Assessing Cyberbullying in Higher Education

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Abstract

This project aims to expose information educators to various aspects of cyberbullying for the purpose of policy development in an environment of higher education. The preponderance of nation-wide research on cyberbullying is concentrated on adolescents; such efforts in college campuses are limited to individual endeavors. Cyberbullying research on college campuses lacks a unified definition of the concept. Although the states mandated most school districts to develop and enact some sort of policy, the law is silent on the college level cyberbullying. According to the literature, *cyberbullying* is reserved for adolescents; however, *cyber-harassment* or *cyberstalking* are related to adults. While cyberbullying shares with conventional bullying intimidation, aggression, and harm, it is unique because 1) the encounter is not face-to-face; 2) the perpetrator can employ varied means (e.g., cell-phones, texts, blogs, Internet, social media, etc.), and 3) the act can be undisclosed. The data was collected from a random sample of 511 students (out of a student population of approximately 6,000) in a Midwestern town by employing self-administered questionnaire. It was found that engagement with different social network groups and online communications with those with questionable identity are good predictor of increased vulnerability to the risks of being victimized. The data suggests being victimized leads to victimization. Although males differ from females in terms of the type and the extent of cyberbullying, no significant difference was found among the categories of student status or their class ranks.

Keywords: cyberbullying, cyberstalking, cyber-harassment, IT Policy, assessment

1. INTRODUCTION

The intention in this project is to provide educators in higher education information on the misuse information system that are potentially harmful. One such danger is cyberbullying. Dan Olweus, a Belgian professor of psychology at the University of Bergen in Norway, was the first person who attempted to systematically study bullying in the 1970s (Neves & de Oliveira, 2010). Harmful consequences of bullying (e.g., suicide, death, or injuries) inspired many to pay closer attention to it as a serious issue. Bullying is "peer abuse" (Englander, 2008), which is a form of power imbalance between actors (Olweus, 1993), which results in one (the bully) dominating the other (the victim) by degrading or intimidating through inflicting physical, verbal, and/or psychological harm as an avenue to gain superiority (Donegan, 2012).

Bullying can be found in all types of social environments; and, can be pornographic or sexual, hostile name calling, or *flaming.* Bullying has symbolically kept pace with the advent of information technology and the worldwide use of electronic devices. Hawkins, Pepler, and Craig (2001) have estimated that slightly over 80% of Internet users either have experienced or witnessed electronic (or cyber) bullying. As much as the internet and other forms of communication technology have enabled global interactions, they have equally exacerbated vulnerability to harm either symbolic or via direct interactions (Jäger, Amado, Matos, & Pessoa, 2010). The availability of mobile devices and access to the Internet have provided more

amenable means for communicating forms of verbal attacks (e.g., insult, rumors, name calling, threat) and/or social assail (e.g., intimidation, humiliation, isolation, degradation).

Cyberbullying, similar to face-to-face bullying, is not occasional or accidental; in many instances it is deliberate and continuous. It is not clear who is vulnerable as a victim, but the preponderance of the research is conducted on adolescents; research on cyberbullying in colleges and universities is lagging behind. For example, with the exception of the National Crime Prevention Council, which only explained the nature, definition, and strategies to confront cyberbullying, which also targets adolescents, a national and officially sponsored survey of cyberbullying in post-secondary education has received little attention. Research on collegiate level cyberbullying is also limited (Piotrowski & Lathrop, 2012; Zacchilli & Valerio, 2011); and the findings are diverse. The preponderance of the available information on college students is generated by independent researchers (e.g., Finn, 2004; Molluzzo & Lawler, 2013 and 2012; Smith & Yoon, 2013; Reyns, Henson, & Fisher, 2012; Hinduja, & Patchin, 2007; Walker, Sockman, & Koehn, 2011). Moreover, the diversity in conceptualization might have confused the issue that instances of bullying may not occur on college campuses. These points strongly confirm the need for more research on cyberbullying on college campuses.

Thus, exploring the extent of cyberbullying in colleges is an important endeavor that will contribute to our understanding of the issue more fully, and will help educators identify and prevent these occurrences. Hence, the current study proposes to add to the body of knowledge on cyberbullying by exploring the issue among college aged young adults, their experiences, and their reactive responses to the situation. The purpose is to explore the challenges that college students face when experiencing cyberbullying. This study further intends to inform the audience the elemental variables in victimization risk so that educators and university administrators can provide a safe learning environment for their students.

2. LITERATURE REVIEW

Information technology has transformed information diffusion in an unprecedented manner, both constructively and destructively, with a comfort level that remained vulnerable to misusing or abusing the technology. One of the main reasons for this duality is the Internet's open door that encourages privacy and security issues, and the assumption that *everything goes on the Internet*. Bullying is among the issues that has not been immune to this. The sheer volume of the attention paid to this issue has placed cyberbullying among top legal issues—such as guns and hazing—on college campuses (Gilroy, 2013).

