffering model (Rueger et al., 2016). It can be stated that the stress-buffering model insinuates that the

effect of the association among cyber victimization and interpersonal trust was reduced by perceived social support. It is related to the study variables in a way that when individuals experience more cyber victimization, they will be unable to trust other people, but individuals develop trust toward others when they perceive that support from others is provided in case of any need. Perceived social support serves as a buffer that weakens the effect cyber victimization has on the levels of interpersonal trust in an individual. This model affirms the beneficial outcomes of perceived social support. In the presence of supportive relationships individuals show high interpersonal trust. Simply put, quality of life is made better when supportive relationships are present (Bailey et al., 1994).

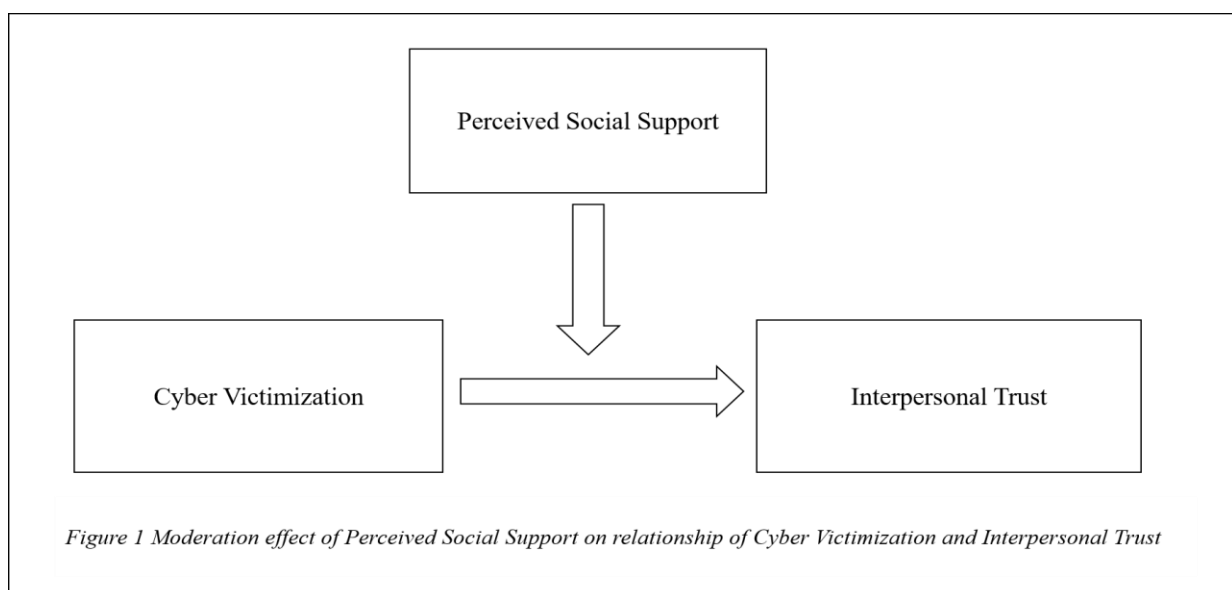
**Social Ecological Theory.** Social ecological theory proposes that humans progress within a multi-layered “ecosystem” that certainly supports their ability to form connections and develop. According to Bronfenbrenner (1979), individuals have direct interactions with their environments, such as their families, schools, and peer groups, at the most immediate level (microsystem). These contexts also have impact on the child by influencing each other at mesosystem level, as families interact with schools and teachers and have combined effects on the individual. The theory states that the interconnected contextual factors encourage or prevent cyber victimization and can determine the degree to which negative outcomes affect development of humans with the passage of time (Hong et al., 2012). Cyberbullying arises from the mutual interactions between individuals and their social environment (Bauman, 2010; Mishna et al., 2008).

According to the theory, due to disturbance in social ecology zones, individuals begin to display stress and behavioral changes that overstates their condition. Students are more likely to be cyber victimized when they receive less or no social support from parents, friends or significant others which leads to the behavioral change (low interpersonal trust) associated with cyber victimization. Theory also describes that individual bond first with parents then

with entire family, teachers and peer group. A lack of support from parents and a lack of supervision in online activities (Holt & Espelage, 2007) of students place them at a heightened risk of cyber victimization. The peer group may associate to the severity of their cyber victimization experiences. Individuals who have negative interaction with friends are more likely to become the victims of cyberbullying which leads them to develop less interpersonal trust on friends, family, and significant others. The quality of relationships within the school environment is related with cyberbullying victimization among students (Cho et al., 2019). Poorer experiences of school environments have been constantly related to an increase in the frequency of cyberbullying and cyber victimization. Students who interacted with supportive teachers and peers are more likely to attain positive progressive outcomes (Forster et al., 2020) such as students develop trust and respect towards teachers and positive interpersonal relations with peer groups and teachers (Espelage et al., 2014). Positive interaction and support from peer groups, family, and school may influence student's ability to cope with cyber victimization experiences and help them to develop interpersonal trust and positive relationships with others.

### Conceptual Framework

The proposed conceptual framework of the present study is shown below.



## **Problem Statement**

Cyberbullying incorporates a wide range of behaviors including text wars, posting rude or insulting comments, using email to harass, defamation, impersonation, sharing or threatening to share inappropriate pictures, website creation, video shaming, followed by other subtle methods. Cyber victimization creates a variety of consequences, physiological and emotional. Based on the line of reasoning mentioned above, it is apparent that cyberbullying has a significant impact on the victim's life. Previous studies show that "Cyber bullying is a growing problem because increasing numbers of young people use computers, cell phones, and other interactive devices as their main form of social interaction" (Hinduja et al., 2011). It is becoming a pressing concern.

## **Solution**

Awareness of the adverse consequence and adequate research on it will help authorities address the issue and help mental health practitioners identify the effects of cyberbullying and victimization which will in turn assist them in forming counter treatment.

## **Significance and Rationale of the Study**

In today's world, technological advancement has given way to the increase in online communication. The current generation is becoming more and more involved in web-based mode of communication. During times of quarantine and lockdown in covid-19, this has escalated even further. There were 61.34 million people who uses internet in Pakistan in January 2021 (Kemp, 2021).

According to Pieschl and Porsch (2017), the relationship between cyber victimization and interpersonal trust is a complex one. On one hand, being victims of cyberbullying might contribute to low trust in others because an individual's level of trust is based on experiences and being victimized is an ill-natured experience. But on the other hand, individuals who have high levels of trust and who trust easily will indulge more in risky behavior online for

instance self-disclosures. Such conduct will increase the risk of them being cyber victimized. To explore this convoluted relationship and understand it, a research study between these variables becomes pivotal. Furthermore, Interpersonal Trust plays a significant role in a life of individual and is to be taken into account. Research on cyber victimization among adults is of great importance as it is off the essence and a huge concern for parents and educators. Thus, research focus has been paid to factors, such as perceived social support, that work to help understand and eventually lead to decreasing the detrimental effects of cyber victimization.

Furthermore, little attention has been given to the moderating effect of social support on the connections between cyber victimization and difficulties in psychosocial adjustment (Wright, 2017) such as interpersonal trust. Results from different studies show that perceived social support acts as a buffer against the psychosocial adjustment problems associated to cyber victimization (Wright, 2015b, 2016). Previous research has focused on intellectual disabilities and academic achievement with regard but had not been particularly paid attention on the role of perceived social support on the level of interpersonal trust in individuals who have been cyber victimized. Hence, this research study will focus on perceived social support buffering against the negative results related with cyber victimization among young adults with low levels of interpersonal trust.

This research helps link interpersonal trust and cyber victimization and what kind of impact it has on the person. Similarly, perceived social support is a prime factor in one's life, it defines how well we cope in the face of distress. And so, each of these needs to be adequately analyzed. Cyberbullying is becoming more common than traditional bullying, and so cyber victimization and its effects have a lot of room for research in the Pakistani context. With reference to Pakistan, limited research has been conducted on the study variables. This research aims to explore the links between cyber victimization, interpersonal trust and



perceived social support. It emphasizes on the relationship between cyber victimization and interpersonal trust, as well as perceived social support and interpersonal trust.

Perceived social support acts as a protective factor that considers parental, teacher and friend's support. The accumulation of these sources of support may prove to be effective enough to decrease the hostile repercussions of cyber victimization (Li, 2018). This makes it adamant to research this relationship. The aftermath of cyber victimization is a valid concern for the young population and there is an increasing trend, which is why this issue needs to be highlighted.

This research will help address one of the adverse effects of these advancements. It is essential to examine variables that may mediate or moderate the pathway among cyber victimization and the lower levels of interpersonal trust in order to explore future prevention and intervention techniques and efforts (Li, 2018). It becomes crucial to understand the effect of cyberbullying so that precautionary measures can be taken in the future, as well as interventions by the universities in the form of policies to help the victims and curtail the bullies. To cater to these gaps in literature, the current study is designed to conceptualize perceived social support moderating the association between cyber victimization and interpersonal trust.

### **Research Objectives**

- To identify the relationship between cyber victimization and interpersonal trust among university students
- To investigate cyber victimization and perceived social support as predictors of interpersonal trust among university students.
- To explore whether perceived social support moderates relationship between cyber victimization and interpersonal trust
- To investigate which gender faces more cyber victimization

- To investigate which birth order faces more cyber victimization

### **Research Hypotheses**

H1 = By controlling gender, there will likely be a negative relationship between cyber victimization, perceived social support and Interpersonal Trust among university students.

