

INFORMATION SYSTEMS EDUCATION JOURNAL

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A Comparison of Faculty and Student Perceptions of Cyberbullying

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Abstract

Cyberbullying is a concern for any college or university. Digital harassment incidents continue to be featured frequently in the news. The authors of this study compare the perceptions of faculty and students on cyberbullying at an urban university. From the findings of surveys distributed to faculty and students in all schools of the university, the authors learn of high levels of perceptions on incidents as an issue, but low levels of perceptions on infrastructural and instructional methods of preemption and resolution, at the university. This study will be beneficial to field researchers, as cyberbullying is considered an issue more often in high schools than in colleges and universities.

Keywords: cyberbullying, cyberharassment, hostility, Internet, privacy, social networking, technology, and victimization

1. BACKGROUND

Cyberbullying is the abuse of choice of the "cyberimmersion generation" (Englander, 2009). Cyberbullying is "any behavior performed through digital or electronic media by [a college student or groups of college students or by faculty] that repeatedly [over time] communicates aggressive or hostile messages intended to inflict discomfort or harm on [another faculty or student or other students]" (Tokunaga, 2010). Cyberbullying is about control (Roome, 2012) or dominance (Olthof, Goossens, Vermande, Aleva, & Van Der Meulen, 2011) over another faculty or student. This control is an attempt by the attacker to demeaning the other faculty or student, and to improve the attacker's esteem (Fertik & Thompson, 2010). In brief, cyberbullying is "bullying [through] the Internet" (Vandebosch &

Van Cleemput, 2008) - "a common risk" confronting students (Palfrey, Boyd, & Sacco, 2009) and faculty in "a new school yard" (Burnham, Wright, & Houser, 2011).

The attacker is empowered by the Internet. The behavior of attackers is evident in the following forms of cyberbullying:

- Cellular or digital imaging messages considered derogatory, harmful or mean to another faculty or student;
- Discussion board messages considered harmful or mean-spirited to another faculty or student;
- E-mails, instant messages, pictures, photographs or "sexting" of videos considered homophobic, racist or sexual if not humiliating and offensive to another faculty, student or students;

- "Flaming" or messaging on profiles on gaming or social networking sites considered offensive to another faculty, student or students; and
- Impersonating or messaging on gossip, personal polling or virtual reality sites or systems and "outing" or targeting other faculty members or students if not stalking and threatening them (Reynolds, 2012).

This behavior may be initiated by a direct form of an attacker attacking the other faculty or student, or an indirect form of an attacker engaging [faculty or] students in attacking the other faculty or student (Wong-Lo, Bullock, & Gable, 2009). The cyberbullying messaging of the attacker may be forwarded instantaneously to others to be bystander observers of the attacked faculty or student. The attacker may be cyberbullying on-line even other faculty or students without the increased risk (Dempsey, Sulkowski, Nichols, & Storch, 2009) that was evident when the bullying was off-line without the Internet. The bullying is moreover "non-stop" (Mishna, Saini, & Solomon, 2009), as the cyberbullying may be continuing beyond the location of the school. Impact is in increased internalizing psychological problems manifested in cyberbullied students (Greene, 2003, & Faryadi, 2011) – problems that may be resulting in school shootings (Chapell, Hasselman, Kitchin, Lomon, Maclver, & Sarullo, 2006) if not suicides. Clearly cyberbullying is not the "fact of life" or "kids are kids" that bullying was without the Internet (Scott, 2012).

Estimates in a consensus of the literature disclose that cyberbullying is experienced by 21% of high school students – 21.8% of female and 19.5% of male students (Patchin & Hinduja, 2012). 17% of high and middle school students experienced one or more incidents 2 to 3 times in the last 30 days, and 14% of these students experienced incidents in generic hurtful or mean-spirited messaging. In addition, 16.8% of high and middle school students were attackers or perpetrators of cyberbullying (Patchin & Hinduja, 2012). Literature discloses college students may experience that cyberbullying as frequently. A recent study (Indiana State University, 2011) showed that 22% of college students – 22% of female and 21.9% of male students – experienced cyberbullying with 25% of incidents instances on social networking sites. Also, 8.6% of college students were perpetrators (MacDonald & Roberts-Pittman, 2010), the bulk of whom were already middle, high or

elementary school perpetrators or victims (Walker, Sockman, & Koehn, 2011). Literature discloses even female students to be more involved in both perpetration and victimization (Snell & Englander, 2010), though male students may be more involved in perpetration than female students (Chapell, Casey, De La Cruz, Ferrell, Forman, Lipkin, Newsham, Sterling, & Whittaker, 2004). However the literature on cyberbullying is focused frequently on high school and middle school students. The impression may be that cyberbullying is a feature of life in high and middle school students and not of college students, who are considered adults, or faculty (Zacchilli & Valerio, 2011). Therefore, the authors of this study examine the perceptions of faculty and students on cyberbullying at an urban university in the United States.

