

The psychological impact of cyberbullying on university student.

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Abstract— Nowadays cyberbullying is a common phenomenon in the world of internet. It poses seriously negative impact especially emotional consequences. This research analyses the psychological impact of cyberbullying among university students and concentrate the behavioral and mental issues like stress, anxiety, sadness and academic performance. Using quantitative approach, we did this research because of its easy compatible with numerical type data analysis and we use survey methods to know students' opinion. We add 22 different types of psychological question. From our research findings we can see that most of the students facing or experiencing cyberbullying in social media platform somebody report they even face it on messaging app email and in phone call. The most common impact is anxiety and stress. Due to this their academic performance also affected and some student even dropout from semester.

Keywords—cyberbullying, psychological.

I. Introduction

In today's world, most of the people dependent on electronic communication specially on internet or social media. They use the Internet daily for a wide range of activities, from studying to socializing. While the Internet has many advantages, it also comes with its fair share of disadvantages. One of the major issues is cyberbullying, which is also known as digital violence, online violence, or internet violence [1]. Defining cyberbullying can be tricky because it takes on many forms, but it is generally recognized as a type of peer aggression carried out through digital platforms like computers and mobile devices. Cyberbullying typically involves intentional, repeated, and harmful actions by an individual or group aimed at someone who often feels powerless to respond or defend themselves [2]. This study explores the prevalence and impact of cyberbullying among college students, looking closely at how it affects their social lives, academic performance, and mental health. It also seeks to uncover the root causes of cyberbullying, evaluate how institutions are currently addressing the issue, and suggest practical solutions. The goal is to raise awareness and create strategies to make campuses safer and more welcoming for everyone.

A. Reasearch Question:

- i. How does cyberbullying affect university students' mental health, including anxiety, depression, and self-esteem?
- ii. What coping mechanisms do university students use to deal with the psychological consequences of cyberbullying?

II. Literature Review:

A study of 677 multiethnic high school students in Hawai'i found that 56.1% experienced cyberbullying, with Filipino and Samoan youth more likely to report negative self-perceptions [3]. The research revealed a significant association between cyberbullying and increased substance use, with victims being approximately 2.5 times more likely to engage in substance use and 3.2 times more likely to attempt suicide. Despite limitations such as self-reported data and a cross-sectional design, the study emphasizes the widespread prevalence and harmful effects of cyberbullying within this demographic. The authors highlight the need for comprehensive prevention strategies involving schools, families, and communities to effectively address and mitigate the impact of cyberbullying on youth. Studies highlight the widespread issue of bullying and cyberbullying in university. Research by Lee and Shin found that 34% of Korean high school students were involved in cyberbullying, with 6.3% as bullies, 14.6% as victims, and 13.1% as both [2]. Machimbarrena and Garaigordobil reported similar trends, with 13.4% as cyber victims and 25.6% as bystanders, emphasizing verbal aggression and offensive messages as prevalent forms (2018). In Belgrade, 10% of students admitted to cyberbullying, while 20% were victims [3]. A Serbian study revealed 66% of students experienced cyber violence, with 27% facing three or more forms. These findings underscore the need for intervention to address this significant educational issue. This research review highlights the prevalence and behaviours of bullying and cyberbullying among high school and college students in different countries.

Research on cyberbullying among university students highlights significant gender-related distinctions in victimization and aggression. A study with 1,108 students found that 77.6% experienced cyberbullying, while 51.2% acted as aggressors [6]. Male victims showed higher levels of hostility and psychoticism, while female victims experienced greater anxiety. The study utilized quantitative

methods, including the CYB-VIC, CYB-AGRE, and SA-45 scales, to measure cyberbullying intensity, aggression, and psychopathological symptoms. Findings indicated a strong link between cyberbullying severity and adverse mental health outcomes. However, the study's cross-sectional design limited causal conclusions, and the homogeneity of the sample restricted the generalizability of the results. These findings emphasize the need for targeted prevention strategies, especially considering gender differences in the psychological impact of cyberbullying. The study "Cyberbullying and Psychological Well-being in Young Adolescence" examines the psychological impact of cyberbullying on 1707 adolescents aged 10–13 years, focusing on depression, anxiety, and subjective well-being [4]. Using a cross-sectional design and self-reported surveys, it analysed the roles of cyber-victims, cyberbullies, and cyberbully-victims, as well as the protective effects of social support. The findings revealed that cyber-victims and cyberbully-victims experienced higher levels of depression and anxiety and lower well-being, with cyberbully-victims being the most vulnerable. While peer support was less effective, family and teacher support significantly reduced distress and improved well-being. However, the study has some limitations, including its focus on younger adolescents, its cross-sectional design, which prevents assessing long-term impacts, and the reliance on self-reported data, which may introduce bias. Despite these limitations, the study provides valuable insights into the detrimental effects of cyberbullying and highlights the need for further research to assess its long-term impact on university students and the role of institutional support systems in mitigating harm.

