

AN EXPLORATORY STUDY OF CYBERBULLYING AMONG NATIVE  
AMERICAN STUDENTS AT HUMBOLDT STATE UNIVERSITY

By

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A Thesis Presented to

The Faculty of Humboldt State University

In Partial Fulfillment of the Requirements for the Degree

Master of Arts in Education

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May 2014

## ABSTRACT

### AN EXPLORATORY STUDY OF CYBERBULLYING AMONG NATIVE AMERICAN STUDENTS AT HUMBOLDT STATE UNIVERSITY

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This study explores the prevalence and the relationship of cyberbullying among Native American students at Humboldt State University. Cyberbullying defined in brief as the repetitive use of technology to harm an individual. Cyberbullying is a widely studied issue that has gained International media attention with the tragic deaths of several youths and students resulting from having been cyberbullied. A host of debatable issues have emerged from the International research involving cyberbullying including age-specificity of the term, applicability, overlapping, and competing legislation of non-cyber crimes with the expanding cyber-issues, problems associated with varied instruments and inconsistent operationalization and measurement of constructs, and as school budgets are increasingly restricted debate about how best to use funds in the crafting of bullying prevention policies for schools. Trends in cyberbullying research also emerging from the literature include age, gender, ethnicity and cultural effects on prevalence rates, types of forums and technologies used, and the affect and motivations of victims and perpetrators. The present study used a modified version of an 81 item instrument but whose current convenience sample included 272 University students, with an overrepresentation of Native American students (n=58) at 21% of the sample representing 23 US Federally recognized tribes, anonymously surveyed in the Spring and Fall of the 2013-2014

academic year. The exploratory study produced robust data including demographic distinctions for comparison of gender, ethnicity, and adherence to tribal traditions for Native American respondents. Also reported on are, the identity of the perpetrator - addressing the role of anonymity, the frequency of daily Internet and cell phone use, for cyberbullying victimization and perpetration the frequency of occurrence and type of forums used and the resulting affect of victimization and motivation of perpetration. The major research question centered on the potential effect adherence to tribal traditions had for Native American respondents on the rates of perpetration and victimization. Major results include significantly higher rates of cyberbullying victimization and perpetration for Native American respondents that adhered to their tribal traditions and values relating to bullying compared to respondents not Native American. Also statistically significant was the finding of relational aggression as the primary motivation for cyberbullying perpetration among Native American respondents adhering to their tribal traditions compared to respondents not Native American, and Native American respondents that reported not adhering to their tribal traditions. Relational Aggression is defined here as aggressive behavior with the intent to attack relationships and was operationalized by two questions addressing weakness and exclusion of the victim. Conclusions include the validity in considering effects for gender, ethnicity, and culture on rates of cyberbullying perpetration and victimization when prevention policy is being created, and as response by future research to the current dearth addressing these potential effects in the literature. Cyberharassment is the intentional use of information and communication technologies to distress an individual, and it is occasionally used interchangeably in the literature with

cyberbullying. Cyberharassment is distinguishable in some State legislation from cyberbullying in that the victim of technology-based harassment is often categorized as an adult, whereas in cyberbullying legislation the victim is often distinguished as children and adolescence. Cyberstalking is generally used to describe computer-mediated acts or communications deemed as being associated with either an implied or a credible threat of violence to an undistinguished aged victim.

## ACKNOWLEDGEMENTS

I am humbled by this experience. Gravititas as a dancing partner; I tried to lead, I tried to follow, and now, I am trying to just release these beautiful ideas so that they might take shape anew with invigorated rhythm and purpose among others. As a youth, I used to ride my bike to school and would give popular kids a ride home; sometimes two at a time with one on the handlebars, one on the seat and myself straining to pump the pedals; to keep the bike going straight; to not let the kids see me as a weakling. I wanted this thesis to make a difference, so, though a bit clumsy in places, I have taken the space of days, away from my son and my wife to try and write something about cyberbullying that the next researcher could use to forward the study and creation of effective policies. I wanted to reach through time and prevent another child from feeling fear, or humiliation, or exclusion, or so many things other than the happiness of being young and new. I am now middle-aged, so I still think of 20 year-olds as young and new. At the end of my bike ride, as now, I would always look up to the Great Spirit with inexpressible appreciation of life, and that sweat-soaked exhilaration that comes from splendid effort. As a Cherokee I would stretch my appreciation through time to tell my ancestors that their sacrifices, of which there were many, are acknowledged here. I have appreciation to parents for loving me, supporting me, and teaching me everyday. I extend my appreciation to my professors especially Rain Marshall, Marlon Sherman, Ann Diver-Stamnes, Joseph Giovannetti, Eric Van Duzer, David Ellerd, Suzanne Pastzor, and Dakota Hamilton. I also thank my brothers Jade, Keif, Joe, and their families for their generosity, patience, honesty and care. Thank you Linda Sutton, David and Debbie

Boston, David and Jennifer Hillegeist, Mr. Dorfman, Gwennie, Kieara, Shawna, Becca, Aunt Kathy and Uncle Gary, Auntie Jan, Auntie Ricka, Uncle Pete, Sam, James, Steve, Seth, Jack, Billy, Uncle Ed, Joe and Cynthia, Phil and Marcia, Mary, Itala, J.P., John, Richy, Peter and Catherine, Steve and Cathy, Brian and Gale, Margret and John, Melinda, Gay Mary Ann, Lora, Damien, Jessica B. Stephanie W., Tara N. and to those many unnamed persons that have helped in such a range of ways from providing courage, humor, sustenance, insight, and child care- when one begins to write a list it quickly becomes apparent how much help has been received- thank you to everyone unnamed here, but who has helped me along the trail. Dearest to my heart, my appreciation goes to my son Javelin and my wife Sara.

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## CHAPTER ONE

### INTRODUCTION

The phenomenon of cyberbullying has gained wide attention in the media because of the resulting suicides of several students, directly linked to cyberbullying, from a range of ages and educational institutions. With the rapid increase in affordability and access to information and communication technologies, concern has developed among educators, legislators, and parents based on the perception of the ineffective, outdated or complete absence of corresponding safety guidelines for responsible Internet use. With increasing access and use of information and communication technologies by users, a corresponding increase in cyberbullying has been reported. This phenomenon though, like the technologies and environments it is perpetrated through and experienced in, and like the research that has been conducted to describe and measure it, are all new. Hoff and Mitchell (2009) describe cyberberspace as an uncivilized virtual world lacking governance, where lawlessness and vigilante justice reign supreme, similar, they assert, to a time in America's "Wild West" (p. 661). For Native Americans this reference is potentially poignant but also painful, as the legacy of lawlessness regarding the violation of Indians as people, and political entities is well documented (see Deloria, 1988; Jaimes, 1992; Stannard, 1992; Hoxie and Iverson, 1998; Prucha, 2000; Evans, 2001; Churchill, 2003). The development of cyberspace, represents a new frontier or landscape. It is expanding, developing, and taking shape with the international human expression of ideas and values, personalities and worldviews, rules and laws, or the absence of which

(in regards to the latter), as described by Hoff and Mitchell (2009). Even so, Native American behaviors studied and reported on in the field of cyberbullying are conspicuously absent much as the awareness of the rich diversity of languages, cultures and traditions among the 566 U.S. federally recognized tribes that persist despite the lawless history that they have survived. With cyberbullying research occurring internationally and with the critical mass being achieved for studies with non-demographically diverse samples, the field of study is logically branching out to examine the potential effects of culture, gender, and ethnicity on cyberbullying perpetration and victimization. This is occurring in part as theories and trends from traditional bullying and aggression are being utilized to move beyond inferential analysis in the creation of applied theory. This process requires uniform constructs and measurements to increase the predictive validity of the results and allow for cross-study comparison and meta-analysis. The study that follows is an attempt to constructively contribute to the overture of research. As the cyberbullying landscape develops and changes, the current body of research projects an initial image much as the early camera obscura projected an approximation of its object of focus. However, with committed effort and continual refinement of constructs and instruments, one day the body of research will likely represent the discrete values of the landscape, describing them with precision like that of a digital camera simultaneously detailing both the trees and the forest (Trochim, 2006).

### *Operational Definitions*

.....In an attempt to maintain consistency of the term cyberbullying as used in the present study and to allow the reader a context of the term as presented both in contrast or as aligned with the literature and in the instrument used for data collection, a composite definition is provided: Cyberbullying is a form of electronic aggression; it includes any kind of aggression perpetrated through technology “any type of harassment or bullying (teasing, telling lies, making fun of someone, making rude or mean comments, spreading rumors, or making threatening or aggressive comments) that occurs through email, a chat room, instant messaging, a website (including blogs), or text messaging” (David-Ferdon & Feldman, 2007, p. S2); Cyberbullying can include pictures, written comments/text, icons and videos (Sbarbaro & Enyeart Smith, 2011); Cyberbullying can occur anywhere information and communications technologies can be accessed, i.e. anywhere there is access to the Internet or cell phone reception/transmission is available (Willard, 2012). Cyberspace is defined here as the global, networked information representation space created by the worldwide interconnection of computer memory, data storage, and users” (Biocca, 2000, p. 23). A composite definition is also used to describe the term “Native American” with the intent to encompass a more inclusive group range than the BIA criteria, but that is still specific to the 566 U.S. federally recognized tribal entities. Native American in the present study shall mean: A Native American citizen of an unrecognized tribe; an individual that self-identifies as a descendant of a Native American; or “... someone who has blood degree from and is recognized as such by a federally recognized

tribe or village (as an enrolled tribal member) and/or the United States (Department of the Interior, 2013, section IV., para.1).

### *Overview of Thesis*

The present exploratory study examines the quantitative responses of a cross-population of University students for the usage rates of information and communication technologies, cyberbullying perpetration and victimization rates, forums and frequencies in which cyberbullying occurs both as perpetration and victimization; the identity or anonymity of the perpetrator; and the motivation for perpetration. There is, within the larger exploratory study, a specific focus on the potential effects of culture, in a minority demographics' responses, to the cyberbullying perpetration and victimization rates; forums and frequencies in which cyberbullying occurs both as perpetration and victimization; the identity or anonymity of the perpetrator; and the motivation for perpetration. The chapters are organized as follows.

Chapter Two as a detailed literature review both locates the present study within the field of cyberbullying research, specifically as filling the current void of demographically-based cross-population cyberbullying research, but it also contributes as a summary of current issues both resolved and under contention, hypotheses linked to computer-mediated communication, and problems in measuring and analyzing an emerging phenomenon amid the fervor generated by the mass media's insistence that a quick solution be found as a response to several untimely students' cyberbullying-linked suicides. Also discussed in the literature review and in Appendix A is a review of legal

issues, both domestically and in a larger international discussion relating to challenges to defining terms, creating and enforcing legislation, and the fundamental balance required in the judiciary to maintain First Amendment Rights while preventing abusive, and threatening language, in publicly funded institutions especially as related to acts of substantial disruption in schools. Chapter Three describes the conceptual development of the study; a detailed account is given of the sampling strategy and the population examined; the origins of the instrument and subsequent modification is explained; the analysis conducted is then described. Chapter Four “Results” is combined with “Analysis” as determined appropriate by the thesis committee members as the exploratory nature of the cross-population study produced a significant amount of data, and which is presented in tables as similar to Sbarbaro and Enyeart Smith’s (2011) study which used an iteration of the instrument used in the present study. A “Summary of Findings” represents a discussion of the results, as well as answering the original research questions and linking findings to the literature. Chapter Five “Conclusion” draws final conclusions, discusses limitations to the results, and describes implications of the present study for future research both in terms of content, but also in terms of its form as a demographically-based cross-population study filling the current void of this type of study, called for and cited as lacking in the cyberbullying literature.



## CHAPTER TWO

### LITERATURE REVIEW

#### *Introduction/Overview*

In an attempt to present a panoptic review of the inchoate but expanding corpus of scientific literature addressing the emerging phenomenon of cyberbullying, an evaluation of major legal points, legislation, executive orders, and adjudicated opinions was first conducted, and the results of this examination are attached as Appendix A.

In September of 2009, the House of Representatives Sub-Committee on Crime, Terrorism, and Homeland Security held a hearing in Washington, D.C. to discuss two proposed bills addressing cyberbullying (H.R. 1966 and H.R. 3630) entitled “Cyberbullying and Other Online Safety Issues for Children” (Cyberbullying and Other Online, 2009). Evidence at the hearing was presented establishing the following facts: 1) the existence of widespread access to, and use of information and computer technologies among American households; 2) a correlation exists between increased use of the Internet, and the occurrence of victimization from cyberbullying; 3) the anonymity facilitated by harassing electronic communications, and the distribution of hurtful messages to a vast and public audience via the Internet, can negatively affect user’s psychological wellbeing; 4) cyberbullying is associated with depression, negative impact on academic performance, and in some instances, suicide. (Cyberbullying and Other Online, 2009).

