The Factors, Impact, and Interventions of Cyberbullying in schools

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Abstract. Cyberbullying has become a global public health problem among adolescents. The impact of cyberbullying on its participants was also different. Cyberbullying greatly impacted the victim's physical and mental health, and cyberbullies were more prone to bad behavior. This paper summarized the causes of cyberbullying, including the causes of individuals, family environment, and online environment, effects and interventions from cyber bystanders, school education practitioners, and techniques. The results showed that some interventions were effective, such as encouraging bystanders to intervene during bullying, strengthening school educators ' interventions by teaching cyberbullying knowledge, and cooperating with other educational roles. These findings were significant in adding further in-depth understandings of Cyberbullying and further developing more effective interventions for it.

Keywords: cyberbullying, adolescent health, intervention, prevention.

1. Introduction

Bullying was considered a significant social problem that seriously affects different groups of people who go through this kind of experience. Individuals or groups could carry out aggressive behaviors toward their peers who cannot defend themselves [1]. In the last few years, the widespread of smartphones and the availability of the Internet have led to a new form of bullying: cyberbullying. Cyberbullying was abusive behavior that intentionally excludes or continually harasses a particular person or group in an online environment [2]. It was not limited to brutal exclusion and harassment but also extended to anonymous stalking, trickery, impersonation, and denigration [1,3,4].

The causes of cyberbullying were complex and overlapping [1,7]. Personal emotions, parenting, and the online environment were essential factors in the formation of cyberbullying [8-10]. Cyberbullying could have enormous negative impacts on those who experience it. In addition to the damage to behaviors, mental health, and emotional development also affected the victims' future life choices, social activities, and substance use [7,8]. At the same time, bullying was not only harmful to the victims, but the bully, to a certain extent, also caused some damage in many ways, such as depression, sleeping difficulties, and substance abuse [8,10].

Although cyberbullying was related to traditional offline bullying, cyberbullying had its unique characteristics. Firstly, new technologies allowed bullies to harm others 24 hours a day deliberately and repeatedly, regardless of space and time. It could occur anywhere Internet can reach, such as through different media: e-mails, social networks, text messages, and chat rooms [6,11]. Meanwhile, the harm of anonymity increased the anxiety of the victim and the secrecy of the abuser, often with no consequences. Meanwhile, because there was no direct contact with the victim, many people might not recognize it as a form of violence [12], which was worrying. Thus, cyberbullying must be considered a relatively unique social problem. Many studies classified cyberbullying as a traditional bullying category, and few considered its unique characteristics.

Therefore, this paper would review the causes of cyberbullying, including the causes of individuals, family environment, and online environment. Effects on three roles and the interventions from cyber bystanders, school education practitioners, and techniques of helping reduce or preventing cyberbullying.

2. Causes

2.1 Individual

The individual factors of cyberbullying contained many aspects. There was a strong relationship between the ability to self-control and tolerance for social problems and misconduct and violent behavior. Researchers have used self-control as one of the factors to investigate its relationship to cyberbullying. According to a survey in 2016, Shin examined the effects of self-control and physical and verbal violence [13]. The findings showed that the lower the level of self-control, the higher the likelihood of school violence and cyberbullying. If students could not control their anger or destructive behaviors, the possibility and frequency of bullying would be increased. At the same time, in a survey in 2018, Jung and Park confirmed that empathy and ability to self-control have a direct impact on cyberbullying through a study of 254 adolescents [14]. The results showed that high self-control ability could effectively prevent the occurrence of cyberbullying, and strong empathy would also increase the chances of intervening in cyberbullying.

