Research Article

Prevalence of Cyberbullying in the New Normal of Learning: Implications to Higher Education Institutions

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ABSTRACT

In the advent of the "new normal" during the pandemic era, strategies to teach and learn switched to online. Students' behavior and attitude also shifted from face-to-face to online. This study aims to assess the students' profiles and the prevalence of cyberbullying in the higher education institutions in Central Luzon, Philippines. The study used a descriptive-correlational technique with the help of an online survey to gather data. Using a convenience sampling technique, 300 higher education students participated in the online survey during the first semester of 2021–2022. In order to attain the objective of the study, the investigators used a standardized instrument. With the help of SPSS 23, the data analyst analyzed the gathered data using the following statistical tools: frequency, weighted mean, and non-parametrical tests like Kruskal-Wallis, Mann-Whitney U, and Spearman rho. The investigator found that the student-respondents were "never" cyberbullying victims or offenders. Furthermore, statistical inferences showed a variation for cyberbullying offenders as to age and sponsorship/scholarship and a weak indirect relationship between cyberbullying offenders and sponsorship/scholarship characteristics of the students. The investigators recommended pertinent implications for the new normal of learning among students and the institution from the study results.

Keywords: cyberbullying, higher education institution, the prevalence of cyberbullying, offenders, victimization, new normal learning

Introduction

In the 21st century, technology has a significant influence on the evolution of education. It is a must for everyone to be entwined with technology, and no one is spared regardless of their status in life and situation. Technology always finds a way to reach out to everyone. For students, technology has taken on a whole new meaning. For example, some subjects pertain to technology in everyday lives in the curriculum. In education, there is educational technology (or EdTech for short), where the most basic premise of this subject is to use different technologies in delivering lessons and learning to students.

Technological advances created a whole new perspective on our lives. However, it also has its setbacks. One is known as cyberbullying, which is now quite prevalent with the new generation of learners. According to different literature abroad, cyberbullying occurs among undergraduate students (Watts et al., 2017). In Malaysia, 66% of the 712 public and private college/university students reported being cyberbullied (Lai et al., 2017). In France, cyber victimization was prevalent and higher in males than female students (Cenat et al., 2019). In Pakistan, almost 90% of the respondents from the six participating universities reported cyberbullying (Saleem et al., 2021). In Israel, 57% of undergraduate students had experienced cyberbullying at least once or twice through various media. (Peled, 2019). In an exploratory study by Mooketsi (2018), the investigator found that cyberbullying is prevalent among students at a university in Botswana. While Ndiege et al. (2020) discovered that the act of deception is the highest form of victimization and malice is the highest form of perpetration of cyberbullying in their investigation of cyberbullying in higher learning in Kenya.

On the other hand, Musharraf and Anis-ul-Haque (2018) revealed that 67% of university students were involved in cyberbullying. In a U.S. Catholic university, Webber and Ovedovitz (2018) reported that 4.3% of 187 undergraduate students indicated victims of cyberbullying. In China, 25.98% of the respondents reported that they had bullied others online (Huang et al., 2021). All mentioned countries agree on one point: cyberbullying exists in all institutions. Whether they like it or not, it is part of the daily routines of students, especially in higher education.

Cyberbullying did not develop overnight. It has a long history, and it originated from the usual school bullying behaviors in the early days. Different studies that describe how cyberbullying commences, the studies of Kowalski et al. (2020), wherein cyberbullying's most common technology was texting and social media. Lai et al. (2017) also stated that Facebook and mobile phone apps were the most common platforms for cyberbullying. Also, Lee (2017) stated that text messages, phone calls, and social networking sites were the most common venues for victimization occurrences. Based on these premises, the technology contributed considerably to the overwhelming prevalence of cyberbullying. This concept is the reality, and cyberbullying happens right before our eyes by simply going over the different social media platforms available today.