In 1996, the California State University Board of Trustees adopted the Integrated Technology Strategy (ITS) in an attempt to enable the California State University (CSU) system “to respond to the academic, technological, and economic challenges of the next century” (California State Board, 1996, p.2). The 23 campuses that comprise the CSU system have implemented the Technology Infrastructure Initiative (TII) of the Integrated Technology Strategy (ITS) which holds the modernizing of the CSU system’s telecommunications infrastructure, for the benefit of faculty, students, and staff, as a major objective (California State University, 2005, p.1). Articulated through the CSU’s Office of the Chancellor as proposed in the ITS Planning and Implementation Process report is the estimation that the California State University system can better prepare students for the challenges of the 21<sup>st</sup> century by “providing judicious application of information technology”(California State University, n.d., p.11). In so doing, the CSU continues its attempts to maintain alignment with the overarching CSU goal, established in 1960, to “provide broad and convenient access to high quality education at an affordable cost” (California State University, n.d., p.11). All students at Humboldt State University have access to a range of information technology for “academic programs and institutional operations” in concert with the system-wide values and commitments articulated in the Cornerstones Report (1996) (Humboldt State University, 2000, p.2; California State University, 2005, p.1). In the CSU generated report “Access to Excellence” Native American students, as grouped with other minorities in the CSU system, are referred to collectively as “underserved students” in a context of inadequate

college preparation, matriculation, and graduation (California State University, 2011, p. 15). A range of studies expand the articulation of the “underserved students” reference by concluding that Native American students continue to exist at higher levels of risk for academic failure, substance abuse, depression, and suicide than most other segments of the student body (Tyler et al., 2008; O’Connor, Hill, & Robinson, 2009; Friedman, 2013). There are currently no studies in the literature specifically examining the prevalence of cyberbullying among Native American undergraduates. Several studies on cyberbullying, as with traditional bullying, point to a need to examine the prevalence of this phenomenon among distinct populations using the independent variable of demographics (i.e. race/ethnicity and cultural influences) to compare results with existing studies, to evaluate the impact of limited access to information and communication technologies (e.g. resulting from poverty, or rural isolation), and to inform practitioners on the effectiveness and relevance of existing preventive strategies as applied to a diverse student body (Espelage & Swearer, 2003; Carlyle & Steinman, 2007; Werner, Bumpus, & Rock, 2010; Jones, 2012; Kowalski, Limber, & Agatston, 2012b; Smith, Thompson, & Bhatti, 2012). The importance of the issue of computer and information competency, training, and skills acquisition is not isolated to Native Americans, but is considered relevant to all students, faculty, and staff according to the Humboldt State University’s Information and Technology Plan (2000). However, if, as the Humboldt State University Information and Technology Plan (2000, p. 2) report asserts, mastery of computer and information technologies is to be considered not only a “fact of life” but more critically a

“survival tool of the current age” then, research into technology-based behaviors associated with negative academic outcomes (Beran & Li, 2007; Li, 2007, Kowalski & Limber, 2013) of “underserved students” (i.e. minorities referenced in the CSU generated “Access to Excellence”, 2011) is correspondingly critical, to informing current one-size-fits all policy, founded on research with minimal accounting for demographic-based effects (i.e. homogenous samples with limited examination of potential effects for ethnicity or culture as related to cyberbullying outcomes). Useful studies in this area are currently lacking in the literature (see Kowalski et al., 2012b; Smith et al., 2012) despite calls for more work in cyberbullying and special populations by researchers (Werner et al., 2010; Jones, 2012). It is posited therefore as necessary, to conduct cyberbullying research of “underserved” students, thus informing the literature which shapes the initiatives and policies intent on reducing academic disparities, negative psychosocial outcomes, and affirming access to the tools and training critical for academic and post-academic success (Humboldt State University, 2000, p.2). The Present study informs various points raised in “Access to Excellence” by addressing cross-population usage rates of information and communication technology, forums frequented in cyberbullying perpetration and victimization, and computer-mediated behaviors linked to academic outcomes and psychological well-being of underserved and underrepresented students from the existing cyberbullying literature.

In focusing on a specific sub-group of the CSU population the present study is not exhaustive or definitive in conclusion, but rather because of the void in the literature,

meant as exploratory data collection and analysis for future investigation to build on. The 566 U.S. federally recognized Native American political entities maintain distinct languages, worldviews, values, and traditions that may serve to minimize and mitigate perpetration rates, and the effects of cyberbullying victimization, or have the opposite effect (i.e. contribute to detrimental psychosocial, and educational outcomes) as a result of “cultural discontinuity” (e.g. attitudes, beliefs, and values existing and reinforced in one context, such as home, but not in another, such as school) (Tyler et. al., 2008, p. 290; California Rural Indian, 2009). Also though, as some of the Native American students at Humboldt State University live or have grown up in one of the many surrounding rural (i.e. unwired) locations (see California Rural Indian, 2009, p.12), or have attended schools without adequate technology facilities, they may be unfamiliar with the cultural norms in cyberspace; the safe and responsible use of the technology; and the dangers contained therein (e.g. sexual predation, cyberbullying, or cybertheft of personal and financial information) (see National Congress of American Indians, n.d., p.7; O’Connor, Hill, & Robinson, 2009, pp. 19-20, for discussion of inadequately resourced schools- including the quality of teachers). Thus, the focus of this study on the prevalence of cyberbullying among Native American students may produce findings useful to Native American college students who are increasingly, once matriculated, required to utilize information and communication technologies, in the pursuit and completion of academic goals.

*A range of cyberbullying definitions.*

Cyberbullying research is occurring worldwide, but as with any systematic study there must be a uniformly defined phenomenon and unit of measurement, to produce comparable findings (Gradinger, Strohmeier, Spiel, 2010; Hasebrink, Görzig, Haddon, Kalmus, & Livingstone, 2011; Ybarra, Boyd, Korchmaros, & Oppenheim, 2012; Cassidy, Faucher, & Jackson, 2013). The broad range of definitions for the phenomenon of cyberbullying can prevent accurate assessment of its occurrence and prevalence, but it can also begin to describe the myriad ways that emerging technologies are being used to enable cyberbullying by students, irrespective of age (Butler, Kift, & Campbell, 2009; Cyberbullying and Other Online, 2009; Grigg, 2010; Menesini et al., 2012; Olweus, 2012; Wankle & Wankle, 2012).

When researchers define a behavior such as cyberbullying they are creating the “paradigmatic lens or conceptual approach” to observing and measuring the phenomenon (Shariff, 2008, p. 28). As so much variation exists in the terms used and subsequent measurement of the phenomenon, much of the existing data is inconclusive or incompatible (Ybarra & Mitchell, 2004; Tokunaga, 2010; Law et al., 2012, Olweus, 2012; Zhou, 2013). Also though, proposed legislation, healthcare solutions, educational policies, and existing criminal statutes add to the variation of terminology and potential for confusion by using the terms cyberharassment, cyberstalking, cyberbullying, cybercrime, cyberdeviance, online incivility, and cyber-incivility, at times, to refer to the same behaviors (Fukuchi, 2011; Holt, Bossler, & May, 2012; Kowalski, Limber, &

Agatston, 2012b). Wankel and Wankel (2012) suggest that the rush to implement cyberbullying legislation and preventative policies among many international governmental bodies and in higher education is a response to the extreme cases of cyberbullying that have occurred. Patchin and Hinduja (2012) determine that misinformation and confusion are the natural consequences of having such a broad range of cyberbullying definitions and measurements.

Examining the definition of cyberbullying in some proposed Federal legislation, existing state legislation, and healthcare examples in the U.S., as well as the difference among those used in scholarly articles, reveals the range of terms used and the difficulty associated in focusing of the paradigmatic lens for examination of the phenomenon of cyberbullying. Even so, the examination of these examples does not exhaust the range of complexities surrounding the researcher's challenge to define and align the domestic use of the term with the burgeoning international corpus of research. Other issues related to the difficulty of arriving at a universal definition include the absence of universally ratified international law regarding cyberbullying, the concomitant variations in meaning that potentially occur in the attempted translation and transliteration of terms between languages, and differences in cultural norms (United Nations Children's Fund, IRC, 2011; Lee, 2012; Zhou et al., 2013).

*A challenge to clarify definitions based on Federal and state legislation usage.*

Ample grey-area exists among researchers, policymakers, and law enforcement on the use and application of the terms cyberbullying, cyberharassment, and

cyberstalking. The following section describes how these and related terms are used in their legal contexts. In 2006 Megan Meier, a 13 year old girl from Missouri committed suicide based on what investigators later determined to be cyberbullying (see Outing and trickery in Willard, 2005) on the social networking site MySpace.com, by a classmate's mother (Wong-Lo & Bullock, 2011). Proposed legislation in H.R. 1966, entitled the Megan Meier Cyberbullying Prevention Act (2009), defined cyberbullying as the transmission of "...interstate or foreign... communications made with the intent to coerce, intimidate, harass, or cause substantial emotional distress that use electronic means to support severe, repeated, and hostile behavior..." (H.R. 1966, § 3, 2009). Elements of this definition that will be discussed in a later section comparing cyberbullying to a traditional bullying definition include; 1) intent to cause harm, 2) substantial, 3) electronic means, and 4) repeated. Also worth noting is that this proposed Federal legislation for cyberbullying does not distinguish between adults or minors, and is consistent with existing Federal legislation covering and/or applied to cyberstalking and cyberharassment on this point (see 47 U.S.C. 223(a)(1)(C); and 18 U.S.C. 875(c)). H.R. 1966 (2009) did not pass Congress and detractors of the bill contend its authors erred in their focus on criminalization of designated behaviors and deemphasized strategies to limit cyberbullying occurrences (Cyberbullying & Other, 2009, p.131).

More recently, the suicide of an 18 year old Rutgers University student in 2010 as a result of his homosexual identity being surreptitiously revealed on the Internet (i.e. by limited streaming webcam and use of Twitter) prompted an alternative approach to



Federal legislation addressing cyberbullying by emphasizing education, counseling, and prevention of harassment at institutions of higher education through \$50 million in grants over a 5 year period (H.R. 482). The Tyler Clementi Higher Education Anti-Harassment Act of 2013 (2013) defined harassment as:

...conduct, including acts of verbal, nonverbal, or physical aggression, intimidation, or hostility (including conduct that is undertaken in whole or in part, through the use of electronic messaging services, commercial mobile services, electronic communications, or other technology) that... is sufficiently severe, persistent, or pervasive so as to limit a student's ability to participate in or benefit from a program or activity at an institution of higher education, or to create a hostile or abusive educational environment at an institution of higher education; and ...is based on a student's actual or perceived...race; color; national origin; sex; disability; sexual orientation; gender identity; or religion. (H.R. 482, para. (2)(B)(v))

According to the website [www.congress.gov](http://www.congress.gov) the proposed legislation H.R. 482 (2013) has been referred to the Subcommittee on Higher Education and Workforce Training on 4/23/13. It is interesting to note that H.R. 482 (2013) is limited to institutions of higher education that receive public funding and of which many discrimination and exclusion criteria are already covered under existing Federal legislation (see discussion in Appendix A. on the Civil Rights Act of 1964, and Title IX of the Education Amendments of 1972). Also, in H.R. 482 (2013) the use of the term anti-harassment is defined to be

inclusive of traditional and cyber-forms of harassment, instead of designating the perpetrating behaviors as the more specific, and widely referenced terms of cyberharassment, or cyberbullying (i.e. as some matriculated students may not yet be 18 years old negating the adult designation). Both of the cyber-oriented terms are mutually exclusive categorizations of emerging cyberbehaviors, while the use of the term “anti-harassment” in H.R. 482 (i.e. The Tyler Clementi, 2013) does little to streamline or clarify definitions (e.g. harassment online is more specifically described and measured in the scientific literature as cyberbullying, cyberharassment, or cyberstalking), is limited in the bill’s proposed scope (i.e. enrolled students, faculty, and staff of publicly funded institutions of higher education) while contributing legislative redundancy (See 47 U.S. Code “Protection for private blocking and screening of offensive material” § 230(b)(5) “to deter and punish trafficking in obscenity, stalking, and harassment by means of computer”). Still, H.R. 482 (i.e. The Tyler Clementi, 2013) begins the apparently arduous process of moving the discussion and subsequent definitions beyond more general and inclusive traditional forms of harassment, to refined descriptions of computer mediated hostile behaviors where, because of a law’s specificity, its refinement might more readily enable law enforcement to pursue the prosecution of cyber-violations (Cyberbullying and Other, 2009; National Conference of State Legislatures, 2012).

The drawback to the approach of refined legislation then, would be, as argued in Cyberbullying and Other (2009), that statutes might be written so narrowly as to exclude variations of the offence that might hinge on minute and technical differences in

meanings, or linked to particular technologies without anticipating technology advancements, thereby creating layers of additional legislation or amendments addressing cyber-behaviors not currently prosecutable in traditional statutes (pp. 60-70). A survey of state legislation relating to cyberbullying, cyberharassment, and cyberstalking on the National Conference of State Legislatures (NCSL) website [www.ncsl.org](http://www.ncsl.org) reveals both approaches currently being pursued (i.e., supplemental or amended versions of existing legislation, and new legislation representing refinement and specificity in relevant criteria to address cyber-behaviors, populations, and setting).

Absent existing Federal legislation on cyberbullying, and considering the subsequent range of terms applied to describe this phenomenon by state legislation, it is understandable how the overlap of some descriptions can still lead to confusion about what term to apply. In this absence it becomes essential to define the two closest and most cross-applied concepts of cyberstalking and cyberharassment in an attempt to evince distinctions between the three constructs. The definition of “cyberbullying” in H.R. 1966 (The Megan Meier, 2009), and “harassment”, through information and communication technologies in H.R. 482 (The Tyler Clementi, 2013) are drawing on existing frames of reference ranging from traditional bullying and aggression research, to cyberharassment and cyberstalking legislation (as discussed below and in Appendix A). “Cyberharassment is typically a reference to types of harassing or threatening computer mediated communications (e.g. emails, instant messages, blog entries, or websites) whose sole aim is the dedicated distress of an individual” (NCSL, 2012).