The literature suggests that cyberbullying is increasingly becoming epidemic. For example, a recent Pew project (Pew Internet & American Life Project, 2007) estimated that approximately one-third of all teenagers have been victimized. A parallel finding by the US Department of Education (2011) also verified 1,521,000 such instances that were experienced by adolescents ages 12 through 18 in 2009. The 2011 Youth Risk Behavior Surveillance Survey (Center for Disease Control and Prevention, 2011) also found that "16% of high school students (grades 9-12) were electronically bullied" in the year that preceded the survey. In line with these findings, Spitzberg and Hoobler (2002) also reported that one-third of undergraduate students in their sample were being stalked over the Internet.

There are many reasons for the spread of cyberbullying. For example, Pratto, Sidanius, and Levin (2006) resorted to "social dominance theory" (i.e., discrimination that favors the dominant group) and asserted social dominance in terms of age, gender, and other arbitrary set of systems that act as harbingers for exerting power. Dominance is a group dynamics, a socio-political phenomenon, which is a verification of the disproportionate arbitration or power. In the cyberspace, bullying (or any other type of aggression) may not be explained by Pratto et al.'s theorization since aggression in the cyberspace is an indistinguishable act according to age or gender, therefore leaving the victim with a series of guesswork about the perpetrator's identity. In addition, these authors left out the social class or race issues in their *dominance* equation.

Hoff and Mitchell (2008) have found that cyberbullying among adolescent stems from negative experiences such as bad relationship, break-ups, envy, intolerance, and ganging up. Shariff (2006) saw a pattern of encouraging others to engage in sending the victim a series of persistent messages on a regular basis. When others (e.g., Donegan, 2012; Eslea & Mukhtar, 2000; Hoover & Olson, 2001; Le, 2006) tried to draw parallels between traditional bullying and

cyberbullying, they found more incidents of bullying and physical aggression among males than females; females tend to be verbally reactive (Hoff & Mitchell, 2008). Although there is a significant correlation between cyberbullying and anonymity (Aricak, 2009), female victims tend to reveal their experiences (Li, 2006). Unless the victim has knowledge of the perpetrator, the anonymity of the perpetrator and the lack of physical proximity in the cyberspace hinders physical reactivity by male victims (Baldasare, Bauman, Goldman, & Robie, 2012).

Whether these findings can be generalized to college students is debatable. For example, Chapell et al. have argued that because of the diversity in conceptualization, research findings on cyberbullying behavior cannot be generalized from one setting (e.g., elementary and high school) to another (e.g. College) Hoff and Mitchell's (2008) study of adolescents revealed more instances cyberbullying among White children than any other racial categories; MacDonald and Roberts-Pittman (2010) did not find significant differences in race when the sample shifted to the college-age respondents. Smith and Yoon (2013) also reached similar conclusions regarding the experiences of college students. These studies also suggest that incidents of cyberbullying in colleges may be veiled, and that the maturity level of college students in handling the situation may hinder the actual officially reported occurrences of the events, which may not protect them against tragedies. An issue of concern here is the term "bully," which may convey an adolescent connotation, whereas the situation with adults is characterized more so based on "harassment" or "cyberstalking," which could dilute the issue at hand. Brown (n.d.) claims that college students are more vulnerable to cyberstalking because of the availability of e-mail addresses.

Because cyberbullying is on the rise, some states have enacted laws targeting cyberbullying. State laws, however, lag behind technology. Cyberbullying laws are developed based on the assumption that the existing laws against personal threats and harassment are applicable to cyberbullying (Purusothaman & Rani, 2014). The common thread in these laws is their reference to direct and indirect harm that can be inflicted upon an individual because of employing electronic devices. States that have passed cyberbullying laws mandated school districts to develop anti-cyberbullying policies that would comply with the state and federal laws.

In a summary collection of the state law sponsored by Cyberbullying Research Center, Hindjua and Patchin (2014) evinced that all states (except Montana) and the District of Columbia have enacted "bullying" laws as of February 2014. However, the laws in 26 states do not include the term *cyberbullying* per se; these states have incorporated other terms such as *cyberstalking* or *electronic harassment* interchangeably with cyberbullying. All but three states (Alaska, Montana, and Wisconsin) have included laws that explicitly focus on *electronic harassment* or *cyberstalking*. Thus, the states do not convey a uniform vocabulary concerning cyberbullying; often their contents vary according to whether it is cyberbullying, cyber-harassment, or cyber-stalking. The statutory emphasis is on the mental state of the accused and the reaction of the victim (Fukuchi, 2011). Moreover, according to Hindjua and Patchin (2014), there is no federal law specifically on this issue, but instances of racial, ethic, sexual, religion, and disability harassments are treated as bullying.