H2 = Gender, cyber victimization, perceived social support will likely to predict interpersonal trust among University Students.

H3= Perceived Social Support will likely to moderate the relationship between Cyber victimization and Interpersonal Trust among university students.

H4 = Female university students are more likely to become the victims of cyberbullying as compared to male students of university

H5 = Students who are the middle child face significantly higher level of cyber victimization as compared to other age groups.

## Method

### Research Design

A Correlational study design was employed to examine the relationship between Cyber victimization, Perceived Social Support, and Interpersonal Trust among university students of Islamabad.

### Pilot Study

A pilot study was conducted on a sample of (N=20) participants to assess the language comprehension, feasibility and understandability of the scales. They were asked to rate the scale from 1 to 10, with 1 being the most difficult and 10 being the easiest. The participants were satisfied with the language used in the scale. This data was further added in the final research. The table for descriptive of the pilot study is given below.

**Table A**

*Descriptive Statistics of Pilot Study*

	N	M	SD
Rating	20	8.55	1.932

### Participants

A sample of N=251 adults, including 93 male and 158 female, within the age range of 18 to 25 ( $M_{age} = 21.3$ ,  $SD 1.45$ ), were recruited from four universities of Islamabad. The universities include Bahria University, National University of Sciences & Technology (NUST), Air University and National Defense University (NDU). They were currently enrolled in Undergraduate degree programs. Sample size was calculated using G power and reviewing existing literature. Participants were required to have the ability to understand and

write in English language, use at least one form of electronic mode of communication. The response rate for the participants is given below.

**Table B**

*Response Rate*

Response	Frequencies
No. of circulated questionnaire	300
Give back questionnaire	293
Useable questionnaire	251
Discarded questionnaire	40
Incomplete questionnaire	2
Questionnaire not returned	7
Response rate %	97.6
Useable response rate %	83.6

**Table 1***Demographic Characteristics on gender (N=251)*

		Males		Females	
		<i>F</i>	(%)	<i>f</i>	(%)
Have you ever been a victim of cyberbullying?					
	Yes	64	68.8	111	70.3
	No	29	31.2	47	29.7
Have you ever been cyberbullied on more than one occasion?					
	Yes	50	53.8	81	51.3
	No	43	46.2	77	48.7
Category of Number of electronic devices					
	2 or less	50	53.8	106	67.1
	More than 2	43	46.2	52	32.9
Category of Number of Active Social Media Platforms					
	1 to 5	65	69.9	117	47.1
	6 to 10	26	28	41	25.9
	More than 10	2	2.2	0	0
Most Used Social Medium					
	One	23	24.7	35	22.5
	More than one	70	75.3	123	77.8
Medium with worst experience					
	One	68	73.1	99	62.7
	More than one	13	14	21	13.3

		Males		Females	
		<i>F</i>	(%)	<i>f</i>	(%)
Daily Duration	None	12	12.9	38	24.1
	Less than 1 hour	5	5.4	6	3.8
	1 to 2 hours	22	23.7	27	17.1
	3 to 4 hours	25	26.9	61	38.6
	5 to 6 hours	23	24.7	34	21.5
	7 to 8 hours	10	10.8	16	10.1
	More than 8 hours	8	8.6	14	8.9
Weekly Duration	All days of the week	68	73.1	129	81.6
	Most days of the week	18	19.4	24	15.2
	Usually on weekends	7	7.5	5	3.2
Nature of use	Alone	84.9	84.9	132	83.5
	Group	6.5	6.5	11	7
	Both	8.6	8.6	15	9.5

*Note: f = frequency, % = percentage*

**Table 2***Demographic Characteristics on Birth Order (N=251)*

		First Born		Middle Child		Last Born	
		<i>f</i>	(%)	<i>f</i>	(%)	<i>f</i>	(%)
Have you ever been a victim of cyberbullying?							
	Yes	66	72.5	66	73.5	41	62.1
	No	25	27.5	24	26.7	25	37.9
Have you ever been cyberbullied on more than one occasion?							
	Yes	48	52.7	47	52.2	34	51.5
	No	43	47.3	43	47.8	32	48.5
Category of Number of electronic devices							
	2 or less	54	59.3	57	63.3	43	62.5
	More than 2	37	40.7	33	36.7	23	34.8
Category of Number of Active Social Media Platforms							
	1 to 5	67	73.6	67	74.4	46	69.7
	6 to 10	22	24.2	23	25.6	20	30.3
	More than 10	2	2.2	0	0	0	0
Most Used Social Medium							
	One	23	25.3	18	20	17	25.8
	More than one	68	74.7	73	80	49	74.2
Medium with worst experience							
	One	62	68.1	57	63.3	47	71.2
	More than one	13	14.3	12	13.3	7	10.6
	None	16	17.6	21	23.3	12	18.2
Daily Duration							

	First Born		Middle Child		Last Born		
	<i>f</i>	(%)	<i>f</i>	(%)	<i>f</i>	(%)	
Weekly Duration	Less than 1 hour	4	4.4	5	5.6	2	3
	1 to 2 hours	18	19.8	16	17.8	15	22.7
	3 to 4 hours	30	33	34	37.8	22	33.3
	5 to 6 hours	20	22	16	17.8	18	27.3
	7 to 8 hours	11	12.1	12	13.3	2	3
	More than 8 hours	8	8.8	7	7.8	7	10.6
	Nature of use	All days of the week	68	74.7	71	78.9	55
Most days of the week		19	20.9	14	15.6	8	12.1
Usually on weekends		4	4.4	5	5.6	3	4.5
Nature of use	Alone	79	86.8	71	78.9	58	87.9
	Group	7	7.7	9	10	1	1.5
	Both	5	5.5	10	11.1	7	10.6

*Note: f = frequency, % = percentage*



### ***Inclusion Criteria***

- Individuals who have been cyber victimized at least more than once in the last six months

### ***Exclusion Criteria***

- Individuals with physical and mental disability; measured by including a close ended question in the demographic sheet
- Individuals who have been cyber victimized only once in their life

### **Operational Definition**

#### ***Cyber Victimization***

Cyber victimization is operationally defined by the total scores on the subscale of Revised Cyberbullying Inventory II (Topcu & Erdur-Baker, 2018). Cyber Victimization is the process of getting victimized through the cyber world or cyber space (Akhter, 2020). It denotes a broader meaning when referring to victimization i.e., any victimization generated through technology (Langos, 2012).

#### ***Interpersonal Trust***

Interpersonal Trust is operationally defined by the composite scores on Interpersonal Trust scale (Rotter, 1967). Interpersonal Trust can be defined as an outlook or expectation of being able to rely on someone's promise, word, verbal, and written statement. (Rotter, 1967). It is the perception that the other person can be trusted and that they will not harm your interests. It is the willingness to be vulnerable.

#### ***Perceived Social Support***

Perceived social support is operationally defined by the total scores on the scale and subscale of Multidimensional Scale of Perceived Social Support (Zimet et al., 2018). Social Support refers to physical or/and emotional support that a person can receive from family, friends, neighbors, institutions etc. (Gülaçtı, 2010) Social support is divided into two

categories, received and perceived. By extension, Perceived Social Support is how we perceive our family, friends, and others as sources accessible to provide material, psychological and overall support during times of need (Ioannou et al., 2019).

## **Measures**

### ***Demographic Sheet:***

This includes Name, Age, Gender, Current Semester and Degree of Education, Current Educational Level, Name of University, Employment Status, Marital Status, Family Income, Family System, Number of family members, Number of friends, Relationship with parents, Relationship with friends, Parents alive or deceased, Parents' education, Parents' employment, and Birth Order. Furthermore, this includes history of cyber victimization, Number of electronic devices, Number of Social Media Platforms, Medium with worst experience, Daily and weekly usage, and nature of use.

### ***Revised Cyberbullying Inventory II (RCBI-II):***

This scale was developed by Erdur-Baker and Kavşut in 2007 and revised by Topcu and Erdur-Baker in 2018. It consists of two forms, side by side, containing 10 statements. These items are to be responded to by the participant as both, the bully and the victim. This is done with the help of a four-point Likert type scale where 1 = never, 2 = once, 3 = twice or three times, 4 = more than three times. The responses of the participants are added at the end to attain a total score in each form. The Cronbach Alpha reliability coefficient for the cyberbullying form is 0.79 and for the cyber victimization form is 0.80 (Topcu & Erdur-Baker, 2018). In current study, Cronbach's alpha reliability of cyber victimization scale is 0.79 showing good reliability of the scale. In this study, only cyber victimization subscale has been used, as per requirement. The lowest possible score is 10 and the highest possible score is 40, where higher scores stipulate more frequent cyberbullying and cyber victimization. Adding scores for all 10 items is the scoring key.

***Rotter's Interpersonal Scale:***

Rotter's Interpersonal Trust Scale is used to assess interpersonal trust (Rotter, 1967) and was used in a study on Cyberbullying, Self-Esteem, and Interpersonal Trust in Young Adults by Butt et al. (2019). The scale consists of 25 items in the form of statements. These items have a five-point Likert-type scale response format spanning between 1 "strongly agree" to 5 "strong disagree." A split-half reliability produced a score of  $r = 0.76$  (Rotter, 1967). In this study reliability of the scale is 0.72 which shows it is a good and reliable tool to measure Interpersonal Trust. In the scoring procedure, responses to the items of scale that worded in a "trustful" direction were reversed. Higher scores on the scale indicate high interpersonal trust.