Like the ambiguity, inconsistency, and at times contrasting conceptualizations of the terms “aggression” (Geen, 2001; Xie, Swift, Cairns, & Cairns, 2002), “bullying” (Olweus, 1993; Lee, 2012), and “cyberbullying” (Kowalski, Limber, & Agatston, 2012b; Cassidy, Faucher, & Jackson, 2013), the meaning of the term cyberstalking was not uniformly described or applied in 1999 (Department of Justice, 1999). Cyberstalking is defined here, early in its inception, in a report to Vice President Al Gore by Attorney General Janet Reno (1999) as:

the use of the Internet, e-mail, or other electronic communications devices to stalk another person. Stalking generally involves harassing or threatening behavior that an individual engages in repeatedly, such as following the person, appearing at a person's home or place of business, making harassing phone calls, leaving written messages or objects, or vandalizing a person's property, Most stalking laws require that the perpetrator make a credible threat of violence against the victim; others include threats against the victim's immediate family, and still others require only that the alleged stalker's course of conduct constitute an implied threat. (U.S. Department of Justice, 1999, para. 5)

Cyberharassment and cyberstalking laws enacted by many states specifically address electronic forms of communication, but do so within existing traditional harassment and stalking laws (NCSL, 2012). Often, the major distinction in the meaning of the terms cyberharassment and cyberstalking is linked in state legislation, to the absence (cyberharassment), or the presence (cyberstalking), of a credible threat, and

therefore is considered the most dangerous of the three types of Internet aggression (NCSL, 2012). According to the website [www.cyberbullying.us](http://www.cyberbullying.us) created by researchers Sameer Hinduja Ph.D. & Justin W. Patchin Ph.D. (2013), 49 states have a bullying law; 18 states specifically mention “cyberbullying” or “cyber-bullying”; 47 states include electronic harassment in existing legislation; 49 states require a school policy to address bullying in its various forms; and 12 states include off-campus behaviors in their laws – determine the range of dates for these laws.

A few examples follow that demonstrate the range of state approaches taken to define, prevent, and punish cyber-behaviors. The state of Virginia has two related laws (Threats of death or bodily injury to a person or member of his family; threats to commit serious bodily harm to persons on school property, 2002, 5§18.2-60 (A)(1) & (B)(2002), and Harassment by computer, 2000, 5§18.2-152.7:1) that attempt to cover a wide range of behaviors inclusive to both cyber, and traditional violations (i.e. “communicates, in a writing, including an electronically transmitted communication producing a visual or electronic message” 5§18.2-60(A)(1), “orally makes a threat...” 5§18.2-60(B), and 5§18.2-152.7:1 “shall use a computer or computer network to communicate obscene, vulgar, profane, lewd, lascivious, or indecent language, or make any suggestion or proposal of an obscene nature, or threaten any illegal or immoral act...”; perpetrated by a generic offender (i.e. “any person”, 5§18.2-152.7:1, & 5§18.2-60(A)(1)); whose victim is unspecific in age and pertaining to both unspecified location (i.e. occurring anywhere 5§18.2-152.7:1, & 5§18.2-60(A)(1), but also with provisions for geographic location (i.e.

school specific 5§18.2-60(2), &(B); with two separate punishments depending on the law and section applied (i.e. Class 1 misdemeanor 5§18.2-152.7:1, & Class 1, or Class 2 felony, or Class 1 misdemeanor 5§18.2-60(A)(1),(2), & (B). Also though, in 2009 the General Assembly of Virginia, amended their Code (Board of Education guidelines and model policies for codes of student conduct; school board regulations, 431§22.1-279.6(1)(A), 2009) in an attempt to directly establish and codify among school boards, the proscribed student code of conduct and punitive policies, relating to (among other things) “...bullying, the use of electronic means for purposes of bullying, harassment, and intimidation...” (Board of Education, 431§ 22.1-279.6(1)(A), 2009). While this law does not explicitly address cyberbullying beyond the passage cited above, its creation some seven years after VA 5§18.2-60(2002), its contextual references to students and schools, and relevant adults associated with setting and subject (i.e. parents, school personnel) approximates cyberbullying as an extension of bullying, which is, by inference, a school related issue involving minors (VA Code 431§ 22.1-279.6(1)(A). Further inference from relevant facts locates cyberbullying as an increasingly prevalent manifestation of traditional bullying, primarily related to minors, with links or origins to schools, and thus beyond the efficient prosecution and purview of VA Code 5§18.2-152.7:1, 2000; VA Code 5§18.2-60(A)(1), 2002) necessitating additional legislation which places responsibility for management and mitigation in the existing and appropriate authorities’ control: “Each school board shall include, in its code of student conduct, prohibitions against bullying...” Board of Education§ 22.1-279.6(1)(B), 2009).

An inclusive grouping of vaguely defined terms is found in Ohio's (2012) legislation directing school districts to develop policies prohibiting "harassment, intimidation, or bullying by an electronic act" (District policy prohibiting harassment, intimidation, or bullying, §3313.666, 2012). Some states' legislation simply use the term 'Internet Intimidation' as a proxy for behavior that many studies would define as cyberbullying (NCSL, 2012). Another example of variation among terms and potential disparate meanings is Utah's legislation titled "Electronic communication harassment" (see Utah S.B. 91, 2009), which covers the behaviors of both adults and minors (in separate sections), but which also might be readily understood to refer to the more common terms cyberharassment and/or cyberbullying. Redundancy accompanying limitations in legislation is observed in Utah's S.B. 304 (2011), which specifically prohibits "cyberbullying" (behaviors described previously in Utah S.B. 91 among students and employees of public schools (elementary, secondary and charter), however does not extend beyond the parameters of school (Preventing Bullying and Hazing in Elementary and Secondary § 53A-11a-102, 2011; Electronic Communication Harassment Amendment §76-9-201(2)(a-d), 2009). The issues of variation in terms applied, domains of applicability, cross-application of laws to traditional and cyber-behaviors, general to specific age of perpetrator and/or victim, redundancy in legislation, and line of reasoning from the analysis of the Virginia, Utah, and Ohio legislative approaches attempting to create legislation addressing cyberbullying as a school specific issue, are themes repeated throughout the review of state legislation.

Some definitions of cyberbullying would overlap with the behaviors described in some state legislation on cyberharassment (see Jones & Scott, 2012, p.179). While some states approach cyberharassment and by extension some behaviors that would be included in many cyberbullying definitions (e.g. MA Code Part IV, Title I, Ch. 269, Annoying telephone calls or electronic communication §14A, 2010) including language addressing electronic communications in generic statutes for harassment, others have created stand-alone cyberharassment statutes (NCSL, 2012). Therefore, not only is there potential overlap between cyber-related offending behaviors codified in legislation, but there also exists among some non-cyber (i.e. traditional stalking v. cyberstalking) behaviors and corresponding state laws, the same potential overlap (for additional debate on this point see King, 2010; Jones & Scott, 2012; Bird, Taylor, & Kraft, 2012). The way in which an online aggressive behavior is defined can directly result in how punitive actions by civil and criminal courts are carried out, as well as influence educational policies regarding online associated risks (Bocij & McFarlane, 2003; Gillespie, 2006). The enactment of cyberbullying laws among many states has generally been focused on protecting minors (specifically students) from online bullying and/or harassment, and as discussed, often positions the implementation of cyberbullying prevention as the responsibility of school boards, and as such, much need exists in future legislation for clarification of the violating behaviors and the population the behaviors affect (i.e. if cyberbullying is to exclusively mean online behaviors against children, or if it is to be more inclusive to any perpetrator and any victim; also in regards to the refinement of the



offending behaviors such as the inclusion of any act of aggression online, such as harassing, intimidating, stalking, or if it is exclusive to specific acts, with defined characteristics, in online or computer-mediated environments).

*Age as a point of debate in defining cyberbullying.*

One considerable point of debate among researchers, and legislators is that cyberbullying is an age related concept (Kowalski, Limber, & Agatston, 2012b). Some linkage to research and the findings therein related to traditional bullying and aggression may be contributing to confusion on this point as developmental changes and differences in maturation are reported as contributing factors to the variation in prevalence for these non-cyber phenomenon (Olweus, 1995b; Smith & Monks, 2008; Lee, 2012), but findings are contradictory in cyberbullying studies on this point (see Ybarra & Mitchell, 2004; Beran & Li, 2007; Slojne & Smith, 2008; Jones, 2012). In traditional bullying, students in high school tend to see bullying in terms of physical aggression and consequently associate the term with younger children (Greene, 2000). Parry Aftab, a U.S. lawyer, cybercrime expert, and executive director of the website stopcyberbullying.org, states that, “adult cyber-harassment or cyberstalking is *NEVER* called cyberbullying.” (What is cyberbullying, 2013, para. 1) However, on another website (www.aftab.com) Aftab contributes to, rather than clarifying the confusion related to age-specific designations within the cyber-terminology when she states, “When a student harasses a teacher, it falls under cyberharassment...Note that some new cyberbullying laws classify teacher cyberharassment as ‘cyberbullying’ for those purposes, though.” (Aftab, Cyberbullying,

para. 3, 2013). By contrasting Aftab's (2013) legal contextualization of the term cyberharassment applied to adults, with the term "Internet harassment" used by researchers Priebe, Mitchell, & Finklehor (2013) as applied to minors, the inconsistency yet to be clarified between academic and legal use of cyber-terms begins to emerge. Internally the academic community researching cyberbullying is similarly inconsistent in determining universal meaning and application of cyber-terminology on the basis of age as cyberbullying can be found applied to both studies on minors (Menesini, Nocentini, & Camodeca, 2013), and adults (Hoff & Mitchell, 2009). One study among college students concluded that the majority of cyberbullying incidents reported, and many of the first incidents experienced, had occurred during college (Kowalski, Giumetti, Schroeder, & Reese, 2012a, p.308). Several studies use population samples that both defy categorical description or age-based generalizability because the age span from the study sample includes children and adults (i.e. the U.S. legal definition of a child is under 18 years old), but they also demonstrate that cyberbullying is occurring across a spectrum of ages (See Patchin & Hinduja, 2006; Slonje & Smith, 2008; Fenaughty & Harré, 2013).

Researchers of workplace bullying among adults, using the term bullying and a term approximated, through translation, to mean bullying, (i.e. the Swedish term "mobbing") have determined that "exposure to systematic and long-lasting verbal, non-physical, and non-sexual abusive and aggressive behavior in the workplace causes a variety of negative health effects in the target" (Zapf & Einarsen, 2001, p.370). Zapf (1999) reported increases in anxiety, depression and negative affect, as well as stress among a population

of mobbed (i.e. bullied) adult workplace respondents (p. 81). The point becomes evident that even among experts on the phenomenon, the paradigmatic lens continues to require adjustment to adequately describe and define this emerging construct. Additional discussion of cyberbullying laws, orders, and judgements is included in Appendix A.

*International issues preventing clear definition, measurement, and interventions*

Bocij & McFarlane (2003) point out how even the clearest definitions have limitations on applicability as variations among nations' legislation can prevent International criminal prosecution of Internet promoted race hate and targeted harassment of minority groups. Beyond the existence or absence of actual legislation applicable to cyberbullying lies the question of International jurisdiction and limitations therein. One approach to address the complex issue of myriad jurisdictions involved with cybercrime, used in Canada, links cyberbullying of children to the violation of human rights (UNICEF Canada, 2012). Canadian legislators determined that "although adults can also be perpetrators or victims, cyberbullying is a unique aspect of growing up for today's children that can have a significant impact on their development and futures" (Cyberbullying Hurts, 2012, p. 7). As such, the Canadian Parliament's use of the term cyberbullying is focused on children (i.e. under 18 years old) and the government's "international human rights obligations under the United Nations *Convention on the Rights of the Child*" (Cyberbullying Hurts, 2012, p.7). Further, UNICEF Canada (2012) determines that "the bullying of children in all of its forms is a human rights violation, requiring a rights-based response according to international normative standards and the

principles of children's rights" (UNICEF Canada, 2012, p.14). This standardization of 1) an international definition of the victimized population (in this instance designated as children), and 2) a codified set of laws, ratified among an international governing body, addressing perpetrator behaviors, is one potential solution to addressing the complexities involved with the issues of international legislation, jurisdiction, and ultimately linguistic and cultural differences associated with a global definition of cyberbullying. As academics researching cyberbullying are noted to be contributing professional opinions and data to UNICEF, it is again observed that refinement, then consistent use of definitions and domains used to research and measure by the academic community, is fundamental to adequately inform and describe cyberbullying behaviors which future legislation and preventative policies is founded on (UNICEF-IRC 2011; UNICEF Canada, 2012; Cyberbullying Hurts, 2012).

Benbenishty, & Astor (2011) address similar challenges with the variations among definitions, measurement and subsequent contrasting findings from international studies and publications focused on the terms "school violence" and "bullying"(p.13). They suggest that a cross-cultural perspectives approach termed "ecologically sensitive", (i.e. not a one-size-fits-all approach to solutions), that allows for diverse, socio-cultural contexts to be considered and compared from multiple perspectives and examples that have worked, but that may require specific adjustment from country to country (pp.7-12). They conclude that for valid comparisons to be made, effective interventions devised, and relevant policies to be implemented there must first be "standardized and highly

congruent instruments across participating countries,”(Benbenishty & Astor, 2011, p.12). Similarly in order for a standardized definition of the phenomenon cyberbullying to be created and internationally agreed upon, measured and studied, legislated, enforced, and effectively limited or prevented, global participation among many individuals, organizations, and states will be required (UNICEF-IRC, 2011). The present international collaborative approach to addressing “online abuse and exploitation of children” by members of the U.N. include using existing protocols that facilitate the reduction and elimination of transnational crime such as the Convention on the Rights of the Child (1989); the United Nations Convention against Transnational Organized Crime (‘Palermo Protocol’, 2000); Council of Europe Convention on Cybercrime (2001); Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (2007); Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography (OPSC, 2000), (UNICEF-IRC, 2011, p. 10).

