Involvement in Cyber-Bullying with Respect to Awareness, Psychological and Peer Influence amongst Undergraduates

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Abstract: The inclination of screen time over the years had made most daily social interactions happened online instead of offline. Therefore, various behaviours or interactions that happened online were sometimes deemed sensitive or offensive for some but not for others. The purpose of this study was to examine the contributing factors that affected cyber-bullying. The review was focused on gender, psychological and peer influence, including awareness as variables that contribute to cyber-bullying. The sample collected was 335 out of the 2,420 undergraduates at Universiti Teknologi MARA (UiTM) Pahang, Raub Campus. In the research, new findings showed that 25% of respondents were involved in cyber-bullying while another 75% of respondents could be subconsciously involved. Gender, psychological aspects, and awareness of cyber-bullying were found to have significant influence on cyber-bullying, except for peer influence. It was advisable to be thorough before responding or commenting on the online platform, as everybody has different interpretation levels of certain behaviours and words. Therefore, most people are sometimes not aware of their offensive conducts to others. To thrive for a healthy relationship and mental health, always treat others with kindness and think twice before responding or posting on the social media platforms.

Keywords: Cyber bullying, Factor influence, Psychological impact, Peer influence

Introduction

In the past few years, social networking sites had grown its popularity for individuals to get in touch with one another. People with access to computers and wireless connections can connect with others in parallel universes, anywhere, anytime. In some context, social networking has a lot of benefits for individuals who use it well. But, under different circumstances the advantage of social networking is misused by some irresponsible individuals. While most online interactions are considered positive or neutral, a negative consequence is the exposure or perpetration to cyber-bullying (Tokunaga, 2010).

Cyber-bullying is a form of terrorising or harassment via electronic means, also known as online bullying. It occurs when someone, usually a teenager, intimidates or harasses others on the Internet and other digital spaces, especially on social networking sites. Some online bullying behaviours may include posting rumours, threats, sexual comments, personal information about a victim or sarcastic labels. Cyber-bullying is also said to be a modern form of bullying and is performed by using electronic forms of contact (SMS, MMS, Facebook, YouTube). It has been considered worse than the traditional bullying with regard to consequences for its victims (Stica & Perren, 2012). Technological advances are making this issue a growing phenomenon in the society. Cyber-bullying is defined as repeated and unwanted harassment by using digital technologies (Adams & Lawrence, 2011; Kraft &Wang, 2010). The intention is to embarrass, hurt, humiliate, offend, get

revenge, have fun or exert power over others (Carter, 2013). Certain modalities are specific to the cyber world: hacking, bombing, outing, happy slapping, and masquerading (Carter, 2012).

Donegan (2012) studied the background situation, current legal struggles, clinical implications and potential preventative steps concerning bullying and cyber-bullying alikes. The study concluded that the society illustrated the pinnacle of capitalistic competition. This win-or-die-trying atmosphere, competitive college acceptance process and much of the corporate world contribute too many of the bullying problems that are being battled today. The issues of bullying and cyber-bullying can be contained only on short term and cannot be eliminated completely due to how deep-seeded they are into the competitive society. A research by Crosslin & Golman (2014) also learned more on how the phenomenon of cyber-bullying is affecting the social and learning environments in college, as well as how college students view cyber-bullying.

Cyber-bullying has emerged as a prominent concern in adolescent studies because of the increased usage of Internet media. Motivated by these issues, Festl, et al. (2013) focused on the comparison of various forms of peer influence on cyber-bullying behaviour amongst high school students in Germany, more particularly the impact of close friends, and more distant peers in the school class on perpetrator and victims' roles. The results indicated that the class context was highly relevant for cyber-bullying. The number of cyber bullies in a class has a significant influence in predicting individual behaviour for both processes — perpetration and victimisation. The findings revealed that cyber-bullying was significantly linked to the usage of social networking sites and the chance of being victimised increased as time spent online increased. In some context, Keskin et al. (2016) developed a conceptual model that encapsulated the relation between workplace cyber-bullying and counterproductive work behaviours (CWBs) as well as the role of employee emotional intelligence on this relation. It was proven that workplace cyber-bullying had negative impact on employee's physical and mental health. The distinct cyber-bullying feature allowed it to infiltrate the employees' personal life, since there was no escape from technology, leading to a sense of being trapped.

