

Relationship Between Social Media Use and Students' Cyberbullying Behaviors in a West Malaysian Public University

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Abstract

Social media is widely used by university students in modern times, although, serious psychological damage is caused to users through cyberbullying activities. This study examined the relationship between social media use and students' cyberbullying behaviors in a west Malaysian public university. Correlational survey was adopted, while 400 undergraduates purposively selected from three faculties participated in the study. Questionnaire entitled "Engagement on Social Media Use (ESMU)" was used for data collection. Two hypotheses were tested using SEM-PLS3. Results indicated that social media use and gender significantly related to cyberbullying behaviors. Counseling is recommended to assist in stemming cyberbullying behaviors among undergraduates.

Keywords

counseling, social media use, cyberbullying, behaviors, students, West Malaysian Public University

Introduction

Social media use or networking plays a vital role in widening and strengthening social bonds, connections, interrelationships, and learning of technical skills among young adults, particularly university students in contemporary times. This is partly due to the fact that almost every aspect human endeavors in the 21st century has been taken over by advanced technology. People in recent times seemingly appear to depend on the social media for direction in almost any activity they engage in, this includes the type of food they eat, clothing worn, friends or relationships kept, finding solutions to school tasks or assignments being performed, among others; this has largely given rise to increased psychological and mental health-related problems experienced by young adults, particularly those in the university.

The interconnections of social networking, undergraduates, and cyberbullying behaviors are rather huge due to the continuous advancements in technology. This has given rise to the population of young adult users of various social media platforms which currently stands at about 75% across the world having profiles on different social media sites, which consequently makes them highly vulnerable to cyber assaults that are electronically perpetrated by cyber harassers or bullies (Ramasubbu, 2015). The numerous risks associated with social media use cannot be overlooked regardless of the positive roles it plays in strengthening bonds and friendship relationships across the world.

The menace of social media bullying (also called cyberbullying) presents new breeds of clients or helpees to practitioners in the helping (counseling) profession. Looking at this from the point of view of globalization, posits that this new trend presents new sets of clients to counseling practitioners. This is as Agatson et al., (2007) have earlier averred that university students, as well as other young adults are sophisticated users of technology, who also employ advanced information and communication technologies in everyday living, including interpersonal communication and relationships among themselves. This further indicates that university undergraduates often communicate in ways that are unknown to the adult members in their environment, that is, the university community (Agatson, Kowalski & Limber, 2007).

These newest ways of communicating within the cyberspace that could be alien to the adult culture include the various emoji's used, the short forms of conversing among themselves, as well as other styles of interactions only known to youngsters but which typical counseling practitioners need to be conversant with to adequately

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understand the nature of undergraduates' social media interactions as well as eventual cyberbullying assaults occasioned by such interactions on the cyberspace. This becomes imperative to have an effective counseling process with the student-clients when the need arises as well as to be able to properly guide undergraduates in their social media use to guide against or nip early appearances of cyberbullying in the bud once such signs are steering the young adult in the face or looming.

According to Bishop (2013, 2015), the advancement of information and communication technology often results in early adoption, followed by concern over a digital divide, which is succeeded by mass adoption and above all, abuse and misuse of the platform. Social media is a veritable tool for strengthening interpersonal relationships among university students as well as other young adults. However, as important as the platform is, it has numerous risks and dangers that cannot be overlooked (Ramasubbu, 2015). This is because its associated risks have caused many promising university students, teens, and adolescents alike serious emotional/psychological pains, while in other instances, some have made irrational suicidal choices/decisions arising from the aches and pains apparently suffered on social media platforms (Ramasubbu, 2015).

The most recent of the technologies adopted by youngsters in recent times is social networking services (SNS). The early adopters of social media used platforms like Friendster and MySpace, whereas in recent times, the society now uses majorly Facebook as well as Twitter handles. The abuse of people on these platforms was called cyberbullying in the case of the first two in the 2000s, and internet trolling in the case of the second two in the 2010s; nevertheless, the broad term is still regarded as cyberbullying, either on Facebook, Twitter or any other social media platforms.