2. INTRODUCTION TO STUDY

In 2011 the authors completed a study of students in the Seidenberg School of Computer Science and Information Systems at the PACE University (Molluzzo & Lawler, 2011). The limitation of the 2011 study was that students of the other schools of the university were not included. Though the results were generally consistent with the literature, the 2011 study, being limited to the students of one school of the university, limited the perceptions learned from that study. The authors, therefore, conducted a more general survey in 2012 that included all the university's students and another survey of the university's entire faculty. The results of the faculty perceptions on cyberbullying were presented at ISECON 2012 (Molluzzo & Lawler, 2012). The authors will publish in 2013 (Molluzzo, Lawler, & Desai, 2013) a full analysis of perceptions of students across the entire university. From these studies, the authors learned that cyberbullying was perceived as an issue on the Internet and was managed insensitively by institutional methods of non-proaction of the university. In this paper, the authors compare the perceptions of students and faculty based on the 2012 surveys.

This paper posits the following considerations on cyberbullying at PACE University:

- The extent to which faculty members and students agree that cyberbullying is a generic issue in society and in a university;
- The extent to which faculty members and students agree that cyberbullying is a specific issue whereby students known to

- them were victimized by other faculty or students in the university;
- The extent to which faculty members and students agree that the culture of discussion of cyberbullying and cyberethics is a fabric of infrastructure and instruction in the university;
 - The extent to which faculty members and students agree that the culture of pro-action of pre-emption and resolution of cyberbullying by chair, department and institutional officials in the university; and
 - The extent to which faculty members and students agree on proposed recommendations of sensitivity solutions to cyberbullying in the university.

This paper is critical in learning the culture of cyberbullying in an urban university, as papers in the academic field concentrate more on cyberbullying prior to university (Zacchilli & Valerio, 2011). Cyberbullying is evident more in the practitioner publications, as in the sensational Tyler Clementi and Dharun Ravi story (Bazelon, 2012, Glaberson, 2012, & Rouba, 2011). Increased incident reporting of students may indicate the increased seriousness of cyberbullying (Patchin & Hindjua, 2012). Faculty members and officials of a university need to be in a position to protectively but realistically respond to cyberbullying if faculty or students perceive perpetration problems, otherwise there may be liability potential (Willard, 2012) with the reality of victimization. Staff needs to respond in reinforcement and safety solutions (Snakenborg, Van Acker, & Gable, 2011), software systems, (Lieberman, Dinakar, & Jones, 2011) and support shared with faculty members and students.

(Resources for further cyberbullying study are furnished in Table 1 of the Appendix.)

3. FOCUS OF STUDY

The focus of the authors is to compare the perceptions of faculty and students on cyberbullying in all schools of PACE University, a recognized urban institution of learning in the northeast corridor of the United States. The new study furnishes input into the prevalence of cyberbullying. This comparison of students and faculty will be beneficial to faculty members and staff in all schools of a university, in considering the growing issue of cyberbullying. The prevalence of cyberbullying, and the seriousness or non-seriousness of cyberbullying as an issue,

learned from the perceptions of the faculty and the students of PACE University will be reflected in the analysis of the findings of this new study.

4. RESEARCH METHODOLOGY

The research methodology of this new study consisted of a survey of the perceptions of 433 faculty members and 7807 students, both undergraduate and graduate of PACE University.

The surveys consisted of a cyberbullying definition (Tokunaga, 2010) and 47 items:

- 6 demographic questions;
- 7 fundamental knowledge of cyberbullying questions;
- 9 knowledge and perception of group or individual incidents and methods of cyberbullying perpetration questions;
- 14 knowledge and perception of cyberbullying institutional response questions; and
- 11 perception of seriousness or non-seriousness of cyberbullying as an issue at the university questions.

The surveys were distributed to the faculty members and to the students in the March to May 2012 through the university e-mail, and the questions were furnished through the Qualtrics software survey system. The responses returned to the authors were anonymous, and the faculty members and the students were assured of anonymity on the instrument of survey. The authors reviewed the responses for statistical interpretation (McClave, Sincich, & Mendenhall, 2007) using SPSS tools in May to June 2012.