A few states (e.g., Idaho, Illinois, and Hawaii) have explicitly mentioned cyberbullying as a form of misdemeanor and punishable by law, but the extent of punishment has not been set by more than forty states. Many states that have specified punishment suggested either extended suspension or expulsion; others gave the school officials more discretion on how to handle such issues. These states also held parents liable to pay $100 in fine—which is ironic given the consequences of cyber-bullying. There are also other forms of reactions: the Mississippi legislature insisted on peer-mediation; Louisiana enacted pay counseling; Tennessee enforced the harshest punishment: up to one year imprisonment and $2,500 in fines for making threats.

Three points are noteworthy in the above content analysis of the law: 1) states have not articulated a uniform legal standard; 2) they do not address whether the state law should include incidents occurring outside of the school compound; and 3) the target audience seems primarily adolescents. This is paradoxical because, according to the Working to Halt Online Abuse (WHOA) Website, approximately 38% of cyberstalking victims in 2013 were between the ages of 18 and 29, which is the age cohort for the majority of college students, which should make the concerns for the cyberbullying/stalking on college campuses more urgent.

Another issue with cyberbullying on college campuses is that many institutions do not have an established Internet violence or harassment policy in place; if such policies exit, they seem lax because of the absence of a mandatory legal punishment. One reason for the absence of cyberbullying policies on college campuses is the absence of a direct mandate in the state law; colleges and universities are not obligated to enact policies in this regard. The tendency for the state to separate itself from the internal affairs of the universities is an old tradition in the U.S. judicial system whereby courts do not impose duties on colleges regarding their students (Barr & Lugus, 2011). This is inconsistent with *in loco parentis* (Barr & Lugus, 2011), which sanctions colleges to protect students based on the knowledge that an injury is foreseeable. The national experiences with cyberbullying or cyberstalking on college campuses point to predictable outcomes, yet the laws are silent concerning the incidents on college campuses.

There are also two other issues that should concern instructors and school officials: 1) the court is ambivalent regarding whether the incidents occur on- or campus off-campus; and 2) "the application of the policy could easily reach constitutionally protected speech in light of the ambiguous nature of the term 'abuse'" (Dryden, n.d.). According to Davies and Lee (2008), US bully or harassment laws are stronger when they are directed to adolescents than to college students; the latter are considered adults. These authors further argue that elementary and secondary school officials enjoy greater power than university officials since college students are legally adults.

In summary, studies of cyberbullying have generated diverse results. Some researchers (e.g., Kowalski & Limber, 2013; Pieschl, Porsch, Kahl, & Klockenbusch, 2013) have perceived cyberbullying as an extension of conventional bullying in terms of the intention to harm; others (e.g., Smith, Mahdavi, Carvalho, & Tippett, 2006) contend that cyberbullying shares with traditional bullying patterns such as intimidation, aggression, and harm; however, it is unique because of anonymity, the perpetrator can employ varied means (e.g., cell-phones, texts, blogs, Internet, social media, etc.), and can be undisclosed. A controversial issue here is the comprehension of the message received by the target—there is always the possibility that a message may be misread and misinterpreted; and that the *bully* may not be aware of offending someone else (Menesini & Nocentini, 2009).

3. METHODOLOGY

Sample and Data Collection

The data was collected from a random sample of 511 students (out of a student population of approximately 6,000) during the Fall, 2013 semester, by employing self-administered questionnaire. Because a sampling list was unavailable, a random sample of the day and the time slots when the courses meet was generated. Classes that met on Monday, Wednesday, and Friday 10:00-10:50 were randomly selected; they constituted the working sample and the data source. Selecting the participants from only this time slot avoided duplicating participation—hence, increasing reliability. The sample was slightly 10% of the theoretical population, which is sufficient enough to warrant reliability (Monette, Sullivan, & DeJong, 2010; Neuman, 2011).

Validity was ensured by piloting the questionnaire on 20 randomly selected undergraduate students. Problematic questions were eliminated; vague questions were modified and rephrased. Statistically significant bivariate correlation ($p \leq .05$) among items reflected internal consistency. The final questionnaire included 32 items that measured demographic information such as sex, class or student status; frequency of using information technology and social network participation; and the experience with cyberbullying (either as victim or victimizer).

The sex composition of the sample is slightly skewed (35.8% males and 64.2% females). However, students are more equitably distributed among the categories of Class Rank (25.7% Freshmen, 28.1% Sophomore, 21.5% Junior, 23.3% Seniors, and 1.4% Other). Also, the sample closely reflects the national patterns of distribution between traditional students (78.9%)—typically 18-24 years of age who enters the university with no delay from high school, may work part-time, is financially dependent on other sources (Deil-Amen, 2011)—and non-traditional students (21.1%).