At the same time, the tolerance of adolescents for relatively unorthodox social issues and destructive behaviors was also one factor that affected cyberbullying. Eccentric social issues referred to controversial topics, such as stereotypes, prejudice, and social phenomena toward social and gender diversity [10]. Antonino and his staff highlighted the tolerance of teenagers for these social phenomena as one of the risk factors for cyberbullying in the survey in 2019. Personal extreme opinions towards social phenomena were likely to turn these factors into triggers for racism, xenophobia, and homophobia, which were more likely to lead to cyberbullying. On the contrary, adolescents who were highly tolerant of social issues and could gently handle social differences could significantly reduce cyberbullying. At the same time, the results showed that low tolerance to drug and alcohol-related bad behavior also formed a protective factor against bullying and reduced the occurrence of deviant behaviors [10].

2.2 Family Environment

Family factors were also significant to cyberbullying. Family risk factors included lack of parental emotional support, poor parent-child relationships, and insufficient family communication [6]. Chang [15] stated in their study that children's loneliness in the family and the lack of communication between parents and children would be more likely to make children use the Internet more to express their improper emotions and increase the risk of cyberbullying. At the same time, María and her colleagues obtained results through a survey of 1282 college students about the European cyberbullying intervention project and family atmosphere. It showed that a deteriorating family environment would likely increase the possibility of becoming a victim and also a bully of cyberbullying [16]. In contrast, a good family environment would reduce this kind of possibility [16]. In addition, Woochun also mentioned in his study that the interaction between parents and children was negatively related to the rate of cyberbullying experience. That is to say, the less interaction between parents and children, the higher the probability of children experiencing and committing cyberbullying [17].

In addition, research has shown that the mobile phone use habits of mothers at home are closely related to bullying. Mother phubbing referred to paying more attention to the mobile phone than others in family interactions. Mother phubbing not only greatly reduced the chances of parent-child communication but also made mothers ignore their children's emotions and behaviors. A mother's indifference and neglect were sources of family stress, which would make children hide their emotional needs [9].

2.3 Identification Internet Platforms Problematic Internet Habits

There were many factors in the online environment of cyberbullying, such as untimely attention of websites and platforms to bullying speeches and behaviors and problematic Internet use of adolescents. The information on the Internet was enormous and constantly changing [18] [19]. In

many social media and instant messaging tools, insufficient screening of bullying remarked and insufficient interception of repetitive offensive information would likely lead to the further ferment of cyberbullying [18]. At the same time, some bullying information was sent on various school-related online platforms, and schools' lack of information management on the platform could also lead to the rapid spread of bullying remarks about the students in school [20]. If the school platform could not supervise timely, the victim might not be protected in a familiar environment but would be harmed more by disseminating information in a familiar environment.

In addition, the inappropriate use of technology and the Internet by adolescence also provided potential factors for cyberbullying. First, teenagers who were not concerned or less concerned about personal privacy on social media lead to personal privacy information leaked. In the study of Liu, Ang and Lwin, by analyzing a sample of 780 Facebook users from Singaporean adolescents, it was found that the direct display or clues of private information during the use of social media were one of the risk factors for cyberbullying [21]. Individuals more willing to disclose personal information online were more likely to be harmed online and engage in other potentially dangerous behaviors [19][21]. Meanwhile, a Korean study found that the time people spend on the Internet was often associated with cyberbullying [22] [23]. Cyberbullying had a static correlation with smartphone overuse and attacks. This meant that excessive smartphone use had a direct effect on aggression, which had a direct impact on cyberbullying. In addition, the excessive use of smartphones with aggression was a medium indirectly impacts cyberbullying [17]. Problematic internet use was a significant predictor of cyberbullying. Adolescents who frequently use the Internet, especially those who are active users of social networking sites and do not care about personal privacy, were particularly vulnerable [19][21][22].

3. Impacts

Similar to bullying, cyberbullying had three main roles: the bully, the victim, and bystanders [1] [5]. The bully was usually the strongest among their peers. They preferred to gain a higher status in the groups and tried to fulfill a sense of power satisfaction through bullying behaviors [5]. Bullying victims were usually the targets of aggressive behaviors and isolation. At the same time, they were directly exposed to powerlessness, fear, and despair [6]. Bystanders have always been considered a role that does not directly participate in the entire bullying. Still, the bystander, as the "spectator" or " audience" of the bullying action, was the object of the bully to show their power. Many researchers have shown that bystander attitudes significantly impact bullying tendencies. They included some silent onlookers and those who support the bully and defend the victim[1] [6].