The instruments of the surveys were reviewed for feasibility and integrity by the university Internal Review Board (IRB), and were approved by the Dean for Students and the Provost for distribution to the populations in the studies. The surveys are too long to include both in this paper. We do, however, include the faculty survey in Figure 1 of the Appendix. All questions referred to in the following discussion are included in this survey. Note that the question numbering was that imposed on the questionnaire by the Qualtrics survey software.

5. ANALYSIS OF FINDINGS –COMPARISONS OF FACULTY AND STUDENTS

The student survey was distributed to over 7,807 undergraduate and graduate students. The number of valid responses received was 355, which is a return rate of 4.5%. (The low student response rate could be due to the number of questions in the survey.) The faculty survey was distributed to all 433 faculty in the university. The number of valid responses was 79, which is a return rate of 18.2%.

Faculty Demographic Data

Of the respondent faculty, 46% were full-time and 54% part-time; 51% were female and 49% were male. The university has two main campuses – one in a large city and one in the suburbs of that city. Of the faculty responding 51% were from the suburban campus and 49% were from the city campus. 59% of the faculty respondents were in the liberal arts school, and 41% were in the professional schools (Business, Computing, Education, and Health Professions.)

Student Demographic Data

73% of the student respondents were female, 27% male. 53% were in the liberal arts school and 47% in the professional schools. 38% of the respondents were Freshmen or Sophomores, 34% were Juniors or Seniors, and 28% were graduate students. 64% of the student respondents were from the urban campus and 37% of the respondents were from the suburban campus.

The surveys asked several questions on a 5-point Likert scale. Because our sample sizes were relatively small, having five Likert categories did not yield statistically valid results. It was felt that the Strongly Agree and Agree responses basically meant the same thing, and the other three responses meant the opposite – the respondent did not agree with the statement. Therefore, we combined these categories into two responses, which enabled a chi-squared test of independence on 2x2 cross-tabs. Following is an analysis of some of the statistically significant results organized along some of the demographic categories of the respondents. The Yes-No questions were similarly analyzed using a chi-squared test of independence on 2x2 cross-tabs.

Differences Between All Students and All Faculty

Table 2 summarizes the significant differences between faculty and student perceptions towards cyberbullying. On the question Q9: "Cyberbullying is a serious issue for you." a significantly greater number of students (47.4%) than faculty (26.6%) responded Yes, which is not surprising given that students are usually (although not always) the ones being bullied. Also, on Q10: "You are aware of cyberbullying at other schools." again students had a higher percentage of Yes answers (16.0%) than faculty (6.3%).

The University Core requires that all students take UNIV 101, which introduces them to college life, fosters good study habits, etc. On Q48: "Should cyberbullying be discussed in UNIV 101." significantly more faculty (97.4%) than students (84.7%) responded Yes. This could mean that faculty feel stronger that this course is a good venue to discuss the issues of cyberbullying.

Question Q53: "The university should publicize more its policy on cyberbullying" is sort of a trick question. At the time of the survey the university had no explicit policy on cyberbullying. Instead, the university relied on a code of behavior published in its student handbook. On this question, a greater number of the faculty (94.7%) than students (84.4%) agreed that the cyberbullying policy should be publicized more.

The survey showed that 76.3% of students and 55.6% of faculty agree with Q64: "The university is sensitive to the problems of cyberbullying". On one hand this is a tribute to the handling of cyberbullying incidents by the administration of the university, and on the other an indication that the faculty is not aware of what the administration does to handle these problems.

Differences Between Male Students and Male Faculty

The literature supports the belief that there is a difference between males and females in their perceptions and incidents of cyberbullying. Significant differences between male students and male faculty are summarized in Table 3. As in the general population, cyberbullying was more of a serious issue (Q9) among students (59.8%) as opposed to faculty (36.8%). In addition significantly more male faculty (94.3%)

than male students (72.8%) believe that cyberbullying should be discussed in UNIV 101 (Q48), although both percentages are very high.

In addition to the University Core requiring UNIV 101, it also requires all students to take CIS 101, a required computer technology course. The survey asked (Q49) if the faculty believed that cyberbullying should be discussed in these courses. As with UNIV 101, significantly more male faculty (82.4%) than male students (64.1%) believe that cyberbullying should be discussed in CIS 101.