Other findings that have given a great contribution in research are the study of cross-sectional associations between cyber-bullying and psychiatric with psychosomatic problems amongst adolescents. Sourander et al. (2010) found that cyber-bullying and cyber victimisation were associated with psychiatric and psychosomatic problems. The most troubled were those who were both cyber bullies and cyber victims. Amongst cyber victims who were being cyber-bullied by a same-sex or opposite-sex adult, by an unknown person, and by a group of people, they were associated with fear for safety, showing a possible trauma. This indicated that new strategies are needed for cyber-bullying in prevention and intervention. This is also supported by Campbell (2005), which explored the definitional issues, incidence and potential consequences of cyber-bullying, including a discussion on possible prevention and intervention strategies. In Jakarta, Arya Dipa, a newspaper author, posted on September 2016 that while young people are familiar with the Internet and social media, it does not necessarily mean they are fully aware about the dangers of online activities, let alone of cyber-bullying. Therefore, it showed the lack of cyber-bullying awareness amongst youngsters. Those issues have been a worrisome for the environment.

Cyber-bullying has attracted many researchers from different disciplines. However, a specific context of cyber-bullying, workplace cyber-bullying and its impact on employees' behaviours has rarely been theoretically reported in literature (Keskin & Akgün, 2016). Since it is relatively a new phenomenon, studies on cyber-bullying factor effects are limited. Motivated by previous research works, this study is aimed to investigate the contributing factors that affect cyber-bullying and promote issues on awareness amongst the community.

Methodology

Participants

The target population for this study consist of all students in Universiti Teknologi MARA (UiTM). The target population for this study consisted of undergraduates in Universiti Teknologi MARA (UiTM) Pahang, Raub Campus. In this campus there were 2,420 students for the December to March 2017 semester. There were five different programmes, which are Diploma in Public Administration

(AM110), Statistics (CS111), Business Management (BM111), Banking Management (BM119) and Computer Science (CS110). Most respondents (36%) were from the Diploma of Administration Management programme, followed by Banking Management (19.3%) and Business Studies (18%). Meanwhile, students from Statistics Course (CS111) and Computer Science were represented by 15% and 12%, respectively. About 58% of respondents were males and the remaining 42% were females. Based on types of social media network used, most respondents were using Instagram (32%), followed by Twitter (26%) and the least usage amongst students was Facebook (20%). Other than that, about 23% of respondents answered "others" (for example, Snapchat, ASKfm, WeChat, WhatsApp, Tumblr).

Data Collection

This study used single cross – sectional design. As suggested by Krejcie et al. (1970), the selected samples were 335. Only active students of UiTM Raub were involved in this study. For the sampling techniques, stratified sampling was employed. The selection from each stratum is in Fig. 1. The list of the students in UiTM Raub has been collected and compiled with the name list of students from related faculties.

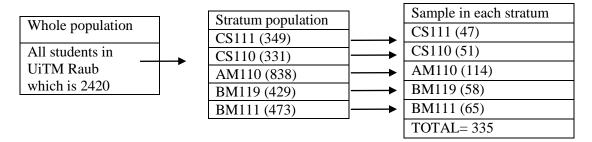


Fig. 1 Stratified Sampling Process

Simple random sampling was conducted to select samples in this study. After obtaining the name lists from Hal Ehwal Akademik of UiTM Raub, the computerised system was used to generate a random number and matched with the earlier assigned numbers. A total of 340 questionnaires were distributed, but only 334 were returned (98.82 %). All analyses were based on these responses.