3.1 The Victims

Victims who were the direct targets of cyberbullying face various mental health issues. Long-term persistence of cyberbullying was likely to lead to low self-esteem in adolescents and the gradual development of depressive symptoms, and these psychological impairments persisted into adulthood [1][2][24]. Compared with children who were not bullied, victims of bullying experienced psychological and emotional stress, and the victims had higher levels of anxiety, depression, and feelings of helplessness. According to the data from the questionnaire survey, about 86.9% of bullying victims express that the experience of being bullied in childhood also had a relevant impact on their adult life [24]. The study found that approximately 67% of victims reported higher levels of mental anxiety and more incredible frustration than non-bullying individuals [8].

Meanwhile, depressive symptoms and self-harm behavior were more frequent and even led to suicide [1] [2] [5] [8]. At the same time, victims would continue to suffer from various psychological problems, which further lead to physical difficulties, such as sleep disturbance, headache, stress, abdominal pain, enuresis, and psychological-related physical pain [1] [7] [24]. The experience of bullying victims in the early years was positively correlated with substance use [8]. The study found

that the victims were more likely to use external substance such as drugs or alcohol to help themselves relieve tension and stress[8].

Victims' social functioning was also affected by bullying. According to research, in interacting with other people, their emotions were more sensitive and extreme [1]. At the same time, perceived social exclusion and isolation were stronger. At the same time, according to the questionnaire data, the impact of cyberbullying would last for a long time, making them experience greater social marginalization and lower social status. Hostile remarks and unwilling memories would leave more or fewer traces on the Internet. The constant mention of rumors likely increased the chance and duration of the victim being harmed [12].

In addition, compared to youth who were not bullied, those who were bullied were more frequently involved in crime and misconduct [1]. In the learning environment, the victims were more likely to show difficulties in team adaptability or group integration [1][5][7]. This meant that the victims were more difficult to be accepted by the student groups, and friendship development had certain difficulties. It is worth noting that online rumors and slanderous remarks might have a particularly negative impact on the inclusiveness of student groups. At the same time, the victim's lack of social ability and confidence was further related to the difficulty of group integration [7]. In terms of academic performance, victims experienced more learning difficulties, including difficulty in completing homework, learning attention deficit problems, and absenteeism [1] [2]. Therefore, cyberbullying has also damaged the social functions of victims to a certain extent, making them more challenging to be accepted by different groups and more accessible to be marginalized.

Victims were vulnerable in traditional bullying, but in cyberbullying, the roles of victims and the bully often overlapped. This meant that while victims were being bullied online, they were also likely to bully others [2]. In the study by Beran et al., 14% (140 students) of the 1,001 teens surveyed reported going through cyberbullying for a long time. It is worth noting that the questionnaire showed that among the 140 students, there are 36 students (25.7%) were bullying others [25]. Role overlapping and switching were one of the characteristics of cyberbullying. The victim did not need to have sufficient advantages, such as a solid body, high student status, or related groups belonging, which were necessary for traditional bullying, to be able to launch retaliatory cyberbullying or hatred diversion to others [2] [5] [26]. The conditions of cyberbullying were relatively simple and highly concealed, significantly contributing to the transformation of victims into abusers.

Moreover, studies have shown that young people who were both victims and perpetrators experience the worst health outcomes compared to those with single roles. Specifically, these teens were reported to have higher levels of depression, substance abuse, and behavioral problems than their peers. They also had higher levels of criminality, so they were likely to need the company of professional health care workers, educators, and mature, caring adults [24].