Cyberbullying is a serious issue that affects university students, causing significant harm to their mental health. It is different from traditional bullying because it happens online, can be anonymous, and is constant [5]. Studies like those by Smith et al and Kowalski et al. show that cyberbullying leads to problems like anxiety, depression, low self-esteem, and even thoughts of suicide. Research has used surveys, interviews, and focus groups to understand its effects. Surveys provide numbers about how common cyberbullying is, while interviews and focus groups help us learn how victims feel and cope. For example, Ortega-Barón et al. studied how students' behaviours change after being bullied online. The results show that cyberbullying increases stress, makes students feel lonely, and hurts their grades. However, there are problems with current research. Many studies rely on self-reports, which can be inaccurate. They also don't look closely at how culture, gender, or financial background affect bullying experiences. Another issue is the lack of focus on solutions, such as programs to help victims cope. Future studies need to address these gaps by exploring why students don't report bullying and testing ways to stop it. Universities, governments, and online platforms need to work together to create safer online spaces. By raising awareness and finding effective ways to support students, we can reduce the harm caused by cyberbullying and improve their mental health and academic success.

III. Methodology

Research Desing:

This study employs a quantitative research approach to explore the psychological impact of cyberbullying on university students. We chose quantitative research for its ability to generate numerical data which can be easily statistically analyzed. We chose a survey system to ensure all the possibilities among the students and can get a large amount of dataset from them.

Methods:

Survey Design: An online survey is conducted as the primary data collection tool. The survey consists of 22 questions designed to explore three key areas:

1. **Demographic Information:** student's age, gender.
2. **Experience with Cyberbullying:** This section collects data on the frequency of cyberbullying experience, the types of cyberbullying (such as harassment, exclusion, and impersonation), the platforms where cyberbullying happened.
3. **Psychological Impact:** This section collects data on the psychological impact of cyberbullying like stress, anxiety, depression, self-esteem, and social withdrawal. We chose liker type question and the binary yes/no type of question for this section for students convenient and easy for us to generate the data easily.

Participants

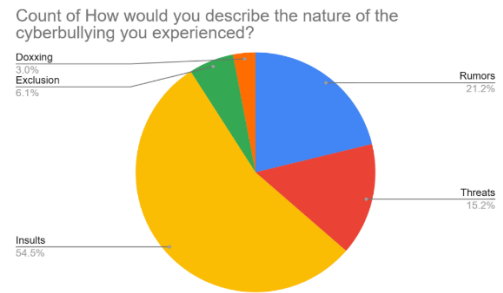
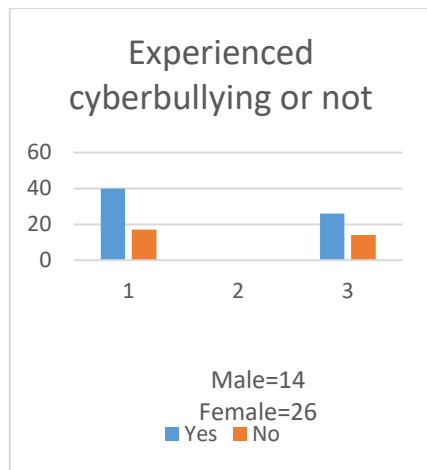
Our research participants are mostly undergraduates between the ages of 18 and 28. To provide sufficient data we chose this age range because there are many semester or year students doing their undergrads between the range. We target 50-60 students in total to give a dataset for the study. The survey is administered online to ensure more accessibility and to maintain anonymity, which is essential for encouraging honest and uninhibited responses from participants.

Data Analysis:

We use statistical data analysis to analyze our data more effectively and find the appropriate data value. We can also make our decision depending on the data that is more than other data. We also can make all kinds of predictions using the data of our survey. We can calculate the average and find more specific data using these methods.

