

EXAMINING THE ROLE OF TEACHERS IN ADDRESSING THE PSYCHOLOGICAL IMPACTS OF CYBER THREATS ON SCHOOL STUDENTS

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ABSTRACT

The present qualitative study examines the vital role of teachers in ensuring cyber safety and psychological well-being among secondary school students in the digital age. While technology offers immense opportunities, it also exposes students to cyber risks like bullying, harassment, and harmful content, leading to anxiety, depression, and isolation. Teachers play a critical role in mitigating these impacts by recognizing warning signs, providing emotional support, and fostering digital resilience. In the present study, the sample was selected through purposive sampling and the data was collected through personal interviews with 15 secondary school teachers which revealed their efforts in sharing preventive measures and creating awareness regarding cyber threats. The findings reveal that despite efforts from the teachers, students were hesitant to report cyber threats. Recommendations in the study include equipping teachers with specialized training, integrating cyber safety into curricula, fostering open communication, and promoting collaboration among stakeholders. By addressing these challenges, teachers can empower students to navigate the online world safely. Future research should explore advanced technologies, cultural influences, and the unique behaviours of adolescents to develop comprehensive strategies for fostering ethically responsible digital citizens.

KEYWORDS: Teacher, Psychological Impact, Cyber Threats, Cyber Harassment, Adolescents, Cyber wellness, Secondary Schools

INTRODUCTION

The swift digital integration within the realm of education has fundamentally transformed the learning landscape by affording unparalleled access to information, tailored learning experiences, and opportunities for global collaboration. Tools such as e-learning platforms, AI-enhanced tutoring systems, and virtual classrooms have enabled students to extend their learning beyond conventional boundaries. Nevertheless, this digital transition also introduces vulnerabilities, particularly for younger learners. The increase in screen time, exposure to online disinformation, cyberbullying, and privacy threats present considerable challenges. Achieving a balance between these opportunities and vulnerabilities necessitates comprehensive digital literacy programs, secure online environments, and proactive involvement from educators and parents to ensure that technology serves to enhance learning while concurrently protecting students. Livingstone, S., & Helsper, E. J. (2007) explored how digital technologies influence children's learning opportunities and their exposure to online risks. The results highlighted that digital inclusion is not just about owning devices or internet access but also about the skills, literacy, and ability to

critically engage with online content. Teachers can play crucial role in creating this awareness. Kumar, S., & Kumar, R. (2018) has also done a similar study focusing on the opportunities digital learning creates and the potential negative impacts on students. The privacy risks faced by children and young people in increasingly digital learning environments (Livingstone, et.al., 2019). Screen time and digital engagement impact students' mental health and social interactions (Pew Research Center, 2022).

KNOWLEDGE GAP

While the existing body of literature has thoroughly examined the opportunities for digital learning and the associated risks, there is a notable deficiency in comparative research that investigates the role of teachers in cultivating cyber awareness among students across diverse socio-cultural frameworks. The majority of the studies tend to concentrate on either digital literacy or psychological well-being in a compartmentalized manner, neglecting to explore how educators might effectively integrate these dimensions. Furthermore, there exists a paucity of empirical investigations regarding the frequency with which students communicate cyber threats to

educators and the strategies that could enhance this reporting behaviour. This research endeavours to address these gaps by assessing the proactive involvement of teachers in promoting cyber wellness among students and elucidating the obstacles that hinder students from seeking assistance concerning cyber safety matters.

RATIONALE OF THE STUDY

With the increasing integration of technology in education and the daily lives of students, cyber threats such as cyberbullying, online harassment, identity theft, and exposure to inappropriate content have become pervasive issues. These threats not only compromise students' digital safety but also have significant psychological impacts, including anxiety, depression, decreased self-esteem, and academic disengagement.