Also, Campbell (2012) assert that in the early 1990s, many incidents revolved around student-on-student violence, usually involving guns; and this largely made schools to implement many programs to keep guns and gangs out of schools. In other words, physical assault or bullying predates the 21st-century style which is largely perpetrated through the cyberspace (Campbell, 2012). Accordingly, it implies that prior to recent times, humans traveled considerable distances to carry out acts of bullying on their victims, while in recent times, bullying is done right from where the bully is and extends to any part of the world that he or she desires.

In the 21st century, school violence is assuming a new and more insidious form, in which new technologies have made it easier for bullies to gain access to their victims, without necessarily having physical contacts with them. This form of bullying is known as cyberbullying (Campbell, 2012). In other words, technological advancements have made it easier for bullies to reach their targets without stress. Regardless of setting, Australia or other parts of the world, cyberbullies easily reach their targeted victims (Campbell, 2012).

Problem Statement

The world is consistently making considerable progress in the area of technology. To this end, various social media handles, platforms, or devices have been designed, are currently being worked on, and a lot more will still be developed as years roll by. University students have been observed as the most frequent users of the various cyber and social media platforms partly due to the nature of tertiary education which affords the individual the opportunity to explore for new discoveries and innovations Abu-bakar (2015).

However, as important as the social media is in terms of assisting students to form themselves into online study groups; working harmoniously on given group tasks or assignments, and strengthening interpersonal relationships or bonding among themselves; the platforms have been variously abused, and this has continued to increase emotional and psychological challenges for the teeming university undergraduates in recent times through the menace of cyberbullying which is being carried out in different forms: like making fun of other colleagues, name-calling, derogatory labels, as well as representation with demeaning symbols and emoji's. Several research works have been done on extreme use of the internet by various researchers especially internet and online games leading ultimately to pathological outcomes in undergraduates' mental and social behaviors in different parts of the world. It is the socially related behavior that this study attempts to fill in terms of the use of the cyber media to harass themselves; thus, breeding traumatic experiences that could have been avoided if adequate caution is taken early by the unsuspecting victims before the act is carried out by the cyber harasser.

A platform of this nature (social media) ought to ease the burden of tutors or lecturers by aiding transfer as well as acquisition or learning of new knowledge and skills in the various fields by undergraduates: bringing discussed concepts in the classroom to real-life situations by exposing them to more detailed analysis of such taught concepts, as well as helping them build harmonious working/studying relationships with one another that is devoid of emotional aches and pains; however, in the course of carrying out these academic tasks, group classes, discussions and given assignments, the reversed side is what youngsters in the university systems often experience when various social media platforms are used, and one of the reversed outcomes is cyber assaults which has left many with severe psychological trauma, whereas many other youngsters have chosen to either isolate themselves from the cyber world or end their own lives due to the shame and seemingly grievous irreparable aches suffered after the ugly cyberbullying encounter. Moreover, these could have been prevented if psychological help is sought early by victims of cyberbullying assaults.

Lu (2015) carried out a study on the influence of pathological internet use and demographic factors on pathological

internet use among 1,493 surveyed university undergraduates; 1.2% prevalence of PIU was reported among undergraduates; the author also found that undergraduates spent between 19 to 68 hours on the internet weekly, that is, at least about 6.5 hours on a daily basis; thus, the researcher found from the findings that majorly, undergraduates engaged in online games (Massively Multiplayer Online Role-Playing Game, MMORPG) and social networking sites (SNS), which were influenced by cognitive distortion, motivation via access to the internet, and stressful life events (boredom, depression) contributing 65% variance of PIU (Pathological Internet Use).

It has also been established that undergraduates spend considerable number of hours on social media platforms on a daily basis, thus, this study is therefore aimed at determining the relationship or link between motivations for social media use, demography, personality, and cyberbullying behaviors among undergraduates studying in a Malaysian public university. Furthermore, Lu (2015) focused on pathological internet use through online games; used 1,493 student-participants; and employed Group scanning electron microscopy (SEM) analysis and multivariate for data analysis, whereas this study concentrated on social media use and cyberbullying behaviors among 400 undergraduates in a West Malaysian public university, with SEM-PLS 3 used for data analysis. In essence, this study is aimed at establishing the interconnections between undergraduates' frequent use of social media platforms and cyberbullying behaviors; and to also determine whether the consistent visits of undergraduates to the various cyber platforms for academic, or social reasons has any relationship with the cyber assaults, emotional aches, and pains as well as noticeable drops in their academic performances they undergo after having such frequent use of the social media platforms and its attendant embarrassing encounters.