IV. Finding

A total of 57 students participated in our survey, among them 40 reported they experienced cyberbullying, while 17 report that they had not encountered any form of cyberbullying. Among those who experienced cyberbullying, most of the student were female (26), and 14 were male. This data shows that female students are excessively affected by cyberbullying compared to their male counterparts, suggesting a gendered disparity in the prevalence of cyberbullying.

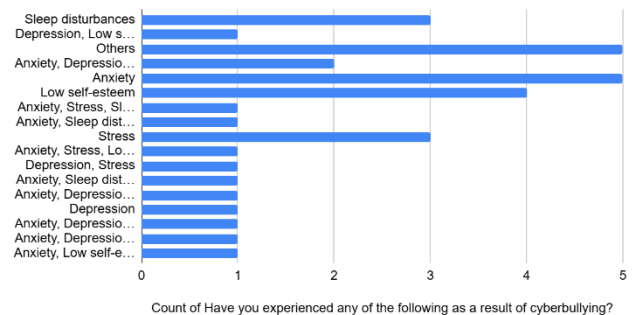


The information shows the various forms of cyberbullying that students encounter. With the data we can see insults is the nature of cyberbullying that students are facing more after that rumors and threats type cyberbullying is there and the least type is doxing and exclusion.

3) Effect of Cyberbullying

Category	Number of Students	Value (x_1)	Deviation from Mean ($x_1 - \mu$)	Squared Deviation ($(x_1 - \mu)^2$)	Total Contribution
Experienced	40	1	0.2982	0.0889	3.556
Not Experienced	17	0	0.7018	(0.4926)	8.3742

Count of Have you experienced any of the following as a result of cyberbullying?

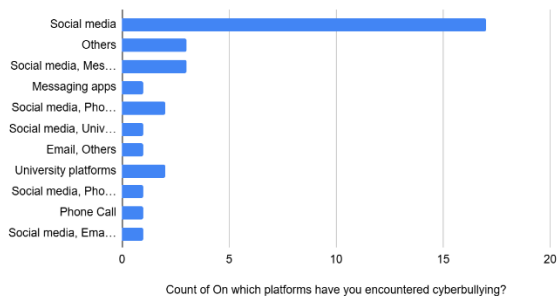


Count of Have you experienced any of the following as a result of cyberbullying?

The graph highlights different types of cyberbullying, with anxiety being the most reported effect. After that we can see that sleep disturbances and low self-esteem are also reported most. Somebody reported that they are facing multiple effects together like anxiety, depression, stress and others.

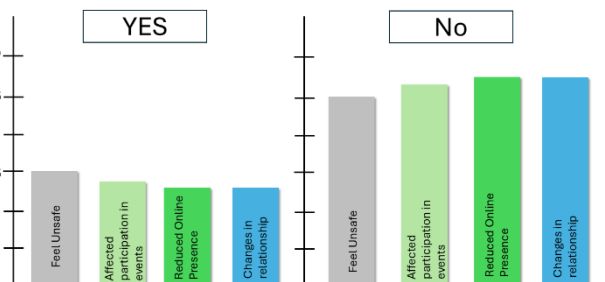
1) Platforms where cyberbullying encountered most.

Count of On which platforms have you encountered cyberbullying?

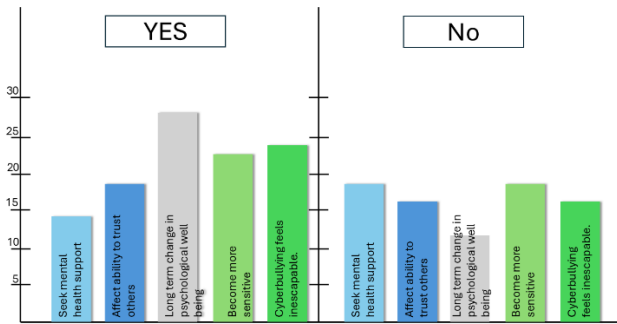


From the graph we can see that social media is the most used platform to bully student compare to other platforms. Which is expected because internet and social media is now most used thing. After that we can see that somebody reported that they encountered cyberbullying in messaging app, email, phone call and university platform.

2) Nature of cyberbullying.