3.2 The Bully

Cyberbullying perpetrators, as the initiator of violence, also suffer negative effects from this behavior. The most notable one was problem behavior. Research on cyberbullying in youth behaviors suggested that those bullies cyberbullying were more likely to engage in problem behaviors, including higher levels of active and passive aggression, property damage, illegal behavior, substance use, crime, and suicidal behavior [24] [27]In addition, compared to those who did not participate the bullying, the bullies exposed more difficulties on social interaction. Anxiety, stress, and sensitivity in interpersonal relationships have been reported in research [8] [24]. The decreased empathy made it difficult to realize the destructiveness of cyberbullying and speech bullying. Instead, more verbal violence was treated as humor and playfulness, which harms social interaction [2]. Low self-control and high self-esteem might trigger new bullying in different environments, such as workplace bullying [24] [28].

3.3 The Bystanders

Cyberbullying had certain effects on bystanders' social cognition and emotional responses[29]. Compared with offline bullying, bystanders had a stronger sense of moral detachment from cyberbullying, which meant that cyberspace largely weakened bystanders' moral sense of bullying [29]. On the Internet, due to the lack of witnessing bullying behaviors, the emotions of victims could not be directly captured, which greatly reduced the probability of bystanders preventing bullying behaviors. In cyberbullying, cyberspace might weaken moral constraints, and there might be counter-influences such as shirking of responsibility and blaming the victim. At the same time, cyberbullying could undermine the social responsibility of bystanders [30]. Privacy and repeated retweets of rumors, difficulty distinguishing between true and false information, and the high frequency of cyberbullying incidents have made bystanders more tolerant of rumors and verbal violence. This also subtly made bystanders gradually numb to repeated information, reducing bystanders' recognition behavior of cyberbullying.

4. Prevention and Interventions

In recent years, there have been many mainstream intervention methods for cyberbullying. Here are three main types of intervention: intervention by bystanders, teacher intervention, and technical intervention.

4.1 Cyberbystanders Intervention

Bystanders, a role who participants in cyberbullying directly, usually be seen as audiences of bullying. Bystander intervention has long been described as a powerful 'antidote' to bullying: when spectators take action to start intervening in bullying, it effectively mitigates the victim's harm [30]. For offline bullying, considering the consequences and the situation at the time, onlookers needed more courage to face bullying [12]. But when bullying happens online, bystanders could have more diverse forms. The direct intervention included responding directly to cyberbullies or sending messages to victims. The indirect intervention included reporting bullying to SNS administrators, complaining about harmful information to the platform, and so on [30]. Bystander intervention appeared to be easier and faster online. At the same time, instead of face-to-face intervention and the concealment of personal information on the Internet, onlookers were relatively less hesitant to intervene, making it easier to apply effective intervention [12] [30] [31]. Meanwhile, surveys have shown that the empathy of bystanders could effectively motivate them to come forward when the cost is less [31].

However, cyber bystanders intervention also had its limitations. In a study, Domic et al. showed that cyber bystanders were more likely to use indirect intervention than direct intervention. The reason behind this might be that cyber bystanders are more likely to experience a diffuse sense of responsibility [31]. Due to the online audience being enormous in scope and could be anonymous online, individuals were likely to be "lost in the crowd," resulting in a spread of responsibility[31]. To reduce this dispersion of responsibility, web developers could increase the "being watched" experience of cyber bystanders in several ways, for example, by increasing the transparency of network information, the real-name system, appropriately displaying the source of the message, and improving pf two-way supervision of bystanders by adding pop-up windows [5] [19][30] [31].

4.2 School Education Practitioner Intervention

School educators must guide those students who are cyberbullying in the school context. Different educators in their specialties could make changes to bullying. Studies have shown that teaching teachers, school psychologists, and library practitioners have different roles in intervening in cyberbullying [20] [32] [33]. Several projects have affirmed the position of school teachers in cyberbullying interventions. In the school-wide intervention model, teacher training about cyberbullying was considered a priority. At the same time, the effective intervention of the TIPIP

(tabby improved prevention and intervention program) project was also achieved by teachers. In the "NoTrap!" program, the training of teachers on bullying knowledge fostered collaboration among peer educators to ensure the program's effectiveness. Another notable teacher intervention program: the RPC program (Relazioni per Crescere, Relations to grow), also highlighted the influential role of teachers in bullying. The RPC project aimed to achieve the purpose of intervention by teaching students the knowledge and experience related to cyberbullying in the form of lectures [32].