***Multidimensional Scale of Perceived Social Support (MSPSS):***

"Multidimensional Scale of Perceived Social Support" was developed by Zimet, Dahlem and Farley (1988), and has been used by Chan and Lee in their study on perceived social support and depression among work-related therapists during COVID-19 pandemic (2022 in Hong Kong. MSPSS has been used to measure supportive relationships within three areas: family ( $\alpha = .82$ ), friends ( $\alpha = .80$ ), and significant others ( $\alpha = .87$ ). The scale comprises 12 items including three subscales, consisting of four items for each subscale, which were averaged to yield a composite score of perceived social support. Each of the 12 items was assessed on a 7-point scale, ranging from 1 (very strongly disagree) to 7 (very strongly agree). A summary score was computed, high scores show high perceived support, and low scores show low level of perceived support (Altınay-Cebeci et al., 2002). The Cronbach's  $\alpha$  coefficient of the scale was 0.88. The alpha reliability for this scale in the current study is 0.90 and for significant other subscales, family subscale and friend's subscales are 0.90, 0.86 and .77 respectively. This includes an Urdu version, but the research conducted made use of the original English version. For subscales, the respective four items were summated, and the

result was divided by four. For the total scale, sum across all 12 items and was then divided by 12.

### **Procedure**

Initially, the formal institutional permission was taken from the department of Professional Psychology in Bahria University Islamabad Campus to conduct the study. Then, permission from authors to translate and adapt the scales was taken. All the scales were used in the English version for the students. Afterwards, the pilot study was conducted.

A sample of 251 university students, who were currently enrolled in different universities of Islamabad, namely Bahria University, Air University, National University of science and technology and National Defense University were invited to participate in the research. A total of 300 questionnaires were circulated, out of which 251 were usable. Number of questionnaires given back were 293 and discarded were 40. Furthermore, 2 were incomplete and could not be utilized. The response rate was 97.6% but usable response rate was 83.6% which is favorable.

Participants were educated about the aim of the study and understanding of the questionnaire provided to them. To measure cyberbullying, Revised Cyberbullying Inventory II (RCBI-II) was used. For Perceived Social Support, Multidimensional Perceived Social Support Scale (MSPSS) was used. And Rotter's interpersonal trust scale was used to measure interpersonal trust. Ethical considerations were strictly followed, and informed consent was obtained from the participants. After securing an informed consent from the participants, questionnaires were provided to be filled out. Participants were guided about the intent of the study and given a brief description about the research so that they could decide whether they want to participate in the study. The willingness of the participants was ensured along with their right to withdraw from the research. Problems in understanding the questionnaire and

the purpose of the research were thoroughly solved and the participants were requested to provide accurate and honest responses.

It was ensured that the participant's privacy and response confidentiality will be maintained. If, at any point, the participant was to feel distress due to reliving the trauma of being cyberbullied, the process was ceased, and therapy was recommended. Total duration of the research study was over the span of 4 months.

### **Ethical Consideration**

- Permission to conduct this research has been taken by the respective department.
- This research was conducted under supervision of an assigned supervisor.
- Permission to use scales was attained by respective authors.
- Informed consent was obtained from the participants, and their confidentiality was promised to be maintained. They were given the right to withdraw at any point.
- Purpose of study was communicated to the participants, and it was ensured that their data was to be used for research and academic purposes only.
- If victimization trauma reoccurred in any participant, then he or she was to be referred to a prearranged clinical service and was to be recommended to take clinical guidance and counseling.

### **Statistical Analysis**

The Statistical Package for Social Sciences (SPSS) was used to analyze data collected from the participants. Analysis was conducted in a quantitative manner. Descriptive statistics was used to analyze frequencies, percentages and mean of demographic variables. Pearson Product Moment Partial Correlation when controlling gender, Hierarchical Linear Regression, Independent sample t-test and moderation analysis was used to test hypotheses.

### Results

The current research is aimed to assess the relationship between cyber victimization, perceived social support and interpersonal trust among university students (N=251). In order to test the hypothesis, the data was analyzed using Statistical Package for Social Sciences Version 25 (SPSS-25). Reliability analysis of the measures used was conducted and their psychometric properties were obtained. To run frequencies and percentages of demographic variables, descriptive statistics was used. To find correlation between cyber victimization and Interpersonal Trust, Pearson Product Moment Partial Correlation was run. Hierarchical Linear Regression was run to determine predictors of Interpersonal Trust. PROCESS by Hayes Version 4.1 was used to carry out moderation analysis.

**Table 3.1**

*Psychometric properties of study variables of the sample*

Scales	No. of Items	$\alpha$	M	SD	Range	Skewness	Kurtosis
RCBI-II	10	0.79	13.94	4.63	10 – 40	1.74	3.23
ITS	25	0.72	88.70	9.24	25 – 125	0.21	-0.59
MSPSS	12	0.90	5.16	1.24	1 – 7	-0.67	-0.01
Significant Other Subscale	4	0.90	5.05	1.73	1 – 7	-0.76	-0.44
Family Subscale	4	0.86	5.25	1.44	1 – 7	-0.76	-0.11
Friends Subscale	4	0.77	5.03	1.37	1 – 7	-0.63	-0.38

*Note: ITS = Interpersonal Trust Scale, MSPSS = Multidimensional Scale of Perceived Social Support, RCBI = Revised Cyberbullying Inventory*

Table 3.1 contains alpha reliability for the subscales and whole scales of RCBI-II, ITS and MSPSS scales. The reliability was in the range of 0.72 to 0.90, which is good to high. Reliability for RCBI-II and ITS, both, is reliable (0.79 and 0.72 respectively). The Significant Other Subscale and Family Subscale of MSPSS is highly reliable (0.90 and 0.86 respectively). The Friends Subscale has a good reliability (0.77). Overall, the MSPSS Wholescale is highly reliable with (0.90).

The SD are relatively low for RCBI-II and ITS, in accordance with their mean values. SD values for MSPSS Wholescale and subscales are moderately high. With the expectation of RCBI-II, the subscales and whole scales all have skewness values that lie within -1 and 1, hence their data is not skewed. Similarly for kurtosis, all except RCBI-II, have values lying between -3 and 3 i.e. not leptokurtic or platykurtic. RCBI-II on the other hand contains both, skewness and kurtosis.

**Table 3.2**

*Frequencies and Percentages of the Demographic characteristics of sample (N=251)*

Characteristics of Participant	f	%	M	SD
Age			21.3	1.45
18 to 21	125	51%		
22 to 25	123	49%		
Gender				
Male	93	37		
Female	158	36		
Birth Order				
First Born	91	36		
Middle Born	90	90		

Characteristics	f	%	M	S.D
Last Born	66	26		
Single Child	4	1.6		
Major of Degree				
Management Sciences	39	16		
Engineering	50	20		
Humanities and Social Sciences	92	37		
Computer Science	21	8.4		
Architecture and Design	18	7.2		
Law	31	12		
Current Semester			5.54	2.23
1 to 4	67	27		
5 to 8	184	73		
University				
Bahria	86	34		
NUST	63	25		
Air University	64	26		
NDU	28	18		
Marital Status				
Unmarried	241	96		
Married	10	4		
Family Income				
Lower Class	53	21		
Middle Class	115	46		
Upper Class	14	5.6		
Unknown	69	28		
Family System				
Nuclear	201	80		
Joint	50	20		
Number of Family Members			6.37	2.37
2 to 5	96	38		
6 to 10	144	57		
Above 10	11	4.4		



Characteristics	f	%	M	S.D
<b>Number of Friends</b>				
I have a lot of friends	73	29		
I have a few close friends	161	64		
I don't have close friends	17	6.8		
<b>Relationship with parents</b>				
Satisfactory	199	79		
Neutral	46	18		
Unsatisfactory	6	2.4		
<b>Relationship with friends</b>				
Satisfactory	187	75		
Neutral	53	21		
Unsatisfactory	11	4.4		
<b>Father's Living Status</b>				
Alive	239	95		
Deceased	12	5		
<b>Mother's Living Status</b>				
Alive	242	96		
Deceased	9	4		
<b>Father's Education</b>				
Illiterate	1	0.4		
Matric/Under matric	17	18.6		
Inter	39	16		
Under grade	82	33		
Post Grade	112	45		
<b>Mother's Education</b>				
Illiterate	16	6.4		
Matric/Under matric	41	16		
Inter	52	21		
Under grade	79	32		
Post Grade	63	25		
<b>Father's Employment Status</b>				

Characteristics	f	%	M	S.D
Employed	213	85		
Unemployed	38	15		
Mother's Employment Status				
Employed	52	21		
Unemployed	199	79		
Employment Status				
Employed Full Time	11	4.4		
Employed Part Time	21	8.4		
Seeking Opportunities	81	32		
No Employment	138	55		
Work Experience				
Less than 2 years	182	73		
More than 2 years	11	4.4		
None	58	23		
Cyberbullied				
Yes	175	70		
No	76	30		
Cyberbullied More than once				
Yes	131	52		
No	120	48		
Number of Electronic Devices				
2 or less	156	62		
More than 2	95	38		
Number of Active Social Media Platforms				
1 to 5	182	73		
6 to 10	67	27		
More than 10	2	0.8		
Most Used Social Medium				
One Medium	56	23		
More than One	193	77		
Medium with worst experience				

