CYBER BULLYING AND ACADEMIC PERFORMANCE

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ABSTRACT

This research investigates the emotional and physiological effects of cyber bullying on the university students. The primary objective of this investigation is to identify the victims of cyber bullying and critically analyze their emotional state and frame of mind in order to provide them with a workable and feasible intervention in fighting cyber bullying. In this research a triangulation method (quantitative, qualitative and descriptive) is employed in the investigation. The instruments used in this study, in which 365 students participated, included questionnaires, interviews, checklists and observations. The results of the study indicated that a significant number of the respondents 35 (13%) had suffered emotionally due to cyber bullying. Furthermore, 300 (85%) of the respondents indicated that in their views cyber bullying causes emotional and psychological stress. Further, majority of the respondents 255 (70%) agreed that cyber bullying adversely affects students' academic performance. Results further designate that 60 (16.6%) of the respondents specified that they had bullied someone inside the university at least 2 or 3 times a month while 4 (1.1%) of the participants said that they had bullied someone outside the university at least 2 or 3 times a month. It is interesting to note that majority of the students 75 (20.8%) signify that they have heard bullying taking place inside the university.

Index Terms: Computer, internet, bullying, student, emotional psychology

INTRODUCTION

Modern technology is continuously evolving, and in recent times, it has manifested itself in a very serious social problem, namely cyber bullying. Modern technology is like a double-edged sword; on one hand it gives us connectivity, on the other it increases emotional stress (Michel, 2011). As such, young internet users, including students, may be at the mercy of cyber bullies. The victims, under great emotional stress, are unable to concentrate on their studies, and thus their academic progress is adversely affected (Juliana, 2010). Unfortunately little attention is given to this global problem by institutions of higher learning, teachers, parents and emergency service providers. The depressive effect of cyber bullying prevents students from excelling in their studies (Lauren, 2011).

Bullying in schools and universities are causing unimaginable problems to students, parents and to educational institutions. Unfortunately little has been done to help those victims who are continuously trapped in the name of modernization and digitalization (Watson, 2010). Researchers agree that the stressful impact of bullying is escalating with the rapid expansion of technological advancement (Justin, 2011). Many students who are victims of cyber bullies suffer silently; they are reluctant to complain to the authorities or their parents owing to the social stigma attached to victims of bullies (Susan, 2011). As such, parents, teachers and institutional authorities have to be on the lookout for such occurrences.

PROBLEM STATEMENT

Cyber bullying is an online aggressive behaviour in the digital space. Bullying is a form of peer aggression which can be as damaging as any form of conventional aggression (Mickie, 2011). The problem investigated in this research concerns cyber bullying that disturbs university students psychologically and emotionally. Bullying also prevents students from achieving good grades. It seems that technologies are in some ways creating more stress on our young in the form of cyber bullying rather than to help them progress. Research findings have shown that young students who become victims of cyber bullies suffer great stress (Elizabeth, 2010). Hence there is an urgent need to understand the problems faced by the victims so that concrete and proactive measures can be taken by university authorities, teachers and parents to address this global problem.

LITERATURE REVIEW

The Internet has created a new paradigm shift in communication. Today our youth are addicted to using electronic communication tools. It is an undeniable fact that electronic-based communication has transformed our lives tremendously, but unfortunately, there is a dark side to this technological advancement. Cyberspace is a potential site for violence, victimization and oppression (Faye, 2011). According to Olweus (1993), "a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students." Hence, bullying is showing aggressive behavior to a person without any prior provocation with the intention of causing harm.

It also denotes that the harm is done repeatedly over time and there is a disparity in strength and power between the victims and cyber criminals. Electronic bullying or cyber bullying, according to Kowalski (2011) simply indicates using the Internet to cause psychological and emotional disturbances. Olthof (2011) defines cyber bullying as a *strategic behavior* of an individual to dominate another individual or a group of individuals. Online Oxford Dictionary defines cyber bullying as *the use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature*. Cyber bullying is defined by Wikipedia as a deliberate act of aggression using technological advances such as internet to cause harm to a person. This aggression can be repeated, deliberate hostility. Cyber-bullying occurs "when the Internet, cell phones or other devices are used to send or post text or images intended to hurt or embarrass another person" (http://en.wikipedia.org/wiki/Cyber-bullying).

Cyber bullying causes grave harm to an individual or group of people by exposing their personal data, real names and addresses to criminals with malicious intent to the targeted individual or group. Cyber bullying can include such acts as making threats, sending provocative insults or racial or ethnic slurs, gay bashing, attempting to infect the victim's computer with a virus, and flooding an e-mail inbox with messages (WatIs.com).