With international research continuing to be conducted, a greater understanding of the potential role culture plays in cyberbullying behaviors may be determined. Konishi et al. (2009) examined longitudinal bullying data including the subscale item cyber/electronic bullying (i.e. “By using computer, e-mail, or phone text messages?”) of students grades 5-7, from 5 Pacific-Rim countries, concluding that comparability of bullying measures and determinations of construct stability, across diverse language and cultural contexts, must be examined with caution as “culture and language are

fundamental and complex” (pp. 90-91). Research conducted by Zhou et al. (2013) among 1,438 10th-12th graders, using anonymous surveys, reported that high school students from mainland China are more frequently involved in cyberbullying than reported rates from Western countries. Zhou et al. (2013) attributes differences in gender findings, compared with studies conducted in Western countries (i.e. higher levels of both perpetration and victimization in boys), to be linked with cultural differences. Huang and Chou (2010) administering anonymous surveys to 545 7<sup>th</sup>-9<sup>th</sup> grade Chinese Taiwanese students and based on their findings hypothesized that the influence of cultural norms such as conflict avoidance and collective group harmony contributed to findings related to “teens’ passive responses” both as bystanders witness to, and more directly as a victim of cyberbullying (p.1588). Smith & Monks, (2008) reviewing cross-national differences in research on bullying conclude that while there are known socio-cultural distinctions such as the individualism-collectivism dichotomy (e.g. Western industrialized v. Eastern collectivist societies as reflected in perpetrator behaviors, of an individual or group, based on the cultural and societal orientation), or hierarchy (e.g. South Korea being more hierarchically oriented and thus abuse by older students being more common/accepted), other factors such as differences in schools’ configuration (e.g. age groupings, amount of supervision at school), conceptualization of abuse, and the terms used by researchers to describe perpetrating behaviors, all must be considered when evaluating results from cross-nation bullying studies (p. 110). Juvonen, & Gross, (2008) posit that any definition used in a study must be based on the subject’s experiences, using terminology familiar to

them. Benbenishty & Astor (2011) discuss the potential for reducing the range of inconsonant definitions that are influenced by distinct cultural interpretations of the designated constructs through self-reports that “focus on specific behaviors and suggest researchers should refrain, as much as possible, from using loosely defined abstract labels (such as bully) that may have different meanings and connotations in different countries” (p. 15). Gradinger, Strohmeier, & Spiel (2010) studying Austrian students ages 10-15, determined that because there is no exact translation in the German language of the English term “bullying”, the use of combined terms “beleidigen oder verletzen” (i.e. hurting or insulting) along with a global construct and behavioral-specific characteristics were used (Instrument, para 2). Smith & Monks (2008) reviewing international prevalence rates of bullying describe how the variation in rates may be reflective of real behavioral differences, but may be accounted for by differences in the interpretation of the term “bullied”, or may be ascribed to meaning differences of related concepts used in a particular country (e.g. the Japanese term “ijime” as emphasizing verbal/indirect bullying v. physical bullying) (p. 109). Further, Smith & Monks (2008) compiled a list of related, or approximated terms for bullying from 32 different countries, and when viewed in light of the discussion of domestic cyber-terms above (i.e. the interchangeable use in the U.S. of the terms cyberbullying, cyberharassment, and cyberharassment), the challenge for researchers to generalize findings beyond specific samples or similar methodological approaches, on varying terms, meanings, temporal or cultural influences,

becomes more evident and is cause for “care and circumspection in interpretation of results” (Smith & Monks, 2008, p.110).

Though many international challenges exist to define, study, and prevent cyberbullying, the viable path ahead entails using international protocols, standardized instruments, and existing legal constructs developed for other social problems, as well as considering multiple socio-cultural perspectives, behavioral norms, and the spectrum of approximated behavioral and linguistic meanings for terms when attempting to translate policies and interventions from distinct contexts.

There is currently no universally agreed upon definition of the term cyberbullying as a consequence of the many factors discussed in the above analysis. Factors including that research is occurring with different sample populations; the use of diverse instruments and methods of data collection with distinct conceptual and operational constructs; studies conducted in many countries, among different cultures with discrete languages, which can possess subtle differences in meaning, by students, teachers, parents, education administrators, health care professionals, Internet users, law enforcement officers, legislators, and adjudicators; in an attempt to describe, define, measure, compare, predict, limit, prevent, and when it is deemed appropriate, punish offenders of cyberbullying, (Espelage & Swearer, 2003; Langos, 2012; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012). Even as discussions continue on the usefulness and/or appropriateness of existing terms, inconsistent or divergent meanings, and incompatible measurements involving multiple facets of cyber hostility, the need for



uniformity and consensus of meaning and measurement is without question. There is agreement too, that cyberbullying exists, and that it is a global phenomenon (Konishi et al., 2009; Dooley, Cross, Hearn, & Treyvaud, 2009, Erdur-Baker, 2010; Lee, 2012; Cassidy, Faucher, & Jackson, 2013; Fenaughty & Harré, 2013; Zhou et al., 2013).

*A working definition of cyberbullying.*

For the purposes of this study cyberbullying will refer to the following composite definition: Cyberbullying is a form of electronic aggression; it includes any kind of aggression perpetrated through technology “any type of harassment or bullying (teasing, telling lies, making fun of someone, making rude or mean comments, spreading rumors, or making threatening or aggressive comments) that occurs through email, a chat room, instant messaging, a website (including blogs), or text messaging” (David-Ferdon & Feldman, 2007, p. S2); Cyberbullying can include pictures, written comments/text, icons and videos (Sbarbaro & Enyeart Smith, 2011); Cyberbullying can occur anywhere information and communications technologies can be accessed, (i.e. anywhere there is access to the Internet or cell phone reception/transmission is available) (Willard, 2012).

*Influences of previous research on aggression and bullying.*

The existing conceptual and theoretical framework from studies on aggression and bullying comprise the blueprints for much of the research conducted to date on cyberbullying. As such, a brief review of these terms and their constructs help narrow the parameters of the examination of cyberbullying and discern the subtle distinctions between the various phenomena, but also to locate the current empirical

examination of cyberbullying in relation to its antecedents. Aggression "...is the delivery of an aversive stimulus from one person to another, with intent to harm and with an expectation of causing such harm, when the other person is motivated to escape or avoid the stimulus" (Geen, 2001, p. 3). Research in the aggression domain focuses on discovering what "biological, environmental, psychological, and social factors influence aggressive behavior," and attempts to apply the findings to solutions and policies intent on mitigating the frequency and scope of aggression in society (Anderson & Bushman, 2002, p. 34). Building off of her research with adults, Norma Feshbach (1969) examined gender differences in aggression among first graders and differentiated overt, direct, anti-social aggression (i.e. physical attacks, verbal assaults, expressive aggression such as sneering or threatening gestures, and fantasies of violence), from covert, indirect, pro-social aggression (i.e. social exclusion, ignoring, avoiding, exclusion, and rejection) (p. 252). Feshbach's (1969) finding of which the girls' indirect scores were significantly higher than boys (p. 257) are consistent with Crick and Grotpeter's (1995) findings' of significantly higher relational aggression scores among third through sixth grade girls than boys (p.718). Crick and Grotpeter (1995) describe relational aggression as "harming others through purposeful manipulation and damage" (or threat of damage) "of their peer relationships"(p.711). Also included in this definition is the act of social control of friendships, or group membership through exclusion or inclusion of individuals with the aim of affecting an individual's feelings of acceptance i.e. spreading rumors about an individual, using the "...silent treatment' as punishment or to get one's way," and "using

social exclusion as a form of retaliation...” (Crick et al., 1999, p. 77). The terms “covert, indirect, pro-social aggression” used by Feshbach (1969) differ in form and function to the term “relational aggression” used by Crick and Grotpeter (1995). While these terms appear to describe essentially the same non-physical, verbal acts of aggression (e.g. verbal insults, threats), there remain subtle yet significant differences (Crick & Grotpeter, 1995, p.711). Xie, Swift, Cairns & Cairns (2002) expanded several distinctions between non-physical types of aggression by continuing the refinement of classification describing social, indirect, and relational aggression in terms of confrontational or non-confrontational actions. Social aggression is described as behaviors “that cause interpersonal damage and are achieved by non-confrontational and largely concealed methods that employ the social community” (i.e.. gossiping, social exclusion, and social alienation) (Xie et al., 2002, p.206). Feshbach’s (1969) use of indirect aggression (i.e. ignoring, avoiding, and excluding others from social interchanges) differs, according to Xie et al. (2002) from social aggression in that the perpetrator does not have to use the social community as a means to attack (e.g., ‘Takes revenge in play’), but also that it was confrontational in the sense that in Feshbach (1969) the perpetrator and victim were both present in a laboratory, where beyond this setting, this type of aggression would be employed through group dynamics and thus would be non-confrontational actions (Xie et al., 2002, p. 206). Relational aggression as defined by Crick and Grotpeter (1995), differs from social aggression as “social aggression refers exclusively to non-confrontational actions that employ the social community”, but certain behaviors covered under relational

aggression can require the social community (e.g. gossiping, exclusion) where others (e.g. ignoring) do not (Xie et al., 2002, p.206). Crick et al. (1999) elaborate on the fundamental distinguishing characteristics between relational aggression that "...includes all hostile acts in which relationships are the vehicle of harm, regardless of the indirect or direct nature of the behavior"; indirect aggression that is "...focused on the nonconfrontational nature of hostile behavior..."; and social aggression "...that does not specifically focus on damage to relationships" (Crick et al., 1999, pp. 77-78). Acts of relational aggression could be encompassed in indirect aggression (e.g. ignoring or rumor spreading), and social aggression (e.g. rumor spreading and social exclusion), but it is an exclusive form of aggression based on the intent of the behavior (Crick et al., 1999, pp. 77-78). Cassidy, Faucher, & Jackson (2013) posit that some types of cyberbullying resemble the traditional bullying form of relational aggression. Jackson, Cassidy, & Brown (2009) determine "cyber-bullying" to be "a form of aggressive behavior... specifically relational aggression" as it can employ indirect or covert bullying behaviors (i.e. hurtful comments, exclusion, gossip, retaliation) with the intention of attacking and damaging relationships (p.79). In a longitudinal study of 7<sup>th</sup> and 9<sup>th</sup> grade Australian students' cyberbullying and traditional bullying behaviors, Hemphill et al. (2012) equated relational aggression to a type of covert bullying (e.g. exclusion, spreading rumors, and distinct from overt physical and verbal forms) and concluded the existence of a predictive association between a student's previous involvement as the perpetrator and/or victim of relational aggression, and both traditional covert bullying, and cyberbullying (n.p., para.

3 & 23). Werner, Bumpus, and Rock (2010) determined that “youth who were relationally aggressive offline were approximately ten times more likely than non-relationally aggressive youth to aggress over the Internet” (p. 616). Also though, as noted by Smith et al. (2008) some aspects of cyberbullying will continue to require additional theoretical elaboration if aggression and bullying constructs and prevention policies are to be applied to cyberbullying because it combines old and new behavioral forms and contexts similar to, but in some instances distinct from, the traditional behaviors of which the traditional assessments are formed and focused (e.g. the anonymity of the aggressor found in traditional indirect aggression combined with the traditional direct aggression characteristic of an overt attack as in a hurtful image posted, or text written) (p. 376). Werner et al. (2010) also contend that while not all cyberbullying behaviors fit a description fitting that of relational aggression, researchers should continue to examine the similarities in the dynamics of the harassing behaviors both online and off, to gain greater understanding of where they align and where they diverge (e.g., threatening to harm someone physically though online, would constitute physical aggression; sending a racially derogatory email to an individual recipient, would equate verbal aggression; the use of a social networking platform such as Facebook for the social significance in the exclusion of a victim would be construed as a relationally aggressive attack)(p. 616). As many of the defined covert and/or indirect behaviors, methods employed, and the intended outcomes, of relational aggression align and overlap with both bullying and cyberbullying definitions, further analysis of prevention strategies among relational

aggression studies and subsequent evidence-based solutions derived from them, is an apparent area of future study. This point is reinforced by Ólafsson, Livingstone, and Haddon (2013) who determine that, “although multidisciplinary, multi-method, contextual, and longitudinal research is particularly demanding, it remains sorely needed if we are to understand not only what children encounter online but also why, how and with what consequences” (p.33).

Langos (2012) contends that cyberbullying definitions should evolve to reflect specific differences in the form and context of the behaviors similar to those found in the aggression schemata and proposes the subcategories *direct cyberbullying* (i.e. addressing characteristics of repetition and intent to clarify inadvertent and isolated incidents such as in harmful emails or blog comments directed at someone), and *intentionally directed cyberbullying* (i.e. intentionally directed, but intended negative impact, such as excluding someone from a chatroom, using anonymity to post harmful videos, images, or text on social networking sites) (p. 287). The scientific literature examining cyberbullying is limited in revealing solutions (legislative solutions notwithstanding) generated from aggression research on matters of refinement of definition and, despite the overarching behavioral themes, co-application of relevant paradigmatic dynamics developed in the study of aggression and bullying but modified to the study of cyberbullying.

