

The Nature, Prevalence, and Impact of Cyberbullying Victimization of University Employees in Indonesia, Malaysia, and Thailand

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Abstract: Cyberbullying is a new form of bullying because of modern social media tools, mainly messaging and chat rooms. This research study focuses on the prevalence and the effects of cyberbullying of university lecturers of Southeast Asia universities. Participants from the following countries completed a questionnaire – Thailand (259), Malaysia (200), and Indonesia (185). This data was supplemented by semi-structured interviews with 20 participants who had completed the questionnaire, and these were selected using the snowballing method. The data was analyzed using hypothesis testing, log-odds ratios, and word-cloud (for qualitative data). Of the 644 participants, 66.6% have never experienced cyberbullying, 21.0% have experienced it on rare occasions, while 12.4% do experience it regularly. While most participants have never experienced cyberbullying, there is still a relatively high proportion that has experienced cyberbullying; and even more, concerning is those who are regular victims of cyberbullying. Approximately a quarter had taken time off work because of cyberbullying. The result suggests that cyberbullying has psychological and emotional health adverse effects on victims, and there is also a loss of manpower hours due to time off work. The odd ratios analysis suggested that females were 1.28 times more likely to take time off due to cyberbullying than males. This result suggests that experiences of females and males differ in terms of the impact of cyberbullying; as such, any coping measures developed by policymakers need to consider these differences. The word cloud showed that words such as “Friend”, “Talk”, “Help”, “Stress”, etc. were dominant phrases when it comes to supporting structures available, indicating that when we are stressed with seek help and talk to friends and family. However, another dominant word was “Nobody”, which indicates those stressed and yet have nobody to talk to or seek help. Policymakers in universities and governance should enact laws that especially protect females, offer support, and limit the prevalence of cyberbullying among university lecturers.

Introduction

Cyberbullying, regardless of the target audience, is a recent and contemporary problem besetting modern societies. It is a relatively new form of bullying that has emerged because of modern communication technologies (Chatzakou et al., 2019; Khine et al., 2020). It is generally "carried out via mobile phones; instant messaging, email, chat rooms or social networking sites such as Facebook and Twitter" (Yao et al., 2019) and involves sending hurtful messages. Addressing emerging social and ethical challenges that result from cyberbullying has recently become topical issues among researchers, policymakers, academia, etc. (Bentley et al., 2016; Khong et al., 2020; Ruangnapakul et al., 2019). Most of the research efforts in this area have focused on cyberbullying in schools or amongst young people (Bentley et al., 2016; Khong et al., 2020), with only a handful of studies focusing on cyberbullying in the workplace (Ahmed et al., 2020) and more-so focusing on a particular workforce subgroup (Park & Choi, 2019). Research by Farley and his colleagues (Farley et al., 2015) investigated cyberbullying of trainee doctors in the workplace and concluded that "workplace bullying is an occupational hazard", but also noted that "however, little is known about their experiences of cyberbullying at work". While the conclusions were drawn related to cyberbullying of trainee doctors in the United Kingdom, similar conclusions concerning academic staff in general and Southeast Asian universities can be drawn. Countries within and around the Association of South-East Asian Nations (ASEAN) are associated with a strong communal or social way of life, where each person within the community is firmly bound with other members. In such societies, people occupying some offices are highly esteemed (e.g. doctors, nurses, lecturers, etc.). Lecturers and teachers enjoy much prestige from the members of the societies due to their societal developmental impact. Hence, lecturers at the receiving end of negative actions and abuses such as cyberbullying will be affected psychologically and emotionally, but there could be some ripple effect on society (Sittichai & Smith, 2015). We believe that building a knowledge base and raising awareness about cyberbullying issues will create an evidence-based and rich information source helpful in cyberbullying victims, policymakers, and policy implementers.

Given that university academic staff are still regarded as the pillar of society, there is a strong argument that building support structures and systems to help them fight cyberbully will indirectly help build stronger societies. Since the research is based on three different countries with different cultural outlooks, the research allows for a cross-cultural understanding of cyberbullying and whether solutions can be tailored to each different culture involved. The present research aims to investigate and examine whether there are differences in cyberbully victims based on demographic factors and assess the impact of cyberbullying on victims using the "psychological and emotional health outcome factors/scores" of victims.