Ling et al. (2011) also identified 58 persons (29%) at-risk of extreme internet use among 203 Malaysian undergraduates and the study asserted that individuals at ages 18 to 25 years were more vulnerable to the extreme use of the internet, called pathological internet use, particularly university or college students. This is because university students are considered as often having more free time to themselves, have easy access to the internet, as well as a more rational reason in the environment (Ling et al., 2011). Therefore, if individuals within the age bracket 18 to 25 years were found to be engaging in extreme use of the internet, particularly for nonacademic purposes, there is the need to establish if the frequency of use of social media by undergraduates has any relationship or link with cyberbullying behaviors or activities; as well as the motivations for such frequent visits to social media platforms particularly among university undergraduates.

The Malaysia Crime Prevention Foundation in April, 2017, gave a detailed analysis of cyberbullying behaviors perpetrated by university and other categories of students,

from the statistics obtained from Cyber-Security Malaysia's first quarter report of 2017 in which it was revealed that there were (300) cyber harassment cases in 2012, (512) 2013, 2014 (550), 2015 (442) and 2016 (529); a total of 2,333 general cases of cyberbullying. However, according to the report, cyberbullying among students of tertiary institutions is considered more serious, with 250 cases reported in 2012, (389) 2013, 2014 (291), 2015 (256), and 2016 (338). In all, a total of 1,524 (65% of 2,333) cases of cyberbullying have been reported and recorded among university and high school students in the past 6 years; this is not including the variously unreported cases because of the inherent shame and ridicule that victims are most likely to face should they report the attacks (Malaysia Crime Prevention Foundation, 2017). Hence, the reason for this study to determine the relationship between social media use and students' cyberbullying behaviors in a west Malaysian public university.

Objective of the Study

The objective of this study was to determine the relationship between social media use and students' cyberbullying behaviors in a West Malaysian public university, Johor, Malaysia.

Research Question

Is there any significant relationship between social media use and students' cyberbullying behaviors in a West Malaysian public university?

Research Hypotheses

The following research hypotheses were generated in the null form and tested in this study:

1. There is no significant relationship between social media use and students' cyberbullying behaviors in a west Malaysian public university.
2. There is no significant relationship between social media use and students' cyberbullying behaviors in a west Malaysian public university based on gender.

Methodology

This is a quantitative study, and it adopted correlational survey design. Correlational survey was deemed more suitable and appropriate because of the nature of the study; that is, one dealing with large population from which samples were drawn for the study. The population comprised all undergraduates in West Malaysian public university; whereas, samples consisting of 400 undergraduates were purposively selected from the three faculties through a multistage sampling process of cluster, random, and purposive sampling techniques.

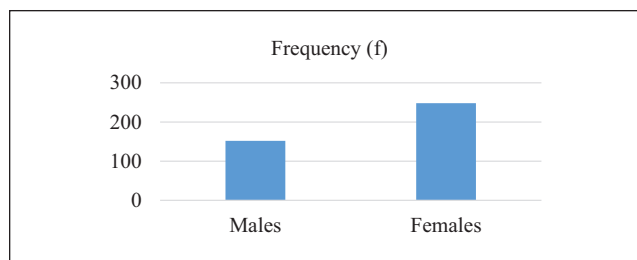


Figure 1. Gender distribution of respondents.

Purposive sampling was adopted to ensure that all the races represented in the university were fairly enlisted to participate in the study to have generalizable results/findings. A self-designed questionnaire was used for data collection. The questionnaire was entitled “Engagement on Social Media Use and Cyberbullying Behaviors (ESMU & CBB Questionnaire).” The researchers decided to design the questionnaire to be able to give careful consideration to the cultural and religious practices of the respondents in this part of the country without any form of bias. The questionnaire was divided into two parts (A & B). Part A focused on respondents’ demographic details, while part B consisted of items on influence of motivations for social media use on cyberbullying among undergraduates. The instrument was tailored toward a Four-point Likert-type format on a continuum of 4-1 scoring. The instrument had 35 items. A total of 140 score was the highest point obtainable, while 35 was the lowest score obtainable; whereas the midpoint was 70. The instrument was subjected to a Cronbach’s alpha method of reliability, and it yielded a coefficient of 0.92, thus, making it reliable for use as the data gathering tool for this study. Participation was voluntary, thus, respondents offered to actively participate in the study. Data collected were analyzed using the descriptive statistical tools and SEM-PLS3. While the demographic aspects were analyzed with the use of percentage, mean and standard deviation, the null hypotheses were tested with the SEM-PLS3. All hypotheses were tested at 0.05 alpha level of significance.