Characteristics	f	%	M	S.D
One Medium	167	67		
More than One	34	14		
<b>Daily Duration of Social Media</b>				
Less than 1 hour	11	4.4		
1 to 2 hours	49	20		
3 to 4 hours	86	34		
5 to 6 hours	57	23		
7 to 8 hours	26	10		
More than 8 hours	22	8.8		
<b>Social Media Use on Weekly basis</b>				
All days of the week	197	79		
Most days of the week	42	17		
Usually on weekends	12	4.8		
<b>Nature of Social Media Use</b>				
Alone	211	84		
In-Group	17	6.8		
Both	23	9.2		

*Note: f = frequency, % = percentage, NUST = National University of Sciences and Technology, NDU = National Defence University*

Table 3.2 represents demographic characteristics of participants. There were N= 251 participants in total. The number of participants are slightly higher (n=5) in the age bracket of 18 to 21. The mean age is 21.3 (SD is 1.45). The value for the SD is low. The table indicates that the number of female population is greater than male, 63% and 37% respectively. Most students are first born or second born. Majority of the sample is from humanities and social sciences but data has been collected comparatively fairly from all departments. Students are from semesters 5 to 8 mostly (73%) rather than semesters 1 to 4 (27%). Highest number of students are from Bahria University at 34% and lowest from National Defence University (NDU) at 15%, with National university of science and technology (NUST) and Air

university in between at 25% and 26% respectively. Almost all of the participants were unmarried, a very small population (4%) was married.

Majority of the participants were from nuclear families (80%) and a small portion was from joint family systems (20%). The number of family members is the least for the category of above 10. The mean value for number of members in a family is 6.37 which is accurate according to the data, since the highest percentage of 57% is in the 6 to 10 category, followed by 38% in the 2 to 5 category. The SD is 2.37, which is relatively high as compared to its mean. More than half of the sample have a few close friends, and very little do not have any close friends. Mainly, relationships with parents and friends are satisfactory. Living Status of both parents is generally alive.

Percentage for education of the participants' mothers was highest for postgraduate level, and as well as for father's education. Majority of the fathers were employed (85%) and the majority of the mothers were unemployed (79%). Employment status of the participants was 55% for not employed, 81% seeking opportunities, and employed part time and full time 21% and 11% respectively. As for the Financial Situation of the families, 46% of families are in the middle class, 21% in lower, 5.6% in upper and 28% did not know what their monthly income was.

62% participants have 2 or less than 2 number of electronic devices and the remaining 38% have more than 2. The most common category of number of social media platforms is 1 to 5 and mostly more than one medium is used. 67% of the participants have claimed that their worst experience has been on one medium, 14% said on more than one and 20% did not have any worst experience with a forum. Daily Duration peaks at 3 to 4 hours (34%) and on a weekly basis, it is most for all days of the week (79%). Nature of social media use, 84% of the participants use it alone, 6.8% who use it most in groups and 9.2% are those who use it in both cases.

**Table 3.3**

*Pearson Product Moment Partial Correlation when controlling gender analysis between the variables of Cyber victimization, Perceived Social Support and Interpersonal Trust (N=251)*

<i>Control Variables</i>		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Gender of the Participants	1. ITS Whole Scale	-	-.15*	.12*	-.11*	-.20**	-.04
	2. MSPSS Whole Scale		-	-.09	.87**	.75**	.83**
	3. RCBI Whole Scale			-	-.02	-.11*	-.10
	4. MSPSS Significant Other Subscale				-	.44**	.65**
	5. MSPSS Family Subscale					-	.43**
	6. MSPSS Friends Subscale						-

*Note: ITS = Interpersonal Trust Scale, MSPSS = Multidimensional Scale of Perceived Social Support, RCBI = Revised Cyberbullying Inventory,*

*\*p<0.05, \*\*p<0.01*

The table 3.3 shows correlation analysis. Pearson Product Moment Partial Correlation when controlling gender was run to find the relationship between the variables in the study. Gender was used as a control variable. The results show that cyber victimization is significantly correlated with interpersonal trust. It has a weak positive correlation (.12) which indicates that more cyber victimization of an individual means higher interpersonal trust in them.

Perceived Social Support shows a significant negative correlation with interpersonal trust. The correlation between them is also weak (-.15). The higher the perception of social support, the lower the level of interpersonal trust. The subscales of significant other, family and friends all have negative correlation, and is also weak in nature. All subscales are have significant correlation with interpersonal trust except friends subscale.

Cyber victimization has weak negative correlation with Perceived Social Support (-.09) and it is not significant. For the subscales, it can be observed that all have weak negative correlation with all subscales: significant other, family and friends (-.02, -.11, and -.10 respectively). Relationship between cyber victimization and family subscale is significant.

Interpersonal Trust has weak negative relationship with perceived social support. The correlation is highly significant with family subscale (-.20), significant with significant other subscale (-.11) and not significant with friends subscale (-.04). MSPSS Whole scale has highly significant correlation with all of its subscales.

**Table 3.4**

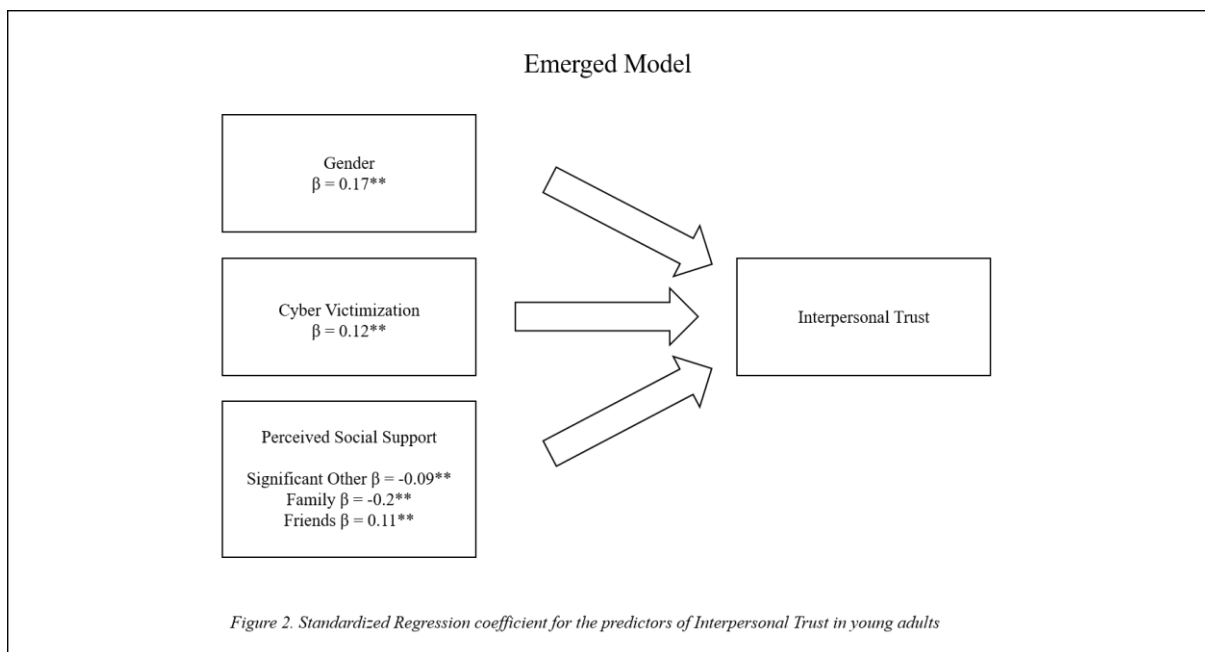
*Hierarchical Linear Regression analysis with the study variables as predictors of Interpersonal Trust (N=251)*

<i>Variables</i>	95% CI			SE	$\beta$	P	R	R <sup>2</sup>	$\Delta R^2$	F
	B	LL	UL							
<b>Block 1</b>						0.006	0.17	0.03	0.03	7.63
(Constant)	83.74	79.80	87.68	2						
Gender	3.25	0.93	5.57	1.18	0.17					
<b>Block 2</b>						0.004	0.2	0.04	0.01	5.59
(Constant)	80.21	74.80	85.62	2.75						
Gender	3.45	1.14	5.77	1.18	0.18					
RCBI	0.23	-0.01	0.47	0.12	0.12					
<b>Block 3</b>						0.000	0.29	0.08	0.04	4.64
(Constant)	86.55	78.86	94.24	3.91						
Gender	2.98	0.67	5.29	1.17	0.16					
RCBI	0.2	-0.04	0.45	0.12	0.1					
Significant Other Subscale	-0.49	-1.35	0.37	0.43	-0.09					
Family Subscale	-1.26	-2.13	-0.38	0.45	-0.2					
Friends Subscale	0.74	-0.34	1.82	0.55	0.11					

*Note: RCBI = Revised Cyberbullying Inventory, MSPSS = Multidimensional Scale of Social Support*

A hierarchical linear regression table 3.4 was used to find predictors of Interpersonal Trust among university students. In block 1 of linear regression, demographic variable gender was entered as a control variable. In block 2, Cyber victimization was entered as a predictor variable. In block 3, Perceived Social Support was used as a predictor.