School psychologists also acted as social agents in the intervention of school bullying. They could cooperate with curriculum makers according to their own fields to formulate appropriate and practical courses to prevent cyberbullying [33]. Notably, other educators could also play their part in influencing bullying. What's more, library-based intervention was considered to be very important. Due to a lack of time and online experience, teachers and school psychologists might not obtain timely information on the Internet, and sometimes it is not an easy job to distinguish details on cyberbullying [20]. At this time, the school library system could supplement the deficiencies of other educational roles. Online bullying would instantly be detected in the school, and harmful information would be cleaned up on the school platform. Information about cyberbullying could also be shared at parent conferences to increase parental awareness of intervention.

4.3 Technical Intervention

There were many types of technical interventions, including various videos and games about cyberbullying, which made cyberbullying more intuitively reflected in front of students. Huang analyzed some YouTube videos about cyberbullying and concluded that video intervention was effective for students but had certain limitations. The shortcomings lay in two aspects. First, students were less likely to search for these terms to obtain videos actively. This required active school guidance to organize students to learn about videos. For example, librarians could increase the frequency of placing videos on school web pages and organize related activities [20]. Secondly, the content of the video was an essential factor affecting the effectiveness. Simply stating the harm and other factual information, the video lacked the presence of the subjective feelings of different roles in bullying. Students were more likely to feel a sense of distance [20]. So the choice of video content might directly affect the effectiveness of video intervention.

Additionally, online games were also one of the ways to make more teenagers aware of cyberbullying. Especially role-playing games allowed students to face the dangers of cyberbullying [6]. By playing different roles in bullying, students could understand the harm of the behavior in multiple ways.

5. Conclusion

Cyberbullying, as a social problem, should be taken seriously. The causes of cyberbullying are complex and closely related to an individual's personality traits, including levels of self-control, empathy, and self-esteem. At the same time, the family environment also played a significant role in cyberbullying. Insufficient communication between parents and children, tense family relationships, and mother in the family are all risk factors. In terms of Internet use, the time spent on the Internet by adolescents and the negligence of protecting personal privacy information all give cyberbullying occurrence opportunities. Like traditional offline bullying, they both could have serious negative consequences for both the victim and the perpetrator. But it is worth noting that cyberbullying has its own special characteristics, which also prompt overlapping of victim and perpetrator. The cyberspace of cyberbullying would significantly reduce the sensitivity of bystanders to bullying behavior and weaken the role of bystanders in monitoring and the probability of intervening behaviors. Several interventions and prevention could be effectively applied to cyberbullying. Bystander intervention was considered easier to implement in an online environment than traditional bullying. In addition, the joint efforts of different educators, such as teachers, school psychologists, and library agencies in the school context could also be an effective way of preventing or intervening in bullying. Online

videos and role-playing games have also increased young people's awareness of cyberbullying. Young people could find more detailed information on cyberbullying on relevant program websites, such as the Cyberbullying Research Centre (cyberbullying.org), Pantallas Amigas (www.pantallasamigas.net), and StopBullying (www.stopbullying.gov). At the same time, some existing games could also be used as resources for teenagers. Be Internet Awesome, a Google project about the potential dangers of the Internet could increase children's safety awareness when using the Internet. In addition, some role-playing games, such as SchoolLife, Conectado, were designed to reduce school bullying and cyberbullying [6][13][20][21].