Results

Demographic Data

The study was conducted among 400 university undergraduates from three faculties in the selected public university in West Malaysia. In this section of the study, the demographic profile of the respondents which is referred to as the description of the attribute of the samples were presented on their individual characteristics based on gender, frequency of daily use of social media platforms, program of study, race, and whether or not they have experienced cyberbullying assaults before. The section below elaborates on the results obtained.

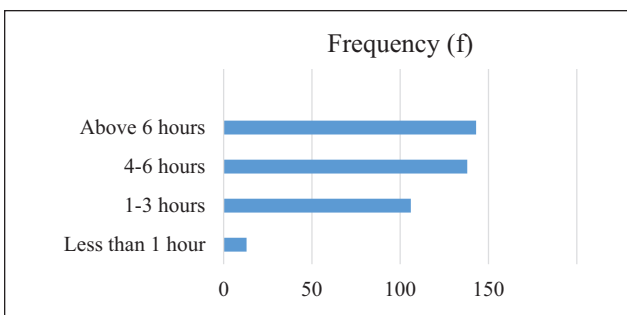


Figure 2. Respondents’ distribution on frequency of daily social media use.

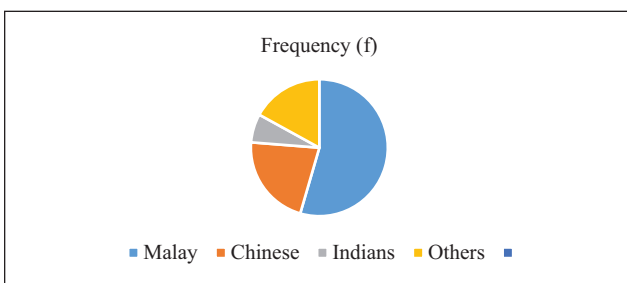


Figure 3. Respondents’ races.

Gender. For gender, the results indicated that 152 (38.0%) of the respondents were male and 248 (62.0%) of the respondents were females. This implies that more female undergraduates participated in the study than their male counterparts. It also suggests that there are more female undergraduates than there are male undergraduates in the university. Figure 1 presented the demographic summary of gender.

Frequency of daily use of social media platforms. The daily frequency of the respondents’ usage of social media platforms was grouped into less than 1 hour, 1 to 3 hours, 4 to 6 hours and above 6 hours. The result indicates that 13 (3.3%) of the respondents spend less than an hour daily on the social media, 106 (26.5%) spend 1 to 3 hours, 138 (34.5%) of the respondents spend between 4 to 6 hours and 143 (35.8%) spend above 6 hours daily on social media platforms. This implies that undergraduates spend more than 6 hours daily on social media platforms. Figure 2 presented the demographic summary of undergraduates’ frequency of daily social media use.

Race. The race was categorized into four: Malays, Chinese, Indians, and Others. The analysis revealed that 218 (54.5%) of the respondents were Malays, while 87 (21.8%) were Chinese, whereas, there were 27 (6.8%) Indians and 68 (17.0%) other races/ethnic nationals that participated in the study. It was presented in the Figure 3.

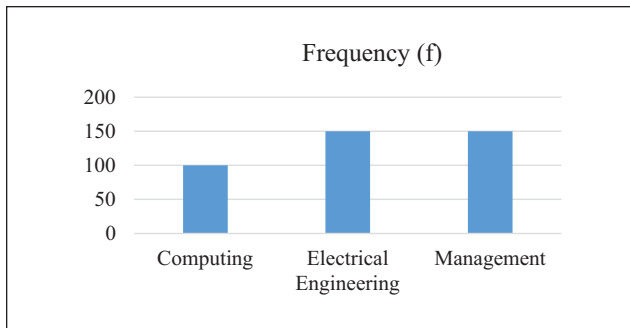


Figure 4. Respondents' program of study.