According to Olweus, (1986, 1993) the following are some symptoms of victims of cyber bullying:

- 1. Anxious, insecure, unhappy and have low self-esteem
- 2. Cautious, sensitive, quiet, withdrawn and shy
- 3. Depressed and engaged in suicidal ideation much more often than their peers
- 4. Do not have a single good friend to discuss problems.
- 5. Often physically weaker than their peers in the school.

The following are some characteristics of cyber bullies:

- 1. Often involved in other antisocial activities such as drug use.
- 2. Impulsive and easily angered
- 3. Strong need to dominate other students.
- 4. Show little empathy toward students who are victimized
- 5. Often physically stronger than other students in the class.
- 6. Often defiant and aggressive, including to parents and teachers.

Cyber bullying also happens when a person's name is used to publish undesirable materials online, thus causing character assassination of the victim. Character assassination can be done through e-mail, chat room, sms, calls, social network, twitter, MySpace, Facebook, discussion boards, on-line forums, blogs, instigation and rumors. Recent findings indicate that cyber bullying is becoming a pervasive problem around the world and it is increasing alarmingly. (John, 2011). The psychological effects of cyber bullying in our society and institutions cannot be ignored any longer (Bulent, 2009). As the social networking domain expands in cyber space, it inevitably creates more opportunities for cyber criminals to victimize young, unsuspecting internet users (Allison, 2009). Research findings have shown that cyber bullying causes emotional and physiological damage to defenseless victims. (Yavuz, 2010).

SIGNIFICANCE OF THE RESEARCH

- 1. The finding of this research provides up to date information about the nature and extent of cyber bullying among the university students.
- 2. The finding of this research will assist the university authorities, lecturers and parents to take more effective steps to combat cyber bullying.
- 3. Records of interviews, observations and questionnaires are valuable assets for future researchers in finding workable solutions to cyber bullying.

METHODOLOGY

This research applied a triangulation method to carry out the investigation. Data were collected using quantitative, qualitative, observation and descriptive methods. The study applied direct or passive observation in the investigation. In passive observation the researcher has no influence on the students. The qualitative method was used to collect and analyze data while the quantitative method was used to further strengthen the qualitative data. In research it is better to use both eyes rather than one (Thompson, 2004). Research further indicates that qualitative methodology is very naturalistic and conducted in real time with the investigator in control (Bogdan & Biklen, 2003; Golafshani, 2003). Faryadi, 2010).

POPULATION AND SAMPLE

This study was conducted at a university level in Malaysia. Student enrolment was around 8,000 students (at the time of writing); 365 first year students were randomly chosen to participate in the study. Students' parents were given special questioners so that their feedbacks might reveal significant information about their children's unusual behavior.

INSTRUMENTS

The data for this study were collected through the following instruments: (1) Questionnaires for students' parents; (2) Questionnaires for students; (3) Interviews with selected students; (4) Observation of participants and field notes.

VALIDITY AND RELIABILTY OF THE INSTRUMENTS

Even though the questionnaires used in this study were derived from a well known psychologist and theorists, the researcher submitted the questionnaires to a panel of linguistic experts and English Language experts for their perusal. Furthermore, copies of the research questions, problems, goals, objectives were also submitted to these professionals for further advice. The feedback obtained from these experts was useful for increasing the validity of the instrument. A set of reliability tests was also conducted to determine the Cronbach's Alpha reliability coefficient. The Cronbach's Alpha reliability coefficient was noted at .945, indicating that all the instruments used in this study were satisfactory and reliable.

DATA COLLECTION PROCEDURE

The instruments for the study were administered by the researcher. All the data in the questionnaires were also personally collected by the researcher. The whole process took one week.

DATA ANALYSIS PROCEDURE

The framework for data analysis in this study was adopted from the model developed by Miles and Huber man (1994) to describe the major phases of the data analysis. The primary tools used to analyze collected data were the Statistical Package for Social Sciences (SPSS version 16.0) and Microsoft Excel to determine means, standard deviations, frequencies, counts and percentages of the data. A combination of deductive and inductive analyses was used to organize the collected data. Data were then categorized and meaningfully reconfigured. Crucial data were selected and focused, simplified and abstracted for easy comprehension. Data conformity and validity were verified. Data were cross-checked several times to determine their validity and reliability.