Similar trends from aggression literature can be observed in the scientific literature devoted to bullying research regarding inconsistent definitions, scope, and interchangeable usage of terms (e.g. aggression, harassment, and bullying) (Greene,

2000, p.72; Vandebosch & Van Cleemput, 2009, p.1350). A common definition of traditional bullying used in the literature states that "...a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students" (Olweus, 1993, p. 9). "Negative actions can include physical contact, words, making faces or dirty gestures and intentional exclusion from a group" (Olweus, 1995a, p. 197). Olweus (1995a) also notes that a criterion of bullying is, a real or perceived, imbalance in strength (i.e. an asymmetrical power relationship) (p.197). "The student who is exposed to the negative actions has difficulty defending him/herself and is somewhat helpless against the student or students who harass" (Olweus, 1993, p. 10). Greene (2000) adds to the traditional bullying definition (Olweus, 1993) by including two additional criteria: 1) the bullying behavior is "unprovoked by verbal or physical aggression..." and 2) "bullying always occurs in small social groups in which members of the group know, or are familiar with, one another..." (p. 73). These additional criteria cited by Greene (2000) however are widely overlooked in both the conceptual and operational definitions of cyberbullying (see Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Smith et al., 2008; Parris, Varjas, Meyers, & Cutts, 2012). Olweus, (1993) established a distinction between direct bullying (i.e. open attacks) and indirect bullying (i.e. less visible attacks) including "...social isolation and exclusion from a group" (p.10). Greene (2000) refers to indirect bullying as "relational victimization" and describes it as behavior intent on damaging, through indirect means, the victim's social relationships, and social exclusion (e.g. shunning, maligning,

spreading derogatory rumors) (p.75). Through systematic synthesis the similarities and differences arising between conceptual and applied definitions as posited at the beginning of this section, become evident as Greene's (2000) "relational victimization", as an approximation of a sub-type of the widely cited Olweus (1993) traditional bullying definition, bears significant resemblance to behavioral characteristics and intent of "relational aggression" discussed by Feshbach (1969), Crick and Grotpeter (1995), and Xie et al. (2002). It is significant to note too, that as this seminal definition of traditional bullying relates to students, and many cyberbullying definitions utilize components of the Olweus' (1993) definition, it is comprehensible how the origins for many references to cyberbullying also relate to students (See Beran & Li, 2005; Agatston et al., 2007; Li, 2007; Cassidy, Jackson & Brown, 2009; Erdur-Baker, 2010; Gradinger, Strohmeier, & Spiel, 2010; Hemphill et al., 2012; Zhou et al., 2013). Also though, as discussed in greater depth below, the aggression and bullying schemata serve as the established and durable foundations to the nascent research into the technology-enabled behaviors inclusive to cyberbullying. The recent and rapid emergence of the phenomenon cyberbullying and its subsequent empirical examination has prompted researchers, as similarly noted with legislators and policy makers (e.g. Wankle & Wankle, 2012), to borrow from the existing conceptual and theoretical paradigms in an attempt to understand and make recommendations on reducing and preventing the cyberbullying's deleterious effects (see [www.cyberbullying.us](http://www.cyberbullying.us) for detailed list linking to cyberbullying laws of which the majority have been enacted within the past decade).



One issue brief published by the U.S. Department of Health and Human Services (2008), describes behaviors that meet the most general criteria for cyberbullying used in many extant scholarly studies, but rather than align terminology with cyberbullying research, they subsumed the established behavioral characteristics into a parallel phenomenon titled “electronic aggression” (Hertz & David-Ferdon, 2008). In a subsequent publication, David-Ferdon, & Hertz (2009) define the phenomenon “electronic aggression” as: “Any type of harassment or bullying (teasing, telling lies, making fun of someone, making rude or mean comments, spreading rumors, or making threatening or aggressive comments) that occurs through e-mail, a chat room, instant messaging, a website (including blogs), text messaging, or videos or pictures posted on websites or sent through cell phones” (David-Ferdon & Hertz, 2009, p. 3).

Langos (2012) contends that there is international consensus on the point of cyberbullying existing as a branch of the aggression schemata. Greene (2000) asserts that, “bullying is the most common form of aggression among school children” (p.76). Smith & Monks (2008) posit that bullying is a “subcategory of aggressive behavior” (p.101). But as Dooley, Pyzalski, & Cross (2009b) point out, Olweus (1993) distinguished aggression from bullying in two ways: 1) there must be a power imbalance between the victim and the bully (aggression can occur between individuals or groups of equal standing/strength/power), and 2) the offending action must occur in more than one instance to be classified as bullying (i.e. repetitive as opposed to one isolated, aggressive act)(p.182). Establishing the presence of both of these distinguishing points (imbalance of

power, and repetitiveness) is a unique challenge for researchers examining cyberbullying, as the bullying occurs in cyberspace under variable conditions (Dooley et al., 2009b; Grigg, 2010, p.144). In traditional bullying the asymmetrical power relationship (i.e. imbalance of power) can be equated to physical strength or psychological power of the perpetrator, however in a cyber-environment it can be difficult to measure this definitional criteria of cyberbullying (Dooley et al., 2009b). Baldasare et al. (2012) posit that because of the element of anonymity in many digital communications, observing and measuring the presence and extent of a power imbalance becomes undeterminable, rendering this descriptive criteria, unessential to a cyberbullying definition. When viewed as advanced technological skills, power imbalance has mixed findings (see discussion below Hinduja & Patchin, 2006; Grigg, 2010; Hemphill et al., 2012).

The question of repetition in cyberbullying is not easily clarified when the perpetrator's single action, such as the posting of a damaging video, can be viewed innumerable times by an online audience (Vandebosch, & Van Cleemput, 2009; Dooley, Pyzalski, & Cross, 2009b; Grigg, 2010). "Having an embarrassing picture posted on the Internet has the potential for significant and long-lasting social and emotional harm", and thus the questioning of parameters for, and deemphasizing of the "repetitive" criteria, in an applied cyberbullying definition is occurring among researchers (Dooley, Pyzalski, & Cross, 2009b, p.183). The fundamental element of repetition in many cyberbullying definitions is commonplace, drawing on traditional bullying research (e.g. Olweus, 1993), however unlike traditional bullying, the online aggressive acts perpetrated in

communication modalities (i.e. chat rooms, social networking sites, blogs, Internet gaming etc.) and facilitated by information and computer technologies, can obfuscate the accurate definition and measurement of cyberbullying (Grigg, 2010; Kowalski et al., 2012a). Still, defining cyberbullying as a conceptual construct based on the behaviorally similar constructs of traditional bullying, and aggression, provides important parameters with which the succinct refinement of the phenomenon might proceed.

*Cyberbullying compared with traditional bullying.*

An ongoing discussion is occurring among researchers of cyberbullying involving the question of whether the phenomenon of cyberbullying is a new branch of behavior that the existing theories and models of traditional bullying behaviors' pertain, or if it is a unique form of behavior that is requiring new theories, models, and solutions distinct from those specifically designed for traditional bullying (Li, 2007; Raskauskas & Stoltz, 2007; Cassidy, Jackson, & Brown, 2009; Tokunagwa, 2010; Ang, Tan, & Mansor, 2011; Law, Shapka, Hymel, Olson, & Waterhouse, 2012; Bauman, 2013; Menesini, Nocentini, & Camodeca, 2013). Many cyberbullying studies either use a direct version of the Olweus (1993) definition of bullying, or incorporate elements of the original constructs (i.e. power imbalance, repetition; intentionality, negative stimulus), into their description of a cyberbullying definition (see Patchin & Hinduja, 2006; Smith et al., 2008; Dooley, Pyszalski, & Cross, 2009b; Belsey, 2011; Von Mareés & Peterman, 2012; Menesini, Nocentini, & Camodeca, 2013). A functional comparison between traditional bullying and cyberbullying evinces similarities and distinctions between the two terms.

Either Nancy Willard or Bill Belsey first coined the term cyberbullying in the early part of the 21<sup>st</sup> Century (Shariff, 2008). The Canadian educator Bill Belsey claims that he was first to use the term to describe an emerging phenomenon that he was observing among his students that were accessing the Internet (Belsey, 2006). Belsey defines cyberbullying on his anti-bullying website [cyberbullying.org](http://cyberbullying.org) as, "...the use of information and communication technologies to support deliberate, repeated, and hostile behaviour, by an individual or group, that is intended to harm others" (Belsey, 2011). Similar, and widely cited is the cyberbullying definition proposed by Smith et al. (2008): "An aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" (p. 376). Smith et al. (2008) cite the Olweus (1993) bullying definition as directly influencing their conceptualization of the construct (i.e. "an aggressive, intentional act or behaviour, that is carried out by a group or an individual repeatedly and over time, against a victim who can not easily defend him or herself" p.376).

Dehue, Bolman, and Vollink (2008) suggest that three necessary conditions must be met for a situation to be considered cyberbullying: the behaviors must be repeated, involve psychological torment, and be carried out with intent. Perceptibly absent from this determination though, is the necessary criteria that the bullying occurs using information and communication technologies (see discussion below Smith et al., 2008; Bocij & McFarlane, 2003; Baldasare et al., 2012). Ybarra et al. (2012) suggest that double counting of incidents can occur because of the range of definitions and ways the

term is operationalized in studies, therefore they propose “three mutually exclusive components: (1) type (e.g., physical, relational), (2) mode of communication through which occurs (e.g., in person, online), and (3) environment (e.g., school) (p.54).

Some research has demonstrated a co-occurrence between traditional bullying and cyberbullying (Ybarra & Mitchell, 2004; Beran & Li, 2007; Raskauskas & Stoltz, 2007; Juvonen & Gross, 2008; Sourander et al., 2010; Werner et al., 2010; Wang, 2012; Bauman, 2013). Juvonen, & Gross, (2008) compared cyberbullying to traditional bullying and determined a similarly resulting increase in victims’ psychological distress and anxiety. Another study examining both traditional bullying and cyberbullying found that elevated rates of depressive symptoms were found in youths who were cybervictims and traditional bully-victims compared with those who identified as just cyberbullies or were uninvolved in the defined behavior (Perren, Dooley, Shaw, & Cross, 2010). Gini & Pozzoli (2009) conducted a meta-analysis on bullying and concluded “children... of both genders, of different age groups, and from different countries around the world... frequently involved in bullying, particularly victims and bully-victims, suffer from psychosomatic problems.” (p. 1064). While Sourander et al. (2010) studying cyberbullying among Finnish 13-16 year olds had similar findings “that all children involved in bullying behavior (bullies, victims, and bully-victims) are at significantly higher risk for a variety of psychosomatic problems compared with uninvolved peers” (p.727). Also, Hemphill et al. (2009) found that academic failure was a predictor of traditional bullying, and this reverse corollary has similarly been reported in

cyberbullying studies (Beran & Li, 2007; Kowalski & Limber, 2013). And perhaps most significant is the analysis of data compiled by the U.S. Secret Service and the Department of Education, by Vossekuil, Fein, Reddy, Borum, & Modzeleski (2002) that reported on U.S. school violence between the years 1974-2000, and cautiously approximated that 71% of the 41 students who attacked their schoolmates (n=37) had reported having been bullied (p. 21). Smith et al. (2008) conducted two studies among approximately 600, 11-16 UK students and found that “cyberbullying, unlike traditional bullying, is experienced more out of school than in school (Smith et al., 2008, p. 382). As the findings analyzed by Vossekuil et al. (2002) don’t specify what type of bullying occurred in the descriptive statistic, it is uncertain if the Smith et al. (2008) finding (i.e. more out of school) is contrasting the former, or merely elaborating on the point that cyberbullying extends beyond traditional domains as similarly determined by Patchin & Hinduja, (2006). But, as described in Appendix A., though often times occurring outside of school, cyberbullying still has the potential to present a substantial and significant disruption to a child’s right to a publicly funded education (see discussion in Appendix A. re: Tinker v. Des Moines Independent Community School Dist., 1969; Title IX of the Educational Amendments of 1972; The Civil Rights Act of 1964; JC ex rel. RC v Beverly Hills Unified School, 2010).

Although similarities exist there are also specific differences between cyberbullying and traditional bullying, which, as touched on in the previous point and from Appendix A, can be linked to the use of information and communication

technology. Another widely cited difference is that the technology has the potential to disseminate bullying speech (text, icons, pictures, videos, etc.) to a large percentage of the bully/victims' peer group (Slojne & Smith, 2008; Von Marées & Petermann, 2012). Second, it is more difficult for the cybervictim to get away from the cyberbullying compared to traditional bullying as the near-ubiquitous wireless infrastructure (i.e. the basic service set) and the use of information and communication technology as a means of bullying increases (Slojne & Smith, 2008; Von Marées & Petermann, 2012).

Sourander et al. (2010) describe how through the use of information and communication technologies the conveyance of hostile messages (e.g. texts or emails) by perpetrators, at any hour to victims, presents a distinct difference from traditional bullying (p.725). But also to be considered is the asynchronous nature of many online exchanges, as Werner et al. (2010) noted "adolescents can carefully construct emails, comments to social networking sites, and blog entries, rather than having to respond immediately as is typically the case in a telephone or face- to-face conversation" (p.608). Regarding the characteristic of *power imbalance* considered fundamental to traditional bullying (Olweus, 1993), some studies relate the power imbalance in cyberbullying to technological skills and superior knowledge as contrasted with physical strength or social standing (Patchin & Hinduja, 2006, p.152; Vandebosch & Van Cleemput, 2008; Dooley et al., 2009b, Hemphill et al., 2012). However, Grigg, (2010) regards this hypothesis as unsupported by the existing data and asserts the need for a quantifiable measurement to

be created enabling additional research and analysis for the construct of power imbalance.