Theoretical Framework and Hypotheses

Approached to research on cyberbullying is diverse. This does not allow for a universal theory of cyberbullying. Despite the emphasis on demographic factors, the literature is silent on the salient of vulnerability. Thus, this research verifies how technology as a platform for global interactions has exacerbated vulnerability to exposure and harms either directly or symbolically by using any digital communication

devices or the Internet as a means of intimidation, harassment, degradation, threats, or posting hurtful or harmful information about someone else (Willard, 2004). The frequency of using digital communication devices increases vulnerability—i.e., susceptibility to threats and the resulting discomfort or danger. The following hypotheses aim to test the above assumption:

Hypothesis 1. Cyberbullying experiences (whether being victimized or victimizing others) differ according to the sex, class rank, and the student status of the respondents.

Hypothesis 2. Increased engagement with different social network and Internet groups increases vulnerability or the risk of being victimized.

Hypothesis 3. Communicating with those with questionable identity in social networks increases vulnerability or the risk of being victimized.

Hypothesis 4. Victims of cyberbullying are more likely to resort to cyberbullying and become perpetrators.

Variables and Measure

Two additive scales measured the relevance of cyberbullying to college students' experiences: 1) *Cyberbullying Experiences (being victimized)*; and 2) *Attempts to Cyberbully (Victimizing)*. The experience of *being victimized* reflects vulnerability, which is measured in terms of susceptibility to threats and experiences of discomfort due to threats, defamation, and harms. *Cyberbullying Experiences* was measured by a 6-item scale; each reflected an aspect of vulnerability—e.g., whether harassed, received threatening messages and hurtful posts, and was intimidated via receiving phone calls, texts, and/or e-mails. Chronbach's *a* for this scale was .71, which ensures reliability. 2) *Attempts to Cyberbully* was also measured by 5 items. The survey questions focused on: sending negative or hurtful texts, posting negative information, and posting or texting threats of physical harm. Chronbach's reliability test for this scale was .67. Although not a cause for concern, items in this scale were cross-checked for internal consistency via bi-variate correlation analysis—all were statistically significant at $p< .01$. A 5-point Likert scale measured the variables, which were recoded into three categories ranging from "high" through "medium" to "low". Spearman's Rho measured the bivariate correlations between the variables because of their ordinal level of measurement.

4. ANALYSIS AND FINDINGS

The first layer of analysis examined the variations in the student experiences of being victimized, their attempts at victimizing someone else, and comparing these aspects according to different categories of sex, class ranks, and student status. The data indicates that a good number of college students are targeted for electrnic harassment and defamation on the social networks: 15.7% of them regularly receive intimidating e-mails during a normal week; 14% experienced intimidating phone calls from those whom they know in their social networks; and 15.3% have been frequently harassed on Facebook or other social networks during a normal week. According to the data in Table 1 (Appendix A), the experiences of being cyberbullied are statistically correlated with Sex and student Status (Rho= .11, p=.01; Rho=.10, p=.04, respectively). Further analysis indicates no significant difference between the sexes or among the class ranks: the χ^2 tests of the difference were significant at p>.05). Also, nontraditional students expressed higher incidents of being victimized in terms of receiving threatening e-mails (χ^2=8.131, p=.02) and phone calls (χ^2=8.677, p=.03) in various social networks. Non-traditional students are often intimidated by the frequency of the media usage by the younger generation—particularly, when school requirements are communicated via texts, Instagram, or Facebook instead of the university provided means.).

Regarding *Attempts to Victimize,* an overwhelming majority of the participants (80.2%) expressed that they are concerned about the effects that their online posts will have on others. As a result, they are very careful about what they post lest they are misinterpreted. Yet, during the month prior to the survey, 14.2% of the respondents reported that they had occasionally or frequently posted harmful/hurtful information concerning others; 23.6% sent e-mails with harmful/hurtful information concerning others; only a smaller number (6.0%) e-mailed another individual or posted messages with intent to physically harm him/her. These are textbook examples of assault—i.e., act in a threatening manner that puts another person in fear of immediate harm (FindLaw, n.d.). A common denominator that qualifies these acts as criminal behavior is the intention to harm. Thus, by definition, the criminal intent to harm someone is present in the behavior of a sizable portion of college students.

Furthermore, the data shows a statistically significant difference between the sexes in regard to the concern about the negative effects that one's posting may have on others ((χ^2=6.939, p=.03). More female respondents than the males expressed concerns about the effects that their postings may have on others. No sex differences were observed in regard to posting harmful/hurtful information online ((χ^2=3.075, p=.21), or sending harmful/hurtful e-mails to someone ((χ^2=0.746, p=.68). Although female participants seemed to be concerned about the contents of what they post, they seemed more inclined toward sending harmful or hurtful texts (χ^2=8.056, p=.01), and posting threats of physical harms (χ^2=5.907, p=.05). This contradiction is peculiar and needs further study on the reasons for this paradox. Also, the behavior difference between the males and the females in terms of texting versus e-mail is unclear. However, both the males (61%) and the females (67.5%) seemed equally inclined toward confronting the bully. Overall, the findings in this study correspond with the findings in the literature: more physically reactivity by the males, and verbal reactivity by the females (Hoff & Mitchell, 2008).