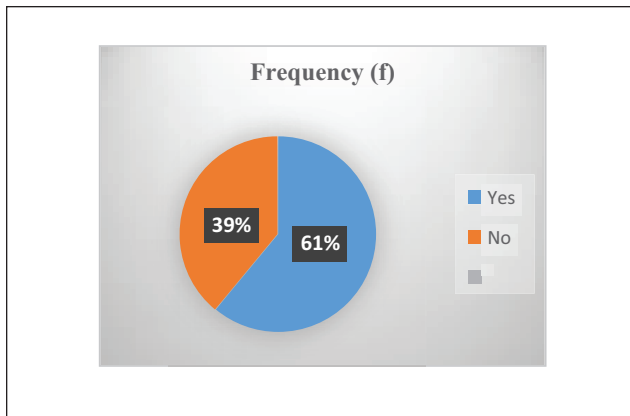


Figure 5. Respondents' experience of cyberbullying.

Program of study. According to the results, 25.0% ($N = 100$) consisted of computing undergraduates, 37.5% ($N = 150$) electrical engineering students, and 37.5% ($N = 150$) undergraduates in various management programs participated in the study. From the result, it can be deduced that there are more undergraduates in both electrical engineering and management than computing. Figure 4 presented the summary.

Experience of cyberbullying. The distribution of the respondents based on their cyberbullying experiences indicated that 244 (61%) of the respondents have experienced cyberbullying, while 156 (39%) have never experienced cyberbullying. This further confirms that cyberbullying behavior is rampant among university undergraduates. The summary was presented in Figure 5.

Hypothesis 1: There is no significant relationship between social media use and students' cyberbullying behaviors in a West Malaysian public university.

Hypothesis 1 examined the relationship that undergraduates' daily frequent use of social media platforms has on

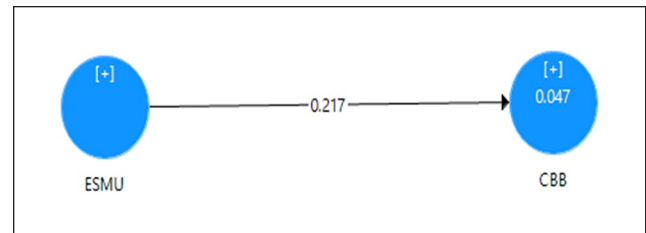


Figure 6. Structural model of the relationship between social media use (ESMU) and cyberbullying behaviors (CBB).

their cyberbullying behaviors. The results were presented in Figure 6 and Table 1.

The results of the path analysis showed that ESMU has a significant and direct positive relationship with undergraduates' CBB. The relationship is positive with a path coefficient ($\beta = 0.217$, $t \geq \pm 1.96$). According to Byrne (2010), the standard decision rule for a relationship between constructs to be significant is (t -value ≥ 1.96 and p value ≤ 0.05). This was employed here to decide the significances of the path coefficient between the dependent variable and the independent variables. Since the t -value is $\geq \pm 1.96$, it therefore means the relationship between social media use and cyberbullying behavior is significant, and social media use/engagement has an influence on undergraduates' cyberbullying behaviors. Thus, the null hypothesis which states that there is no significant relationship between frequent use of social media and cyberbullying behavior was rejected. In this study, social media use/engagement accounted for .047% determinant of coefficient (R^2) on cyberbullying behaviors.

Hypothesis 2: There is no significant relationship between social media use students' cyberbullying behaviors in a West Malaysian public university based on gender.