The next three questions dealt with the perception of how the university deals with the issue of cyberbullying. On questions Q53 and Q54 significantly more male faculty (91.9% on both questions than male students (70.8% and 76.4%, respectively) believed the university should publicize the issue of cyberbullying. However, on Q64, significantly more male students (76.6%) than male faculty (51.4%) believed the university is sensitive to the problems of cyberbullying.

Differences Between Female Students and Female Faculty

Table 4 summarizes the significant differences between female students and female faculty. As might be expected among the female student population (they tend to be the victims of cyberbullying more than males), significantly more female students believed that cyberbullying was a serious issue for them (Q9) than female faculty (42.2% to 12.5%), and more female students (76.4%) believed that the university is sensitive to issues of cyberbullying (Q64) than female faculty (58.3%). As to the question of whether cyberbullying should be discussed in UNIV 101 (Q48), 100% of the female faculty agreed while 89.5% of the female students agreed.

Differences Between Urban Students and Urban Faculty

Pace University has two campuses. One campus is in downtown Manhattan and the other in suburban Westchester. The campus settings are quite different and each campus attracts demographically different sets of students. It is, therefore, interesting to consider the differences in these populations. The significant differences between urban students and urban faculty are summarized in Table 5. The next subsection discusses the differences between the corresponding suburban populations.

Among the urban students and faculty, there were only two significant differences. 85.5% of the urban campus students claimed they were aware of the official policies of the university on cyberbullying as opposed to 72.2% of the urban campus faculty. Also, 78.4 % of the urban campus students believed the university is sensitive to the problems of cyberbullying as opposed to 58.3% of the urban campus faculty.

Differences Between Suburban Students and Suburban Faculty

Table 6 summarizes the significant differences between suburban students and suburban faculty. Significantly more suburban students (47.2%) consider cyberbullying a serious issue (Q9) than suburban faculty (20.0%). On the other hand, all suburban faculty (100%) believe that cyberbullying should be discussed in UNIV 101 as opposed to 89.6% of suburban students.

Differences Between Liberal Arts Students and Liberal Arts Faculty

Approximately half of each of our samples were from the liberal arts school and half from the professional schools. Therefore, it is interesting to consider these populations separately. Table 7 summarizes the differences between students and faculty in the liberal arts school of the university. Significantly more liberal arts faculty (97.8%) believed that cyberbullying should be taught in UNIV 101 (Q48) than liberal arts students (79.8%). Also, more the liberal arts faculty (93.7%) believe the university should publicize more its cyberbullying policy (Q53) than liberal arts students (84.6%). However, significantly more liberal arts students (77.6%) believe the university is more sensitive to the problems of cyberbullying (Q64) than liberal arts faculty (58.1%).

Differences Between Professional School Students and Professional School Faculty

The significant differences between students in the professional schools and faculty in the professional schools are summarized in Table 8. Significantly more professional school students (56.5) consider cyberbullying a serious issue (Q9) than do professional school faculty (25.8%). Significantly more professional school students than professional school faculty (63.0%) believe that the administration of the university is knowledgeable of cyberbullying as an activity that is harmful to students (Q60) than professional school faculty (37.9%). Also more of professional school students (74.4%) believe the university is sensitive to the

problems of cyberbullying (Q64) than professional school faculty (51.7%).

6. IMPLICATIONS OF STUDY

In all cases where there is a significant difference on Q9 (Cyberbullying is a serious issue for you), students consider cyberbullying as a serious issue for themselves. This is not surprising because students are more likely than faculty to be victims of cyberbullying. (Note that in Molluzzo and Lawler (2012) it was noted that some faculty were victims of cyberbullying.)

Also, on Q64 (The university is sensitive to the problems of cyberbullying) in all cases where there is a significant difference, students agree more than faculty. This indicates that students more than faculty believe the university is doing a good job in addressing the issues of cyberbullying. Although we have no data to substantiate, this could be the result of students learning of the university response to such issues through their peers. Faculty would normally not be privy to such reports.

It is also interesting to note that on all significant differences on Q48 (Should Cyberbullying be discussed in UNIV 101?) more faculty believe that cyberbullying should be taught in UNIV 101. As mentioned previously, all undergraduate students are required to take UNIV 101. The instructors of this course are drawn from all departments of the university that have undergraduate programs. Many of the faculty across the university have taught the course and consider it an important part of students' introduction to academic life. Therefore, it is not surprising that more faculty than students consider the course as an appropriate venue in which to discuss the problems associated with cyberbullying.