In Model 1 i.e. gender was entered as a predictor of interpersonal trust. The emerged regression model proved to be significant,  $R^2 = 0.03$ ,  $F=7.63$ ,  $p<0.05$ . This model predicted total 3% variance in the outcome. In Model 2 i.e. Cyber Victimization was entered as predictor of interpersonal trust. The emerged regression model was significant.  $R^2 = 0.04$ ,  $F=5.59$ ,  $p<0.05$ . It predicted total 4% variance in the outcome. It is a positive predictor of interpersonal trust. Being cyber victimized results in increase in interpersonal trust. In Model 3 i.e. Perceived Social Support was entered as predictor of interpersonal trust. The emerged regression model was significant.  $R^2 = 0.08$ ,  $F=4.64$ ,  $p<0.05$ . It predicted total 8% variance in the outcome. It is a negative predictor of interpersonal trust. Having perceived social support results in decrease in interpersonal trust.





**Table 3.5***Independent sample T-test showing gender difference (N=251)*

Variables	Male (n=93)		Female (n=158)		<i>t</i>	<i>p</i>	95% Confidence Interval		<i>Cohen's d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
ITS	86.99	9.31	90.24	8.82	-2.76	0.006	-5.57	-0.93	0.36

*Note: ITS = Interpersonal Trust Scale, M= mean, SD = Standard Deviation, LL = Lower Limit, UL = Upper Limit*

Table 3.5 represents independent sample T-test that was run in order to check gender differences among university students. 93 males and 158 females participated in the study. There was significant gender difference in Interpersonal Trust. Females (M=90.24) have higher levels of interpersonal trust as compared to Males (M=86.99). The *t* stands for *t* statistics. 95% confidence interval has been used. Cohen's *d* value is low, with magnitude of 0.36.

**Table 3.6***Independent sample T-test showing difference in categories of age (N=251)*

Variable	18 to 21 (n=128)		22 to 25 (n=123)		<i>T</i>	<i>p</i>	95% Confidence Interval		<i>Cohen's d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
	88.4				-	0.3			
ITS	5	9.94	89.64	8.18	1.04	0	-3.45	1.07	0.13

*Note: ITS = Interpersonal Trust Scale, M= mean, SD = Standard Deviation, LL = Lower Limit, UL = Upper Limit*

Table 3.6 represents independent sample T-test that was run in order to assess differences in category of age among university students. 128 students from the ages of 18 to 21, and 123 students from ages 22 to 25 participated in the study. There was no significant difference with respect to age, in Interpersonal Trust. Participants of ages 22 to 25 ( $M=89.64$ ) have higher levels of interpersonal trust as compared to participants of ages 18 to 21 ( $M=88.45$ ). The  $t$  stands for  $t$  statistics. 95% confidence interval has been used. Cohen's  $d$  value is very low, with a magnitude of 0.13.

**Table 3.7**

*Moderating effect of Perceived Social Support on the relationship between cyber victimization and interpersonal trust (N=251)*

Variables	B	SE	95% Confidence Interval		R <sup>2</sup>	P	F
			LL	UL			
					0.3	0.06	2.49
Constant	89.04	0.57	87.91	90.17			
RCBI	0.18	0.13	-0.074	0.43			
MSPSS	-1.03	0.46	-0.194	-0.12			
ITS	0.01	0.09	-0.17	0.19			
Interaction					$\Delta R^2 = 0$	0.91	0.01

*Note: ITS = Interpersonal Trust Scale, MSPSS = Multidimensional Scale of Perceived Social Support, RCBI = Revised Cyberbullying Inventory,*

In this model, Perceived Social Support acted as a moderator which influenced the relationship between cyber victimization (IV) and interpersonal trust (DV).  $\Delta R^2 = 0$ , which means that perceived social support added 0% additional variance in the relationship between the IV and DV of this study. The results show that there was no significant interaction effect of perceived social support and its subscales on the relationship between cyber victimization

and interpersonal trust. This further concludes that no moderation was found. There was no emergence of a significant moderator.

### Discussion

Evidence shows that cyber victimization is a developing concept with a particular lack of attention on this issue in the Pakistani context. Furthermore, many studies were conducted on adolescents' population and school students. There is a need to investigate relationship between study variables among university students. The present research examined the relationship among cyber victimization and interpersonal trust and investigated cyber victimization and perceived social support as predictors of interpersonal trust among university students. For this study, the total of N=251 university students were selected including 93 males and 158 females. The age range of the participants is between 18 to 25 years (M=21.3 and SD=1.45). Convenient sampling strategy was used to select sample for the research and the target sample was selected from different universities of Islamabad. The relationship between study variables were analyzed by using Pearson Product Moment Partial Correlation, hierarchical linear regression, and independent sample t-test. The measuring instruments used in study were Revised Cyberbullying Scale II, Rotter's Interpersonal Trust Scale and Multidimensional Scale of Perceived Social Support.

All measuring instruments used in the study showed good and acceptable Cronbach alpha reliability which shows that all the scales are reliable in this culture as well. Table 3.1 indicates that Cronbach alpha reliability for RCBI-II, ITS and MSPSS is 0.79, 0.72 and 0.90 respectively. The reliability for significant other subscales, family subscale and friend's subscales of MSPSS is 0.90, 0.86 and .77 respectively. These reliabilities are consistent with the reliabilities of standardized scale of RCBI-II ( $\alpha=0.80$ ), MSPSS ( $\alpha=0.88$ ) and ITS ( $\alpha=0.76$ ) and reliabilities of family, friends, and significant other's subscales of MSPSS which is 0.82, 0.80 and 0.87 respectively. It indicates that the scales are appropriate measure study variables.

Internationally, numerous studies have been done on relationships between cyber victimization and perceived social support but in Pakistan, very few studies have been conducted to measure relationships between study variables. Number of indigenous studies measuring the prevalence of cyberbullying and cyber victimization among university students target only the female population (Magsi et al., 2017) or a very small sample size selected from only one or two universities (Butt et al., 2019).

Table 1 represents gender differences based on descriptive categories of the study. In order to identify whether more males or more females are victims or cyberbullying, descriptive frequencies were run. According to the results, females face slightly higher levels of cyber victimization (70.3%) than males (68.8%). It should be noted, most males have been cyberbullied on more than one occasion (53.8%) over females (51.3%). In both cases, male and female, individual gender population includes more people who have 2 or less than 2 electronic devices. Comparatively between male and female, less than 2 devices are more frequent in females. In number of active social media platforms, both male and female have highest population having one to five active social media platforms. Majority of male and female have more than one most used social mediums (75.3% and 77.8% respectively). Frequencies for both male and female were highest for having worst experiences on one medium. Most males spend 3 to 4 hours online daily (26.9%) and most females also spend 3 to 4 hours daily (38.6%). Majority of male and female weekly exposure is all days of the week. And both, male and female, usually use social media alone and not in group setting. The category of Single Child was not added in the table, because it would be an inaccurate representation of frequencies since single child were n=4 out of the whole sample of N=251.

These frequencies are consistent with the studies conducted previously. Research conducted by Balakrishnan (2015) found that individuals accessing internet from spend 2 to 5 hours daily are more likely to cyber victimized than those used internet for 1 hour daily.

Another study by Twyman (2010) revealed that those adults are more vulnerable to the cyber victimization who can easily access the devices and spend more time on the internet as compared to those spend less time on accessing internet. Moreover, another study found that moderate internet users are at more risk of experiencing cyberbullying in comparison with heavy internet users (Savoldi & Abreu, 2016).

The conducted research hypothesized a negative relationship between gender, cyber victimization, perceived social support and interpersonal trust among university students. According to this hypothesis, table 3.3 is showing the partial correlation between gender, cyber victimization, perceived social support and interpersonal trust. Gender was used as a covariate that was controlled. The results from the partial correlation table showed significant weak negative correlations between perceived social support and interpersonal trust as well as between cyber victimization and perceived social support. Bowlby's Attachment Theory strongly supported the results, theory states that securely attached adults seek comfort from others when frightened and exhibit positive emotions after getting support from others which leads to the trusting relationships and those who seek out social support and also adults having secure attachment with others are more vulnerable to experiences cyber victimization. (Bowlby, 2005). It was also found that cyber victimization was indicating significant weak positive correlation with interpersonal trust among university students. One reason for this could be political instability at the time the data was collected for research. A few items in the Interpersonal Trust Scale had political statements such as item 3 "This country has a dark future unless we could attract better people into politics", item 13 "If we really knew what was going on in international politics, the public would have reason to be more frightened than they now seem to be" that could result in the participants scoring low on the scale regardless of ever being cyber victimized. Furthermore, item 12 "The future seems very promising" can reflect the participant's response with regard to political uncertainty at the

time of data collection process. More experiences of cyber victimization by university students, higher will be the interpersonal trust in them. Another reason could be that the scale used for measuring interpersonal trust and cyber victimization among university students was not according to our culture because these scales were developed by international authors. Lastly, there are some cultural variations between the relationship of cyber victimization and interpersonal trust that varies from culture to culture. The results are consistent with the previous literature that cyber victimization has increased interpersonal trust among young adults. Butt et al. (2019) conducted a research on role of cyber victimization in interpersonal trust and they found that there is a positive relationship among cyber victimization and interpersonal trust in university students. Those who experience more events of cyber victimization are more likely to have strong trust in other people around them.