Teachers play a crucial role in shaping students' emotional and psychological well-being, given their close and consistent interactions with learners. However, there is a growing need to understand how teachers can effectively address the psychological repercussions of cyber threats. The widespread use of digital platforms among students has heightened their vulnerability to cyber threats, creating an urgent need for proactive measures. Studies show that cyber threats can lead to severe emotional distress, affecting students' academic performance, mental health, and social development. Teachers are often the first point of contact for students experiencing such challenges. A study conducted by Kowalski, et. Al. (2014) highlighted that cyberbullying is significantly associated with negative psychological outcomes in students, including anxiety, depression, and lower self-esteem. It also discusses how these impacts can interfere with academic performance and social relationships. In a similar study conducted by Hinduja & Patchin, (2010) discussed the link between cyberbullying and psychological distress, emphasizing its potential to contribute to suicidal ideation among youth.

The importance of teachers in addressing emotional experiences in classrooms, emphasizing the interplay between academic and emotional development can play an important role in reducing the negative psychological impact of cyber threats on students. Teachers' emotional engagement significantly influences their resilience against challenges such as cyber threats (Grant, 2024). Thus, it becomes crucial to understand the role of teachers in mitigating the impact of cyber threats on adolescents present study was conducted.

RESEARCH QUESTIONS

1. How can teachers recognize signs of distress caused by cyber threats among school students?
2. What strategies can educators implement to build emotional resilience?

3. How can collaboration among stakeholders enhance support systems?

LITERATURE REVIEW

Psychological Impacts of Cyber Threats:

The increasing prevalence of cyber threats, such as cyberbullying, online harassment, and exposure to harmful content, has led to significant psychological consequences, particularly among adolescents. Cyberbullying is one of the most pervasive online threats where victimization rates range between **13.99% and 57.5%**, and it often involves repeated online harassment (Kowalski et al., 2018). Common tactics include denigration, impersonation, and public shaming. Adolescents frequently encounter inappropriate content, including violence, hate speech, and explicit material, which can negatively influence their mental health (Livingstone & Smith, 2014). Victims of cyberbullying often report higher levels of anxiety and depressive symptoms compared to peers. The study and further many other such studies suggest that online harassment has an equal or more severe psychological impact than traditional bullying due to its pervasive nature and the lack of safe spaces for victims (Hinduja, & Patchin, 2018). They may develop feelings of loneliness and a decline in self-esteem (Tokunaga, 2010), prone to disrupted sleep patterns, which exacerbate stress and emotional regulation challenges (Sampasa & Lewis, 2015). Persistent exposure to cyber threats can lead to chronic stress and symptoms resembling post-traumatic stress disorder (PTSD). Adolescents with pre-existing vulnerabilities are at greater risk of long-term psychological damage (Baumgartner, et.al., 2012). Studies indicate global victimization rates from cyberbullying among children and adolescents range from 13.99% to 57.5%, with perpetration rates between 6.0% and 46.3%. A case study of middle schools in Serbia found 20% of students aged 11–15 were victims of cyberbullying, and 10% admitted to being perpetrators (Popović, 2011). 19% of children aged 10–15 reported interacting with strangers online. More than 9,000 child sexual abuse cases involved an online element in 2022-2023 (NSPCC Learning, 2024).

Digital Resilience and Cyber Wellness:

Digital resilience and cyber wellness are essential components for navigating the increasingly complex digital landscape. As technology use continues to grow, individuals, especially students, face numerous online challenges such as cyberbullying, privacy concerns, and misinformation. Developing digital resilience involves enhancing individuals' ability to manage these challenges effectively while maintaining mental well-being. Research by Livingstone and Helsper (2007) emphasizes the importance of fostering digital literacy and emotional intelligence to build resilience, enabling users to cope with cyber threats while promoting a healthy online presence. Furthermore, cyber wellness initiatives focus on creating

supportive environments that encourage safe and responsible use of technology. These initiatives are crucial for mitigating the adverse effects of digital interactions, promoting positive digital experiences, and ensuring that users can thrive in a balanced, secure online world.