Of course, being a cyberbully victim takes its toll on one's personal and social life. In their study, Sobba et al. (2017) found that college students agreed that cyberbullying is a serious societal problem. Nevertheless, Meter et al.'s (2021) interviews of 16 undergraduate students revealed that almost all participants experienced and witnessed cyberbullying during adolescence. Regardless of age, cyberbullying chooses no one. Regardless of status or well-being, everyone becomes a victim. The group Kowlaski (2019) also emphasized the gaps in the literature in terms of cyberbullying risk and protective factors across ages, particularly among elementary school-aged youths and adults. Although one would want to protect oneself from the harm that cyberbullying brings, circumstances allow an individual to build up some mechanism that entails safeguards. Johnson and Blackshire (2019) predicted that cyberbullying has an immense impact on undergraduate students. In their article, Myers and Cowie (2019) also demonstrated that harm from cyberbullying is of great concern to students and the possibility of continuity of progress at each point in their academic life. Moreover, Oudah et al. (2019)

showed that cyberbullying reporting by a group of university students was 20.7. Therefore, the students try to remedy this unruly activity by reporting it to the proper school authorities. The problem is the resolution of such a kind. Why? Coric and Kastelan (2020) revealed that bullying through the internet by perpetrators has a degree of anonymity, and the exposure and embarrassment of the victim is on a large scale.

Further argument discloses that perceived control of an individual (e.g., students) is directly and negatively predicted by cyber victimization (Wang et al., 2021). Gender also plays a role in social media use and cyberbullying problems (Kasahara et al., 2019). However, the self-esteem and empathy of an individual do not predict the behavior of cyberbullies, victims, and bystanders (Balakrishnan & Fernandez, 2018).

In the local context, a few studies focused on the prevalence of cyberbullying. However, some articles showed promising results and findings that contribute to the current investigation. Tadena et al. (2021) concluded that high levels of empathy were found among cyberbullying victims and that these victims could become cyberbullies. In a different study by the group of Bilag in 2021, it was revealed that the modes of cyberbullying among students were posting photographs that downgrade or humiliate victims and writing offensive comments. On the other hand, Masangcay (2020) disclosed that cyberbullying affects students' cognitive, emotional, and social aspects. Gonzales and Madrigal (2020) also posited a high level of awareness of bullying regardless of the variables among students. They identified significant variations in awareness when grouped based on sex, grade level, and family income. In the paper by Fabito et al. (2018), they concluded that victims of cyberbullying are most likely to perpetrate or initiate cyberbullying later on.

The researchers confided some exciting results and findings from previous and recent studies by other researchers from the different reviewed literature. The investigators found that cyberbullying exists and is prevalent among students, especially in higher education institutions from different areas and countries of the world. This result means that cyberbullying does not choose who is the next victim and the offenders. Most studies pointed out either cyberbully victims or cyberbully perpetrators and provided other variables like psychological, social, or technological impacts. None of the reviewed literature or studies was attributed to both victims and perpetrators, which was the research gap found by the investigators. Thus, this is the main reason for the current study's commencement. The general objective of this study is to analyze the students' characteristics and the prevalence of cyberbullying (victimization and offenders) from higher education institutions in Central Luzon, Philippines. Additionally, it tries to find variations and relationships among the provided variables in the study.

The results from this study are primarily helpful to institutions in formulating policies for students' proper conduct and decorum and for guidance counselors in various institutions. It will serve as a framework or foundation for their increased drive and motivation to discourage or eliminate cyberbullying in the school. The result also contributes to the growing literature about cyberbullying and its possible implications for the new normal of learning and the new generation of learners.

Research Methodology
Research Design

The study used a quantitative type of research, to be specific, a descriptive-survey design. The researchers also utilized an online survey as the primary data gathering tool. In the book of Creswell (2014), the author specified that a descriptive-survey design takes a broad view from a sample (of a population) of some characteristic, attitude, or behavior. The benefit of this particular design is the quick attendance of data and the sensibleness of applying ideas. The current study plans to determine a particular characteristic in the population, so the mentioned research design fits perfectly.

Respondents of the Study

The study population was students from higher education institutions located in the

province of Central Luzon, Philippines. Using a convenience sampling technique, the data gathering returned a sample of 300 students via an online survey. Due to the country's pandemic situation and the strict protocols executed by the local government units, the researchers had difficulties and challenges in gathering data. The criteria for inclusion in the study were: (1) a bona fide college student of a duly recognized higher education institution; (2) enrolled currently within the academic year (2021-2022); (3) must have an institutional or working email account; and (4) have a stable internet or data connection at home.