The data further suggests no statistically significant difference between traditional and nontraditional students in terms of the concerns about the negative effects that one's postings may have on others (χ^2=5.525, p=.06), the frequency of posting something harmful or hurtful information about someone else (χ^2=4.446, p=.10), the frequency of sending harmful/hurtful texts (χ^2=1.959, p=.37), the frequency of sending harmful/hurtful e-mails (χ^2=1.062, p=.44), and the frequency of posting threats of physical harm (χ^2=1.284, p=.52). A similar patterns was also observed on the relationship between a student's academic rank and the variables of *Attempts to Cyberbully* (i.e., no statistically significant behavioral differences among Freshmen, Sophomores, Juniors, and Seniors), except for the frequency of sending harmful/hurtful texts (χ^2=15.079, p=.05).

Close to 95% of the respondents actively participate in blogs, chat-rooms, Interne and social network groups. The data in Table 1 (Appendix A) points to a positive and statistically significant (although weak) correlation between vulnerability to being cyberbullied and the number of social network groups to which one belongs (*Rho*=.12, p=.008). Despite the weak correlation between the two variables, increased engagement with different social network groups is a good predictor of increased vulnerability to the risks of being victimized: there is a greater chance of being cyberbullied when the increased engagement in social network groups. Thus, the empirical data supports Hypothesis 2.

One of the biggest issues in cyberbullying is anonymity and questionable identity of the perpetrators. Although 74% to 79% of the respondents expressed trusting the identity of others in their social network groups, a great many (64.3%) frequently question the authenticity of the identity of those with whom they communicate on the Internet. Whereas only 33% of the participants who know the identity of their group members reported being cyberbullied, 46.6 of those who question the identity of their group members experienced being cyberbullied. Statistics in Table 1 (Appendix A) support the hypothesis that communicating with those with questionable identity in online social networks increases vulnerability to being cyberbullied. Although the correlation between awareness of questionable identity of online social group members and experiencing cyberbullying is weak (Rho=.12), this correlation is statistically significant at p=.008 (Table 1, Appendix A). Thus, knowledge of the identity of the members of the social network groups can help us understand vulnerability to cyberbullying. These findings support Hypothesis 3.

Lastly, further tests indicate that victims of cyberbullying are more likely to become cyber-perpetrators. According to the data in Table 1 (Appendix A), the is a fairly strong and statistically significant correlation between being victimized and attempts to victimize someone else (Rho=.24, p<.001). Although the frequency by which one is bullied or bullies someone else varied from case to case, close to one half of those who were cyberbullied (46.3%) attempted to electronically bully someone else either by posting harmful information on the social media, or by sending intimidating or threatening messages via e-mails or texts. Conversely, 77.1% of the respondents who have never been cyberbullied did not attempt to bully some else. The above data supports Hypothesis 4, and corresponds with the findings in the literature.

Although the above bivariate tests delineated the effects of the correlates of cyberbullying, this study employed multiple regression as the second layer of analysis to test the hypotheses (Table 2, Appendix A). Prior to this, tests of multicollinearity ensured >.98 tolerance level for all correlates of cyberbullying, except for the number of membership in social network groups

where the identity of the members is questionable (.85). Accordingly, the variables are independent of each other. Also, the overall model examined in this study is significant (F (6, 438)=4.978, p=.000). Therefore, the model significantly predicts the linear relationship between the constructs and cyberbullying.

The data further suggests that only 7% of the variations in the experiences of being electronically bullied are due to the constructs examined here. The data confirms the inconsequential effects that sex, class rank, or student status differences may have on experiencing cyberbullying. However, the model predicts that one's *Membership in Social Network Groups* (β=.19, p=.000) and one's *Perceptions* of the legitimacy of their members' identity to be good predictors of vulnerability to cyberbullying (β=.19, p=.000; β=.10, p=.03, respectively). The t scores for these constructs (t =3.70 and t =2.092, respectively) are greater than 1.96 (i.e., the confidence interval is greater than 95%). Perhaps, further studies may shed more light on the unexplained portion of the variance in vulnerability to cyberbullying. Nonetheless, the data in Table 2 (Appendix A) is compatible with the findings of the bivariate tests of the hypotheses.

5. DISCUSSION AND CONCLUSIONS

We have noticed in the above literature review that there is no nation-wide, official study of cyberbullying among college-aged students. Although Zacchilli and Velerio (2011) reported a lesser (minimal) number of the instances of cyberbullying experienced by college students as compared with adolescents, the discrepancy is mainly due to conceptualization and approaches to this issue. In general, the findings in the literature point to certain commonalities of constructs and structural variables that measure and predict patterned environments for cyberbullying—for example, although victims are not physically present in the cyberspace, they are within reach via blogs, texts, e-mails, etc. Once verified in this manner, then we can see that characteristics of adolescent cyberbullying can also be found among adult college students.