Teachers as Interveners:

Teachers can play a critical role in mitigating these impacts by fostering safe classroom environments, promoting digital literacy, and recognizing warning signs of cyber distress. They serve as trusted figures who can identify signs of distress and provide a safe space for students to express their feelings and concerns. Teachers are often the first to recognize changes in students' behaviour, emotional well-being, or academic performance, which may be linked to cyber threats such as cyberbullying or online harassment. Beyond academic instruction, teachers provide emotional support and guidance, helping students develop coping strategies and resilience in the face of digital challenges (Smith, et.al., 2008; Banyard, 2011; Craig, 2017). They are uniquely positioned to implement preventive measures through digital literacy programs and awareness campaigns while also offering immediate support when cyber threats arise by creating safe, inclusive environments. Students feel empowered to seek help without fear of judgment or reprisal, fostering a sense of belonging and psychological safety under the guidance of teachers. The

METHODOLOGY

A qualitative study was conducted where teachers from secondary schools were interviewed about the psychological wellbeing of students who are using cyber space. The engagement of the students in cyber threats were analysed from teacher's viewpoint. The data was collected from 15 teachers of different government and private secondary schools of Lucknow. Purposive sampling was adopted to collect the data and only one computer teacher from each school was interviewed. The data was collected through semi-structured interview where questions were based on the psychological well-being of students, especially adolescents who are in continuous contact with internet and digital devices and are prone to cyber threats. Thematic analysis was done for the data collected by coding the transcript in subthemes.

RESULTS AND INTERPRETATION

This section presents the results of the study and their interpretation, providing insights into key findings and their implications in the context of cyber social wellness

Table:1 Themes showing teachers role in addressing Psychological Impacts of Cyber Threats of students. (R=10)

S.No.	Sub-Themes	Frequency of responses received	Percentage (%) of responses received
1.	students are emotionally driven by online activities	9	90%
2.	cases of depression	2	20%
3.	cases of anxiety	7	70 %
4.	cases of stress	8	80%
5.	Peer pressure to use social media	6	60 %
6.	Students involved in online gaming	6	60%
7.	Students involved in online shopping	10	100 %
8.	Students involve in online social media platforms	9	90%
9.	students are aware about cyber threats	2	20%
10.	students don't report cyber threats	8	80%
11.	Teachers counsel students	5	50%
12.	teachers create awareness	10	100%

INTERPRETATIONS

It can be analysed from the table 1 that cases of stress (80%), anxiety (70%) and depression (20%) was prevalent among students. It is also interesting to note that peer create lot of pressure to join social media platforms which is one of the reasons for creating stress, anxiety and depression among them. There are content available which drive the students emotionally. 90% of teachers agreed to it that the emotions of students are driven by online activities which leads to cyber threats. 100% of teachers agreed that the students are engaged in online activities like shopping (100%) and gaming (60%) and social media platform (90%). It has adverse psychological impacts on their wellbeing. It is to be noted that 80% teachers mentioned students don't report cases of cyber threats to their teachers. They are afraid of shame and guilt which further leads to stress and depression. It also increases the suicidal tendency among students. 50% teachers said that they counsel students whereas others said that the students don't report cases. 100% teachers agreed that they create awareness among students about cyber threats. They share recent cases with students and update about policies and prevention measures.

FINDINGS AND DISCUSSION

The contemporary cohort of internet and mobile device users is subjected to cyber threats on a continual basis (Livingstone & Haddon, 2019). In their interviews, educators articulated that they consistently disseminate the most recent preventive strategies to their students. Nevertheless, the inherent behavioral tendencies and the prevalent lack of vigilance regarding cyber threats constitute the principal factors that render students susceptible to cyberattacks (Hinduja & Patchin, 2020). The psychological well-being of students can be assured solely through the proactive intervention of teachers and the timely dissemination of pertinent information.

The findings of the study are as follows:

1. Teachers as Key Stakeholders in Cyber Awareness:

Educators serve an integral function in fostering awareness of cyber threats among students. Empirical evidence suggests that the digital literacy of teachers has a direct bearing on the online safety awareness of students (Chou & Peng, 2019). Their proactive engagement in cyber safety education is imperative for cultivating digital resilience (Willard, 2019).