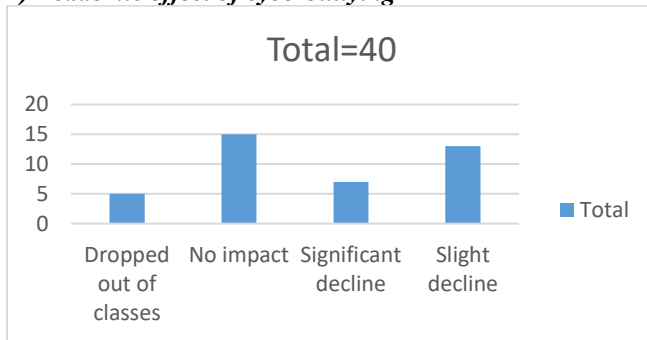


The graphs show other psychological and emotional effects of cyberbullying like feeling unsafe, Online availability, change in relationships. Mostly of the student report that they can not see any change in their availability on online, relationship status, event participation and many more. While 15 students report that they feel unsafe because of cyberbullying, they reduced their online presence and also see change in their relationship with others and they reduce their different event participation.



From the above graphs we can see that student report yes in their long-term psychological wellbeing due to cyberbullying, they become even more sensitive, they feel inescapable from bullying when they are in offline some student report that they ability to trust others are also affected because of cyberbullying. While some students also report that they cannot see these changes.

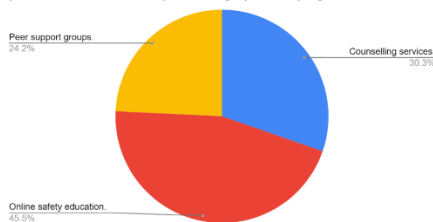
4) Academic effect of cyberbullying



Based on 40 respondents who experienced cyberbullying, the bar chart shows how cyberbullying affects students' academic performance. Of the participants, 15 students said that their academic performance was unaffected by cyberbullying, while 6 students reported quitting school because of it. Seven students showed a significant decline in their academic performance, while twelve students showed a slight decline. The information shows that although a sizable percentage experienced difficulties, many said it had no effect on their academic performance.

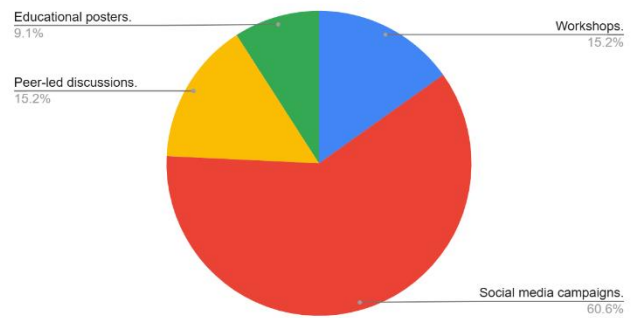
5) coping mechanism and University support

Count of What type of support do you think universities should provide for students experiencing cyberbullying?

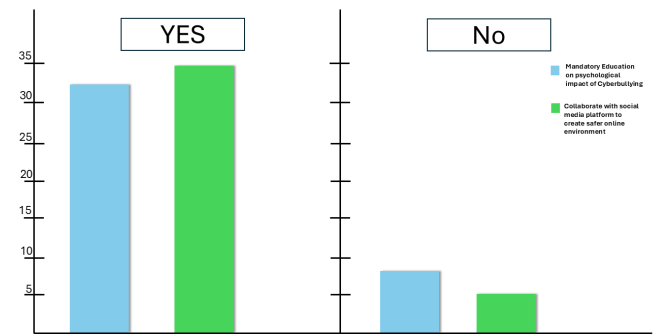


According to the survey results, students have clear preferences on how the university should help them deal with cyberbullying. Online safety education was the most popular choice, highlighting the importance of preventive measures. The second most popular option was counselling services, suggesting a need for expert psychological support. Peer support groups also attracted a lot of attention, emphasizing the value of collective experiences and neighbourhood-based solutions. These observations highlight how crucial emotional and educational resources are to solving this problem successfully.

Count of What types of awareness campaigns do you think would be most effective for university students?



Social media campaigns have become the predominant strategy for increasing awareness of cyberbullying, reflecting their significant appeal to college students. Conversely, educational posters ranked as the least preferred option, with workshops and peer-led discussions following closely behind. This trend underscores a clear inclination towards interactive and digital methods rather than conventional awareness strategies.