Consequently, the null hypotheses H_{01} : Demographic factors are unrelated to the reported "psychological and emotional health outcome factors/scores" of victims.

Literature Review

Forms of Bullying

Social networking has dramatically influenced our everyday activities. These days, a large proportion of people around the world are connected through one platform of social networking or the other such as Facebook, Twitter, Instagram, WhatsApp, WeChat and a whole lot of others (Ahmed et al., 2020), and this has made it easier to engage in or be a victim of cyberbullying. Thus, cyberbullying has lately been viewed as severe; one of the societal challenges confronting adults at workplaces and young people; particularly, with the increase in the use of technological devices as means of communication and easy access to internet connectivity (Jungup et al., 2020). Cyberbullying encompasses various negative displays through digital and electronic media. This could include uploading unpleasant images and videos, intentionally delivering hurtful messages through various electronic messaging platforms, etc. (Lee et al., 2017). Unlike traditional bullying, it has the potential of reaching far more audiences than intended by the bully, making the victim(s) more exposed to far more significant sources of emotional and psychological trauma (Jungup et al., 2020). For purposes of the research, we will use the exact definition of cyberbullying as Gardner and his colleagues. (Gardner et al., 2016), who defined it as the *"situation where a person feels they have repeatedly been on the receiving end of negative actions from one or more other people when it is difficult to defend themselves against these actions"*. This is because a single incident is not defined as cyberbullying. The bullying must persist over a period with the intent of harming or upsetting someone. Furthermore, *"the relationship between bully/bullies and the victim/victims has characterized an imbalance of power"*(Craig et al., 2020).

The Southeast Asian universities-wide prevalence survey combined with in-depth interviews would *"give the clearest possible picture of cyberbullying"* of academic staff in these universities. This will help in *"understanding what these numbers tell us is vital", "what's working", and "what needs to be done to better protect our..."* educators in Universities (Bentley et al., 2016). Furthermore, extending the research to universities within the different countries will help build a broader picture of the prevalence of such cases and allow for comparison across countries. What also becomes interesting is investigating whether cultural differences would be reflected in the experiences and reactions to cyberbullying. Although this research follows the recommendation from Sittichai and Smith for *"future research in this area, in Thailand and other Southeast Asian countries"*, however, it differs in that it focuses on university lecturers rather than school students. Thus, the focus is on work cyberbullying. Nonetheless, this allows comparing the issues between the two groups and note any similarities.

Workplace Cyberbullying South-East Asia Context

In the past few years, technological advances have changed communication patterns within various organizational set-ups both advantageously and in degrading manners (Leidner, 2014). Although technological advancement has critically improved workplace productivity, it has also changed the face and style through which perpetrators of bullying carry out the act to get at their victims (Privitera et al., 2009). Cyberbullying is not only gaining ground in developed nations; this monster is also prevailing in various parts of the world. A market survey revealed that Southeast Asia is among the world's regions where cyberbullying is prevalent (Ruangnapakul et al., 2019). The Southeast Asian country Malaysia ranked sixth

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among the 28 countries surveyed worldwide, only behind India in Asia. Although cyberbullying is common among children and teenagers, it is also real among adults and working-class citizens in Southeast Asian countries and happens even more than expected (Chew, 2019).

Perpetration of violent acts varies in modalities from one cultural setting to the other, and as such, comparing incidences and prevalence of cyberbullying across cultures becomes difficult. For instance, considering the European-American culture, self-dependency and self-reliance is esteemed among the people and could be viewed as an outstanding attribute; whereas in the oriental eastern culture (for example in Japan), most people consider it appropriate and commendable to live inter-dependably or communal lifestyle (Barlett et al., 2014). For example, in the latter case, people would likely give more audience to situational context than people from communities where self-dependency is valued. Hence, following incidences of provocation, individuals from communal dependency may consider some situational factors as reasons for the provocations and that the bullying was not intentional. However, when a similar situation arises within the self-reliant, it would be viewed as an assault on their personality, and thus aggressive revenge may occur (Barlett et al., 2014). Due to this reason, the prevalence of cyberbullying may be lower in societies with inter-dependent mentality than self-reliant communities as research participants from the eastern cultures may not consider bullying or cyberbullying the situations their western counterparts (participants) consider as bullying. Similarly, people from western communities may boldly own up to be responsible for bullying whereas, in interdependent societies, several people do not dare to be open and yet when they have the opportunity to do it anonymously (which is an essential feature of cyberbullying), they choose this method to bully others