Moreover, research findings also verify the growth in cyberbullying incidents because of the increasing availability of the media for social networking. We can only speculate the frequency by which cyberbullying or cyber-stalking occurs in any given time. On the other hand, we also noticed that standards that are applicable in a situation of face-to-face bullying may not be applicable to cyberbullying. The problem with cyberbullying is that often such exchanges may not be interpreted as bullying; or, the victim may not know how to react.

We have noticed that cyberbullying does not occur randomly; stopping cyberbullying effectively cannot be accomplished by haphazard intervention or based on case-by-case. An issue that arises at the collegiate level, as the literature suggests, is the ambivalence about the relevance of empirically verifiable variables such as age, gender, race/ethnicity, social class, and a host of other factors to cyberbullying. Another issue in curbing cyberbullying on college campuses could be due to the possibility that campus officials may not be aware of the extent of the problem, or view the small percent of occurrences on their campuses as trivial, which adds to the complexities of the issue, which in turns makes establishing preventive measures even more difficult. Moreover, it seems common practice that colleges and universities, in general, do not provide any education on risks associated with cyberbullying; neither do they provide any guidelines on how to circumvent it.

Although an increasing number of university officials are becoming aware of the issue on their campuses, there are a few loopholes: higher education is immune to liability unless the institution is accused of negligence (Mitrano, 2011); private colleges can exercise discretionary practices (Hinduja, 2009); and, the extent or domain of enforcing the state law in higher education remains unclear, and its effectiveness in preventing cyber-harassment is speculative. For the most part, policies may be ineffective under the protective force of the first amendment, unless the act is perceived as a "meaningful threat" to another person. Perhaps, the reason for the existence of cyberbullying on college campuses is the absence of appropriate control mechanisms in terms of technology usage policies that specifically address cyberbullying and cyber-harassment. Hence, the first step for preventing cyberbullying is the recognition of this problem on campuses. Universities should create a special task force for researching this issue and verifying the extent to which their students and faculty are experiencing cyberbullying, and formulate preemptive measures to prevent the problem. These measures should be based on well-grounded empirical research findings, and must be used as tools for cyber training of the end-users.

Morrison (2002) suggested that cyberbullying must be dealt with at many levels, not the individuals themselves. This can be interpreted as using the expertise of partners (e.g., educators, family members, the community), and involving any other concerned constituents as key actors in conjunction with the university when confronting cyberbullying; or, emulating the industries that have developed policies in place. Sates must enact anti-cyberbullying statues that encompass colleges (Barr & Lugus, 2011); universities must develop mandatory policies that address cyberbullying or cyber-stalking; instructors must familiarize themselves with the effects of technology on the wellbeing of their students, and build in their courses (at least indicate in their syllabi) policies that address cyberbullying; and the social media can approach the issue more responsibly and be employed as grass-root, educational tools for raising awareness.

Although concerns for cyberbullying are ubiquitous, no universal policy is best practiced; they may just offer guidelines to help higher education. However, it is hoped that such collectivity would allow the campus community to exercise appropriate online behavior in accordance with the codes delineated by the collective social order that defines the expectations about the student conduct and academic integrity. Cyberbullying may be exercised either individually or in groups, but it needs to be confronted from the opposing group perspectives—it is a community effort.

6. REFERENCES

Aricak, O. (2009). Psychiatric Symptomatology as a Predictor of Cyberbullying among University Students. *Eurasian Journal of Educational Research*. 34, 167-184.

Baldasare, A., Bauman, S., Goldman, L., & Robie, A. (2012). Cyberbullying? Voices of College Students. *Cutting-edge Technologies in Higher Education. 5*, 127-155.

Barr, J., & Lugus, E. (2011). Digital Threats on Campus: Examining the Duty of Colleges to Protect Their Social Networking Students. *Western New England Law Review*. 33(3), 757-788.

Brown, E. (n.d.) *Cyberbullying on the Rise on Campus*, Bostonia Web Exclusive. Retrieved March 2014 from http://www.bu.edu/bostonia/web/cyberbullying.

Center for Disease Control and Prevention. (2011). Youth Risk Behavior Surveillance. Retrieved March 2014 from http://www.cdc.gov/HealthyYouth/yrbs/index.htm.

Chapell, M., Hasselman, S., Kitchin, T., Lomon, S., MacIver, K., & Sarullo, P. (2006) Bullying in elementary school, high school, and university. *Adolescence,* 41 (164), 633-648.

Davies, M, & Lee, B. (2008). The Legal Implications of Student Use of Social Networking Sites in the UK and US: Current Concerns and Lessons for the Future. *Education & the Law.* 20(3), 259-288.

Deil-Amen, R. (2011). The "Traditional" College Student: A Smaller and Smaller Minority and Its Implications for Diversity and Access Institutions University of Arizona, Center for the Study of Higher Education. Paper prepared for the Mapping Broad Access Higher Education Conference, Stanford University.