2. Teachers as Bridges to Psychological Well-being:

Teachers function as intermediaries between students and their psychological well-being. Research has demonstrated that cyber threats can adversely affect the mental health of students, necessitating the guidance of educators to alleviate these risks (Li, 2018). By imparting cyber safety education, teachers facilitate the development of coping mechanisms for students in the face of online threats (Blume & Wölfling, 2021).

3. Underreporting of Cyber Threats: A mere fraction of students report cyber threats to their educators. Investigations indicate that fear, embarrassment, or a deficiency of trust in the reporting mechanisms contribute to this underreporting phenomenon (Patchin & Hinduja, 2018). Enhancing this reporting rate is crucial for safeguarding students' well-being, as timely interventions can avert prolonged psychological distress (Sticca & Perren, 2019).

4. Students' Engagement in Online Activities: Teachers have noted that a significant majority of students exhibit high levels of engagement in online gaming, shopping, and social media platforms. Research corroborates that excessive screen time and participation in online platforms expose students to cyber risks, such as cyberbullying, fraud, and addiction (Rideout & Robb, 2020; Kuss & Griffiths, 2017). Consequently, the promotion of responsible digital practices is of paramount importance.

5. Teachers' Role in Building Digital Resilience:

Teachers acknowledge their obligation to instruct students about cyber threats in order to cultivate digitally resilient citizens. A robust cyber safety curriculum, along with regular awareness initiatives, is essential for equipping students with the competencies required to navigate the online environment safely (Willard, 2019; Blume & Wölfling, 2021).

CONCLUSION

The results of the research presents the crucial role of teachers in safeguarding the cyber safety and psychological health of their students. When students are continuously involved in online endeavours such as gaming, shopping, and engaging with social media platforms, the potential for cyber threats remains omnipresent. Educators serve as essential stakeholders, effectively bridging the divide between students and their psychological wellness through ongoing awareness campaigns and the dissemination of knowledge. Nevertheless, the hesitation exhibited by students in reporting cyber threats creates the necessity of cultivating trust and fostering open dialogue between students and teachers. By strengthening this trust and highlighting their obligations, teachers can empower students to evolve into digitally resilient individuals, adept at manoeuvring through the online landscape with safety.

RECOMMENDATIONS

The recommendations that emerged from the present study are as follows:

- Mandatory training for educators, curriculum integration of cyber wellness, and fostering a collaborative culture in schools.
- To enhance cyber safety among students, schools should prioritize regular training programs to equip teachers with updated knowledge on cyber threats and preventive strategies.
- Creating a safe and open environment where students feel comfortable reporting cyber issues is essential.
- Integrating cyber safety education into the curriculum can ensure consistent learning about digital resilience.
- Collaborative efforts involving teachers, parents, and policymakers are vital to addressing these challenges comprehensively.
- Additionally, interactive awareness campaigns and demonstrations can help students identify and handle cyber threats effectively. Schools should also establish clear technology usage policies focusing on cyber ethics, while providing counselling services to address psychological challenges arising from cyber threats. Regular monitoring and feedback mechanisms can further support the creation of a safer digital environment for students.

FUTURE RESEARCH

In future, further studies can be taken into account as follows:

- longitudinal impacts of teacher interventions and the role of emerging technologies in addressing cyber threats. Research could also focus on the long-term psychological

impacts of cyber threats on students and the role of early interventions in mitigating these effects.

- Future research could explore the impact of advanced technologies, such as artificial intelligence and machine learning, on enhancing cyber safety education for students.

- Investigating the effectiveness of gamified learning tools in teaching cyber ethics and safety could also yield valuable insights. Comparative studies across different regions and educational systems would help identify best practices and cultural influences on cyber safety measures.

- Additionally, studying the effectiveness of collaborative approaches involving teachers, parents, and policymakers in creating digital resilience could provide a robust framework for future cyber safety initiatives. Expanding research to include the perspectives of Generation Alpha and their unique digital behaviours could further enrich the understanding of evolving cyber safety challenges.

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