Instrument of the Study

This study adapted an instrument from Hinduja and Patchin (2015), which tackled the concept of cyber-bullying, to be more specific, recognizing the victim and the perpetrator. The survey instrument has three essential components. The first part contains the basic demographic profile of the respondents. The second part comprised the cyberbullying assessment for victims, and the final section was the cyberbullying assessment for perpetrators. In terms of reliability, the instrument underwent a Cronbach Alpha test. It generated a .902 overall result, above the benchmark score of .70.

Data Analysis

Guided by the study's objectives, the data analyst used the IBM SPSS 23 software to examine the data gathered. The data calculation for the study was frequency, mean for the responses, and non-parametric tests for inferential statistics. Finally, the study utilized a four-point Likert Scale for the students' responses.

Results

To realize the study's general objectives, the following succeeding tables below present the survey results.

Table 1. Cyberbullying Victimization Result

Items	1	2	3	4	Mean	Interpretation
1	181	66	43	10	1.61	Once
2	181	73	40	6	1.57	Once
3	212	56	30	2	1.41	Never
4	265	23	12	0	1.16	Never
5	282	11	6	1	1.09	Never
6	191	66	31	13	1.55	Once
7	230	52	13	5	1.31	Never
8	226	58	12	4	1.31	Never
9	230	50	18	2	1.31	Never
Average					1.37	Never

Legend:
  1=1.00-1.49 (Never)
  2=1.50-2.49 (Once)
  3=2.50-3.49 (Few Times)
  4=3.50-4.00 (Many Times)

Table 1 presents the cyberbullying victimization results. Overall, most of the responses were "never," as observed from the frequency distribution. This result means they have not experienced being a victim of cyberbullying. Looking at the mean results of the responses, most were between the interpretation of "never" and "once." A closer inspection of the table displays that item 1 got the highest mean score, agreeing to a descriptive interpretation of "once."

On the other hand, item 5 congregated the lowest mean score of 1.09, which associates with a descriptive interpretation of "never." The overall mean of the study was 1.37, which is comparable to "never" as well. The result shows that cyberbullying victimization amongst students is not, up till now, experienced by a majority of them.

Table 2. Cyberbullying Offending Results

Items	1	2	3	4	Mean	Interpretation
1	259	31	9	1	1.17	Never
2	259	29	10	2	1.18	Never
3	283	13	4	0	1.07	Never
4	295	4	1	0	1.02	Never
5	296	18	5	0	1.08	Never
6	302	14	3	0	1.06	Never
7	303	15	1	0	1.05	Never
8	312	5	2	0	1.02	Never
9	309	10	0	0	1.03	Never
Average					1.08	Never

Legend: *1=1.00-1.49 (Never)*
                   2=1.50-2.49 (Once)
                   3=2.50-3.49 (Few Times)
                   4=3.50-4.00 (Many Times)

Table 2 displays the cyberbullying offenders' marks. Looking at the table, the student-respondents "never" tried to cyberbully anyone. Such a response from them mirrors the low mean scores for each item in the instrument. More profound scrutiny of the data confirms that item 2 gathered the highest mean of 1.18, interpreted as "never." However, items 4 and 8 bore the lowest mean score of 1.02, which also got a "never" interpretation. The general average mean for this part of the study was 1.08 and had a descriptive interpretation of "never." This investigation demonstrates that the students do not want to bully anyone using the internet or social media. Moreover, this result is a good mark of behavior among the respondents, who have shown responsible conduct regarding online etiquette and other social media do's and don'ts.