Prevalence of Cyberbullying

Various studies on cyberbullying in workplaces (and indeed cyberbullying in general) have come up with different prevalence estimates. For example, Farley et al. (2015) investigated cyberbullying among trainee junior doctors and found a prevalence rate of about 47 percent. Meanwhile, in a survey of adult Internet users in New Zealand, it was reported that 14.9 percent of the respondents had been the victim of cyberbullying at one point or the other (Wang et al., 2019). Furthermore, research on adults' internet users in the United States showed that 20 percent of the participants reported having experienced cyberbullying (Kowalski et al., 2019). In Sweden, Forssell (2016) reported that 9.7 percent of adult participants in workplaces had experienced bullying. Blade and Campbell (2020) found that approximately 24 percent of Australian high school teachers suffered repeated negative behaviours via email and telephone, while Motswi and Mashegoane (2017) reported a prevalence (11 percent) of bullying among young adults investigated in South Africa. These studies indicate that some studies have prevalence rates estimates that are more conservative, while others estimate relatively high prevalence rates. However, the prevalence rate in most countries and workplaces would probably fall between the two estimates uncovered by the above findings. Regarding this research, we anticipate that the prevalence rates among university academic staff in Thailand and the surrounding countries would also be between those two estimates.

Lee and Shin (2017) reported that the rate at which cyberbullying occurs depends on many factors, and these can be gender, means of bullying, empathy, societal acceptance and a lot more. Thus, some of the variations in prevalence rates might be due to the nature of the work, the measurements used, and the

definition of cyberbullying used. For example, Zapf et al. (2020) undertook an international review of prevalence rates and found that the figures range from less than 1 percent for weekly bullying up to 87 percent for occasional bullying over a whole career. These prevalence rates' wide-ranging nature indicates that definitions and measurements scales are vital functions of 'prevalence rates. Besides variations between countries, there can be countless variations in prevalence rates within the same country. For example, studies on bullying in schools in the United States found rates as low as 10 percent (Perry et al., 1988) and as high as 75 percent (Hoover et al., 1992).

Regarding the workplace in Thailand, the authors of this research have not established specific prevalence rates of cyberbullying in the workplace, especially among Academia Staff in Thailand universities and Southeast Asian universities. The lack of particular prevalence rates and the general lack of research in this area means very little can be categorically stated about cyberbullying in these workplaces. This research will go somewhere towards providing answers about the cyberbullying prevalence rates in Thailand. We believe that prevalence rates in Thailand might be influenced by culture, which is viewed as less individualistic in that the country has a large Buddhist population compared to western countries. Also, compared to other countries such as Japan, Thailand is less industrialized, which might impact prevalence rates. Therefore, any statistics and cross-comparison studies should consider the context when concluding studies, as these variations may affect how cyberbullying is measured and the interpretation of the results.