In conclusion, recent literature findings have important implications for health care professionals, educators, and website developers. Follow-up physical health supervision and psychological counseling support are essential for health professionals. At the same time, when dealing with adolescent health problems, such as physical problems such as suicide and self-harm, as well as psychological problems such as anxiety and depression, the investigation of cyberbullying experiences was necessary. For educators, school-based intervention projects with multi-faceted educators needed to be paid attention to, such as lectures organization on preventing cyberbullying and related school cultural performances. Finally, the above research also shows that website developer was obliged to intervene in the phenomenon of cyberbullying through some technological updates and various forms of media. A sense of responsibility for maintaining the network environments of development should be strengthened, and more attention should be paid to the protection of private information.

However, most studies investigating the relationship between cyberbullying behavior and adolescents' physical and mental effects have been correlational. In the future, more longitudinal studies are needed to increase our understanding of how cyberbullying experiences affect adolescents' physical, mental, and future social choices over time. Further clarification of the relationship between the factors that cause cyberbullying and its adverse effects needs to be studied.

References

[1] Cantone, E., Piras, A. P., Vellante, M., Preti, A., Daníelsdóttir, S., D'Aloja, E., ... & Bhugra, D. (2015). Interventions on bullying and cyberbullying in schools: A systematic review. Clinical practice and epidemiology in mental health: CP & EMH, 11(Suppl 1 M4), 58.

[2] Shin, S. Y., & Choi, Y. J. (2021). Comparison of Cyberbullying before and after the COVID-19 Pandemic in Korea. International journal of environmental research and public health, 18(19), 10085.

[3] You, S., & Lim, S. A. (2016). Longitudinal predictors of cyberbullying perpetration: Evidence from Korean middle school students. Personality and Individual Differences, 89, 172-176.

[4] Menesini, E., & Nocentini, A. (2009). Cyberbullying definition and measurement: Some critical considerations. Zeitschrift für Psychologie/Journal of Psychology, 217(4), 230.

[5] Guo, S., Liu, J., & Wang, J. (2021). Cyberbullying roles among adolescents: A social-ecological theory perspective. Journal of School Violence, 20(2), 167-181.

[6] Calvo-Morata, A., Rotaru, D. C., Alonso-Fernández, C., Freire-Morán, M., Martínez-Ortiz, I., & Fernández-Manjón, B. (2018). Validation of a cyberbullying serious game using game analytics. IEEE Transactions on Learning Technologies, 13(1), 186-197.

[7] Cénat, J. M., Blais, M., Lavoie, F., Caron, P. O., & Hébert, M. (2018). Cyberbullying victimization and substance use among Quebec high schools students: The mediating role of psychological distress. Computers in Human Behavior, 89, 207-212.

[8] Pichel, R., Feijóo, S., Isorna, M., Varela, J., & Rial, A. (2022). Analysis of the relationship between school bullying, cyberbullying, and substance use. Children and Youth Services Review, 134, 106369.

[9] Qu, J., Lei, L., Wang, X., Xie, X., & Wang, P. (2022). Mother phubbing and adolescent cyberbullying: the mediating role of perceived mother acceptance and the moderating role of emotional stability. Journal of interpersonal violence, 37(11-12), NP9591-NP9612

[10] Tintori, A., Ciancimino, G., Giovanelli, G., & Cerbara, L. (2021). Bullying and cyberbullying among Italian adolescents: The influence of psychosocial factors on violent behaviours. International journal of environmental research and public health, 18(4), 1558.

[11] Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. Youth violence and juvenile justice, 4(2), 148-169.

[12] Ansary, N. S. (2020). Cyberbullying: Concepts, theories, and correlates informing evidence-based best practices for prevention. Aggression and violent behavior, 50, 101343.

[13] Shin, S. R. (2016). How does juvenile's witness of violence, watch of violence media affect traditional bullying and cyber bullying. J. Welf. Correct, 44, 139-158.

[14] Jung, S. Y., & Park, E. Y. (2018). The Effects of Youth's Empathy on Cyber-Bullying Behaviors: Focused on The Mediating Effect of Youth's Self-Control. Korean J. Youth Stud, 25, 209-233.

