

An Analysis of Cyberbullying Among Sexual Minority University Students

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Cyberbullying is of increasing concern at the university level. The dearth of research regarding the extent of cyberbullying for the sexual minority university students prompts this article. A priori power analysis guided this research. The 60-item survey (Cronbach's $\alpha = .761$) was distributed to 4,000 university students and data from a random, cross-sectional sample of 438 students, aged 18 to 24, were analyzed. Findings highlight the challenges the LGBT student faces as they utilize information and communication technologies (ICT) on the university campus.

INTRODUCTION

Every day, in the university classroom, educators face students who are struggling to learn for reasons beyond intellectual ability. The proliferation of wireless technology and the ability to surreptitiously bully others via social media and cellular phones impacts many 21st Century learners. "Technology . . . consists of more than structures and machines alone, more than just 'hardware.' It includes the uses of those structures and machine in the organization, evolution, and sometimes destruction of society" (Segal, 1994, p.2). Historian Howard Segal's suggestion that technology developments are a mixed blessing is profound when one considers the phenomenon of cyberbullying. The plethora of affordable technologies, used by Millennials, enhances the need for exploration into how they are used to bully others.

The Internet brings many advantages to scholars as it augments their ability for research and communication; however, when people are accessible on a 24/7 basis, via cell phones and the World Wide Web, negative scenarios may also arise. An understanding of the impact that cyberbullying has on college students is essential. This article evaluates the extent of cyberbullying among sexual minority university students. This will provide educators, advisors, and administrators the ability to assist students to navigate through their university experience.

Bullying behavior became the focus of social and psychological research in the late 1970s, with studies led by Olweus (Olweus, 1993). Although there is some disagreement on how bullying should be defined, a generalized understanding of two primary forms does exist. A direct format of bullying consists of physical aggression and physical or verbal threats. Relational, or indirect, bullying refers primarily to covert actions such as teasing, exclusion, social rejection, and spreading rumors (Smith & Gross, 2006; Chapel et al., 2006).

Although bullying was once viewed as a rite of passage and customary aspect of childhood, the increased connection to violent and aggressive behaviors has brought it to the forefront of media headlines both nationally and internationally (Burgess, Garbarino, & Carlson, 2006). Bullying brings much emotional and psychological impact to its victims. Bully victims report increased emotional and academic difficulties, low self-esteem, and increased risk for depression (Bauman & Del Rio, 2006;

Fitzpatrick, Dulin, & Piko, 2007; Kim, Catalano, Haggerty, & Abbott, 2011). Bullycide and school shootings portray the severity of impact that bullying brings to today's youth (Burgess, et al., 2006).

In the 1990s, this problem was clearly illuminated via an FBI report indicating that at least 21 of 27 school shootings investigated were precipitated via bullying (Burgess et al., 2006). The concerns continue to intensify in the 21st Century. In 2007, the Virginia Tech massacre was perpetrated by a young adult who was "immersed in a bullying dorm that exemplified the course of his childhood experiences of bullying and marginalization" (Twemlow, 2008, p. 128). Sadly, a nineteen-year-old Rutgers University student took his life, in September 2010, following harassment and invasion of privacy via a Webcam (Cloud, 2010).

As technology continues to evolve and become more accessible for today's youth, the researcher must be aware of the ability for youth to surreptitiously bully others via technology. Read the newspaper, watch the news, or explore the Internet; news of the impact that cyberbullying has is evident. Whether in small town schools or on large city campuses, students are susceptible to the unrelenting attacks of peers and strangers that may change the course of their lives. The impact of cyberbullying is increased due to the anonymous nature that the bully is allowed. In addition, the inability for the bully to see the victims' emotional response decreases the likelihood of guilt on their behalf (Hoff & Mitchell, 2009; Klomek, Sourander, & Gould, 2010; Mason, 2008; Raskauskas & Stoltz, 2007; Slonje & Smith, 2008; Vandesbosch & Cleemput, 2008).

College undergraduates walk a line between the immature behavior of secondary school and their emerging adulthood. While some research indicated that bullying is most severe in middle school and decreased during secondary school (Raskauskas & Stoltz, 2007; Wolak Mitchell, & Finkelhor, 2007; Williams & Guerra, 2007), it is also evident that the college environment is not immune to cyberbullying (Craig, McInroy, McCready, DiCesare, & Pettaway, 2015; Englander, Mills, & McCoy 2009; Duong & Bradshaw, 2014; Faucher, Jackson, & Cassidy, 2014; Finn, 2004; Smith, Grimm, Lombardi, & Wolfe, 2012; Walker, Sockman, & Koehn, 2011).

The Emotional Toll of Cyberbullying

The same negative emotions experienced with cyberbullying by teenagers were also reported for young adults. Reports of cyberbullying victimization for college-aged individuals ranged widely from eight to fifty-six percent. The range of those who were cyberbullies was from three to 20 percent.