Outcomes of Cyberbullying

Cyberbullying is unique from traditional bullying. Marczak and Coyne (2015), summarized "*there is no doubt that the online environment has unique features that may lead us to consider cyberbullying as a different concept to offline bullying*" (p.150). Therefore, compared to traditional bullying, there are differences between cyberbullying and traditional bullying, which might make their effects on victims so profoundly different. Marczak and Coyne (2015) identify four main differences which might exacerbate the effects of cyberbullying, which are: 'anonymity', 'lack of physical and social cues', 'breadth of potential audience' and 'no place to hide'. Thus, for example, the bully might hide their identity (remain anonymous) or reduce the risk of getting caught, giving them a sense of invisibility leading to a 'failure to moderate' your online behaviour. The other issue might be the 'lack of physical and social cues or the lack of face-to-face contact', which implies that the bully does not immediately and personally see the consequences of the behaviour (Walther, 2018). Finally, social networking increases the 'breadth of potential audiences', which in turn increases cyberbullying. Finally, the victim has 'limited/ no place to hide', in that with cyberbullying, the victim can be bullied from anywhere and at any time. This is contrasted with traditional bullying, where the victim may feel safe when they are not within sight of the bully. However, some of the full effects of cyberbullying may not be fully understood due to a lack of research in this area. Research has uncovered that some known effects include increased depressive symptoms, low self-esteem, higher loneliness scores, etc. (López-Meneses et al., 2020). Studies by Kwak and Oh (2017) found that depressive symptoms were significantly more significant for victims of both traditional and cyberbullying compared to victims of either form alone. Brighi et al. (2012) found significantly poorer self-esteem and higher loneliness scores among victims of both forms of bullying compared to either form alone. Meanwhile, the NSPCC report noted 24,571 Childline counselling sessions with young people during 2015/16 in the UK and these cited bullying/cyberbullying as their primary concern. The figures from NSPCC indicate the scale of the problem

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and how serious a social issue cyberbullying or bullying is in that victims seek counselling sessions. The above discussions and findings dispel the myth that cyberbullying has no social consequences and that it's a victimless activity or harmful fun, as some perpetrators would have us believe. The findings also imply that it is imperative to study cyberbullying.

We note that numerous researches have been undertaken on cyberbullying in different settings; none has focused on academic staff in Thailand, Malaysian and Indonesian universities. One of the recommendations from the work of Sittichai and Smith (2018) was for research on cyberbullying in Thailand, which uses more qualitative approaches, and one which explores the nature and range of cyberbullying cases — not based on pre-determined categories as has been the case with previous studies on the issue in Thailand.

Method

The research primarily used the self-reported survey questionnaire to collect quantitative data, supplemented by semi-structured interviews. The quantitative approach was first used, and the data collected was used to model the relationships between the independent and dependent variables. The qualitative data collection method typically leads to a sustained interaction between researchers and participants (Creswell, 2014), and one of the advantages of qualitative research is that researchers can get a better understanding of the participants in the research. Instead of just answering 'what', 'how much', 'how many' questions, qualitative research focuses on answering questions about 'how' and 'why' things happened (Saunders et al., 2012). In this research, the participants in the interviews were identified through the snowballing effect, with participants referring their friends. The "snowballing" (Dusek et al., 2015) technique is widely used to engage different participants and reach our desired participants and is becoming more popular in recruiting research participants.

Sample and Sample Size

The target population for this research was university lecturers from universities within the three Southeast Asian countries of Malaysia, Indonesia and Thailand. Initially, the aim was to reach this group through both online and emailed questionnaires. Google form was used to collect online data, but we got a meagre response rate, and as a result, we resorted to postal and emailed questionnaires only. The change in the data collection methodology led to a much better response rate, but we could not still meet our target sample size.

Table 1 below shows the calculated sample size for this research. Von Haartman (2012) argues that the ability to generalize the findings of research to a larger population is highly desirable in survey research, and thus notes that "one of the best ways of assuring generalisability is to have a large sample size, and a large-scale survey is a practical way of accomplishing that".

Table 1. Sample Size by Country

Country	Population Size	Confidence Level	Margin of Error	Expected Incidence	Sample Size
Thailand	70, 405*	95%	5%	50%	383
Malaysia	31,712**	95%	5%	50%	380
Indonesia	171 771**	95%	5%	50%	385

Source: * World Bank (2006), ** Department of Statistics Malaysia (2016), & *** Statistics Indonesia (2014/15)

Table 2. Average Response Rate, by Survey Mode

Survey Mode	Response Rate
In person	80-85% good
Phone	80% good
Mail	50% adequate, 60% good, 70% very good
Email	40% average, 50% good, 60% very good
Online	30% average

Source: Saldivar (2012)

https://mgsaldivar.weebly.com/uploads/8/5/1/8/8518205/saldivar_primer_on_survey_response.pdf

Fowler (2013) stated that "there is no agreed-upon standard for a minimum acceptable response rate", and as noted in the table below, these response levels vary tremendously. Suffice to note that Fowler (2013) argued that a sampling strategy produces a representative sample if the response rate is relatively high. While the results in Table 2 are not a definitive and exhaustive list; they indicate what is acceptable and using them as a yardstick, we can conclude that the results from this study represent our study population.