Measuring Instrument

A self-developed questionnaire was used, which comprised two sections, Section A and Section B. Section A was a demographic section, whereby respondents were asked about their background, such as gender, age, course, and their tendency to bully in the future, whether they were cyber bullied, types of social media used, student CGPA and their general experiences in social media. The involvement rate was calculated through a section, whereby respondents were needed to identify whether they have not done it, sometimes or often did certain behaviours that could be considered cyber-bullying. The score is 1 if they answered 'Never', while for 'Sometimes' the score is 2 and for 'Often' the score is 3. Therefore, the lowest score was 8 while the highest was 24.

In the Section B, there were several subs - sections based on their opinions of students and the answers used scales of measurements from 1 to 5, which represented 'strongly disagree' to 'strongly agree'. Section B generally measured their perspective on cyber-bullying awareness in terms of psychological aspects, peer influence and attitudes towards cyber-bullying. In this study, Spearman's rank correlation was used to check the relation between qualitative variables. This technique was used to measure the strength of relation between dependent variables which were factors that affected cyber-bullying amongst students in UiTM Raub and independent variables which were awareness towards cyber-bullying, relation between gender and cyber-bullying, psychological aspects, family, peer influence and attitude.

Data Analysis

The reliability of data was measured by using Cronbach's alpha coefficient. Generally, the data was counted as reliable if the alpha value is more than or equal to 0.8. Result of the reliability test for the questionnaire was between 0.800 and 0.923. In section A, descriptive statistics was used for analysis on gender, age, course, part of cyber-bullying, experience in cyber-bullying, types of social network and CGPA to have better and clearer understanding of the respondents' background. Chi-squared test, cross tabulation and Spearman's rank correlation were used in the study to check the relation between independent variables and cyber-bullying behaviour rate. These methods were used to make inference about the population based on measurements obtained from the samples and to assess whether two or more variables were linearly associated.

Spearman's rank correlation was used to measure the strength of relation between dependent variables, which were factors that affect cyber-bullying amongst students in UiTM Raub and independent variables which were awareness towards cyber-bullying, relation between genders and cyber-bullying, psychological aspects, family, peer influence, and attitude.

Findings and Discussion

Based on Fig. 2, the majority of respondents showed that 56% of them claimed to be never involved in cyber-bullying. Then, 16% had previously encountered and witnessed the bullying. Meanwhile, about 11% of respondents had claimed that previously they were victims of cyber-bullying. Furthermore, about 7.1% confessed that they were the perpetrators while 10.1% claimed to be victims and perpetrators at the same time.

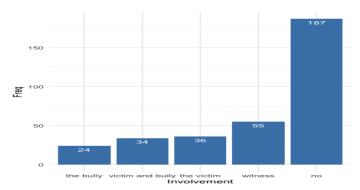


Fig. 2 Number of students involved and experienced bullying.

The involvement rate was measured by asking several questions related to cyber-bullying, in which respondents had done any of the behaviours stated in **Fig. 3**.

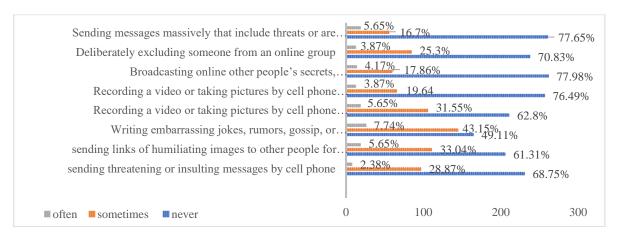


Fig. 3 Involvement in cyber-bullying-related behaviours

The first question, which was about sending threatening or insulting messages via the cell phone, showed that most students (28.87%) admitted that they did it sometimes while 2.38% often did it to their friends. The next question was about sending links of humiliating images to other people for them to see. Results showed that 33.4% did it sometimes and 5.65% did it often. Next, on writing embarrassing jokes, rumours, gossips, or comments about a classmate on the Internet, results showed that 43.15% of respondents answered "sometimes". Then, on the question asked about recording a video or taking pictures with the cell phone while a group laughs and forces another person to do something humiliating or ridiculous, the result showed that 31.5% of respondents answered "sometimes".