Some studies supported a complex relationship between cyber victimization and interpersonal trust. In other words, an increase in cyber victimization may be predicted to increase or decrease in interpersonal trust. This complex relationship was supported by research conducted by Pieschl and Porsch (2017) who reported mixed findings and determined a more complex relationship between cyberbullying and trust than expected.

Hypothesis II reported that gender, cyber victimization, and perceived social support will likely predict interpersonal trust among university students. To test this hypothesis, hierarchical linear regression was used. Regression analysis was significant by controlling the gender in the study. Table 3.4 of hierarchical linear regression analysis showed that interpersonal trust was significantly positively predicted by cyber victimization among university students. It indicates that students who experience more events of cyber victimization are likely to have more interpersonal trust. This may be because students who suffer from cyber victimization also experience adverse consequences such as depression, so many people trust others and communicate their issue with them to receive social support to

cope with stress more effectively. Previous literature available on cyber victimization and interpersonal trust among university students provide strong support to these findings. Research explored the role of cyber victimization and interpersonal trust among university students in Pakistan and found cyber victimization as a significant positive predictor of interpersonal trust (Butt et al., 2019). Table 3.4 also showed that interpersonal trust was negatively predicted by perceived social support which indicated that students receiving more perceived social support had possess less interpersonal trust. Reason for the results could be that if students get enough support from their family, friends, and significant others, they don't need to gain trust from external sources as they have a strong and reliable support system from people around them. This is a new finding explored in the results, no significant indigenous and international literature is available on relationship between perceived social support and interpersonal trust. Lastly, it was also found that gender predicts 3% variance in interpersonal trust.

Stress-buffering model provides strong evidence which supports the results of the present study. According to this model, perceived social support serve as the buffer which change the relationship between two variables. So, individual who are more cyber victimized may leads to the occurrence of negative outcomes caused by having more trust on others, which can be minimize by the presence of perceived social support i.e., less trusting others.

Hypothesis III stated that perceived social support will likely to moderate the relationship between cyber victimization and interpersonal trust among university students. For testing the hypothesis, moderation analysis was run through the PROCESS of Hayes. Table 3.7 is showing the moderation effect of perceived social support on the relationship between study variables. Results presented that perceived social support is insignificant indicating that perceived social support did not buffer the relationship of cyber victimization and interpersonal trust. Some of the previous studies also indicated the same results that



perceived social support does not moderate the direct or indirect affiliation between the independent and dependent variables. Tennant et al. (2015) conducted a research to inspect the social support as a moderator between cyber victimization and depression. Therefore, moderation analysis showed that the relationship between cyber victimization and depression was not moderated by perceived social support. Similarly, Mager (2015) also showed that moderating effect of social support was not found between direct relationship of cyber-victimization with depression as well as social anxiety. Another research also found that perceived social support did have buffering effect between cyber victimization and mental health problems (Noret et al., 2020).

The reasons due to which the results of the participants are not significant could be cultural variations. Like western culture, our culture also showed that perceived social support is not enough to buffer the association between cyber victimization and interpersonal trust. The negative consequence of being cyber victimized can be overcome by having the victim enhance their perceived social support. Other greater measures need to be taken, such as counseling and creating awareness. Cyber victimization leads to number of negative outcomes in future such as depression, poor mental wellbeing, suicidal intents, drug use etc., so along with strong perceived social support effective therapies and counseling sessions should also be given to minimize the adverse effects of cyber victimization.

Hypothesis IV reported that female university students are more likely to become the victims of cyberbullying as compared to male students of university. According to this hypothesis, table 3.5 is showing differences in cyber victimization with respect to gender among young adults. The values of the descriptive frequencies table showed that female's scores were higher on the cyber victimization. In other words, females experience a higher level of cyber victimization as compared to males. Reason for such results could be that females are likely to have more trust on others than males that is why they are more

vulnerable to cyber victimization. Cultural variations could be another reason such as in our culture women remained quiet and did not report such experiences of cyber victimization to their families, friends, and higher authorities because of being considered immoral. This increases the risk for future victimization through cyberbullying in female university students. On the other hand, women in western culture are more confident and report such incidents to authorities to reduce future occurrences of these negative events. These findings are strongly supported by literature which proved that females are more likely to experience cyber victimization than males. Musharraf et al. (2018) found out in the study done on prevalence of cyberbullying/victimization in university students that 34.8% females were more likely to report themselves as victims of cyberbullying than males and 5.7% males report their involvement in cyberbullying activities.

Table 2 represents the birth order variable of descriptive categories of the study. In order to identify which birth order has higher victims of cyberbullying, descriptive frequencies were run. The results show that participants who are the middle child face higher level of cyber victimization (73.3%) than middle born or last born (72.5% and 62.1% respectively). 2 or less than 2 number of electronic devices are most common in all three groups. All the groups are most active of 1 to 5 social media platforms. First born have the highest percentage (68.1%) among the three, for only one medium with which they have had worst experience. 3 to 4 hours is most common observed time spent online. Each group individually uses social media of the week and comparatively last born have highest percentage (83.3%) for all days of the week. Very little portion of the participants use social media in group or in both settings, most common nature of social media use is alone.

Hypothesis V is that students who are the middle child face significantly higher levels of cyber victimization as compared to other age groups. With reference to table 2, results indicate that a high level of cyber victimization is experienced by middle born participants as

compared to first born or last born. The results are also supported through the study conducted by Tharbe and Harun (2000) found that the middle-born individual is the least aggressive than first born and last born and least concerned with having control which suggests that they have an approachable personality type. Therefore, middle born are more likely to be victimized as they are less aggressive, so they do not fight back when experiencing events of cyberbullying. Thus, they are more easily cyber victimized than first and last born.

In the light of our findings supported by theoretical and empirical evidence, it is concluded that cyber victimization is a serious issue which did not receive a proper required attention in Pakistan. Although, cyber victimization is found to have positive relationship with interpersonal trust, which needs to be further studied for the reasons behind such relationship. Perceived social support does not act as a moderator to change the relationship between cyber victimization and interpersonal trust, but it negatively predicts interpersonal trust, the reason behind which is still unexplored in our study. Females are more vulnerable to become the victims of cyberbullying than males. It is also proved that the middle-born participants are likely to be more cyber victimized than first born and last-born participants. So cyber victimization among university students needs to be addressed and more research would be conducted in Pakistan to fill the literature gap and explore complex relationships among all three variables used in the present study.

## **Conclusion**

There was significant relationship among the variables of cyber victimization and interpersonal trust among university students of Islamabad. First results indicated weak correlation between cyber victimization and interpersonal trust. Second results suggested regression was significant, cyber victimization was a significant predictor of interpersonal trust. Perceived Social Support was a significant predictor. Third results proved that females

face more cyber victimization than males. This study is helpful in shedding light upon the aftereffects of cyber victimization and how only perceived social support cannot undo the harm it does. The association between cyber victimization and interpersonal trust is very complex and needs to be studied in depth.

### **Limitations**

- Self-report was used to measure cyber victimization among university students. Due to which measurement errors, as well as boredom effects may affect the results of the study. Furthermore, data was collected in university settings so the aspect of social desirability can also take place in cases where participants filled the questionnaires in presence of their peers.
- Since the content of the items of the victimization scale was point-blank and undisguised, the participants could have faked good on their responses.
- Data was collected from four universities located in Islamabad, three of which were in close proximity to one another. People in closer localities might exhibit similar characteristics and behaviors. This limits the study's ability to generalize the results in all areas of Islamabad.

### **Future recommendations**

- Future research may explore the phenomenon in older young adults by incorporating a sample of young adults more than 25 years of age.
- Further research may be conducted on more educational institutions located in different cities of Pakistan. This provides an opportunity to explore the individual's responses as well as to analyze the variations in respondent's mindset in different institutes of different cities.

- Future research may also focus on qualitative research to gain in-depth and detailed information about the research.
- New variables (such as adverse negative effects) may be used in connection with cyber victimization to examine the relationship in the research.
- Appropriate screening tools may be used in future for the determining if participant has been cyber victimized. Current study solely depends the on integrity of participants and how much the participant chooses to disclose his or her victimization experience. Having the participants answer yes and no to whether they have been bullied is not a valid approach.
- More research studies should be conducted on this topic to understand it in the Pakistani context.
- Some of the items might be very open, and participants could have responded by faking good. There is a need for indigenous scales that are appropriate according to our culture.
- More research should be conducted to understand the complex relationship between cyber victimization and interpersonal trust since previous research prove that this relationship produces both positive and negative correlation in different circumstances.
- Further qualitative research should be conducted to understand correlation results better.

### **Implications**

It is obvious that cyber victimization has adverse negative impacts for both males and females. Intervention and prevention should be taken to deal with this problem. The results of the current study should be communicated to young adults in universities by conducting

seminars, and workshops to increase awareness about the preventive measures, coping strategies and harmful outcomes of cyberbullying as well as the mental and emotional harm experienced by cyber victims. The findings will contribute to future research and practices in helping teachers at educational institutes, mental health practitioners and policy makers to know about the prevalence and adverse psychological effects of cyber victimization among students in universities. The present study can be used by the teachers in developing programs to identify perpetrators of cyberbullying and to facilitate and deal with victims of cyberbullying. Authorities in educational institutions could steps to improve the counseling services to ensure the mental health of the students. Parents should ensure open communications, addressing the problems faced by adults, and providing support to the students.