Limitation

However, it was challenging to establish how big the required sample size should be due to the environment of the data. Even though the response rate was lower than the calculated sample size (Table 1); however, overall, we conclude that the response rate was high enough for this type of research and in comparison to similar studies (Table 2), and therefore the results can be generalized, and the research achieves reliability.

Data Analysis

The data analysis software SPSS was used for the analysis of the data. It undertook both comparison and correlational statistical tests in the context of univariate, bivariate and multivariate analysis for both the parametric and non-parametric statistical techniques (Ong & Puteh, 2017). Specifically, the statistical models used included hypothesis testing and multiple regression models.

Results and Discussion

Socio-Economic Characteristics of Respondents

From the 644 questionnaires analyzed in this study, 143 people (22.2 percent) of the total population falls within the age group 20-34, 381 (59.2 percent) of the participants falls within the age group 35-49, 71 (11

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percent) of the participants fall within the age group 50-64 years, while 49 (7.6 percent) are aged 65 years and above. The age group 35-49 years account for the highest number of participants interviewed. Meanwhile, the educational level attained by the participants are as follows: 316 (49.1 percent) participants are Ph.D. holders, 301 (46.7 percent) of the participants are master's holders, 16 (2.5 percent) of the participants are first degree holders, while 11 (1.7 percent) of the participants have other qualifications. From the findings, the majority (Masters and Ph.D. holders) of the participants are well educated. Furthermore, 5 percent of the participants interviewed were in "management" positions, 91.3 percent are lecturers, while 3.7 percent are "other". The majority (96.3 percent = 5 percent + 91.3 percent) of the total respondents are lecturers.

Table 3. Social Demographic Characteristics of Respondents (N=644)

Characteristic	Total N=644		Male N=218		Female N=402		Don't want to say N=24	
	N	%	N	%	N	%	N	%
Age of respondent								
20-34	143	22.2	58	9	78	12.1	7	1.1
35-49	381	59.2	107	16.6	257	39.9	17	2.6
50-64	71	11	32	5	39	6.1		0
65+	49	7.6	21	3.3	28	4.3		0
Country								
Thailand	259	40.2	92	14.3	151	23.4	16	2.5
Malaysia	200	31.1	62	9.6	130	20.2	8	1.2
Indonesia	185	28.7	64	9.9	121	18.8		0
Educational level								
Ph.D.	316	49.1	127	19.7	183	28.4	6	0.9
Masters	301	46.7	83	12.9	208	32.3	10	1.6
First Degree	16	2.5	5	0.8	6	0.9	5	0.8
Others	11	1.7	3	0.5	5	0.8	3	0.5
Main role in the university								
Management *	32	5		0	29	4.5	3	0.5
Lecturer	588	91.3	212	32.9	359	55.7	17	2.6
"Other"	24	3.7	6	0.9	14	2.2	4	0.6

* NB: Lecturers in a position of authority have been collectively termed as management for reporting and analysis.

Table 4. Adverse Association of Cyberbullying Victimization among the Victims

Characteristic	Total N=644		Male N=218		Female N=402		Don't want to say N=24	
	N	%	N	%	N	%	N	%
Have been cyberbullied at work?								
No	429	66.6	153	23.8	273	42.4	3	0.5
Yes, occasionally	135	21	41	6.4	73	11.3	21	3.3
Yes, regularly	80	12.4	24	3.7	56	8.7		0
For those who have been cyberbullied: What are the main sources of bullying?								
From senior manager	79	36.7	24	11.2	55	25.6		0
From colleagues	36	16.7	13	6	21	9.8	2	0.9
From student	8	3.7	6	2.8	2	0.9		0
Others	92	42.8	22	10.2	51	23.7	19	8.8
Have you or other staff in your area ever had time off work because of cyberbullying?								
Yes	53	24.7	12	5.6	29	13.5	12	5.6
No	116	54	44	20.5	70	32.6	2	0.9
Don't want to say	46	21.4	9	4.2	30	14	7	3.3
What do you think causes cyberbullying?								
Stresses	140	49.5	50	17.7	70	24.7	20	7.1
Access to the social media	53	18.7	22	7.8	31	11		0
Loneliness	9	3.2		0	9	3.2		0
Pressure to conform or fit in	46	16.3	20	7.1	23	8.1	3	1.1
Other reasons	35	12.4	4	1.4	31	11		0