RESULTS

The results signify that cyber bullying indeed affected students academically as well as emotionally. Ninety-five percent of the participants (95%) denoted that they were scared and worried about cyber bullying in the classrooms. The majority of the respondents 300(85%) were of the view that if concrete action was not taken to curb cyber bullying, many students would be affected emotionally. Furthermore, the majority of the respondents 255(70.8%) held the view that cyber bullying had an adverse effect on the victims' academic performance. Data collected from the parents 55 (22%) indicated that their children are worried without apparent reasons. Parents further indicated that they suspect cyber bullying might be the main cause of their mood change. Few parents (10%) designated that their children are depressed most probably due to cyber bullying.

Results from observation specify that 35% of the population in the class showed sign of worries on their faces. The instruments used to collect data were video recording, note taking and digital photography. Many extra ordinary incidents such as students' gesture, facial expressions and body languages are simply self-explanatory about difficulties they face in the class.

SUMMARY OF THE RESEARCH INSTRUMENTS AND THE RESPONDENTS

No	Instruments	Respondents	Sample	Collection
1	Questionnaire	Parents	360	250 (69.4%)
2	Questionnaire	students	360	300 (83.3%)
3	Interviews	Students	50	50 (100%)
4	Observation	Students	360	100%

Table 1 Summary of the Research Instruments and the Respondents

Table 1 shows the summary of the instruments and the responses. It is interesting to observe that the data collection was smooth and satisfactory. Results indicate that out of 360 parents 250 (69.4%) agreed to participate in the study while out of 360 students 300 (83.3%) were took part in the research. Unstructured interviews were conducted to determine the effect of cyber bullying in their academic performance. Students were divided into five groups for better communication and management.

It is worth mentioning that the questions tendered to the participants were not formal questionnaires. The prime purpose of having informal questions was to make participants feel free and keep talking. Majority of the participants (85%) interviewed indicated that cyber bullying indeed affects students academic performance such as their grades. To a question do you think bullying causes students to suffer psychologically and emotionally? Majority of the participants (99%) were of the view that bullying in fact causes psychological and emotional effects on students. To another question do you think bullying can affect students' academic performance such as grade? 99% of the participants viewed cyber bullying indeed affects students' performance in the exam.

A two- hour observation was undertaken in the lecture hall to critically observe students behavior change. Results from observation and field notes indicated that there was no specific or immediate mood change in the classroom. However, when students went out of the classroom, observation showed sign of worry on their faces as some looked confused.

STUDENTS PARTICIPANTS BY GENDER

Boys	Girls	Age	TOTAL		
35	325	21	360(100%)		
DADENTE DAY GENDED					
PARENTS BY GENDER					
Male	Female	Age	Total		
125 (50)	125 (50%)	43	250 (83.3%)		

Table 2 student participants by gender.

Table 2 points out that majority of the participants are 21 years old female while parents participants were intentionally chosen equally. Table 3 also shows significant number of students $N=360 \ (100\%)$ and their parents $N=250 \ (83.3\%)$ has participated.

STUDENTS CLASS OBSERVATION AND CHECKLIST RESULTS

Table Class

No	Evaluation Criteria	Responses
1.	Did the students enter the class in a happy mode?	(No)
2.	Did the students pay attention to the teacher?	(No)
3.	Did the students ask any questions during the lesson?	(Yes)
4.	Were the students motivated in the class?	(No)
5.	Did the students retain the lesson and continue to learn?	(No)
6.	Did the students remain happy in the class?	(No)
7.	Did the students understand the lesson?	(Yes)
8.	Did the students complain about class condition?	(Yes)
9.	Were the students confident in the class?	(No)
10.	Did the students annoy the teacher? (Mood change)	(Yes)

3

Observation Results

The above class observation and checklists signify that majority of the responses 60% (6 out of 10) were negative based on pre determined checklists. It is interesting to note that only 4 out of 10 (40%) are positive. It shows that majority of the students were not happy in the class perhaps due to some sort of emotional disturbance (Cyber Bullying).