### *Gender*

Slojne & Smith (2008) discuss how the variable of gender has factored into traditional bullying prevalence rates (e.g. Olweus, 1993; Crick & Grotpeter, 1995) with males having consistently demonstrated higher rates of perpetration in the bullying sub-type; physical aggression, and females being observed with slightly increased rates of bullying sub-type; indirect/relational aggression, but no difference for verbal aggression (p.149). Similarly, findings from a variety of data sources compiled in the “Indicators of School Crime and Safety: 2012” reported that in 2011, a higher percentage of females to males, ages 12–18 reported that they were involved in verbal, social, or relational sub-types of bullying (i.e. made fun of, called names, insulted, were the subject of rumors, or excluded from activities on purpose), but that a higher percentage of males to females reported being pushed, shoved, tripped, or spit on (i.e. physical bullying), (Robers, Kemp, Truman, & Snyder, 2013, p. 44). Further, the hypothesis has been asserted, based on findings from studies of aggression including traditional bullying (e.g. Olweus, 1993; Crick & Grotpeter, 1995; Robers et al., 2013) determining higher rates of perpetration to males in forms of physical aggression, decreased gender differences in verbal aggression, and increased rates of indirect/relational and social forms of aggression perpetrated by females, that “because most cyberbullying is not face-to-face, the gender balance in bullying might be skewed more towards girls than is found for conventional bullying”



(Slonje and Smith, 2008, p.149; Kowalski, Limber, & Agatston, 2012b; Cassidy, 2013). The findings from the literature cannot conclusively confirm this hypothesis, as a range of findings from significant gender differences, to no significant gender difference in cyberbullying behaviors, presents an unclear picture based on this variable (Slonje & Smith, 2008; Kowalski et al., 2012b; Cassidy, 2013). A cursory description of the divergent findings consistent with (Kowalski et al., 2012b) follows. No gender difference in either the perpetrator or victim roles of cyberbullying (Slonje & Smith, 2008). No gender differences for cyberbullying perpetration was found in various studies (Ybarra & Mitchell, 2004; Williams & Guerra, 2007; Hemphill et al., 2012). No gender difference in cyberbullying victimization was found in various studies (Ybarra & Mitchell, 2004). Male students demonstrated higher levels of cyber-victimization and cyberbullying than female students (Erdur-Baker, 2010, p.111). Jones (2012) reported “ a steady and significant increase in online harassment...since 2000 (especially for girls being harassed online)” (p. 183). In contrast, Li (2007) reported that males were more likely to engage in cyberbullying behaviors than their female counterparts (p.1783). Pornari & Wood (2010) reported higher cyberbullying rates for girls compared with boys. Additionally, Fenaughty & Harré (2013) addressing findings from two studies (i.e. study #1: 36 NZ student interviews ages 13-15, and study #2: 1,673 NZ student questionnaires ages 12-19) that while their gender analysis produced mixed results, no significant gender differences for the successful resolution of electronic harassment by mobile phones or through the Internet was found. Fenaughty & Harré (2013) relate their findings of no significant

gender difference in the successful resolution of electronic harassment, to the literature reporting females experiencing higher rates of “both electronic harassment and distress from harassment and suggests support for female students is particularly critical” (p. 248). Grading, Strohmeier, & Spiel (2010) found divergent results using a global measurement where boys reported higher rates of perpetration, as contrasted to specific behavioral measurement items where no gender difference was found. Grading et al. (2010) determine that their divergent findings on gender differences in cyberbullying, as with the results from previous studies, are likely attributable, in part, to the varying types of measurement used. Bauman (2013) concludes that “no clear conclusion can be drawn regarding age or grade differences in cyberbullying experiences” (p.252).

### *Demographics*

Where there is a wealth of cyberbullying data on gender and age as potentially relevant variables in rates of prevalence (see Dooley, Cross, Hearn, Treyvaud, 2009; Hasebrink et al., 2011; Robers et al., 2012), there is a dearth of data on ethnicity as a relevant variable in cyberbullying (Werner, et al., 2010; Kowalski, 2012a; Smith, Thompson & Bhatti, 2012; Kupczynski, Mundy, & Green, 2013), and while various studies have performed cross-national comparisons of cyberbullying (Nocentini et al. 2010; Menesini et al. 2013; Ólafsson et al., 2013) and discussed the potential effects ethnicity, distinct languages, and cultures, may have on definitions, measurements, outcomes, and prevention strategies (Konishi et al., 2009; Livingstone et al. 2011), no study has used the same demographic variables (i.e. influence of ethnicity, languages, and cultures) as applied to the 566 Native

American sovereign nations and as relevant to the scientific discussion on cyberbullying. Seals and Young (2003) examining ethnicity as a potential variable in traditional bullying, from a sample of 1,126 7-8th grade students with a composition of 79% “African American” and 18% Caucasian, determined no significant difference between groups. Dissimilarly, Spriggs, Iannotti, Nansel, & Haynie (2007) using the 2001 Health Behavior in School-aged Children (HBSC) data, and a sample of 11,033 U.S. children from grades 6-10 (58.6% White, 20.5% Black, 20.89% Hispanic) determined racial/ethnic differences in bullying prevalence: “black students reported less victimization than white and Hispanic students” (p.287). Spriggs et al. (2007) discuss the dissimilarity with findings from Seals & Young (2003) as potentially linked to differences in populations studied (i.e. using a national rather than local sample, and that age range and ethnic diversity varied). Norris, Vines, & Hoeffel, (2012), analyzing data from the 2010 U.S. census report that 1.7% of the US population is, alone or in combination, self-identified as Native American Indian and/or Alaska Native. Wang et al. (2012) analyzed the 2005–2006 Health Behavior in School-aged Children (HBSC) with data from 7,508 U.S. students in grades 7-10 and racial composition of 42.2% Caucasian, 18.7% African American, and 26.4% Hispanic adolescents. While there is no elaboration on the remaining 12.7% of sample race/ethnic composition, Wang et al. (2012) state “we used a large and nationally representative sample with sufficient representation from multiple age and racial/ethnic groups” (p.532). Wang et al. (2012) reported that “compared to Caucasian adolescents, African American adolescents were significantly more likely to

be All-Types bullies and Verbal/Social Bullies; Hispanic adolescents were significantly more likely to be All-Types Bullies, but less likely to be Verbal/Social Bullies; and adolescents of Other race/ethnicity were significantly less likely to be verbal/social bullies (p.528). Wang et al. (2012) describe the findings of racial/ethnic differences as indicative of specific gender and group patterns of association with subtypes of bullying. They direct future research to explore the potential associations between racial/ethnic and gender differences in involvement with the subtypes of bullying. Wolak et al. (2007) studying “online harassment” of U.S. youth ages 10-17 (n=1,500) with self-identified race/ethnicity composition representing 76% as White, 13% as Black and nearly 9% Hispanic did not specifically report on demographic effects of Internet harassment, however, extrapolative analysis of their data reveals non-significant differences for the race/ethnicity variable (see p. S54, table 1). Wolak et al. (2007) do caution however that as not all of their measures consider elements generally regarded as fundamental to cyberbullying (e.g. “repetition” see Smith et al, 2008) “care should be taken to distinguish between online harassment that does and does not qualify as “bullying” (p. S57). DeVoe & Murphy (2011) compiling data for the National Center for Education Statistics, from the 2008-09 school year, report that in the category of “all other races, not Hispanic or Latino”, from 608,000 respondents (i.e. 2.4% of the survey total, n= 25,162,000), 4.2% reported having been cyberbullied, (though authors caution that SE= 30-50%). Jones, Mitchell, and Finklehor (2012) extending data from the Youth and Internet Safety Surveys conducted in the years 2000, 2005, & 2011 through telephone

interviews of a random sample of 1,500 10-17 year olds, had a representative sample (i.e. <1.7% as per 2010 U.S. Census) of self-identified American Indian/Alaskan Native respondents but while they report “there were no significant differences in rates of online harassment across the three ethnic and racial groups”, the analysis did not extend to the American Indian/Alaskan Native demographic (p. 182). Williams & Guerra (2007) conducted bullying research, including the subtype ‘Internet bullying’ in 2005-06 with 5<sup>th</sup>-8<sup>th</sup> U.S. students n=5632, and a subsample n=1,519 where 1.5% and 1.2% of the samples self reported being of “Native-American” ethnicity (i.e. nearing the statistical significant representation within the sample). Importantly, Williams & Guerra (2007) did not control for ethnicity in their study. Similarly, Baldasare et al. (2012) examined cyberbullying through the use of the term “aggression using technology” with a variety of sampling strategies of members from “identity-specific groups” of college students ages 18-28 with a statistically significant Native American representation among respondents (n=30) of 20% (p. 131) However, Baldasare et al. (2012) did not examine prevalence, or specific cyberbullying behaviors using demographic variables available in their sample.

As Internet use, and the acquisition and adoption of information and computer technology varies across SES and ethnic groups (Lopez, Gonzalez-Barrera, & Patten, 2013), and frequent usage has been correlated with increased rates of prevalence (Smith et al., 2008; Cyberbullying & Other, 2009; Werner et al. 2010; Wong-Lo & Bullock, 2011), “additional data are needed on online experiences across a wider demographic spectrum of youth—and especially youth who are not electronically as connected with

their schoolmates” (Juvonen & Gross, 2008, p. 504). The various studies reviewed herein, examining demographic differences as related to cyberbullying rates and behaviors, have yielded inconsistent findings and therefore, as called for by researchers, warrants additional inquiry and analysis for the creation or refinement of prevention programs directed at the potential differences among demographic subgroups (Jones, Mitchell, & Finkelhor, 2012, p185).

#### *Forms of Cyberbullying and manner of dissemination*

Technology-based interactions provide diverse expression through multi-media platforms including, but not limited to the following seven; through text messaging, pictures/photos or video clips, phone calls, email, chat rooms, instant messaging, and websites (Smith et al., 2008, p. 377). Li (2007) provides descriptive statistics based on analysis of data from questionnaires submitted to 177, seventh grade Canadian students: 14.5% had been perpetrators, 24.9% reported having being victims of cyberbullying. Of both the cyber-perpetrators and victims, in Li (2007), multiple modalities are reported: 9% reported that they only used email, 36.4% used only chat-room, and almost 55% used multiple sources to cyberbully, and similarly reported from cybervictims; 22.7% of the cybervictims had been assaulted only by email, 36.4% in chat rooms only, and another 40.9% had been assaulted by multiple sources including email, chat-room, and cell phone” (p.1784). The relevant point demonstrated in findings from Li (2007) and below in Willard (2005) is that because information and communication technology is manifest in diverse media and modalities, the construct of cyberbullying is complex and difficult

to adequately definitively describe, thus the creation of preventative and reduction strategies requires attention to the types of technologies used and the environments in which cyberbullying occurs (see also Ybarra et al., 2012). While evolving technology and the modified use therein, renders any behavioral list outdated, the Willard (2005) list outlines seven, often cited types of behaviors, referred to in cyberbullying studies:

“Flaming: sending angry rude, vulgar messages; Harassment: repeatedly sending offensive messages; Cyberstalking: repeatedly sending threat of harm or highly intimidating messages; Denigration (put-downs): posting untrue or cruel statements; Impersonation: pretending to be someone else to look bad or place (them) in danger; Exclusion: intentionally excluding a person from online group; Outing: posting material that contains sensitive, private information about another person or forwarding private messages, and Trickery: engage in tricks to solicit embarrassing information that is then made public” (p.1).

Data from two studies are considered regarding prevalence among multiple modalities as contrasted with reported effect, to evaluate the potential imbalance different types of cyberbullying has in relation to the frequency with which they occur. Raskauskas & Stoltz (2007) reporting on data from 84 adolescents aged 13-18, found that the most common form of electronic victimization was text messaging (32.1%), followed by Internet or website (15.5%), and picture phone (9.5%), and the most common form of electronic bullying was via text messaging (21.4%)(p. 567). Juvonen & Gross (2008) found that the most common modalities in their study were reported from students who

use message boards (26%) and IM (20%) and were least frequently encountered among those who have profile sites (4%)(p. 501). However, the impact factor, as discussed in Smith et al. (2008) potentially renders the significance of frequency measurements (i.e. of perpetration/victimization among media and modalities) insufficient. In their two studies, Smith et al. (2008) determined that though cyberbullying through phone calls and instant messages were reported at higher frequencies, the impact factor was reported as low, whereas picture/video clip (i.e. distributing abusive images of the victim widely in the peer group) cyberbullying had low reported frequency, but had a high impact factor (pp. 381-383). Still, Juvonen & Gross (2008) argue that among their sample (12-17 year old female-dominated, mostly European American, public school students) “frequency of cyberbullying experiences is related to increased distress”, and call for additional longitudinal studies to measure, with greater depth, the emotional impact of cyberbullying (p.503).

#### *Prevalence Rates*

Data from the UCLA Internet Report – “Surveying the Digital Future” for the year 2002 determines that in the year 2002, 71.1% of Americans went online, with men slightly outnumbering women in computer use (73.1%- 69%); that the weekly hours of use increased from the year 2000 (9.4%) to 2002 (11.1%); and that of the 28.9 percent of Americans who did not use the Internet in 2002, a range of reasons were expressed for not being online including that they did not own a computer, had an inadequate computer, had a lack of interest in the Internet, did not know how to use the Internet, could not



afford a computer, had privacy, security or safety concerns, and had concerns regarding inappropriate content for children (p.28).

Lenhart, Purcell, Smith, and Zickuhr (2010) found that “three quarters (75%) of teens and 93% of adults ages 18-29 now have a cell phone” while “93% of teens ages 12-17 go online, as do 93% of young adults ages 18-29” (p.4). “One quarter (74%) of all adults ages 18 and older go online (Lenhart et al., 2010, p.4). Data compiled from Nielson Online, International Telecommunications Union and other sources on the website [www.internetworldstats.com](http://www.internetworldstats.com) reports that of the 2,405,518,376 global Internet users, 273,785,413 or 11.4% of the total users are in North America (i.e. the U.S. including Canada), with 78.6% Internet penetration of the population, and representing 153.3% growth in use between the years 2000-2012 (Internet World Stats, 2014, Section: Internet Usage Statistics).