Prevalence Rate of Cyberbullying

In terms of the prevalence rates, Table 4 shows that 429 (66.6 percent) of the participants have never experienced cyberbullying, while 215 (33.4 percent) have experienced it in one form or another. Out of the 215 participants who have experienced cyberbullying, 135 (21.0 percent) have experienced it on rare occasions, while 80 (12.4 percent) of the participants do experience it regularly. Thus, while most participants have never experienced cyberbullying, there is still a relatively high proportion that have experienced cyberbullying of one type or another; and even more, concerning is those who are regular victims of cyberbullying.

Experiences of Cyberbullying

Concerning the social and work-related impact of cyberbullying, the results show that 54 percent of the victims of cyberbullying have not had time off work because of cyberbullying. However, approximately a quarter of the victims had taken time off work because of cyberbullying. Given that 21.4 percent of the victims “don’t want to say”; this leads to a suspicion that the “true” figure might be higher than the 24.7 percent self-reported figure. Furthermore, the research focused on the impact of cyberbullying, comparing females with their male counterparts due to the varying sample sizes between the two groups. The results are presented in Figure 1, and they indicate that females were 1.28 times more likely to take time off work due to cyberbullying than males; and 1.89 times more likely to answer, “Don’t want to say”. This result suggests that experiences of females and males

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differ in terms of the impact of cyberbullying; as such, any coping measures developed by policymakers need to consider these differences. Also, more research might be needed to understand the drivers of such observed differences.

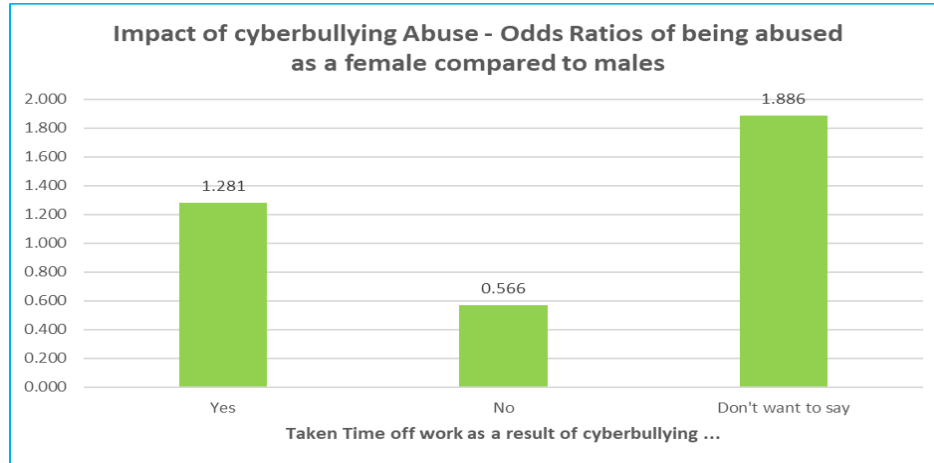


Figure 1. Impact of Cyberbullying - Females Compared to Males

Impact of Cyberbullying on the Psychological and Emotional Health of Victims

In relation to the social and work-related impact of cyberbullying, Table 5 illustrates how varied and multi-faceted the consequences of cyberbullying are to the victims. This is one illustration of the impact of cyberbullying. For example, the health and psychological effects of cyberbullying on the victims range from “loss of confidence and feelings of being worthless” (12.1 percent), “lack of sleep, worry and depression” (23.8 percent), taking time off work as a result, etc. The results also reveal that respondents suffered more than one ill-health due to cyberbullying, with respondents reporting an average of 1.2 ill-effects. These negative consequences of respondents' psychological and emotional outcomes, such as lack of sleep and lack of self-confidence, are some of the well-known triggers and proxies for mental health issues. Therefore, there is a chance that respondents' mental health is negatively impacted (although this was not directly asked during the interview, as it might have been viewed as too intrusive).