[15] Chang, F. C., Chiu, C. H., Miao, N. F., Chen, P. H., Lee, C. M., Chiang, J. T., & Pan, Y. C. (2015). The relationship between parental mediation and Internet addiction among adolescents, and the association with cyberbullying and depression. Comprehensive psychiatry, 57, 21-28.

[16] Martínez-Monteagudo, M. C., Delgado, B., Inglés, C. J., & García-Fernández, J. M. (2019). Cyberbullying in the university setting. Relationship with family environment and emotional intelligence. Computers in Human Behavior, 91, 220-225.

[17] Jun, W. (2020). A study on the cause analysis of cyberbullying in Korean adolescents. International journal of environmental research and public health, 17(13), 4648.

[18] Dillon, K. P., & Bushman, B. J. (2015). Unresponsive or un-noticed?: Cyberbystander intervention in an experimental cyberbullying context. Computers in Human Behavior, 45, 144-150.

[19] Ang, R. P. (2015). Adolescent cyberbullying: A review of characteristics, prevention and intervention strategies. Aggression and violent behavior, 25, 35-42.

[20] Huang, L. M. (2019, November). Stand to stop: A content analysis of YouTube videos about cyberbullying in schools and library-based interventions. In ICERI2019 Conference 11th-13th November 2019 (pp. 8246-8255).

[21] Liu, C., Ang, R. P., & Lwin, M. O. (2013). Cognitive, personality, and social factors associated with adolescents' online personal information disclosure. Journal of adolescence, 36(4), 629-638.

[22] Kircaburun, K., & Baştug, I. (2016). Predicting cyberbullying tendencies of adolescents with problematic internet use. Journal of Academic Social Science Studies, 48, 385-396.

[23] Handono, S. G., Laeheem, K., & Sittichai, R. (2019). Factors related with cyberbullying among the youth of Jakarta, Indonesia. Children and Youth Services Review, 99, 235-239.

[24] Nixon, C. L. (2014). Current perspectives: the impact of cyberbullying on adolescent health. Adolescent health, medicine and therapeutics, 5, 143.

[25] Beran, T., Mishna, F., McInroy, L. B., & Shariff, S. (2015). Children's experiences of cyberbullying: A Canadian national study. Children & Schools, 37(4), 207-214.

[26] Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., ... & Kordic, T. (2015). Cyberbullying perpetration and victimization among middle-school students. American journal of public health, 105(3), e66-e72.

[27] Schenk, A. M., Fremouw, W. J., & Keelan, C. M. (2013). Characteristics of college cyberbullies. Computers in Human Behavior, 29(6), 2320-2327.

[28] Schultze-Krumbholz, A., & Scheithauer, H. (2009). Social-behavioral correlates of cyberbullying in a German student sample. Zeitschrift für psychologie/Journal of Psychology, 217(4), 224.

[29] Knauf, R. K., Eschenbeck, H., & Hock, M. (2018). Bystanders of bullying: Social-cognitive and affective reactions to school bullying and cyberbullying. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 12(4).

[30] DiFranzo, D., Taylor, S. H., Kazerooni, F., Wherry, O. D., & Bazarova, N. N. (2018, April). Upstanding by design: Bystander intervention in cyberbullying. In Proceedings of the 2018 CHI conference on human factors in computing systems(pp. 1-12).

[31] Wang, S. (2021). Standing up or standing by: Bystander intervention in cyberbullying on social media. New media & society, 23(6), 1379-1397.

[32] Guarini, A., Menin, D., Menabò, L., & Brighi, A. (2019). RPC teacher-based program for improving coping strategies to deal with cyberbullying. International journal of environmental research and public health, 16(6), 948.

[33] Elbedour, S., Alqahtani, S., Rihan, I. E. S., Bawalsah, J. A., Booker-Ammah, B., & Turner Jr, J. F. (2020). Cyberbullying: Roles of school psychologists and school counselors in addressing a pervasive social justice issue. Children and youth services review, 109, 104720.