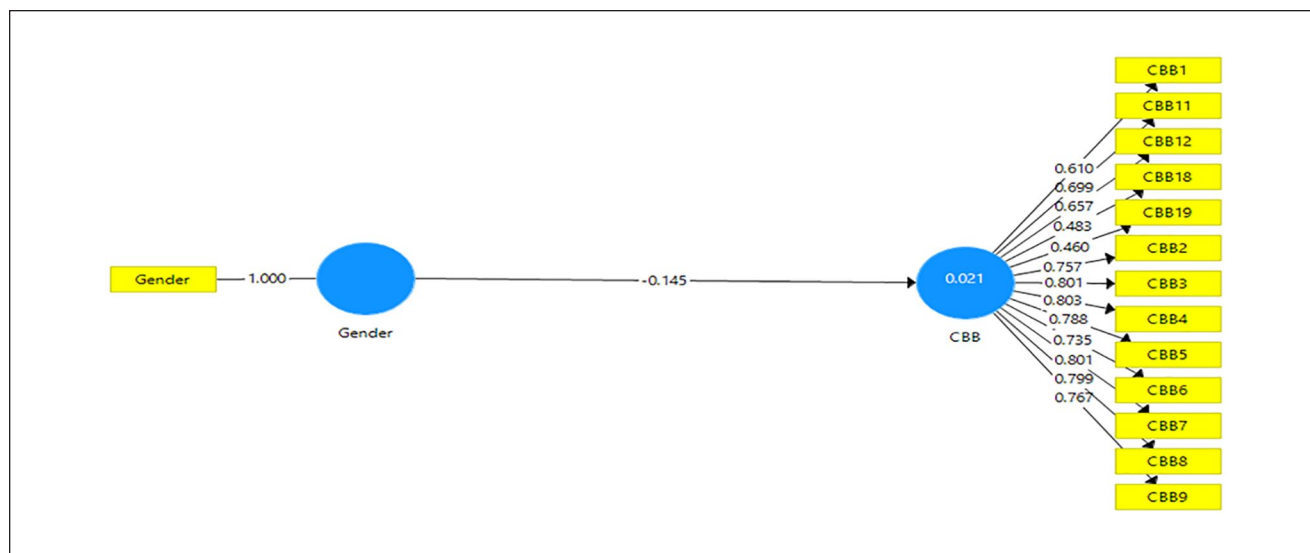
Direct relationship of gender and cyberbullying behaviors. Hypothesis 2 focused on identifying the influence, that is, the relationship that undergraduates' gender has on CBB. The path analysis was used to achieve this hypothesis as shown in Figure 7 and Table 2.

The results of the path analysis indicated that gender (G) has a significant but inverse relationship with cyberbullying behaviors of undergraduates (CBB). The relationship is negative with a path coefficient ($\beta = -0.145$, $t \geq \pm 1.96$). The standard decision rule of Byrne (2010) (t -value ≥ 1.96 and p value ≤ 0.05) is also applicable in this hypothesis to determine the significances of the path coefficient between the dependent variable and the independent variables. Therefore, since the t -value is $\geq \pm 1.96$, it thus implies that the relationship between gender and cyberbullying is significant, and gender has relationship with undergraduates' cyberbullying behaviors.

Table 1. T-Statistics and P-value of ESMU on CBB.

Results	Original sample (O)	Sample mean (M)	SD	T statistics ($ O/SD $)	p values
ESMU > CBB	0.217	.216	.044	4.938	.000

Note. ESMU = engagement on social media use; CBB = cyberbullying behaviors.

**Figure 7.** Gender and cyberbullying behaviors.

Note. CBB = cyberbullying behaviors.

Table 2. T-Statistics and P Value of Gender on Cyberbullying Behaviors.

Results	Original sample (O)	Sample mean (M)	SD	T statistics ($ O/SD $)	P values
Gender > CBB	-0.145	-.166	.042	3.459	.001

Note. CBB = cyberbullying behaviors.

A continuous increase in the mean scores of female undergraduates implies further increase in number of victims of cyberbullying activities, whereas a decrease in the mean of male students implies reduction of perpetration or experiences of cyberbullying by victims; this is because most male undergraduates reported not to have experienced cyberbullying, which implied that females were more of the victims than males who appeared mostly as the perpetrators of the act of cyberbullying. Thus, the null hypothesis which states that there is no significant relationship between gender of undergraduates and cyberbullying behaviors was rejected. In this study, gender accounted for .021% determinant of coefficient (R^2) on cyberbullying behaviors.

Discussion

The result of the study indicates that university undergraduates are heavy users of social media platforms, and this is a

strong predictor of their cyberbullying experiences. From the results obtained in the study, it was revealed that large number (70.3%) of undergraduates in computing, electrical engineering, and management are frequent users of social media platforms (4 hours and above on a daily basis). This according to the finding is as a result of fun-seeking, desire to overcome boredom after a busy day, feel some sense of social belongingness, overcome some hurtful feelings, play various kinds of online games, relieve some tensions, as well as link up with friends, associates and colleagues within or outside the university to have meaningful interpersonal relationships. It may also have resulted from the idiosyncratic assumption that consistent engagement on social media platforms is mostly a student affair, and not to be left out, undergraduate-users choose to be kept abreast with latest happenings in their groups, which ultimately makes them to become victims of cyber assaults. This may have been why the results obtained tilted more toward

social reasons for social media use than academic reasons. Thus, from the results obtained and listed, more of social reasons and motives constituted why undergraduates frequently visit the social media platforms, which largely makes them become susceptible to cyberbullying assaults.