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## **Appendices**

**Appendix A**  
Questionnaire Permission

Permission to use scale - manaal | Assistance in research - manaal

mail.google.com/mail/u/0/#inbox/KtbxLwGgGnqzZxrpwJwZdqwFLXsJPzPg

WhatsApp | Student - Bahria Un... | Watch Grey's Anato... | YouTube | 123Movies - Watch... | Putlockers - Watch... | Microsoft Teams | Watch Full Movies...

Gmail Search mail

Compose

Inbox

Starred

Snoozed

Sent

Drafts

More

Meet

New meeting

Join a meeting

Hangouts

Manaal

No recent chats

Start a new one

2 of 29

Permission to use scale **inbox x**

Manaal Babur  
Respected Sir/Madam, Hope you are in good health. I am a student of BS Psychology (7th semester) at Bahria University, Islamabad. As a part of my project ...

Feb 3, 2022, 11:18 PM

Cigdem Topcu Uzer <cigdemtopcu@gmail.com>  
to me

Feb 11, 2022, 2:02 AM

Dear Manaal,

Attached is the RCBI-II and the paper you can read about it.  
Good luck with your research!

Best,  
Çigdem

2 Attachments

Windows taskbar: 12:56 PM 22/03/2022, 30°C Haze

Queries regarding RCBI II - manaal | Assistance in research - manaal

mail.google.com/mail/u/0/#inbox/QgrcJHsNqLXLbpxBnTtDPKBqsvVNMJXDqHQ

WhatsApp | Student - Bahria Un... | Watch Grey's Anato... | YouTube | 123Movies - Watch... | Putlockers - Watch... | Microsoft Teams | Watch Full Movies...

Gmail Search mail

Compose

Inbox

Starred

Snoozed

Sent

Drafts 1

More

Meet

New meeting

Join a meeting

Hangouts

Manaal

No recent chats

Start a new one

1 of 31

Please see below for my responses to your questions. They are in red.

Best,  
Çigdem

On Tue, Apr 12, 2022 at 1:30 PM Manaal Babur <manaalbabur@gmail.com> wrote:  
I hope you are well. I am conducting a research study as my final year project and I have taken your permission to use your scale of RCBI-II.

However, I have few queries:

1. Does this scale measure both, Bullying and Victimization?  
**yes, the scale measures both CB and CV.**
2. If I need to measure only cyber victimization, can I use one of the two subscales to measure just that (i.e. I only use the "this has happened to me" column)?  
**Yes, you can use only one subscale.**
3. Kindly also share with me the scoring manuals for this scale.  
**You can either use total scores by basically sum all the items for a subscale. For the grouping, please see the article. Copying below.**

The lowest possible score is 10 and the highest possible score is 40, where higher scores indicate more frequent cyberbullying and cybervictimization. To identify the status of perpetrating cyberbullies, cyberbullies and cybervictims, and not involved, categorical scoring is also possible. Those who receive 10 points are grouped as students who are not involved in cyberbullying. For determining cyberbullies and cybervictims, first, one should eliminate the cases who reported that they cyberbullied or were cyber victimized only once to meet the repetition criterion. Then, it is possible to identify the cyberbully and cybervictim cases.

Regards,  
Syeda Manaal Babur

Windows taskbar: 03:11 AM 13/04/2022, 24°C Cloudy

Permission to use scale - manaal x Assistance in research - manaal x

mail.google.com/mail/u/0/#inbox/KtbxLjRgtprrdTrFGdPcNWXOTImDWXrJB

WhatsApp Student - Bahria Un... Watch Grey's Anato... YouTube 123Movies - Watch... Putlockers - Watch... Microsoft Teams Watch Full Movies... Other bookmarks

Gmail Search mail

Compose

Inbox

Starred

Snoozed

Sent

Drafts

More

Meet

New meeting

Join a meeting

Hangouts

Manaal +

No recent chats  
Start a new one

Assistance in research **Inbox x**

4 of 29

Manaal Babur Jan 17, 2022, 9:48 PM ☆

Respected Sir/Madam, 1. Hope you are in good health. I am a student of BS Psychology (7th semester) at Bahria University Islamabad. As a part of our curri...

Crosbie-Cockroft, Joshua (crosbija) <crosbija@ucmail.uc.edu> Jan 26, 2022, 4:51 AM ☆ ↶ ⋮

to me

Hi Syeda,

Please find a link to a copy of the questions in the Rotter Interpersonal Trust Scale. This has previously been published in the book *Measures of personality and social psychological attitudes* (1991).

<https://highered.mheducation.com/sites/dl/free/0072563974/87095/ch07.html>

Sincerely,

Dr. Cockroft

From: Manaal Babur <manaalbabur@gmail.com>  
Sent: Monday, January 17, 2022 11:48 AM

EN 30°C Haze 12:56 PM 22/03/2022

Permission to use scale MSPSS - x

mail.google.com/mail/u/0/#inbox/QgrclHsBmGVHXkNpRhWHgsMBkVxJzGbnQPv

WhatsApp Student - Bahria Un... Watch Grey's Anato... YouTube 123Movies - Watch... Putlockers - Watch... Microsoft Teams Watch Full Movies... Other bookmarks

Gmail Search mail

Compose

Inbox

Starred

Snoozed

Sent

Drafts

More

Meet

New meeting

Join a meeting

Hangouts

Manaal +

No recent chats  
Start a new one

Permission to use scale MSPSS **Inbox x**

1 of 30

Manaal Babur 10:08 PM (2 hours ago) ☆

Respected Sir/Madam, Hope you are in good health. I am a student of BS Psychology (8th semester) at Bahria University, Islamabad. As a part of my project ...

Zimet, Gregory D 11:17 PM (1 hour ago) ☆ ↶ ⋮

to me

Dear Syeda Manaal Babur,

You have my permission to use the Multidimensional Scale of Perceived Social Support (MSPSS) in your research. I have attached several documents: 1. A copy of the original English version of the scale, with scoring information on the 2nd page; 2. A document listing several articles that have reported on the reliability and validity of the MSPSS (references #19, #24, and #29 all report on Urdu versions of the scale); 3. A chapter on the MSPSS; and 4. Copies of two Urdu translations and an article on the Tonsing translation (you have my permission to use either of these translations).

I hope your research goes well.

Best regards,  
Greg Zimet

EN 22°C Haze 12:34 AM 05/04/2022

**Appendix B**  
Data Collection Permission



**Bahria University**  
Discovering Knowledge

April 14, 2022

## TO WHOM IT MAY CONCERN

### REQUEST FOR DATA COLLECTION

It is stated that **Syeda Manaal Babur** Enrollment No. 01-171182-050 is a student of BS Psychology (8<sup>th</sup> Semester) Bahria University Islamabad Campus conducting research on "**Cyber victimization perceived social support and interpersonal trust among University students**" under kind supervision of Dr. Ayesha Aziz. It is requested that kindly allow her to collect the data from your esteemed institution.



Dr. Rizwana Amin  
Head of Department  
Professional Psychology  
Bahria University  
Islamabad

Department of Professional Psychology Shangrilla Road E-8 Islamabad  
Tel: 051-9260002 Ext. No. 1406 Fax: 051-9260889



**Bahria University**  
Discovering Knowledge

April 14, 2022

## TO WHOM IT MAY CONCERN

### REQUEST FOR DATA COLLECTION

It is stated that **Ms. Samiya Ismaeel Abbasi** Enrollment No. 01-171182-045 is a student of BS Psychology (8<sup>th</sup> Semester) Bahria University Islamabad Campus conducting research on "**Cyber victimization perceived social support and interpersonal trust among University students**" under kind supervision of Dr. Ayesha Aziz. It is requested that kindly allow her to collect the data from your esteemed institution.



Dr. Rizwana Amin  
Head of Department  
Professional Psychology  
Bahria University  
Islamabad

Department of Professional Psychology Shangrilla Road E-8 Islamabad  
Tel: 051-9260002 Ext. No. 1406 Fax: 051-9260889



**Appendix C**  
Pilot Study

## Pilot Study

In terms of language comprehension and how much time you took on it, were the statements in the form easy to read and understand? Please rate out of 10, with 10 being the easiest.

S. No	Rate (1-10)	Signature
1	9	<i>[Signature]</i>
2	8	<i>Janella</i>
3	8	<i>Sage</i>
4	9	<i>[Signature]</i>
5	9	<i>[Signature]</i>
6	9	<i>[Signature]</i>
7	8	<i>Wijer</i>
8	9	<i>[Signature]</i>
9	10	<i>[Signature]</i>
10	9	<i>[Signature]</i>
11	10	<i>N.P.</i>
12	10	<i>Arif</i>
13	1	<i>[Signature]</i>
14	8	<i>[Signature]</i>
15	8	<i>[Signature]</i>
16	8	<i>Emar</i>
17	9	<i>[Signature]</i>
18	9	<i>[Signature]</i>
19	10	<i>[Signature]</i>
20	10	<i>MM-ur-Raja</i>

**Appendix D**  
Informed Consent Form

### **Informed Consent**

We, Syeda Manaal Babur and Samiya Ismaeel Abbasi, students of BS Psychology, Bahria University, are conducting our final year project (a research study) under the supervision of Dr. Ayesha Aziz. Our topic is “Cyber victimization, Interpersonal Trust and Perceived Social Support among university students”

We will be thankful of your kind cooperation.