Livingstone et al. (2012) conducted an Internet usage study from “a random stratified sample of 25,142 children aged 9-16 who use the Internet, plus one of their parents, was interviewed during Spring/Summer 2010 in 25 European countries” (p.5). Findings for types of uses from Livingstone et al. (2012) included “a range of diverse and potentially beneficial things online: 9-16 year olds use the internet for school work (85%), playing games (83%), watching video clips (76%) and instant messaging (62%). Fewer post images (39%) or messages (31%) for others to share, use a webcam (31%), file-sharing sites (16%) or blog (11%) (p.5).

The Digital Future Report (2013) continuing the work begun in 2000 at UCLA

found that 86% of Americans use the Internet (up from 66.9% reported in 2000) with a gender difference of 87% of men to 84% of women; an average of 20.4 hours online per week (double the hours reported in 2000 and 2001); Seven percent of respondents state the reason for not being online is cost, however the researchers consistently report a correlation between Internet use and household income (p.22). “Ninety-seven percent of respondents in households with income of \$100,000 a year or more said they use the Internet, the same response now reported four years in a row” (USC Annenberg School, 2013, p.22). The most-cited reason (for not using the Internet) in many of the preceding years of this ongoing study, continues to be “the lack of a computer or no Internet connection, cited by 41 percent of non-users, an increase from 37 percent in 2010 and the highest percentage reported thus far in the studies” (USC Annenberg School, 2013, p.42).

The Pew Hispanic Center’s 2012 National Survey of Latinos (NSL), “explores social media, digital technology and mobile technology use among Latinos, whites and blacks in 2012” (Lopez, Gonzalez-Barrera, & Patten, 2013, p.1). The data representing surveys administered nationally, in 2012 among a randomly selected, nationally representative sample and compared with two additional surveys determines that Internet use, and the acquisition and adoption of information and computer technology varies across SES and ethnic groups and subgroups (Lopez, Gonzalez-Barrera, & Patten, 2013).

One hypothesis regarding the annual increase in prevalence rates of cyberbullying among youth, described in the US Congressional hearing at the opening of this literature review, is that with the proliferation, accessibility, and affordability of information and

communication technology, and the unsupervised, or under-supervised usage at home or school, there exists a corresponding increase in rates of cyberbullying (Ybarra & Mitchell, 2004b; Raskauskas & Stoltz, 2007; Juvonen & Gross, 2008; Smith et al., 2008; Cyberbullying & Other, 2009; Werner et al. 2010; Wong-Lo & Bullock, 2011). To explore this connection, researchers often cite the reported rates of uptake of information and communication technologies, and “Internet penetration” from surveys eliciting user rates/patterns, conducted nationally or derived from international sources, to demonstrate that usage by minors is steadily increasing (Raskauskas & Stoltz, 2007; Ang et al., 2010, p.2623; Wong-Lo & Bullock, 2011). Even so, Ybarra et al. (2012) link their prevalence findings to data from a pan-European study asserting that among their sample of 6-17 year old students twice as many (i.e. 25%) reported bullying in person at a minimum monthly, compared with the modalities of online 10%, telephone 7% (cell or landline), and text messaging 8% (p.57). Ybarra et al. (2012) determine that traditional bullying (i.e. face-to-face) is still the prevailing method of youth aggression. But, Bauman (2013) expresses concern that focusing merely on rates of cyberbullying incidents may overshadow the extent of harm cyberbullying can inflict on the victim as compared to traditional bullying, because of the specific characteristics of media and modalities such as the vast audience an attack can reach, the potential for anonymity of the perpetrator, and the perception of permanence that can accompany hurtful content posted on the Internet. Mishna et al., (2009) conducted research involving seven focus groups with 38 students ranging in grades 5-8, selected from four sections of the city of Toronto and

concluded that many participants would not report cyberbullying to adults because of a fear their phone/computer privileges would be taken away, or because of a belief in parental ineptitude regarding the technology (i.e. inexperience) or problems with parents unfamiliar with the seriousness of cyberbullying. Like Bauman (2013), Mishna et al. (2009) also determined that when compared to traditional bullying (e.g. face-to-face) the potential severity experienced by victims of cyberbullying can exceed that of the former as a result of the perpetrator's anonymity and the continuity of the content. Similarly, Livingston et al. (2011) found that "being bullied online by receiving nasty or hurtful messages is relatively uncommon, experienced by one in twenty children, but it is the risk most likely to upset children" (Livingston et al., 2011, p. 6).

There are several factors obscuring the clarified determination of actual prevalence rates of cyberbullying, and those factors as well as the resulting rates are included in the following discussion. The first factor contributing to a range of reported prevalence rates, as discussed, is comparing studies with inconsistent constructs and varying definitions (Tokunaga, 2010). Prevalence rates and the expansive or restrictiveness of the definition applied are intrinsically connected (Ybarra et al., 2012). "Some definitions include acts that embarrass or humiliate youth while others include only those that are deemed threatening" (Internet Safety Technical Task Force [ISTTF], 2008 p.17). Also to be considered relating to the variation in prevalence is the way in which a study measures the construct (Tokunaga, 2010). Dehue (2013) states that "many studies have shown that online antisocial behaviour is a prevalent problem" and then goes

on to cite a number of sources which contribute to the reported range of 4% to 57% which represent the combined roles of perpetrator/victim (p. 2). This is a common approach in the literature however, it provides an insufficient detailing of specific aspects of the studies cited in the range that, when elaborated on, may facilitate cross-study comparison, or negate the appropriateness of such; examples of critical details necessary for contextualizing reported ranges of prevalence include the definition(s) used, the operationalizing of the definition, the instrument (e.g. anonymous questionnaire, interview, focus group) time parameters used to measure behaviors (e.g. ever occurred v. occurred 5 or more times), composition of and manner of incorporating population sample (e.g. all females, ages 2-5, convenience) (see Tokunaga, 2010). Dehue (2013) discusses how prevalence rates vary based on the matrices utilized and determines that the reporting of occasional involvement, should be clearly quantified for comparison with more restricted measurements. Three examples of findings are presented here to briefly illustrate the point that specificity in measurement can produce greater clarity of findings and enable cross-study comparisons and, where appropriate, contribute to greater generalizability of the findings. This description is the most basic and provides a dichotomized result that can be generally compared to other rates of cyber-perpetration and victimization: Raskauskas and Stoltz (2007) report that of 84 students surveyed, aged 13–18 years, 49% were cybervictims and 21% were cyberbullies at least once or twice over the last school year. The next description is more detailed in the composition of the findings but only examines the victimization of cyberbullying: “Most youth reported that

incidents occurred infrequently: 41% of respondents reported 1-3 incidents, and 13% reported 4-6 incidents in the past year (Juvonen & Gross, 2008, p. 502). The last example details rates of cybervictimization only and is the combined finding of two studies with details of both the media and the communication modality “an average of 25% reported being bullied at least monthly in person, and an average of 10% reported being bullied at least monthly online, 7% via telephone (cell or landline), and 8% via text messaging. (Ybarra et al., 2012, p. 57).

An additional factor potentially impacting rates of reported accounts of cyberbullying is that victims may be reluctant to be forthcoming in regards to their computer-mediated experiences (Kenworthy et al., 2012, p. 91). Mishna (2009) conducted research involving seven focus groups with 38 students ranging in grades 5-8, selected from four sections of the city of Toronto and concluded that many participants would not report cyberbullying to adults because of a fear their phone/computer privileges would be taken away, or because of a belief in parental ineptitude regarding the technology (i.e. experience) or problems with parents unfamiliar with the seriousness of cyberbullying.

Werner et al. (2010) assert a need for additional studies focusing on demographic-based determinants and postulate that a student's household affluence, which may enable acquisition of mechanisms and access to infrastructure, thereby potentially reflecting increased rates of cyberbullying prevalence through increased technology access and usage. However, Werner et al. (2010) conclude there is insufficient evidence to support

this hypothesis because of limited demographic-based studies. (see also Ybarra & Mitchell, 2004; Juvonen, & Gross, 2008; Walker, Sockman, & Koehn, 2011; Wang et al., 2012). As trends and patterns of usage and technology penetration and uptake continue to be measured and analyzed, the importance of research incorporating new data may allow for a more detailed assessment as in Lopez et al. (2013) addressing recent demographic-based differences in ownership and usage, thus rendering the, valid hypothesis about White access and usage by Werner et al. (2010), no longer tenable.

With so much variation in prevalence rates, generalizability becomes difficult however, it is agreed that while rates of traditional bullying and victimization may occur more frequently, cyberbullying and victimization occur at a significant rate among most developed countries, and in many instances bullying behaviors on and offline were co-occurring (Smith et al. 2008; Ybarra et al., 2012; Bauman, 2013). Modecki, Barber, & Vernon (2013) examining the etiology of cyber-aggression, found that a correlation exists between cyber perpetration and victimization, and the rate of decline in self-esteem over a three year period among 8<sup>th</sup>-10<sup>th</sup> grade Australian students” (p.657). The significance of the problems associated with cyberbullying can be overlooked as a result of the disparate findings, and as a consequence of rates being reported lower than traditional bullying (Bauman, 2013). However, as Bauman (2013) relates, “there is a realistic concern that incidents may be more damaging than incidents of traditional bullying” (p.251).

Some additional consideration of methods that may add to the inconsonant findings on presence and prevalence of cyberbullying, takes the discussion of differences

among conceptual definitions and demonstrates how results can vary based on parameters used among distinct studies.

In a study designed to elicit prevalence data on cyberbullying among youths, Juvonen, and Gross (2008) determine that “rather than use the term bullying (with its potentially narrow connotations), we referred to “mean things” defined as “anything that someone does that upsets or offends someone else...”(p. 499). The use of the term “mean things” in Juvonen and Gross’ (2008) study can be used to demonstrate the need for more clearly defined criteria to measure, and cohesive processes of evaluating and responding to potential instances of cyberbullying. The subjectivity of the receiver’s interpretation, the content and context of the message (i.e. social orientations), the sender’s intent, and an interpretation by a third party are all variables that will contribute to greater clarity when attempting to classify computer mediated communication (O’Sullivan & Flanagan, 2003; Langos, 2012). Jackson, Cassidy and Brown, (2009) further the point illustrated by the descriptions above (i.e. Willard, 2005), that “cyber-bullying” can refer to a spectrum of behaviors that range from minor to serious, and it is through open-ended questions related to “cyber-bullying” that specificity of respondents’ definitions are clarified. However, Vandebosch and Van Cleemput (2009) argue that the context of the experiences, including the meaning, as reified by sender and receiver, will deliver a more precise finding on prevalence as compared to the self-report (e.g. Jackson, Cassidy, & Brown’s, 2009 approach), of associated behaviors representative of types of cyberbullying (pp.1367-8). Juvonen and Gross (2008) purposefully attempted to refine



measurement through minimizing self-selection bias (e.g. sampling primarily bullied youth), by eliminating the terms ‘bullying’ and ‘cyberbullying’ from their study.

Ybarra et al., (2012) reporting on the findings from youth sampled in the U.S. determined that “a behavioral list of bullying experiences without either a definition or the word ‘bully’ results in higher prevalence rates and likely measures experiences that are beyond the definition of bullying” (p. 12).

Langos (2012) suggests the introduction of the reasonable person standard whereby an individual’s actions are reconstructed in a hypothetical scenario and applied to the construct of a reasonable person, as an attempt bring objectivity to the interpretation of intent. The objective measurement of intent through the systematic application of the reasonable person standard could increase accuracy when assessing prevalence of cyberbullying, as well as bring operational meaning to the definitional criteria of intent (Langos, 2012, p. 288). Langos (2012) describes practical application of this standard and its effectiveness, as it is currently used in Australian criminal and tort law to distinguish with a greater degree of clarity between cyber-acts of intended harm, and those that result in unintentional outcomes of harm. Additionally, cyberbullying studies conducted prior to 2005 did not include data from the social networking website Facebook as a forum for cyberbullying (Bauman, 2013) As such, findings from these early studies are of limited use to today’s cyberbullying research as Facebook, with 1.19 billion monthly active users (as of September 30, 2013), is the most commonly used social networking site (Bauman, 2013; Facebook statistics, 2013). Based on a review of

the related issues there are many considerations in accounting for the range of prevalence rates of cyberbullying. Though definitions and measurements vary, some form of Internet intimidation, electronic aggression, online harassment or cyberbullying is, and continues to be reported by users of information and communication technology, with varying rates of anxiety or distress, and appears as a corollary with other psychosocial problems (Patchin & Hinduja, 2006; Ybarra & Mitchell 2007; ISTFF, 2008; Dehue, 2013). The following excerpt from Ólafsson et al., (2013), encompasses several points addressed in the previous discussion, and comes at the conclusion of a summary of findings from the ongoing (i.e. 2006-2014), pan-European (i.e. 33 countries) research into children's Internet-related issues:

As the body of research continues to grow year by year it is important to note that more research is not necessarily needed. Current research efforts could probably be better coordinated. Research is sometimes poorly reported, with key information missing, or it is difficult to gain access to. There is scope for improving the quality, rigor and public accessibility of research evidence in this field (p.33).