In terms of the cyberbullying behaviors manifested, undergraduates (typical cyberbullies) attested that they sometimes: initiate abusive online conversations in the course of their online interactions with peers (flaming and harassing other social media users); take pleasure in pretending to be another person online (masquerading/impersonating other students' identities online); enjoy traumatizing others; often solicit nude pictures from others to make fun of them; use the social media platform to show their superiority (narcissistic feelings) to others; derive pleasure in posting offensive pictures as well as using obscene/fowl languages to spite others; represent others with symbols; make comments to contents that do not even concern them; as well as engaging in hot/heated online arguments and making mockery of others especially to take revenge for a perceived wrong done against them by such persons.

The findings are consistent with the study of Lu (2015) which indicated that undergraduates spent between 6.52 to 68 hours daily and weekly respectively on the internet or social media. The finding is also corroborative to the studies of Ng et al., (2012) which revealed that Malaysian university (medical) students spent 13.31 hours per week online, and the age at which the students started using computers was age 14 on the average; and that of Kate re Los et al. (2011) which indicated that students at risk of extreme internet use spent maximum of 9 hours online nonstop on a daily basis on different social media platforms. It also lends support to the findings Whittaker & Kowalski (2014) which found great statistically significant relationships between social media and cyberbullying experiences of university students.

From the findings, it was also revealed that management students are more frequent users of social media platforms than undergraduates in computing and electrical engineering. This may be due to the fact that the excessive workloads of electrical engineering and computing students which may not afford them the privilege of frequently visiting social media platforms compared to management students, whose workloads may be relatively minimal or less laborious. The finding, therefore, reveals management undergraduates as ranking top in the list of topmost frequent users of social media and also as victims of cyberbullying attacks, followed by computing and finally, undergraduates of electrical engineering. Thus, the study confirms the research objective which focuses on determining the relationship between social media use and cyberbullying behaviors among undergraduates in a Malaysian public university.

The study reveals that undergraduates' long hours of usage of social media platforms is premised on social

motives than academic. The finding supports that of Ling et al. (2011) which assert that Malaysian undergraduates at ages 18 to 25 years were more vulnerable to the extreme use of the internet basically for socializing. It also supports the findings of Whittaker and Kowalski (2014) who found that there is a strong relationship between frequent visits to social media and cyberbullying experiences. This may also have been why Campbell (2012) and Kircaburun & Bastug (2016) concluded that social media use at this time of increasing globalization has continued to put university students more in their own self-designed world than in the established norms, tradition, and custom of the society. Social media has thus become another world for teeming youngsters; which is why Campbell (2012), Brighi et al., (2012) regarded them as "netizens," that is, citizens of the internet/social media.

This study also corroborates the study of Raskauskas and Stoltz (2007) in which the researchers found that making fun of another (which is a social motive) is one of the major goals of bullies in social media. It is seen as a platform to express their social worth and status to one another. This, however, results to grievous consequences of higher proneness to being victimized on the cyberspace. Thus, undergraduates' motive for long hours on social media platforms is social motivation. It is the new trend occasioned by globalization and increased technological advancement (Bishop, 2015; Kowalski et al., 2012). Eksi (2012) also asserts that frequent visits to the internet and social media platforms informs why in recent times, many young persons seek the services of counselors and psychotherapists due to series of assaults they suffer on the cyberspace.

Hypothesis 1 of the study showed that there is a significant relationship between motivations for social media use and cyberbullying behaviors. This finding is corroborating the earlier findings of Lei (2007) that cyberbullying is mostly carried out with the use of the electronic device to harass others on the cyberspace. Invariably, consistent users of social media platforms can be highly susceptible to cyber harassments by already waiting bullies, regardless of what motivated (academic or social) their (victims') constant visits to social media platforms. The finding further lends credence to the study of Lu (2015) which found that the usage of social media platform is higher among university undergraduates (6–68 hours daily and weekly, respectively). This further explains why the finding of this study was not different from Lu's in terms of undergraduates' frequency of use of social media platforms, which ultimately makes them victims of cyberbullying.