SUMMARY OF IMPORTANT QUESTIONNAIRES FOR STUDENTS 1

	Do you think bullying causes students to suffer psychologically and emotionally?	Do you think bullying can affect students' academic performance such as grade?	Have you ever been cyber bullied inside the University?
Yes	300 (85%)	255 (70.8%)	35 (13.8%)
No	60 (5%)	55 (15.2%)	300 (83.3%)
Sometimes	0%	0%	0%
Most probably	0%	0%	5 (1.3%)
Once or twice	0%	0%	20 (5.5%)

Table 4 summary of important questionnaires for students 1

Table 4 signifies that majority of the respondents 300 (85%) agree that bullying indeed causes devastating impact on students emotion and equally causes unimaginable psychological problems among the youths. It is of value to note that majority of the students 255 (70%) agreed that cyber bullying has a negative effect on students academic performance while only 55 (15.2%) have indicated to the contrary. A significant number of participants 35 (13.8%) have mentioned that they indeed been bullied by cyber criminals inside the university. 20 (5.5%) of the respondents clarified that they been bullied by cyber criminals at least once or twice inside the university. Only 5 (1.3%) respondents designated that most probably they had been bullied.

SUMMARY OF IMPORTANT QUESTIONNAIRES FOR STUDENTS 2

	Have you bullied anyone inside the university?	Have you ever bullied anyone outside the University for Fun?	Have you ever heard of bullying taking place inside the university? (Yes/No)
It has only happened once.	20 (5.5%)	26 (7.2%)	75 (20.8%) Yes
2 or 3 times a month.	60 (16.6%)	4 (1.1%)	21 (5.8%) NO
Several times a week.	1 (0.27%)	4 (1.1%)	
I never had been bullied.	80 (22.2%)	80 (22.2%	

Table 5 summary of important questionnaires for students 2

Table 5 shows that 20 (5.5%) of the respondents were of the view that they have bullied someone inside the university while 26 (7.2%) of the respondents clarified that it (bullying) had happened at least once. 60 (16.6%) of the students agreed that they have bullied someone at least 2 or 3 times a month while majority of the participants 80 (22.2%) indicated that they have never bullied anyone inside the university. It is interesting to note that 4 (1.1%) of the respondents indicated that they have bullied someone several times a week.

SUMMARY OF IMPORTANT QUESTIONNAIRES FOR PARENTS

	Does your child come home in a happy mode?	Does your child annoy you in the house? (Mood change)	Does your child complain that she/he is being bullied in the university?
Yes	200 (80%)	55 (12%)	15 (6%)
No	50 (20%)	150 (60%)	150 (60%)
Sometimes	0%	0%	0%
Once or twice	0%	0%	0%

Table 6 summary of important questionnaires for parents

Table 6 explains that a significant portion of the respondents 50 (20%) agreed that their children comes home not happy while the majority of the respondents 200 (80%) signified that their children comes home in a happy mood. It is important to note that 55(12%) of the respondents indicated that their children experience mood change in the house while 150 (60%) said that they did not notice any behavioral change on their children in the house. It is interesting to note that 15 (6%) of the parents indicated that their children complained that they are being cyber bullied in the university while majority of the parents 150 (60%) indicated not.

CONCLUSION

This study revealed that university students were not spared the detrimental effects of cyber bullying. The authorities at universities should take steps to curb cyber bullying. Victims of cyber bullies suffer from emotional and psychological stress, and inevitably their grades will deteriorate. Institutions, teachers and parents must realize that cyber space is a risky place and must take effective steps to protect the victims. The following steps are needed to protect students from becoming victims of cyber criminals:

- 1. Identify cyber bullying problems in the university and discuss the problem with the students and their parents.
- 2. Appoint internet safety team in the university to monitor internet activities.
- 3. Create bullying prevention policies that include lessons on cyber bullying.
- 4. Make rules and regulations for acceptable use of technology. Get students, teachers and parents to sign a pledge to report cases of cyber bullying.
- 5. Provide educational materials for parents and students on Internet safety.
- 6. Ensure that cellular phone policies are enforced consistently.
- 7. Encourage students to participate in programs that outline internet responsibilities.
- 8. Develop a program for senior students to teach younger students about Internet safety.

IMPLICATIONS OF THE STUDY

Policy makers have an important role to play in re-shaping the University for the Better. Users, lecturers as well as Education Ministry must support university policy makers to redesign a system that can help students overcome their fear while in cyberspace. The findings of this study indicate that communication between students, parents, teachers and the University is not strong to fight cyber crimes. Malaysian policy makers should support university planners by providing them with state of the art technology and funds to continue their fight against cyber criminals. The following are some constructive suggestions:

- 1. Support and create an environment that protects students from cyber criminals all the time.
- 2. Support the creation of an environment that offers confidence to the students.
- 3. Support the allocation of funds for buying technology so that students can be protected.
- 4. Support and provide sovereignty in information technology faculty so that they decide what to buy to fight crimes in cyberspace.