Preferences for improving the delivery of cyberbullying are contrasted sharply in the bar chart. With more than 35 votes for "Yes," most respondents Favor requiring education on the psychological effects and working with social media companies to create safer environments. On the other hand, there are less than five votes cast in favor of "No," indicating that these measures are widely supported.

V. Discussion:

This study provides insights into the impact of cyberbullying on university students. The findings, when considered alongside existing literature, reveal several key areas of concern:

Demographic Effect:

The standard deviation of the data on whether students experienced cyberbullying is approximately 0.46. This indicates a moderate spread of responses around the mean, reflecting that most students reported experiencing cyberbullying, with fewer reporting they had not. According to our study 65% female are experienced with cyberbullying and 35% are male who experienced with it during university time. This is what Aye Thazin Khine result show where 51.1% affected were female and 48.1% are male [8]. Which shows us that female students are more experienced with cyberbullying rather than male students. So can be told that female student is experiencing cyberbullying more.

Platform Based:

In our finding we can see that social media is the platform that is used most to cyberbully student or people and other than that messaging app, email and university platform are also in the list just after social media. This highlights the significant role social media plays in enabling cyberbullying due to its widespread usage and accessibility. Cyberbullying research is still in its infancy. According to Oliver and Candappa, bullying by text message occurred among students in the UK between the ages of 12 and 13; 4% reported receiving offensive texts, and 2% reported receiving offensive emails. In another piece of research by Peter K. Smith, he reported phone call and text message bullying were most common, both inside and outside of school. However, pupils were most aware of picture/video clip bullying taking place, with other media following the same pattern as for reported experiences [10].

Type of cyberbullying:

According to our research most of the cases are insult type with 54.5% and the next most experienced cases are rumours type (21.2%) and some of the students report they receive threats over phone call or social media (15.2%). In the article by Pilkey and Jacqueline K shows us Eighth graders reported online fights (36.9%), mean messages (38.7%), and putting others down (42.1%). Seventh graders led in impersonation to harm reputations (44.1%), sharing secrets/images (40%), exclusion (35.5%), and receiving mean messages (34.9%) [11].

Impact of cyberbullying:

According to our research findings the most common result is anxiety, which is frequently associated with stress, sadness, low self-esteem, and irregular sleep patterns. 37.5% (15) of respondents said they felt unsafe, 32.5% (13) said they attended fewer events, 27.5% (11) said they were less active online, and 25% (10) said their relationships had changed. On the other hand, individuals who were not impacted reported higher rates: 75% (30) reported no changes in their relationship, 72.5% (29) maintained their online presence, 67.5% (27) continued to participate in events, and 62.5% (25) felt comfortable. A report by Rosario Ortega shows that The first cluster is composed of students that reported some negative emotions, but not a lot of them at the same time; no more than 25% of the group reported any emotion, with the exception of being “angry,” reported by almost half; being “upset” reported by almost 40%; and being “worried” reported by 27%[12]. Also, an article by Chantal Faucher and Margaret Jackson shows that more than one-third of victims of cyberbullying had negative effects on their safety, relationships, mental health, and assignments. Compared to men, women were more likely to report side symptoms and seek assistance (60% vs. 42%). Admissions for cyberbullying were modest (3% girls, 5% males). Retaliation, distaste, and, for men, amusement or embarrassment were among the motivations [13]. According to our survey and result mental health impacts included 32.5% (13) seeking support, 45% (18) reduced trust, 70% (28) long-term psychological changes, 57.5% (23) increased sensitivity, and 60% (24) feeling cyberbullying was inescapable, even offline. Academically, 37.5% (15) saw no effect, 15% (6) quit school, 17.5% (7) faced significant declines, and 30% (12) experienced slight declines. These findings underscore the

extensive toll of cyberbullying on mental health and academic performance.

Coping mechanism and University support:

According to our research to cope up with the cyberbullying, most of the student who faced cyberbullying thinks university provide online safety education to the student after that they think consoling to the student is another best option to cope up with the cyberbullying. Peer support groups can be another option to tackle this and for awareness student votes for social media campaigns and they voted for peer-led discussion and workshop.