Although a vast majority of all respondents believe that the university should publicize its cyberbullying policy, whenever there is a significant difference on Q53 (Should the university publicize more its policy on cyberbullying?), it is the faculty who agree more. This indicates that the university population, faculty more than students, are not aware of the cyberbullying policy of the university. Recall that at the time of the survey the university had no official policy on cyberbullying.

7. LIMITATIONS AND OPPORTUNITIES FOR FURTHER STUDY

The findings from populations at one university may not be generalized without caution. The difficulty of a cyberbullying survey is in potential respondent sensitivity to questions that may obscure perpetration in the populations of the surveys (Cole, Cornell, & Sheras, 2006, even of faculty populations in a university. The extent of victimization in an urban university moreover may not be as representative of cyberstalking vulnerability as in a suburban university (Daniloff, 2009).

The opportunity in this field is fruitful however for further study (Mishna, Cook, Saini, Wu, & MacFadden, 2009). Research in this field is relatively limited in the post-secondary setting of universities. This university is interested in partnering with other universities in the United States in a larger population and setting study that might be performed in a longitudinal survey annually, as perceptions of faculty and students might shift on the topic with novel usage of the technology.

8. CONCLUSION

This study shows that the problems associated with cyberbullying are not confined to pre-college aged students. 9% of the student respondents and 10% of the faculty respondents were cyberbullied at the university. Also 12% of students and 14% of the faculty consider it a serious issue at the university. However, only 24% of student respondents and 45% of the faculty believe the university is sensitive to cyberbullying. It is, therefore, important for universities to have a clearly stated anti-cyberbullying policy that is well-publicized to students and faculty. As a result of the authors' surveys and their collaboration with June Chisholm, a professor of Psychology, and Marijo Russel-O'Grady, Dean for Students on the New York Campus, PACE University is working towards adopting such a policy.

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10. REFERENCES

- Bazon, E. (2012). Make the punishment fit the cyber-crime. *The New York Times*, Op-Ed, March 20.
- Burnham, J.J., Wright, V.H., & Houser, R.A. (2011). Cyberbullying: Emergent concerns for adolescents and challenges for school counselors. *Journal of School Counseling*, 9(15), 4.
- Chapell, M., Casey, D., De La Cruz, C., Ferrell, J., Forman, J., Lipkin, R., Newsham, M., Sterling, M., & Whittaker, S. (2004). Bullying in college by students and teachers. *Adolescence*, 39, 53-64.
- Chapell, M., Hasselman, S.L., Kitchin, T., Lomon, S.N., MacIver, K.W., & Sarullo, P. (2006). Bullying in elementary school, high school and college. *Adolescence*, 41, 633-648.
- Cole, J.C.M., Cornell, D.G., & Sheras, P. (2006). Identification of school bullies by survey methods. *Professional School Counseling*, 9(4), 305-313.
- Daniloff, C. (2009). Cyberbullying goes to college. *Bostonia: The Alumni Magazine of Boston University*, Spring, 5.
- Dempsey, A.G., Sulkowski, M.L., Nichols, R., & Storch, E.A. (2009). Differences between peer victimization in cyber and physical settings and associated psychosocial adjustment in early adolescence. *Psychology in the Schools*, 46, 962-972.
- Englander, E. (2009). Cyberbullying and information exposure: User-generated content in post-secondary education. *International Journal of Contemporary Sociology, Special Edition: Violence and Society in Twenty-First Century*, 46(2), 4.
- Faryadi, Q. (2011). Cyberbullying and academic performance. *International Journal of Computational Engineering Research*, 1(1), 23.
- Fertik, M., & Thompson, D. (2010). Wild West 2.0: How to protect and restore your on-line reputation on the untamed social frontier. *Berkeley Technology Law Journal*, 26(1103), 1108.
- Glaberson, W. (2012). Verdict repudiates notion of youth as legal defense. *The New York Times*, March 18, 20.
- Greene, M.B. (2003). Counseling and climate change as treatment modalities for bullying in school. *International Journal for the Advancement of Counseling*, 25(4), 293-302.
- Lieberman, H., Dinakar, K., & Jones, B. (2011). Let's gang up on cyberbullying: The novel design of social network software can help prevent and manage the growing problem of cyberbullying. *IEEE Computer*, September, 93-96.
- MacDonald, C.D., & Roberts-Pittman, B. (2010). Cyberbullying among college students: Prevalence and demographic differences. *Procedia Social and Behavioral Sciences*, 9, 2005.
- McClave, J., Sincich T., & Mendenhall, W. (2007). *Statistics*, 11th Edition. Pearson Prentice Hall, Upper Saddle River, New Jersey.
- Mishna, F., Cook, C., Saini, M., Wu, M.J., & MacFadden, R. (2009). Interventions for children, youth, and parents to prevent and reduce cyberabuse. *Campbell Systematic Reviews*, 2.
- Mishna, F., Saini, M., & Solomon, S. (2009). On-going and on-line: Children and youths' perceptions of cyberbullying. *Children and Youth Services Review*, 31, 1222-1228.
- Molluzzo, J.C., & Lawler, J.P. (2011). A study of the perceptions of college students on cyberbullying. *Proceedings of the Information Systems Educators Conference (ISECON)*, Wilmington, North Carolina, 28(1633), 1-25.
- Molluzzo, J.C., & Lawler, J. (2012). A comprehensive survey on cyberbullying perceptions at a major metropolitan university - faculty perspectives. *Proceedings of the Information Systems Educators Conference (ISECON)*, New Orleans, Louisiana, November.
- Molluzzo, J.C., Lawler, J. and Desai, S. (2013) A Comprehensive Survey on Cyberbullying Perceptions at a Major Metropolitan