LIMITATIONS OF THE STUDY

The results of this study are subjected to the following limitations: First, this research conducted only on first year students with 350 samples. As thus, the results cannot be generalized. Further investigations are needed to examine how other students such as masters and PhD students are coping with cyber bullying. Second, further examinations are necessary with longer period of time as well as more samples to test whether cyber bullying indeed affected them academically. Third, it is beyond the control of this research to avoid human factor such as bias to cyberspace and affected students.

REFERENCES

Beebe, J. Elizabeth, (2010). The Prevalence of Cyber Bullying Victimization and Its Relationship to Academic, Social, and Emotional Adjustment among College Students. ProQuest LLC, Ph.D. Dissertation, University of Northern Colorado.

Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative Research for Education: An introduction to theories and methods* (4th Ed.). PP. 4-7, Boston: Allyn and Bacon.

Bulent,. D. (2009). Psychological Needs as a Predictor of Cyber Bullying: A Preliminary Report on Students, Educational Sciences: Theory and Practice, v9 n3 p1307-1325.

Faryadi, Q. (2010). Developing an Effective Interactive Multimedia Instructional Design to Teach Arabic Language, p. 80, Al-Mehrab e-Publisher, Kuala Lumpur, Malaysia,

Faye, M.; Cook, C.; Saini, M. I; Wu, Meng-Jia; MacFadden, R. (2011). Interventions to Prevent and Cyber Abuse of Youth: A Systematic Review, Research on Social Work Practice, v21 n1 p5-14.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-606.

Hanson, W. Creswell, J. Plano; Kelly and Creswell, D. (2005). Mixed Methods Design in Counselling Psychology. *Journal of Counselling Psychology*, *52* (2), 224-235.

John., S. Van, A., Richard; Gable, R. A., (2011). Cyberbullying: Prevention and Intervention to Protect Our Children and Youth. Preventing School Failure, v55 n2 p88-95

Juliana, R. (2010). Text-Bullying: Associations with Traditional Bullying and Depression among New Adolescents. *Journal of School Violence*, v9 n1 p74-97 2010

Kowalski, R. M.; Fedina, C. (2011). Cyber Bullying in ADHD and Asperger Syndrome Populations. Research in Autism Spectrum Disorders, v5 n3 p1

Lauren, M.; Ratliffe, K. T., (2011). Cyber Worlds: New Playgrounds for Bullying, Computers in the Schools, v28 n2 p92-116.

Michel, W. Heirman, W. (2011). Cyber bullying: Predicting Victimisation and Perpetration, Children & Society, v25 n1 p59-72.

Miles, M.B, and Huberman, A.M. (1994). *Qualitative Data Analysis*, 2nd Ed., p. 10-12. Newbury Park, CA: Sage.

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Olthof, T.; Goossens, Frits A.; Vermande, Marjolijn M.; Aleva, Elisabeth A.; van der Meulen, Matty, (2011). Bullying as Strategic Behavior: Relations with Desired and Acquired Dominance in the Peer Group. *Journal of School Psychology*, v49 n3 p339-359 Jun 2011

Olweus, D. (1996). Bullying In Schools: Facts And Intervention, Research Centre for Health Promotion, University of Bergen, Norway

Patchin, Justin W.; Hinduja, Sameer, (2011). Traditional and Non-traditional Bullying among Youth: A Test of General Strain Theory. Youth & Society, v43 n2 p727-751 Jun 2011

Susan., D.; Butler, C., W.; Emmison, M. (2011). "Have You Talked with a Teacher Yet?" How Helpline Counsellors Support Young Callers Being Bullied at School, Children & Society, v25 n4 p328-339.

Thompson, P. (2004). Researching Family and Social Mobility with Two Eyes: Some Experiences of Interaction between Qualitative and Quantitative Data. *International Journal of Social Research Methodology*, 7 (3), 237-257.

Watson, Scott E. J.; Vannini, N. Woods, Sarah; D., Kerstin; Sapouna, Maria; Enz, Sibylle; Schneider, W.; Wolke, D.; Hall, L.; Paiva, A.; Andre, E.; Aylett, R., 2010). Inter-Cultural Differences in Response to a Computer-Based Anti-Bullying Intervention, Educational Research, v52 n1 p61-80

Wong-Lo, Mickie; Bullock, Lyndal M. (2011). Digital Aggression: Cyber world Meets School Bullies, Preventing School Failure, v55 n2 p64-70

Yavus, A.; Sahin, Y., Levent; Eristi, B., (2010). Cyber bullying Victimization among Turkish Online Social Utility Members, Educational Technology & Society, v13 n4 p192-201.