The next question, which was about recording a video or taking pictures by cell phone while someone hits or hurts another person, the result showed that only 76.5% of respondents did not do those doings. Next, on broadcasting online about other people's secrets, compromising information or images showed that only 78.0% of respondents had never done it before. On the other hand, question about deliberately excluding someone from an online group indicated that 3.9% of respondents often did it and another 25.3% admitted they did it sometimes. Lastly, on sending messages massively that includes threats or are very intimidating showed that only 77.7% of respondents have never done it.

This contradicted with the result obtained in Fig. 1, whereby 56% of respondents claimed were never involved in cyber-bullying. Therefore, this showed that respondents were either unaware or in denial that some of their behaviours mentioned in Fig. 2 were part of cyber-bullying. Then, based on those statements, the involvement rate was calculated by rating from 1 to 3, which represented 'never', 'sometimes' and 'often', respectively. If they were never involved in any of these actions that can be considered as cyber-bullying, the lowest score was 8. It was found that 24% of respondents scored more than 12 out of 24. Meanwhile, it was found that 100% of respondents did at least one of the discussed behaviours in Fig. 2.

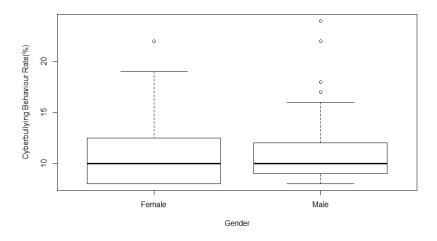


Fig. 4 Comparison between genders

When the involvement was compared according to genders in Fig. 4, there were extreme values recorded for males and females. Three persons admitted that they did almost everything that could be classified as cyber-bullying, whereby the scores were more than 20. The mean rates of involvement amongst females were 10.9 with standard deviation 3.39 while males were slightly higher at 11.0 with standard deviation 2.78. Next, Chi-Square association test was used to check whether gender had significant effect on involvement in cyber-bullying. The Pearson's Chi-squared test showed high Chi-squared valued (X-squared = 26.886, df=13) with p-value of less than 0.05 significance level (p-value = 0.01289); hence, the null hypothesis was rejected. It could be concluded that gender does influence the tendency for someone to be involved in cyber-bullying.

Furthermore, confirmation regarding the influence of awareness towards cyber-bullying, psychological aspects, and peer influence towards involvement in cyber-bullying were also checked by using Pearson Correlation.

0.1483

-0.0552

'ariable	Mean Score	Correlation with cyber bullying Involvement rate			
		t	p-value	95% CI	Sample estimates
wareness	3.70	-2.4174	0.0162*	-0.2348, -0.02448	-0.1311

0.04197, 0.2513

-0.1612, 0.05214

Table 1. Relation between variables of interest and involvement in cyber-bullying

0.0064**

0.3134

2.7406

-1.0097

Based on results in Table 1, the mean score for all three aspects in terms of awareness, psychological aspects and peer influence were rated above 3, which represented that on average all respondents agreed that awareness, phycological aspects and peer influenced cyber-bullying. Then, it was found that there was a significant weak negative relation between awareness and involvement rate in cyber-bullying, whereby the p-value (0.016) was less than 0.05. Psychological aspects also proved to have statistically significant positive weak relation with involvement in cyber-bullying with p-value (0.0064) of less than 0.05. However, in contrast to the mean score result there was no significant relation between peer influence and involvement in cyber-bullying. Hence the p-value obtained was greater than 0.05. The null hypothesis was accepted. This means that in this study it was not statistically proven that involvement in cyber-bullying was being influenced by peers.