- University – Perspectives of Students, to appear.
- Olthof, T., Goossens, F.A., Vermande, M.M., Aleva, E.A., & Van Der Meulen, M. (2011). Bullying as strategic behavior: Relations with desired and acquired dominance in the peer group. *Journal of School Psychology, 49*(3), 339-359.
- Palfrey, J.G., Boyd, D., & Sacco, D. (2009). Enhancing Child Safety and On-Line Technologies: Final Report of the Internet Safety Technical Task Force. North Carolina Academic Press, Durham, North Carolina.
- Patchin, J.W., & Hinduja, S. (2012). *Cyberbullying Prevention and Response: Expert Perspectives*. Taylor & Francis Group, Boca Raton, Florida, 17-18,20,28.
- Reynolds, G.W. (2012). *Ethics in Information Technology*. Cengage Learning: Course Technology, Boston, Massachusetts, 365.
- Roome, D. (2012). Cyberbullying Is Never Alright: Dealing with the Pain of Cyberabuse. Debbie Roome, Lexington, Kentucky, 28.
- Rouba, K. (2011). Tragedy brings rise in support for gay students: High schools, colleges revamp programs in wake of Tyler Clementi case. *The Times*, June 12, A1,A9.
- Scott, A.O. (2012). Behind every harassed child? A whole lot of clueless adults. *The New York Times*, March 30, C10.
- Snakenborg, J., Van Acker, R., & Gable, R.A. (2011). Cyberbullying: Prevention and intervention to protect our children and youth. *Preventing School Failure, 55*(2), 94.
- Snell, P.A., & Englander, E.K. (2010). Cyberbullying victimization and behaviors among girls: Applying research findings in the field. *Journal of Social Sciences, 6*(4), 510.
- Tokunaga, R.S. (2010). Following you from home: A critical review and synthesis of research in cyberbullying victimization. *Computers in Human Behavior, 26*, 278.
- Vandebosch, H., & Van Cleemput, K. (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters. *Cyberpsychology and Behavior, 11*, 499-503.
- Walker, C.M., Sockman, B.R., & Koehn, S. (2011). An exploratory study of cyberbullying with undergraduate university students. *TechTrends*, March / April, 31.
- Willard, N. (2012). Cyberbullying and the law. In J.W. Patchin, & S. Hinduja (Eds.), *Cyberbullying Prevention and Response: Expert Perspectives*. Boca Raton, Florida: Taylor & Francis Group, 47.
- Wong-Lo, M., Bullock, L.M., & Gable, R.A. (2009). Cyberbullying: Facing digital aggression. *Proceedings of the Conference of the Teacher Education Division of the Council of Exceptional Children*, Charlotte, North Carolina.
- Zacchilli, T.L., & Valerio, C.Y. (2011). The knowledge and prevalence of cyberbullying in a college sample. *Journal of Scientific Psychology, March*, 21.
- _____ (2011). Bullying still occurs in college, professors find. *Indiana State University (ISU) Newsroom*, October 20, 1-2.

Appendix

Figure 1: Instrument of Survey: Note that the numbering of the survey questions is that imposed by the survey software.

Q6 To which school of the university do you belong?