**Undertaking (Please tick):**

I have been informed about the purpose of the study. I am assured that my confidentiality will be maintained. I have the right to withdraw at any given moment. I am ensured that the data will be used for research and academic purposes only. I am assured that my data will be kept safe at every stage during research.

I am willing to participate in this research.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**Researchers:**

Syeda Manaal Babur

[manaalbabur@gmail.com](mailto:manaalbabur@gmail.com)

Samiya Ismaeel Abbasi

[samiyaabbasi230@gmail.com](mailto:samiyaabbasi230@gmail.com)

Students of BS Psychology

Department of Professional Psychology

Bahria University Islamabad Campus

**Supervisor:**

Dr. Ayesha Aziz

Assistant Professor

Consultant Clinical Psychologist

Department of Professional Psychology

Bahria University Islamabad Campus

**Appendix E**  
Demographic Characteristics Form

**Demographic sheet**

**Indicate your gender**

- a) Male                      b) Female

**State your age** \_\_\_\_\_

**Birth order**

- a) First born              b) Middle born              c) Last born              d) Single Child

**What is your current educational level?**

- a) Bachelor's                      b) Masters

**Major of degree:** \_\_\_\_\_

**In which semester you are currently enrolled:** \_\_\_\_\_

**In which university you are studying?** \_\_\_\_\_

**What is your current marital status?**

- a) Unmarried                      b) Married

**Family Income:** \_\_\_\_\_

**Family system**

- a) Nuclear                              b) Joint

**Number of family members:** \_\_\_\_\_

**Number of friends:**

- a) I have a lot of friends              b) I have a few close friends              c) I do not have close friends

**Nature of relationship with parents**

- a) Satisfactory                      b) Neutral                              c) Unsatisfactory

**Nature or relationship with friends**

- a) Satisfactory                      b) Neutral                              c) Unsatisfactory

**Is your father**

- a) Alive                                      b) Deceased

**Is your mother**

- a) Alive                                      b) Deceased

**Father's Education**

- a) Illiterate                              b) Primary                              c) Matric                              d) Inter  
e) Bachelor's                              f) Masters                              g) PhD

**Mother's education**

- a) Illiterate                              b) Primary                              c) Matric                              d) Inter  
e) Bachelor's                              f) Masters                              g) PhD

**Is your father**

- a) Employed                              b) Unemployed

**Is your mother**



**Appendix F**  
Extension of Demographic Sheet



### Demographic Sheet - Extension

Being a victim of cyberbullying simply means that you have been a target of intentional harm that is inflicted through electronic media. It is when a person uses the Internet or technology to harass, threaten, embarrass, or target another person (Gordon, S. 2022). This can include:

**Harassment:** Text wars, posting mean or insulting remarks, posting rumors or embarrassing information, using text messages or email to harass etc.

**Impersonation:** Pretending to be someone else or catfishing, setting up a social media account and posting as the victim, stealing passwords to chat with other people etc.

**Photographs:** Posting or threatening to post inappropriate pictures, taking degrading pictures without permission, shaming someone using photographs etc.

**Website Creation:** Conduct an offensive internet poll, create an embarrassing blog about someone, post another person's personal pictures on a website etc.

**Other subtle methods:** Not mentioning the person's name but tweeting or posting about them and the audience knows who it is referencing, sending viruses, and hacking programs to spy etc.

**Have you ever been a victim of cyberbullying?**

- a) Yes                      b) No

**Have you been cyberbullied on more than one occasion?**

- a) Yes                      b) No

**How many electronic devices you have?** \_\_\_\_\_

**Number of social media forums you are active on:** \_\_\_\_\_

**Most used social medium? (You can choose more than one)**

- a) WhatsApp              b) Facebook              c) Instagram              d) Twitter              e) Skype  
 f) Gmail                      g) Snapchat              h) YouTube              i) LinkedIn              j) Tinder  
 k) Other: \_\_\_\_\_

**Which medium have you had the worst experience with? (You can choose more than one)**

- a) WhatsApp              b) Facebook              c) Instagram              d) Twitter              e) Skype  
 f) Gmail                      g) Snapchat              h) YouTube              i) LinkedIn              j) Tinder  
 k) Other: \_\_\_\_\_

**Duration of daily usage of social media:**

- a) Less than 1 hour                      b) 1 to 2 hours                      c) 3 to 4 hours  
 d) 5 to 6 hours                              e) 7 to 8 hours                      f) More than 8 hours

**How often do you use social media on a weekly basis?**

- a) All days of the week                      b) Most days of the week                      c) Usually on weekends

**Do you usually use social media alone or in group?**

- a) Alone                      b) In group

**Appendix G**  
Sample Copy of Questionnaire

**RCBI- II**

Please read the items carefully. Please tell us how often the instances described below have happened to you during the last 6 months. Please make sure that you marked your responses for all the items.

Note that the items are to be read and responded with respect to “This happened to me” i.e. if any of the following have ever happened to you. For example, the item *threatening someone* is asking if you have ever been threatened etc.

		<b>THIS HAPPENED TO ME</b>			
		<b>Never</b>	<b>Once</b>	<b>2-3 times</b>	<b>More than 3 times</b>
	Through the <b>INTERNET</b> ;				
1.	Taking over the password of someone’s account				
2.	Using someone’s account without his/her permission and publishing humiliating posts				
3.	Threatening someone				
4.	Insulting someone				
5.	Sending embarrassing and hurtful messages				
6.	Sharing an inappropriate photo or a video of someone without his/her permission				
7.	Sharing a secret with others without the permission of the owner				
8.	Spreading rumors				
9.	Creating an account on behalf of someone without letting him/her know and acting like the account’s owner				
10.	Creating a humiliating website				

### IT Scale

Indicate the degree to which you agree or disagree with each statement by the following scale:

		Strongly Agree	Mildly Agree	Agree and Disagree Equally	Mildly Disagree	Strongly Disagree
1	Hypocrisy is on the increase in our society					
2	One is better off being cautious when dealing with strangers until they have provided evidence that they are trustworthy.					
3	This country has a dark future unless we can attract better people into politics.					
4	Fear and social disgrace or punishment rather than conscience prevents most people from breaking the law.					
5	An honor system in which teachers would not be present during exams would probably result in increased cheating.					
6	Parents usually can be relied on to keep their promises.					
7	The United Nations will never be an effective force in keeping world peace.					
8	The judiciary is a place where we can all get unbiased treatment.					
9	Most people would be horrified if they knew how much of the news that the public hears and sees is distorted.					
10	It is safe to believe that in spite of what people say most people are primarily interested in their own welfare.					
11	Even though we have reports in newspapers, radio, TV, and the Internet, it is hard to get objective accounts of public events.					
12	The future seems very promising.					
13	If we really knew what was going on in international politics, the public would have reason to be more frightened than they now seem to be.					

14	Most elected officials are really sincere in their campaign promises.					
15	Many major national sports contests are fixed in one way or another.					
16	Most experts can be relied upon to tell the truth about the limits of their knowledge.					
17	Most parents can be relied upon to carry out their threats of punishments.					
18	Most people can be counted on to do what they say they will do.					
19	In these competitive times one has to be alert or someone is likely to take advantage of you.					
20	Most idealists are sincere and usually practice what they preach.					
21	Most salesmen are honest in describing their products.					
22	Most students in school would not cheat even if they were sure they could get away with it.					
23	Most repairmen will not overcharge, even if they think you are ignorant of their specialty.					
24	A large share of accident claims filed against insurance companies are phony.					
25	Most people answer public opinion polls honestly.					

**MSPSS**

We are interested in how you feel about the following statements. Read each statement carefully.  
Indicate how you feel about each statement.

		Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

**Thank you so much!**

(Reference: Gordon, S. (2022). Is Your Child Being Cyberbullied? Retrieved 12 April 2022, from <https://www.verywellfamily.com/types-of-cyberbullying-460549>)

**Appendix H**  
Plagiarism Report

## CYBER VICTIMIZATION, PERCEIVED SOCIAL SUPPORT AND INTERPERSONAL TRUST AMONG UNIVERSITY STUDENTS

### ORIGINALITY REPORT

<b>13%</b>	<b>7%</b>	<b>8%</b>	<b>4%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

**1** Yang Li, Dongping Li, Xian Li, Yueyue Zhou, Wenqiang Sun, Yanhui Wang, Jinfeng Li. "Cyber victimization and adolescent depression: The mediating role of psychological insecurity and the moderating role of perceived social support", Children and Youth Services Review, 2018  
Publication 2%

**2** Michelle F. Wright. "Cyber Victimization and Depression Among Adolescents With Intellectual Disabilities and Developmental Disorders: The Moderation of Perceived Social Support", Journal of Mental Health Research in Intellectual Disabilities, 2017  
Publication 1%

**3** Submitted to American InterContinental University  
Student Paper 1%

**4** cyberbullying.org  
Internet Source 1%

**5** Brett Holfeld, Rachel Baitz. "The Mediating and Moderating Effects of Social Support and School Climate on the Association between Cyber Victimization and Internalizing Symptoms", Journal of Youth and Adolescence, 2020  
Publication 1%

**6** Nathalie Noret, Simon C. Hunter, Susan Rasmussen. "The Role of Perceived Social Support in the Relationship Between Being Bullied and Mental Health Difficulties in Adolescents", School Mental Health, 2019  
Publication <1%

**7** glc.org  
Internet Source <1%