Meanwhile, the time taken off indicates a loss of productive hours for employers due to the harmful effects of cyberbullying. Furthermore, the self-reported incidences indicate that female respondents were more negatively impacted than males - 163 (61.5 percent) than 81 (30.5 percent). This is worth noting and addressing. The differences, though, might indicate that females are more open and, therefore will seek help than males. Among males, there might be a societal expectation to play down specific incidences such as cyberbullying, which will lead to the under-reporting of cyberbullying incidents.

Table 5. Psychological and Emotional Health Consequence of Cyberbullying

Characteristic	Total		Male		Female		Don't want to say	
	N=265*		N=81		N=163		N= 24	
	N	%	N	%	N	%	N	%
What are other consequences of cyberbullying?								
Time off work	53	20	12	4.5	29	10.9	12	4.5
Lack of sleep, worry and depression	63	23.8	20	7.5	41	15.5	2	0.8
Losing confidence and feeling worthless	32	12.1	17	6.4	15	5.7	0	0
Inability to concentrate and boredom	35	13.2	4	1.5	28	10.6	3	1.1
Others	82	30.9	28	10.6	50	18.9	4	1.5

Note: Although 215 respondents indicated that they had been victims of cyberbullying, the total is more because some victims experienced more than one consequence. On average, a victim experiences 1.2 consequences

Hypothesis Test

We fitted the data on the same regression model. The demographic factors were the independent variables, while the outcome variable was the self-reported “psychological and emotional health outcome factors/scores “of victims.

Table 6. Demographic Factor Related to Mental Health of Respondent Using Regression Analysis

Model	Unstandardized Coefficients		T	P-Value
	B	Std. Error		
(Constant)*	3.218	0.243	13.246	0.000
What age group do you follow into? **	0.017	0.034	0.509	0.611
Gender*	0.082	0.036	2.254	0.025
Country**	0.023	0.035	0.669	0.504
Educational level*	0.253	0.047	5.427	0.000
Main role in the university*	0.733	0.117	6.271	0.000

* significant at 0.05 level, ** not significant at 0.05 level

Recall that the regression equation is

$$\bar{Y} = \beta_0 + \beta_1\bar{X}_1 + \beta_2\bar{X}_2 + \beta_3\bar{X}_3 + \beta_4\bar{X}_4 + \beta_5\bar{X}_5 \dots\dots\dots (1)$$

X₁= What age group do you fall into?

X₂= Gender

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X_3 = Country

X_4 = Educational level

X_5 = Main role in the university.

The data suggest that factors such as the participants' agegroup and nationality (which is a proxy for culture) are not essential in determining victims' reported "psychological and emotional health outcome factors/scores". The fact that the "proxy for culture" does not appear as a significant contributing factor might also indicate how close the cultures are between the countries, despite the religious differences.

On the other hand, factors such as "gender", "educational level", and "main role in the university" appear as significant factors at 0.05 level. As already established using the log-odds ratio (Figure 4), females are more susceptible to cyberbullying compared to their male counterparts. This implies that female respondents' reported "psychological and emotional health outcome factors/scores" are more negatively impacted by cyberbullying.

The increase in education level increases the mental health or psychological distress emotional response scores by 0.253. This implies that the educational level is significantly related to mental health or psychological distress emotional response scores.

The main role in the university decreases mental health or psychological distress emotional response scores by 0.733. This implies that the increase in role in the university will decrease mental health or psychological distress emotional response scores and the core role related to the respondent's mental health.

We note that demographic factors such as "gender", "educational level" and "main role in the university" appear as significant factors at 0.05 level, while the "age-group" is not a significant contributor to the model. Therefore, we reject the Null hypothesis (H_{01}), and note that indeed some "demographic factors are related to the reported "psychological and emotional health outcome factors/scores" of victims". This implies that we can partially accept this alternative hypothesis.