- Liberal Arts (1)
- Education (2)
- College of Health Professions and Nursing
- School of Business (4)
- School of Computing (5)

Q5 Which is your "home" campus?

- New York (1)
- Pleasantville (2)
- White Plains (3)

Q71 What is your faculty status?

Full-time (1)

Part-time (Adjunct) (2)

Q72 What is your faculty rank?

Full Professor (1)

Associate Professor (2)

Assistant Professor (3)

Instructor/Lecturer (4)

Q73 How long have you been a faculty member at the university?

1-5 years (1)

6-10 years (2)

11-15 years (3)

16-20 years (4)

21 or more years (5)

Q4 Gender?

Male (1)

Female (2)

Q7 Cyber-bullying is any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others. In cyber-bullying experiences, the identity of the bully may or may not be known. Cyber-bullying can occur through electronically-mediated communication at school; however, cyber-bullying behaviors commonly occur outside school as well.

Q8 You are aware of cyber-bullying as an activity on the Internet

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q9 Cyber-bullying is a serious issue for you.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q74 Cyber-bullying is a serious issue for your students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q10 You are aware of cyber-bullying activities at other schools (for example the Rutgers student who committed suicide as a result of cyber-bullying)?

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q46 Might it be acceptable for freshman or sophomore students to be cyber-bullied by junior or senior students?

- Yes (1)
- No (2)

Q47 Have you discussed issues of cyber-bullying in your department or at the University?

- Yes (1)
- No (2)

Q48 Should cyber-bullying be discussed in UNIV 101?

- Yes (1)
- No (2)

Q49 Should cyber-bullying be discussed in CIS 101?

- Yes (1)
- No (2)

Q75 Are you aware of instances of cyber-bullying at the university?

- Yes (1)
- No (2)

Q76 Have you discussed cyber-bullying in any of your classes?

- Yes (1)
- No (2)

Q50 Do you know if professors at the university, other than yourself, have discussed incidents or issues of cyber-bullying in their classes?

- Yes (1)
- No (2)

Q51 How many professors have done so?

Q52 Should the university do any of the following? Please respond to all.

Q53 Publicize more its policy on cyber-bullying.

- Yes (1) No (2)

Q54 Publicize more the problems of cyber-bullying as an activity harmful to students.

- Yes (1) No (2)

Q55 Sponsor seminars for students on the problems of cyber-bullying as an activity harmful to students.

- Yes (1) No (2)

Q56 Sponsor sensitivity seminars for professors on the problems of cyber-bullying as an activity harmful to students.

- Yes (1) No (2)

Q57 Sponsor sensitivity seminars for staff on the problems of cyber-bullying as an activity harmful to students.

- Yes (1) No (2)

Q58 What should be the penalty for perpetrators of cyber-bullying? Choose as many as appropriate.

- No penalty by the University (1)
- Warning sent to the student by the University (2)
- University informs police of the incident (3)
- Student is suspended by the University (4)
- University immediately expels the student (5)

Q59 If a student of yours is a victim of cyber-bullying, whom would you contact. Choose as many as appropriate.

- The President of The university (1)
- The Dean of Students (2)
- The Dean of your school (3)
- The Chair of your department (4)
- The Counseling Center (5)
- The Security Department (6)
- Your local Police Department (7)
- Your fraternity or sorority (8)
- Your best friend (9)
- Your parents (10)
- No one (11)

Q60 The administration of the university is knowledgeable of cyber-bullying as a activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q77 My dean is knowledgeable of cyber-bullying as a activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q78 My chairperson is knowledgeable of cyber-bullying as an activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q61 Cyber-bullying is a serious issue at the university.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q62 Professors at the university are knowledgeable on cyber-bullying as an activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q79 Professors in my school are knowledgeable on cyber-bullying as an activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q80 Professors in my department are knowledgeable on cyber-bullying as an activity that is harmful to students.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q63 You are aware of the official policies of the university on cyber-bullying.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q64 The university, as an institution, is sensitive to the problems of cyber-bullying.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q81 My school, as an organization within the university, is sensitive to the problems of cyber-bullying.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q82 My department, as an organization within the university, is sensitive to the problems of cyber-bullying.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q65 You are knowledgeable of the laws on cyber-bullying in the United States.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q66 Cyber-bullying is a violation of privacy, regardless of the intent of the perpetrator.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q67 Cyber-bullying, pure and simple, is wrong.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q11 Are you aware of incidents of cyber-bullying at the university?