Table 3. Variance in the Responses of Students to Cyberbullying Victims and Offenders

Variable	Non-parametric Test	Victims	Offenders
Age	Kruskal-Wallis Test	.008*	.180
Gender	Mann-Whitney U Test	.129	.426
Civil Status	Mann-Whitney U Test	.463	.475
Average Family Monthly Income	Kruskal-Wallis Test	.080	.546
Course	Kruskal-Wallis Test	.145	.044*
Year Level	Kruskal-Wallis Test	.693	.325
GWA/GPA	Kruskal-Wallis Test	.398	.320
Scholarship	Kruskal-Wallis Test	.121	.026*

*$p < .05$

Table 3 illustrates the non-parametric tests to deduce whether there are substantial differences in the students' responses when grouped according to their demographic profiles. In terms of cyberbullying victimization, there was a statistical difference in the students' responses in terms of age (.008) based on the Kruskal-Wallis computation. However, other profiles like gender and civil status generated the following Mann-Whitney U results of .129 and .463, respectively. These results are not significant at a .05 alpha level of significance. In addition, average monthly family income (.080), course (.145), year level (.693), GWA/GPA (.398), and scholarship (.121) produced Kruskal-Wallis results which were higher than the Alpha significance level of.05. These results mean that there were no

significant differences in the students' responses when they were grouped according to these variables.

In the case of cyberbullying offenders, the non-parametric test also generated an exciting result. The Kruskal-Wallis Test results for the course and scholarship were .044 and .026, respectively. These findings were significant from the Alpha significance level of .05. It means that cyberbullying offenders have different responses when grouped according to the course and scholarship. The rest of the demographic variables like age, average family monthly income year level and GWA/GPA obtained Kruskal-Wallis results: .180, .546, .325, and .320, respectively. These results were more significant than the Alpha significance level of.05. Furthermore, the Mann-Whitney U test for gender (.426) and civil status (.475) generated the same results, more significant than the .05 Alpha significance level. These results mean that there were no significant variations in the answers of cyberbullying offenders when grouped into the mentioned profiles.

Table 4. Association Between Demographic Profile, Cyberbullying Victims and Offenders

Demographic Profile	Victims	Offenders
Age	.081	.059
	(.163)	(.309)
Gender	-.088	-.046
	(.130)	(.427)
Civil Status	-.042	-.041
	(.464)	(.476)
Average Family Monthly Income	-.125*	-.082
	(.030)	(.156)
Course	.001	.032
	(.983)	(.576)
Year Level	.058	.010
	(.320)	(.859)
GWA/GPA	-.114*	-.108
	(.049)	(.061)
Scholarship	-.060	-.144*
	(.303)	(.012)

*$p < .05$

A closer look at Table 4 reveals the Spearman Rho correlation between the respondents' demographic profile, cyberbullying victims, and cyberbullying offenders. From the table analysis, in terms of cyberbullying victims, there was a significant relationship generated between the respondents' average family monthly income and GWA/GPA. The result of the Spearman rho analysis yielded the following coefficients: -.125 for the average family monthly income and -.114 for the GWA/ GPA of the respondents. Thus, there is a weak inverse relationship between the variables involved. This result further means that cyberbullying victimization is high if the average monthly family income is low. On the other hand, if the GWA/GPA of the student is low, the higher the chances of cyberbullying victimization as well. The rest of the profile variables did not substantially generate enough results to correlate to cyberbullying victimization. The following coefficients were: .081 for age; -.088 for gender; -.042 for civil status; .001 for the course; .058 for year level, and -.060 for the scholarship. Their corresponding probability values were greater than the alpha significance level of .05. The results mean that there is no substantial statistical relationship between the profile of the respondents and cyberbullying victims.

There was also a weak inverse relationship between scholarship and cyberbullying offenders since the coefficient obtained from the Spearman Rho computation was -.144, which is significant to the Alpha significance level of .05. While the rest of the demographic profile includes age (.059), gender (-.046), civil status (-.041), average family monthly income (-.082), course (.032), year level (.010), and GWA/GPA (-.108) bore coefficient results more significant than the .05 Alpha significance level. As a result, these profiles do not provide significant evidence or proof of a relationship to cyberbullying offenders.

Discussion

The principal objective of this study is to assess the cyberbullying prevalence among students in higher education institutions. This investigation revealed some critical implications for the "new normal" of learning.