Hypothesis 2 also indicated that a significant relationship exists between gender of undergraduates and cyberbullying behaviors, though it is an inverse (negative) relationship. Generally, females are mostly reported as victims of cyberbullying activities. This may be due to their nature of being easily emotional when certain

naughty experiences arises, are mostly reserved, very observing, or easily influenced into friendship relationships. It thus implies that if the score of a particular gender (say female) increases, perpetration of cyberbullying behaviors tends to reduce, and if the score of the other gender (male) declines, cyberbullying experiences of victims automatically reduces; whereas, increased mean scores for males or more male enrolments may imply an increase in cyberbullying experiences for female undergraduates, majority of whom constitute victims of cyberbullying as its perpetration may soar higher with an increase in male scores.

It thus implies that if a particular gender (say females) increases, cyberbullying behaviors tend to decrease, and if the other gender (males) declines, cyberbullying experiences of victims decrease while increased male enrolments imply an increase in cyberbullying experiences by female undergraduates. This was consistent with the study of Wright et al. (2015) in which the researchers affirm that Chinese and Japanese females were more of victims of cyberbullying than Chinese and Japanese males who were in the majority of cyberbullies. This finding also corroborates the study of Agatson et al. (2007) which reported that male undergraduates seem to be less of victims of cyberbullying experiences than female undergraduates. Female students are more cyberbullied than males; as a matter of fact, males are either bullies or bully-victims, while most females are largely reported as victims of cyber harassments. Also, the finding confirms that of Li (2006) who found that male students of high schools were more cyberbullies than female students, the majority of whom were victims of cyberbullying assaults. This study however sharply contrasts with the findings of Balakrishnan (2015), Barry (2017) and Batholomew et al., (2013) who concluded that due to the relative newness of social media bullying, the gender that is mostly affected by cyberbullying may not be easily determined because both genders appears equally affected in most cases.

Conclusion

Based on the findings of this study, the conclusions reached are as follows:

The study revealed that female undergraduates are more of victims of cyberbullying than males, who are either cyberbullies or bully-victims. This position has been variously taken by previous researchers but has been further confirmed by this study. It is also found that undergraduates are frequent users of social media. Undergraduates in management programs, followed by computing and electrical engineering are heavy users of social media platforms, and management students are in the majority of the victims of cyberbullying. The findings further revealed that social

motive was the major driving force for undergraduates' frequency of social media platforms and not academic purposes, the frequency of which often results to cyberbullying experiences. It was also established that gender is inversely related to cyberbullying. The implication of this outcome is that where there are more female undergraduates, there may be more victims of cyberbullying or reduction in the behavior if male students are not in larger proportion compared to females; and where there are more male undergraduates, the behavior of cyberbullying goes up, while the number of victims of cyberbullying reduces.

Recommendations

The following suggestions are recommended based on the findings of this study:

1. Future studies should determine if there are more cyberbullies in the faculty of electrical engineering than other faculties in the university. This became necessary because there were less of victims of cyberbullying in electrical engineering than other faculties; likewise, there was more Chinese race in electrical engineering than in other faculties. Future studies could extend this study to be able to determine the particular race that mostly carries out cyberbullying activities on other undergraduate social media users in a West Malaysian public university.
2. There is a need to conduct periodic psychological assessment of students to be able to become aware of their experiences, especially the hurtful ones with appropriate remedial measures put in place; this will largely reduce the rate at which youngsters get depressed or choose to isolate themselves from others or suicidal thoughts due to cyber harassments suffered. This could also encourage victims who are suffering in silence to open up and unbundle the hurts rather than covering-up in pretense.
3. A similar study is recommended for other universities in the Asian continent and across the globe to adequately extend literature in this regard and to ultimately determine the prevalence of cyberbullying activities among undergraduates in other global universities, particularly, the publicly owned educational institutions.
4. Age factor may have also contributed to undergraduates' frequent use of social media platforms. Future studies can focus on graduate students' use of social media to ascertain the frequency of use and cyberbullying among postgraduate students as established for undergraduates in this study.

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