- Yes (1)
- No (2)

Q12 Of how many incidents are you aware?

Q13 How many perpetrators were involved?

Q14 How many victims were involved?

Q15 Have you ever consciously or unconsciously been a perpetrator of cyber-bullying?

- Yes (1) No (2)

Q16 Have you ever been a victim of cyber-bullying at The university?

- Yes (1) No (2)

Q17 How many times were you victimized?

Q18 How many perpetrators were there?

Q20 Which method was used to cyber-bully you. Choose as many as appropriate.

- Looking in to your cell phone (1)
- Looking in to your email (2)
- Sending you harassing emails (3)
- Sending you harassing pictures (4)
- Sending you pornographic images (5)
- Posting harassing messages on a social networking site (6)
- Posting harassing pictures on a social networking site (7)
- Preventing a friend from contacting others on a social networking site (8)
- Sexting (9)
- Other (10)

Q21 Have you ever been a victim of cyber-bullying outside the university - at another university, in high school, or at work?

- Yes (1) No (2)

Q23 How many perpetrators were there?

Q25 Which method was used to cyber-bully you. Choose as many as appropriate.

- Looking in to your cell phone (1)
- Looking in to your email (2)
- Sending you harassing emails (3)
- Sending you harassing pictures (4)
- Sending you pornographic images (5)
- Posting harassing messages on a social networking site (6)
- Posting harassing pictures on a social networking site (7)
- preventing a friend from contacting others on a social networking site (8)
- Sexting (9)
- Other (10)

Q26 Are you aware of cyber-bullying of any of the following groups at the university? Choose as many as appropriate.

- Male students (1)
- Female students (2)
- Asian students (3)
- Gay students (4)
- Lesbian students (5)
- Physically disabled students (6)
- African-American students (7)
- Hispanic students (8)
- Muslim students (9)
- African students (10)

- Developmentally disabled (11)
- Other (12)

Q28 For each of the following pairs, choose the one you think is more likely to be a VICTIM of cyber-bullying at the university.

Q29

- Male (1)
- Female (2)

Q30

- Foreign (1)
- Non-foreign (2)

Q31

- Gay (1)
- Straight (2)

Q32

- Lesbian (1)
- Straight (2)

Q33

- Disabled (1)
- Non-disabled (2)

Q34

- African-American (1)
- White (2)

Q35

- Hispanic (1)
- White (2)

Q36

- Muslim (1)
- White (2)

Q69

- Asian (1)
- White (2)

Q37 For each of the following pairs, choose the one you think is more likely to be a PERPETRATOR of cyber-bullying at the university.

Q38

- Male (1)
- Female (2)

Q39

- Foreign (1)
- Non-foreign (2)

Q40

- Gay (1)
- Straight (2)

Q41

- Lesbian (1)
- Straight (2)

Q42

- Disabled (1)
- Non-disabled (2)

Q43

- African-American (1)
- White (2)

Table 4
Significant Differences Between Female Students and Female Faculty

Survey Question	p < 0.05	p < 0.01
Q9: Cyberbullying is a serious issue for you.		0.003
Q48: Should Cyberbullying be discussed in UNIV 101?	0.032	
Q64: The university is sensitive to the problems of cyberbullying.	0.023	

Table 5
Significant Differences Between Urban Students and Urban Faculty

Survey Question	p < 0.05	p < 0.01
Q63: You are aware of the official policies of the university on cyberbullying	0.049	
Q64: The university is sensitive to the problems of cyberbullying.		0.010

Table 6
Significant Differences Between Suburban Students and Suburban Faculty

Survey Question	p < 0.05	p < 0.01
Q9: Cyberbullying is a serious issue for you.		0.002
Q48: Should Cyberbullying be discussed in UNIV 101?	0.036	

Table 7
Significant Differences Between Liberal Arts Students and Liberal Arts Faculty

Survey Question	p < 0.05	p < 0.01
Q48: Should Cyberbullying be discussed in UNIV 101?		0.003
Q53: Should the university publicize more its policy on cyberbullying.	0.048	
Q64: The university is sensitive to the problems of cyberbullying.		0.01

Table 8
Significant Differences Between Professional School Students and Professional School Faculty

Survey Question	p < 0.05	p < 0.01
Q9: Cyberbullying is a serious issue for you.		0.002
Q60: The administration of the university is knowledgeable of cyberbullying as an activity that is harmful to students.	0.013	
Q64: The university is sensitive to the problems of cyberbullying.	0.015	