VI. Conclusion:

The psychological effects of cyberbullying on university students represent a critical issue, as it can result in detrimental consequences for mental health, academic success, and general well-being. This research emphasizes that individuals targeted by cyberbullying are at a higher risk of suffering from anxiety, depression, diminished self-esteem, and social isolation. The widespread prevalence of cyberbullying, enabled by technological advancements, complicates students' ability to find relief, frequently intensifying its negative effects.

Limitation: There are various limitations to this study. First, relying solely on self-reported information could result in biases, such as possible underreporting or exaggeration of events. Second, for the survey question we are not able to give all the possibility that they are gone through when they face bullying online. Lastly, the research primarily looks at the experiences of victims of cyberbullying, providing little insight into the perspectives of offenders or bystanders, which could improve our understanding of the phenomena.

Recommendation: Based on the research paper findings and other findings we should build more awareness to the university student through online campaign, online safety education for the students and we can give them peer support to overcome the mental pressure. University also should mandatory online safety education in their orientation program and build awareness.

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Question:

1. Have you personally experienced cyberbullying during your time at university?
 - ☐ Yes.
 - ☐ No
2. On which platforms have you encountered cyberbullying?
 - ☐ Social media
 - ☐ Phone Call
 - ☐ Email
 - ☐ Messaging apps
 - ☐ University platforms
 - ☐ Others
3. How would you describe the nature of the cyberbullying you experienced?
 - ☐ Insults.
 - ☐ Rumours.
 - ☐ Threats.
 - ☐ Doxing.
 - ☐ Exclusion
 - ☐ Others.
4. Have you experienced any of the following as a result of cyberbullying?
 - ☐ Anxiety.
 - ☐ Depression.
 - ☐ Sleep disturbances.
 - ☐ Stress.
 - ☐ Low self-esteem.
5. How has cyberbullying affected your academic performance?
 - ☐ No impact.
 - ☐ Slight decline.
 - ☐ Significant decline.
 - ☐ Dropped out of classes.
6. Have you ever felt unsafe or threatened due to cyberbullying?
 - ☐ Yes.
 - ☐ No.
7. Has cyberbullying affected your participation in university events or activities?
 - ☐ Yes.
 - ☐ No.
8. Have you reduced your online presence (e.g. Deleted social media accounts, reduced usage) due to cyberbullying?
 - ☐ Yes.
 - ☐ No.
9. Have you noticed changes in your relationships with peers or friends due to cyberbullying?
 - ☐ Yes.
 - ☐ No
10. How did you cope with cyberbullying?
 - ☐ Ignored it.
 - ☐ Blocked the perpetrator
 - ☐ Sought professional help
 - ☐ Discussed with friends/family
11. Did you seek mental health or counselling support because of cyberbullying?
 - ☐ Yes.
 - ☐ No.
12. Have you ever felt that the cyberbullying you experienced affected your ability to trust others?
 - ☐ Yes.
 - ☐ No.
13. Do you feel that cyberbullying has caused a long-term change in your psychological well-being?
 - ☐ Yes.
 - ☐ No.
14. How often do you find yourself replaying negative online interactions in your mind after the bullying occurred?
 - ☐ Frequently.
 - ☐ Occasionally.
 - ☐ Rarely.
 - ☐ Never.
15. How emotionally distressed do you feel when someone else is being cyberbullied?
 - ☐ No distress.
 - ☐ Mild distress.
 - ☐ Moderate distress.
 - ☐ Severe distress.
16. Has cyberbullying caused you to become more sensitive or reactive to online comments or interactions?
 - ☐ Yes.
 - ☐ No
17. How likely are you to avoid engaging in online conversations because of the fear of further bullying?
 - ☐ Very Likely.
 - ☐ Likely.
 - ☐ Unlikely.
 - ☐ Very Unlikely.
18. Do you ever feel as though you can't escape the emotional consequences of cyberbullying, even when you're offline?
 - ☐ Yes.
 - ☐ No
19. What type of support do you think universities should provide for students experiencing cyberbullying?
 - ☐ Counselling services.
 - ☐ Peer support groups.
 - ☐ Online safety education.
20. What types of awareness campaigns do you think would be most effective for university students?
 - ☐ Social media campaigns.

- Workshops.
 - Educational posters.
 - Peer-led discussions.
21. Do you think mandatory education on the psychological impacts of cyberbullying should be part of university orientation programs?
- Yes.
 - No.
22. Do you think universities should collaborate with social media platforms to create safer online environments for students?
- Yes.
 - No