The tragic suicide death of Tyler Clementi, on September 22, 2010, catapulted the discussion of college level Internet victimization and suicide into the mainstream media (Cloud, 2010). The depth of depression that some victims feel when cyberbullied indicates the necessity for more research to better understand the impact of the proliferation of social media accessibility for college aged individuals and its impact on students of sexual minorities.

Cyberbullying on the College Campus

When young adults leave their homes and enter college, they do so with mixed emotions of trepidation and excitement. Venturing onto the college campus with great expectations of good things to come may leave them vulnerable to the unexpected negativity that Internet and cell phone harassment can generate. The dearth of research reporting on the extent of cyberbullying at the college level experienced by non-heterosexual students (LGBT) prompts this article.

CURRENT STUDY

This paper reports on findings from parts of a broader study of cyberbullying at the university level. In keeping with the representative research that has addressed cyberbullying on the college campus (Abbott, 2011; Akbulut et al., 2010; Akbulut & Eristi, 2011; Englander et al., 2009; Finn, 2004; Johnson, 2011; Schenk, 2011; Walker et al., 2011) a descriptive study was conducted utilizing a survey instrument. The combination of quantitative design with open-ended questions allowed the researcher to present results in charts and numbers augmented by narrative discussion (Bloomberg & Volpe, 2008).

Although the term *cyberbullying* was not utilized for the majority of the data gathered to prevent participant self-selection bias (Akbulut & Eristi, 2011; Juvonen & Gross, 2008), it was provided for the final question in the survey when the definition of Walker et al. (2011) defined cyberbullying as:

The use of interactive technologies such as social networking sites, cell phones (text, video, voice, or picture messaging), instant messaging, or other newly developed technology-based communication tools. These tools are used to deliberately and repeatedly deliver slanderous, harassing, obsessive, or obscene messages that *result* in harm to the recipient (p. 37).

The questionnaire utilized was created based on the concepts that Willard (2007) established as factors in cyberbullying. They are defined as *flaming* (angry or rude messages), *harassment* (recurring offensive messages), *cyberstalking* (threats of harm or intimidation), *denigration* (harmful, false, or cruel statements), *masquerade* (pretending to be someone else to make that person look bad), *outing* (sharing others' private information), *trickery* (tricks to solicit embarrassing information), and *exclusion* (intentional exclusion for an online group) (Akbulut & Eristi, 2011, p. 1155).

The designed the final survey following a systematic research process. Following the initial literature review, a survey was constructed and pilot studied with 120 participants. Additional reading and research led to the creation of a revised survey. Prior to distribution, this questionnaire was reviewed by a pilot group ($n=29$) of demographically specific consultants for jury validation. Expert jury examination was provided by Dr. Yavuz Akbulut, professor at Anadolu University.

Sample, Population, and Participants

Ellis (2010) indicated that power levels relevant to the detection of small effect sizes in communication research range between .16 and .34 (desired = .80). Therefore, missing small effects between 66 to 84% of the time. To assure that this study was adequately able to detect effect, a priori power analysis was conducted.

A Priori Power Analysis

“Seen through a telescope with insufficient power, the galaxy will appear as an indecipherable blur,” yet, when a social science researcher sets samples sizes based on availability of resources without a priori power analysis they are indeed creating a lens insufficient to analyze data (Ellis, 2010, p. 47). Data from Cohen's (1988) tables indicated the necessity for a sample of over 200 to analyze correlation data and a harmonic mean (M_H) of 64 participants for each group to achieve an 80% probability of detecting a real effect (20% probability of Type II error) with a medium effect size (.30). A sample of 370 respondents was determined to generalize findings to the campus population of approximately 11,000 undergraduate students (Patten, 2009).

Data for this investigation of cyberbullying on the undergraduate college campus was obtained in a survey questionnaire disseminated via Qualtrics™ to a simple random sample of 4,000. Demographic data were queried regarding gender (29.5% male, 70.5% female) age (3% under 18, 70.3% 18-21, 17% 22-24, 9.1% over 24) and college major. Each major offered was represented in the study. Ninety-nine percent of participants ($n=433$ of 438) indicated their sexual orientation with 90.4% “Straight” ($n=396$), 1.4% Lesbian ($n=6$), 0.7% Gay ($n=3$) and 6.4% Bisexual ($n=28$). Living arrangements at college were 45% lived in an on-campus dormitory or apartment, 47.9% lived off-campus but not with family, and 5.9% lived at home with family.

Participants were queried regarding sexual orientation based on four options: “straight,” lesbian, gay, or bisexual. This variable was regrouped into a dichotomous set of heterosexual ($n=396$) and non-heterosexual ($n=37$) for data analysis. When two groups differ in terms of sample size, the harmonic mean of the two is used to determine whether the a priori per-group sample size for analysis has been met. The sexual orientation sample ($M_H=67.7$) exceeded the predetermined participant size.