Donegan, R. (2012). Bullying and Cyberbullying: History, Statistics, Law, Prevention and Analysis. The Elon Journal of Undergraduate Research in Communications. 3(1), 33-42.

Dryden, J. (n.d.). Cyber Bullying: Legal Guidelines for Policy Construction. Retrieved March 2014 from http://www.*nau.edu/.../COE/.../Cyber%20Bullying.pdf.*

Eslea, M. and Mukhtar, K. (2000) 'Bullying and Racism Among Asian Schoolchildren in Britain', *Educational Research* 42(2): 207–17.

Englander, E. (2008). Cyberbullying and Information Exposure: User Generated Content in Post-Secondary Education. In *MARC (Massachusetts Aggression Reduction Center) Publications)*. Paper 11. Retrieved May 2014 from http://vc.bridgew.edu/marc_sub/11.

FindLaw. (n.d.). Assault and Battery Overview. Retrieved June 2014 from http://criminal.findlaw.com/criminal-charges/assault-and-battery-overview.html.

Finn, J. (2004). A Survey of Online Harassment at a University Campus. *Journal of Interpersonal Violence*. 19, 468–483.

Fukuchi, A. (2011). A Balance of Convenience: The Use of Burden-Shifting Devices in Criminal Cyberharassment Law. *Boston College Law Review*. 52(1), 289-331.

Gilroy, M. (2013). Guns, Hazing, and Cyberbullying Among Top Legal Issues on Campuses. *The education Digest*. 78(8), 45-50.

Hawkins, D., Pepler, D., & Craig, W. (2001). Naturalistic Observations of Peer Interventions. In *Social Development.* Retrieved February 2014 from http://www3.interscience.wiley.com/journal.

Hinduja, S. (2009). The Response of Private and Public Schools to Cyberbullying. *Cyberbullying Research Center*. Retrieved March 2014 from http://cyberbullying.us/?s=college+cyberbullying.

Hindjua, S. & Patchin, J. (2014). State Cyberbullying Laws: A Brief Review of State Cyberbullying Laws and Policies. Cyberbullying Research Center. Retrieved March 2014 from c*yberbullying.us/Bullying_and_Cyberbullying_Laws.pdf.*

Hinduja, S., & Patchin, J. W. (2007). Offline Consequences of Online Victimization: School Violence and Delinquency. *Journal of School Violence. 6*(3), 89-112.

Hoff, D., Mitchell, S. (2008). Cyberbullying: Causes, Effects, and Remedies. *Journal of Educational Administration*. 47(5), 652-665.

Hoover, J. and Olsen, G. (2001) *Teasing and Harassment: The Frames and Scripts Approach for Teachers and Parents.* Bloomington, IN: National Educational Service.

Jäger, T., Amado, J., Matos, A., & Pessoa, T. (2010). Analysis of Experts' and Trainers' Views on Cyberbullying. *Australian Journal of Guidance & Counseling,*20(2), 169–181.

Kowalski, R., & Limber, S. (2013). Psychological, Physical, and Academic Correlates of Cyberbullying and Traditional Bullying. *Journal of Adolescent Health.* 53, 13-20.

Li, Q. (2006). Cyberbullying in Schools: A Research of Gender Differences, *School Psychology International*. 27(2), 157-170.

MacDonald, C., & Roberts-Pittman, B. (2010). Cyberbullying Among College Students: Prevalence and Demographic Differences. *Procedia-Social and Behavioral Sciences. 9*, 2003-2009.

Menesini, E., & Nocentini, A. (2009). Cyberbullying Definition and Measurement: Some Critical Considerations. *Journal of Psychology*, 217(4), 230–232.

Mitrano, T. (2011). Law, Policy, and IT. *Inside Higher education*. Retrieved March 2014 from http://www.insidehighered.com/blogs/law_policy_and_it/national_association_of_college_and_university_attorneys_cyberbullying#ixzz2wXoWNjyJ.

Molluzzo, J., & Lawler, J. (2013). A Comparison of Faculty and Students Perception of Cyberbullying. *Proceedings of Information System Educators Conference*. 30(2533), ISSN: 2167-1435.

Molluzzo, J. C., & Lawler, J. (2012). A Study of the Perceptions of College Students on Cyberbullying. *Information Systems Education Journal. 10*(4), 84-109.

Monette, D., Sullivan, T., & DeJong, C. (2010). Applied Social Research: Tools for the Human Services. 9th edition. New York, NY: Thompson.

Morrison, B. (2002). Restorative Justice for Bullies and Victims in Schools: A Program That Fosters Responsible Citizenship', in *Australian Institute of Criminology's Trends and Issues Series*: Canberra: Australian Institute of Criminology.

Neuman, L. (2011). *Social research Methods: Qualitative and Quantitative Approaches* (7thedition). New York, NY: Pearson Publishers.