Discussions

This study is the first to analyze the prevalence and the associated impacts of cyberbullying among university lecturers of three Southeast Asian countries of Thailand, Malaysia and Indonesia. There is a high interdependency and a valued communal lifestyle among the southeast Asian communities (Effron et al., 2018). This communal lifestyle tends to impact the manner members of the southeast Asian communities react to inappropriate actions and ways of getting back at offenders. The results from this study support this fact, in so far as the data shows that more than sixty percent of the participants have never been cyberbullied during the period under consideration, while less than one-eighth of all the participants agreed that they had been bullied. The study investigated the hypothesis, which considered the relationship between the demographic factors of the respondents and their reported "psychological and emotional health outcome scores". It is evident that demographic factors such as "gender", "educational level", and "main role in the university" appear as significant factors in determining which participants have been cyberbullied or not.

These findings align with results reported by Loh and Snyman (2020), which indicates that the adverse impact of workplace cyberbullying varies among different gender groups, with females being more likely to

be victims than men. The research findings could be partly explained using the Conservation of Resources (COR) theory, which states that individuals with specific character qualities can withstand the detrimental impact of cyberbullying better than those without such qualities (Han et al., 2021). Being optimistic and having a high level of self-esteem may mean that the person is less negatively impacted by cyberbullying. These qualities are witnessed mainly in males than female workers (Halbesleben et al., 2014). Another possible explanation why fewer males is self-reporting cyberbullying might be cultural and societal. There is a general societal expectation that “men should man-up”; and therefore would not report such incidences. Males are a notoriously hard group to reach, and due to cultural reasons, they might not also be willing to discuss their experiences. This might also explain the fact that the number of self-reported cases is relatively low - there is a possibility of underreporting effects (given 21.4 percent “Don't want to say”) of cyberbullying and the number of incidences (218 male vs 402 female respondents).

As a promoter of psychological stress, cyberbullying could take time off from work (absenteeism) by the participants. This could be necessary because the participants might think that if they are not within reach of the perpetrators (workplace), the bullying will not proceed, and the hurtful memory cut short (Manners & Cates, 2016). However, the cost implication of taking time off from work due to bullying could be significant for the organization. In line with our results, earlier reports showed that some employees resolve to take time off from work to mitigate the effect of cyberbullying (Makhulo, 2019). Our studies showed that only about a quarter of the victims of cyberbullying took time off from work, of which the more significant proportion were female workers (Tables 3 and 5). As mentioned earlier, females could be more sensitive to insulting remarks, particularly on cyber networks, than their male colleagues when exposed to the same remarks (Loh&Snyman, 2020).

Our study area covered the three southeast countries of Thailand, Malaysia, and Indonesia. Our results showed that nationality differences did not contribute (significantly, particularly with our quantitative data) to the mental and psychological impact on victims of different nationalities. Hence, cultural differences do not determine the mental health of the individual. It is inferred from the analysis and results above that the differences in race contribute very little to the mental health outcome, which implies that change in nationality or culture does not guarantee better mental health at the incidence of cyberbullying. From the report, we observed that the nationalities of each respondent are not significant to their mental health stability after being bullied. This implies that cultural differences do not impact “mental health outcome of cyberbullying. However, many different solutions were suggested by participants on how to stop cyberbullying and reduce its effect on respondents. The range of solutions includes “avoiding conflicts”, “be happy”, “be kind”, “be positive”, “be respectful”, “be stronger”, belief inequality”, “communication”, “focus to work”, “friendly”, “good environment”, “teamwork”, “tolerance”, “being well educated” and “strong discipline”.

Conclusion

Modern technological advances have revolutionized a lot of things, but it has also led to non-desirable outcomes such as cyberbullying. In this study, we have considered the nature and prevalence of cyberbullying of academic staff in southeast Asia’s universities in three countries (Thailand, Malaysia and Indonesia). The research findings identified that the negative effect of cyberbullying on the victims could be a function of the social demographic factors like “gender”, “educational level”, and “main role in the

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university”. This indicates that cyberbullying's adverse mental and psychological effects cut across victim groups – without respect of nationality, ethnicity, or societal backgrounds.

Since cyberbullying negatively impacts the victims, directly and indirectly, solutions to fightback against cyberbullying should be developed in universities in southeast Asia and elsewhere in the world. Victim support platforms should be made available for adequate rehabilitation of those mentally and psychologically traumatized through cyberbullying in the institutions. Where necessary, the technological control system should be installed around the universities.

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