Reliability Testing

A reliability analysis indicated an acceptably reliable scale (Cronbach's $\alpha = .761$). The majority of items had an item-total correlation of greater than .3 indicating an acceptable degree of correlation with the total score.

FINDINGS

The dearth of literature concerning cyberbullying experienced by gay, lesbian, bisexual, and transgender college students led to an analysis of data to better understand their experiences on the university campus. Data analysis was conducted with an independent samples *t* test to compare the means between sexual orientation and the questions that queried the extent to which respondents were cyberbullied. The questions utilized in gathering the cyberbullying data provided five selections regarding extent of cyberbullying: never, one time, two to four times, five to seven times, or more than seven times. To create a dichotomous variable, the responses were regrouped into "never (1)" and "one or more times (2)." In addition, participants were queried regarding sexual orientation based on four options: "straight," lesbian, gay, or bisexual. This variable was regrouped into a dichotomous set of heterosexual (1) and non-heterosexual (2) for data analysis.

A comparison of means for each cyberbullying question indicates a higher mean for non-heterosexuals than heterosexuals. Therefore an independent samples *t* test was analyzed for each question. There was one significant difference noted for individuals who had been "outed" via social media: heterosexuals ($M = 1.00$, $SD = .00$) and non-heterosexuals ($M = 1.14$, $SD = .36$; $t(34) = -2.38$, $p = .02$). This finding is reported yet not surprising due to the nature of the question. Individuals who are heterosexual are not "outed" in modern day society.

When responses were reviewed utilizing a crosstabs analysis (See Table 1) non-heterosexuals reported higher percentages of incidents of cyberbullying across each variable queried.

TABLE 1
CROSTABULATION COMPARISON OF CYBERBULLYING FOR HETEROSEXUALS AND
NON-HETEROSEXUALS (N = 438)

	Heterosexual*	Non-heterosexual*
Received Unwanted, Inappropriate Messages	29.9	43.2
Received Unwanted, Pornographic Images	16.1	19.4
Replied Unknowingly to Someone Posing as Someone Else	13.9	25
Facebook Friend "Friended" for Information	22.8	25
Received Harassing or Threatening Messages	17.6	25
Teased or Made Fun of Due to Physical Appearance, Personality or Intelligence	15.8	17.1
Harassed Due to Sexuality	.8	5.7
Target of Untrue Gossip or Humiliating Comments	10.9	14.3
Had Problems Due to Personal Information Shared w/o Consent	16.9	22.9
"Outed"	.0	14.3
Blocked by others	17.4	28.6
Private, Personal Images Shared w/o Consent	10.6	20
Other People Used Your Identity w/o Consent	6.8	11.4
Been Cyberbullied	9.5	22.9

* All number represent percent within group

DISCUSSION

The emotional impact of cyberbullying, that ranges from difficulty with grades to suicide attempts, indicates a strong need for young adults to be supported when cyberbullied. As our young adults leave the safe haven of home and venture onto the college campuses, it is essential that they are protected and provided the environment necessary for academic success. These results indicate a greater extent of cyberbullying for the LGBT student population at university.

Future research is needed to continue the quest to understand the impact of cyberbullying on these students. To this end, much more data are required regarding aspects of why individuals cyberbully. Qualitative research would enhance this understanding. This increased knowledge would aid in developing programs to educate young adults and diminish future harm from cyberbullying.

This research is limited due to the Internet dispersion of the surveys, which inhibits exact knowledge that the recipient was the respondent. As with all survey data, accuracy and honesty of participant response is out of the researcher's control.

Proposed Methods to Educate Millennials About Digital Citizenship

This area of research brings angst to the author. However, it is through research that change can occur and therefore the benefits of gathering and understanding the data far outweigh the costs. As society moves forward, it is through the education of our youth regarding these new communication challenges and how to deal with them that the future will be improved. Cyberbullying is not old wine in a new bottle. It is a new challenge that must be addressed as such with a new definition and education for Millennials.

One method proposed by this author would be through the use of college curriculum to provide a required, hybrid college communication course to address communicating with technology and doing so with decency. This course would emphasize media and information literacy (MIL) and encompass digital citizenship, interpersonal, intercultural, and social media communication theories to provide a basis for the orientation and integration of social media ethics and etiquette in curriculum, lifestyle, and in business and career (UNESCO, 2014).

Research conducted by Kentworthy et al. (2102) provided the second consideration. A service-learning platform, utilized to educate undergraduate college students while working with secondary students, to advance their knowledge of how to recognize, avoid, and address cyberbullying should be considered as a vital part of the undergraduate college experience.

In closing, this author sincerely hopes that all who read this study benefit. No more powerful words can be reiterated than those of Ravi following the suicide of Tyler Clementi, "I just wish I had talked to him more . . ." (Sloan, 2012).

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