As for the result of cyberbullying victims' inquiry, it is fascinating to note that the respondents were "never" victims of cyberbullying as of the time this study commenced. This result only indicates that most of the students stayed away from cyberbullying. This result concurs with Johnson and Blackshire's (2019) and Zhong et al. (2021) studies, where they found a low prevalence rate of cyberbullying in their respective university or college. In addition, Kowalski et al. (2020) revealed that more than 45% of their respondents had been victims of cyberbullying at least once. Watts et al. (2017) stipulated that cyberbullying is a traditional bullying move online, including on social media. While some of the respondents still unveiled that they were cyberbullied at least once, they may be considered exceptional cases.

Nonetheless still, cyberbullying distress the victims to some extent. The coping mechanisms of the respondents play a vital part in this. For the cyberbullying offenders, it is also noteworthy to mention that the majority of the respondents did not commit any form of cyberbullying. It challenged a study by Musharraf and Anis-ul-Haque (2018), wherein 67% of their surveyed sample were involved in cyberbullying. Another also reported that 7.5% of their 187 respondents acknowledged

participating in bullying at the university level (Webber & Ovedovitz, 2018). This result confirms that students are conscious of cyberbullying and its penalties for offenders.

A deeper analysis of the study using non-parametric statistical tools showed substantial evidence that existed to prove variations in the students' responses. Age revealed a significant difference between cyberbullying victims and courses and scholarships for cyberbullying offenders. These results coincided with the study by Gonzales and Madrigal in 2020, where significant differences were shown in the level of awareness of bullying when grouped according to profile variables. However, for Zhou et al. (2019), Oudah et al. (2019), Cenat et al. (2019), Lee (2017), Lai et al. (2017), Musharraf & Anis-ul-Haque, (2018), and Alqahtani et al. (2018) they revealed significant differences in cyberbullying in terms of gender. On the other hand, the study observed a weak indirect relationship between cyberbullying victims, average monthly family income, and GWA/GPA. The study also showed a weak indirect relation between scholarship/sponsorship and cyberbullying offenders. In an article by Wang et al. (2021), the investigators showed that cyber victimization directly and negatively predicts the college students' perceived control. Lee (2017) also divulged that posting indiscreet images and sharing personal information with Facebook friends were associated with cyberbullying victimization. There are still other studies that pertain to the connection of cyberbullying with other variables like higher socio-economic status and the low digital divide (Saleem et al., 2021); age variations in technology use (Kowalski et al., 2019); instant messaging, academic, social, and emotional development of undergraduate students (Peled, 2019); and gender, anxiety symptoms, internet addiction, game time, and violent elements in games (Huang et al., 2021).

The current study showed some relevant, unique results, like variances in some areas where other studies locally and internationally did not show some associations between some of the variables with cyberbullying. The result of the study can be an essential basis for future

policy or programs and a reference for other researchers.

Conclusion

From the results above of the study, the researcher at this moment concludes the following:

- The prevalence of cyberbullying in higher education institutions shows no evidence that such an event exists. In general, the respondents "never" experienced cyberbullying and cyberbullying someone during the survey.
- The statistical analysis produced significant discrepancies in the students' responses to the cyberbullying victimization when grouped according to their age. At the same time, significant differences were found in their course and sponsorship/scholarship for the cyberbullying offenders.
- Further statistical examination showed weak and inverse relationships between average monthly family income, GWA/GPA, and cyberbullying victims. In addition, the study also observed the same statistical result for sponsorship/scholarship and cyberbullying offenders.

Recommendations

Based on the results of the study, the researchers recommended several suggestions for the new normal of learning, which comprise the following:

- Strengthening the school's anti-cyberbullying campaign, especially in this time of new standards and everyone is shifting to online mode due to increased exposure and use of technological gadgets for remote and flexible learning
- Intensification of awareness and capabilities of students to report cyberbullying activity, whether they became a victim or a witness of cyberbullying.
- Formation or drafting of an institutional policy or framework, with the help of the school's guidance counselor, to deal with and help victims of cyberbullying by the law and proper authority.

- Promotion of healthy online, technological, and digital learning platforms in proper discipline, good manners, and right conduct in both online and offline modes.

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