Neves, J., & de Oliveira, P. (2010). Cyberbullying: A Sociological Perspective. *International Journal of Technoethics.* 1(3), 24-34.

Olweus, D. (1993). *Bullying at School: What We Know and What we Can Do*. Malden, MA: Cambridge.

Pew Internet & American Life Project (2007). Cyberbullying and Online Teens. Retrieved February 2014 from, http://www.pewinternet.org/PPF/r/216/report_display.asp.

Pieschl, S., Porsch, T., Kahl, T., & Klockenbusch, R. (2013). Relevant Dimensions of Cyberbullying — Results From Two Experimental Studies. *Journal of Applied Developmental Psychology*, 34 (2013), 241–252.

Piotrowski, C., &Lathrop, P. (2012). Cyberstalking and College-Age Students: A Bibliometric Analysis across Scholarly Databases. *College Student Journal.* 46(3), 533-536.

Pratto, F., Sidanius, J., & Levin, S. (2006), Social Dominance Theory and the Dynamics of Intergroup Relations: Taking Stock. *European Review of Social Psychology.* 17, 271-320.

Purusothaman, D., & Rani, U. (2014). Cyberbullying: A Study. *International Journal of Logistics & Supply Chain Management Perspectives*, *2*(4), 483-486.

Reyns, B*.,* Henson, B., & Fisher, B. (2012). Stalking in the Twilight Zone: Extent of Cyberstalking Victimization and Offending Among College Student. Deviant Behavior. 33(1), 1-25.

Shariff, S. (2006), "Cyber-hierarchies: A New Arsenal of Weapons for Gendered Violence in Schools", in Mitchell, C. and Leech, F. (Eds), *Combating Gender Violence In and Around Schools*, Trentham Books, London.

Smith, J., & Yoon, J. (2013). Cyberbullying Presence, Extent, &Forms in a Midwestern Secondary Education. *Information System Education Journal*. 11(3), 52-78.

Smith, P., Mahdavi, J., Carvalho, C., & Tippett, N. (2006). An investigation into cyberbullying,its forms, awareness and impact, and the relationship between age and gender in cyberbullying. A Report to the Anti-Bullying Alliance. Retrieved May 2014 from Http://www.education.gov.uk/research/data/uploadfiles/RBX03-06.pdf.

Spitzberg, B. and Hoobler, G. (2002). Cyberstalking and The Technologies of Interpersonal Terrorism, *New Media and Society* 4: 71–92.

U.S. Department of Education. (2011). Student Reports of Bullying and Cyber-Bullying: Results From the 2009 School Crime Supplement to the National Crime Victimization Survey. National Center for Education Statistics: Institute of Education Sciences. Retrieved March 2014 from http://nces.ed.gov/pubs2011/2011336.pdf.

Walker, C., Sockman, B., & Koehn, S. (2011). An Exploratory Study of Cyberbullying with Undergraduate University Students. *TechTrend.* 55(2), 31-38.

Willard, N. (2004) *An Educator's Guide to Cyberbullying and Cyberthreats*. Retrieved March 2014 from http://cyberbully.org/docs/cbcteducator.pdf.

Zacchilli, T., & Velario, C. (2011). The Knowledge and Prevalence of Cyberbullying in a College Sample. *Journal of Scientific Psychology. (*March), 11-23. Retrieved June 19, 2014, from Retrieved from http://www.psyencelab.com/images/the_knowledge-and_prevalence_in_a college_sample.pdf.

APPENDIX A

Table 1. Bivariate Correlation Coefficient Values

Variables	1	2	3	4	5	6	7
1. **Sex**	__	-.13**	-.07	.08	.01	-.07	.11*
2. **Class Rank**		__	.14**	-.10*	-.05	-.03	.02
3. **Student Status**			__	-.13**	-.06	.09*	.10*
4. **Membership in Internet Groups**				__	.27**	.11*	.12**
5. **Membership in Questionable Internet Groups**					__	.24**	.07
6. **Perceptions About Social Network Groups**						__	.12**
7. **Experience of Being Cyberbullied**							__

* Significance level ≤ .05
** Significance level ≤ .01

Table 2. Regression Coefficients of Constructs as Predictors of Cyberbullying [a]

Constructs	B	SE	β	t	Sig.
(Constant)	4.614	.47		9.890	.000
Sex	.27	.15	.09	1.836	.06
Class Rank	.02	.06	.02	.316	.75
Student Status	.28	.18	.08	1.606	.10
Membership in Social Network Groups	.37	.10	.19	3.700	.000
Membership in Questionable Social Network Groups	.06	.13	.02	.399	.69
Perceptions about Social Network Groups	.30	.14	.10	2.092	.03

$R = .25$ $R^2 = .07$ Adjusted $R^2 = .05$ $F = 4.978$ $df = (6, 438)$ Sig. = .000

a. Dependent Variable = cyberbullied (victimized).