Conclusion

Psychology

Peers

3.77

3.65

Its conclusion the awareness on behaviours that were deemed to be considered cyber-bullying was low amongst respondents. A total of 56% confidently stated that they were never involved in cyber-bullying. But, when they were asked whether they had done any act that can be considered cyber-bullying, 100% of them at least said 'yes'. To compare the cyber-bullying behaviours between genders, the involvement in cyber-bullying was higher between males and females. The study results also showed that there was a negatively weak significant relation between awareness towards cyber-bullying and involvement in cyber-bullying. This means that if the awareness towards behaviours that were considered cyber-bullying increased, the involvement in cyber-bullying would decrease.

In terms of respondents' perception whether involvement in cyber-bullying is influenced by psychological aspects, there was a positively weak relation, whereby respondents agreed that those who were involved in cyber-bullying mostly had psychological issues which influenced them to be involved. Even though on average the respondents agreed that peers do influence cyber-bullying, the correlation test in this study found that the relation between peers and involvement in cyber-bullying was not significant.

Suggestions for Future Research

In future research, the relation between peers as a factor in cyber-bullying can be further explored as the nature of interaction between users might vary across age and platforms used. Also, future study needs an in-depth focus on the way each social network platform functions. The difference can influence the user's involvement in cyber-bullying.

References

Adams, F. D., & Lawrence, G. J. (2011). Bullying victims: The effects last into college. American Secondary Education, *90*(1), 4-13.

Carter, M. (2012). *Third party observers witnessing cyber bullying on social media sites*. Paper presented at the 3rd World International Conference Psychology, Counselling and Guidance Izmir Turkey 09-12 May.

- Carter, M. A (2013). Protecting oneself from cyber bullying on social media sites a study of undergraduate students. *The Authors*, 1229 1230.
- Campbell, M. A (2005). Cyber bullying: An old problem in a new guise? *Australian Journal of Guidance and Counselling*, 15(1), 68-76.
- Crosslin, K. & Golman. K. (2014). "Maybe you don't want to face it" College students' perspectives on cyber bullying. *Computers in Human Behavior*, 41, 14–20.
- Dipa, A. (3 September 2016). Most youth unaware of cyber bullying. *The Jakarta Post Bandung Sat, September 3 2016*.
- Donegan. R. (2012). Bullying and Cyber bullying: History, Statistics, Law, Prevention and Analysis. *The Elon Journal of Undergraduate Research in Communications*, *3*(1), Spring 2012.
- Festl. R., Scharkow, M. & Quandt, T. (2013). Peer influence, internet use and cyber bullying: a comparison of different context effects among German adolescents. *Journal of Children and Media*, 7(4), 447-462.
- Keskin, H. & Akgün, A. E. (2016). Cyber bullying victimization, counterproductive work behaviors and emotional intelligence at workplace. *The Authors*, 281 287.
- Kraft, E., & Wang, J. (2010). An exploratory study of the cyber bullying and cyberstalking experiences and factors related to victimization of students at a public liberal arts college. <u>International Journal of Technoethics</u>, *1*(4), 74–91.
- Krejcie, R.V. & Morgan. D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.
- Stica, F. & Perren, S. (2012). Is Cyber bullying Worse than Traditional Bullying? Examining the Differential Roles of Medium, Publicity, and Anonymity for the Perceived Severity of Bullying. *J Youth Adolescence*, 42(5), 739-750.
- Sourander, A., Klomek, M. K., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., Ristkari, T. & Helenius, H. (2010). Psychosocial Risk Factors Associated with Cyber bullying Among Adolescents. *Arch gen psychiatry*, 67(1), 720-728.
- Tokunaga, R. (2010). Following you home from school: A critical review and synthesis of research on cyber bullying, victimization. *Computers in Human Behaviour*, 26(3), 277-287.