*Distinct characteristics of cyberbullying and theoretical framework .*

Menesini, Nocentini, and Camodecca, (2013) reviewing literature from both traditional bullying and cyberbullying assert that “bullies seem to be deficient in cognitions, emotions, and behaviours concerning ethical issues and morality”(para. 3). Renati, Berrone, & Zannetti (2012) examining cyberbullying among Italian youths

determined that perpetrators and victims of cyberbullying exhibited significantly higher mean scores on an instrument designed to measure Bandura's (1999) mechanisms of moral disengagement. Renati et al. (2012) also found affective empathy (i.e. the ability to experience vicariously, another's emotions) scores significantly lower than bully/victims, victims, or noninvolved participants, but found no significant difference between cyberbullies, bully/victims, victims, and the uninvolved for cognitive empathy (i.e. the ability to take on another's emotional perspective and link resulting emotionally-based outcomes from an individual's actions) (p. 392). The increased levels of endorsement of guilt-relieving strategies (e.g. Bandura, 1999) in the study by Renati et al. (2012) locates the problematic behavior within an existing theoretical rubric focused on mechanisms that serve as justification for immoral behavior and the elimination of associated guilt.

The theory of moral disengagement articulated by Bandura (1999) posits eight mechanisms that serve moral justification for an immoral action including the restructuring of a harmful behavior (e.g. moral justification, euphemistic labeling, advantageous comparison); displacement or diffusion of responsibilities (e.g. limiting personal agency of a behavior by emphasizing immoral behavior as a response of extraneous prompts, and diminishing individual responsibility because of group identity in the perpetration of a behavior as opposed to individual identity); distortion of consequences (e.g. minimizing, ignoring, misconstruing); dehumanizing the victim (e.g. perceiving the victim as subhuman and thus beyond existing moral standards and

behavioral limits; and attribution of blame to the victim (e.g. the immoral behavior justified as a response to a provocation initiated by the victim) (p. 194).

Similarly, Buba (2001) describes how factors of online communication contribute to disinhibition and deviant behavior based on the perception of anonymity, limited social cues, vague governing rules and delayed or absence of sanctions leading to expressions of “anger or aggression, inappropriate self-disclosure, or personal use of socially doubtful material on the Internet, like pornography” (Behavioral Disinhibition, para. 28). Attempting to contextualize findings of disinhibition in online behavior, Kiesler, Siegel, & McGuire (1984) proposed factors contributing to the “depersonalizing” of the individual through computer-mediated communication, namely anonymity, the reduction of normative social cues and attitudes (i.e. etiquette including uniform salutations, blurring of formal and informal communication conventions, time boundaries for work and home, and contextual cues conveying status or power), and the absence of behavioral cues used to “regulate, modify, and control exchanges” (i.e. feedback such as tone of voice, head nods, distance, posture, gestures, and eye contact) (pp. 1125-26). Deindividuation occurs as a result of the subsumption of individuating details of personality, status, culture, normative offline social and behavioral cues and protocols (Kiesler et al., 1984). These contextual cues, absent in computer mediated communications, contribute to a heightened self-sense of anonymity (i.e. deindividuated state) and resulting disinhibited behavior (e.g. increased aggression, reduced self-regulation) (Kiesler et al., 1984). The absence of social cues in computer mediated

communication results in a departure from traditional social norms exhibited in face-to-face communication, potentially producing polarized groups with antinormative attitudes regarding aggression (Kiesler et al., 1984). Spears and Lea (1992) discuss an alternative interpretation to behavioral outcomes deemed antinormative, in the absence of social cues (i.e. anonymity and deindividuation) with their proposal of the social identity model of deindividuation effects; the “SIDE” theory. They describes how the “cueless” argument is deficient in considering how anonymity relates to the social context and the users goals in computer mediated communications (Spears & Lea, 1992). Christopherson, (2007) adequately summarizes one aspect of SIDE theory describing how an individual strategically using the anonymity provided by computer mediated communications, can act individually or aligned anonymously with a group, to the desired ends, resulting in “pro-social, or anti-social” behavioral norms (e.g. pro-social: “protecting one’s identity, making work groups more efficient and working to empower marginalized individuals”, & anti-social: “predatory behavior toward minors by masking one’s identity, and intensifying racial, religious, or other hatred”) (p. 3051). Zimbardo (1969) defined anonymity as the inability of others to identify or single out an individual such that the individual cannot be evaluated, criticized, judged or punished (p.255). Deindividuation, which is characterized by disinhibited and hostile behavior, is brought about by factors such as anonymity, arousal, sensory overload, unstructured situations, and a reduction in self-focus (Zimbardo, 1969, p.253).

An emphasis on the importance of normative beliefs represents a separate theoretical tact and is taken by researchers associating offline behaviors and cultural traits to an individual's online behaviors whereby the individual initiates the subscription to, alignment with, or formation of social groups that share in similar normative beliefs (Bocij & McFarlane, 2003, p. 212.). "Normative beliefs are an individuals' own thoughts about the appropriateness or inappropriateness of a behavior that "serve to regulate actions by prescribing the range of permitted and prohibited behaviors and these beliefs are expected to be universal across cultures" (Huesmann & Guerra, 1997, p. 409). Ang et al. (2010) asserts that individuals who endorse normative beliefs about aggression view bullying and the use of aggressive behavior as acceptable. Williams and Guerra (2007) found that adolescents' normative beliefs endorsing aggression are associated with all forms of bullying including cyberbullying (p. 2623). If an individual observes and understands the normative behavior of a group, of which they desire to achieve membership in, requires specific acts of aggression, they will attempt to fit in "...with the peer group by following the group's social rules, and will, therefore, begin to bully others in cyberspace" (Beran & Li, 2007, p.24).

Research by O'Sullivan and Flanagin (2003) on prevalence, causes, and social consequences of problematic messages online, examines how the ambiguity of intent, inherent to many computer-mediated communications, coupled with the absence of non-verbal cues (e.g. gesticulation, facial expressions), potential for insufficient external environmental information (context for an online message), and social cues,

correspond with reduced social constraint and a reduced impact transferability of offline social norms to online behaviors (p.71). O'Sullivan & Flanagin (2003) use an interactional norm framework to examine problematic computer-mediated communications, referred to as "flames" (see Willard, 2005) This term is based on the metaphor of a flamethrower torching recipients of the message (O' Sullivan & Flanagin, 2003). They define "flames" as "the intentional (whether successful or unsuccessful) negative violations of (negotiated, evolving, and situated) interactional norms (O'Sullivan & Flanagin, 2003, p. 84). They assert that the requisite criteria of 1) the sender's intent, 2) the perception by the receiver, and 3) a third-party (e.g. classmate, parent, teacher, judge) perception, of the action as "norm violating" (i.e. problematic, hurtful, hate speech etc.), must all be in concert for an online communication to be objectively defined, quantified, prevented, or litigated (O'Sullivan & Flanagin, 2003, p.84). The normative beliefs of adolescents endorsing aggression were associated with all forms of bullying including cyberbullying (Williams & Guerra, 2007). The intentional violation of interactional norms requires knowledge of the appropriate behavior (i.e. in this instance online communication is the examined behavior) and as different norms are appropriate based on the setting, organization, membership etc., the message context rather than content becomes the significant indicator of intentionality to a third party perspective (O'Sullivan & Flanagin, 2003). Further, what might appear in an online communication as a violation of interactional norms based solely on interpretation of content from the perspective of the message receiver, must be leveraged against the

sender's intent and the interpretation of appropriate norms given the setting by a third party perspective. Vandebosch & Van Cleemput, (2009) suggest that the conceptual framework for cyberbullying benefits through clarification from these three perspectives (i.e. sender's intent, receiver's interpretation, and third-party perspective on message content and context as normative or norm violating) by deemphasizing the limitations inherent to a singular interpretation by the message recipient (e.g. misinterpretation, hypersensitive individual).

Werner et al. (2010) found that adolescents who held positive views about relational aggression were nearly three times more likely to simultaneously be Internet aggressors compared with those whose normative beliefs were unsupportive of relational aggression. However, they also caution that, "relational and overt aggression were uncorrelated with future Internet aggression in these analyses..." therefore, "...the predictive utility of normative beliefs cannot be explained by its covariation with traditional aggression at the initial assessment" (Werner et al., 2010, p.616). Still, correlated, though not causal findings, warrant further research into the role of normative beliefs on aggression, both online and off, as a potential factor in promoting cyberbullying and in prevention strategies.

Additionally, the combination of social and technological factors contributes to deviant behavior in online environments by individuals who are otherwise law abiding (i.e. contrasting the same individual's problematic online behavior in offline environments) (Bocij & McFarlane, 2003; Baldasare et al., 2012). Some of the



technological factors cited by Bocij & McFarlane (2003), and Baldasare et al. (2012) include the affordability of hardware, (e.g. computers, cell phones, web-cams), affordable and ubiquitous Internet access, and software such as remailers that allow anonymous emails to be sent (e.g. Quicksilver©), encryption software (e.g. PGP™), and file erasers that delete all traces of Internet activity (e.g. Evidence Eliminator©). Also though Erdur-Baker (2010) determines that anonymity in computer-mediated communications can facilitate impersonation through the belief that an individual can avoid detection and subsequent culpability. These technology factors contribute, it is argued, to the belief that anonymity in cyber-communications can be achieved and maintained, thus contributing to deviant behavior among individuals who do not exhibit deviant behavior offline (Bocij & McFarlane, 2003). The combined technology-based psychological and social factors associated with computer-mediated communications embolden individuals to behave in ways inconsistent with their offline communication (Bocij & McFarlane, 2003; Baldasare et al., 2012). Baldasare et al. (2012), studying college students' cyberbullying experiences determined that anonymity facilitated by information and communication technologies contributes to a suspension of inhibitive behaviors (i.e. disinhibition), otherwise exhibited in face-to-face communications (p. 138).

Examining social networking use among college students, Paradise (2012) determined online self-disclosure habits including both textual content (i.e. demographic data) and visual content, are often motivated by the attempt to manage one's online persona in the creation of a favorable impression, while minimizing content that would be

determined socially undesirable (p. 287). However Paradise (2012) also describes how students post problematic and incriminating textual and visual content (e.g. images or videos of underage drinking, recreational drug use), and asks; “Are peer pressure, risk taking tendencies, immaturity, and a false sense of invulnerability to blame?” (p. 288). Sourander et al. (2010) observed that for youths and adolescents, risky cyber-behavior and unsafe cyber-environments could be prevented by clear and consistent norms and supervision (p.727). Therefore while an individual may not choose to remain anonymous in computer mediated communications (e.g. Cassidy, 2013 as opposed to Bocij & McFarlane, 2003), the fact that they often have that choice as a direct effect of the characteristics of information and communication technologies, requires researchers to continue researching the ways in which the mode of bullying affects the types and consequences of, as well as detailing specific prevention strategies for cyberbullying and the human/technology dynamics of the phenomenon.

As discussed above the anonymity provided by computer-mediated communications can contribute to feelings of disinhibition, deindividuation, and dehumanization, which in turn may affect the kinds and degree of personal information an individual discloses, moral disengagement and emboldened expressions, including increased aggression in communications. But, as Ybarra et al. (2012) note, not all instances of cyberbullying involve the characteristic of anonymity, and anonymity is not exclusive to bullying in online environments. Cassidy (2013) asserts that while

anonymity may distinguish cyberbullying from traditional bullying in some instances, the majority of studies reviewed determined that the cyber-victim knew the perpetrator.

Also, the groups an individual may form and associate with, the normative beliefs about aggression they are exposed to, and which are reinforced in associative online groups, based on their online objectives, influence the content and context of computer-mediated communications (Spears & Lea, 1992; O'Sullivan & Flanagin, 2003, p. 88; Christopherson, 2007).

An adequate theory does not yet seem formally adopted in the literature comprising the myriad factors involved in computer mediated communications resulting in cyberbullying; the individual, interfacing with both the technology, and others using the technology requires additional explanation as certain points are similar to traditional models and thus transferability of the traditional bullying/aggression theoretical components is possible (e.g. anonymity producing disinhibition, deindividuation, dehumanization; reinforcement of behavioral norms as a factor in aggressive behavior), but on other points cyberbullying and the human/technology dynamic is distinct and traditional theoretical explanations are insufficient (e.g. instances where a perpetrator defers anonymity but cyberbullies anyhow; the way an individual's online antinormative behavioral outcomes are related to association with online groups espousing aggression; the inconsistency in explaining a duality in findings on prosocial and antisocial uses of anonymity).

*Risk factors.*

Two risk factors that present opportunities for misuse and abuse resulting in cyberbullying among today's youth include the unprecedented advancements in information and computer technology and the accessibility to this technology (Walker, Sockman, & Koehn, 2011). Linking to this point of "misuse and abuse", a basic prevention of the risk factor "access" to the information and communication technology achieved simply by closer parent monitoring of children's online activities (Ybarra & Mitchell, 2004; Beran & Li, 2007). Of children aged 2 to 17, four out of five live in a home that has access to the Internet (H.R. 1966, 2009). Students who increase their Internet use have an increased likelihood of being the victims of cyberbullying (Ybarra & Mitchell, 2004; Juvonen, & Gross, 2008; Smith, et al., 2008). Adolescents involved in the creation of Internet based content and those who are active on social networking sites have an increased likelihood of future cyberbullying encounters (H.R. 1966, 2009). Vandebosch and Van Cleemput (2009) determined that being a traditional bully and a cybervictim were the strongest predictors of being a cyberbully. Similarly, Bauman (2013) determined that for cybervictims, "being a traditional victim, and being a witness to, or perpetrator of, cyberbullying was associated with being victimized technologically", as was the online disclosure of personal information (p.252).

Interestingly "cyber-bullies" reported "lower academic achievement than their cyberbully victims" but for school grades and perpetrator/victimization there were no significant correlation coefficients (Li, 2007, pp.1785-7). Beran & Li (2007) discuss

findings regarding Canadian students as victims and perpetrators of cyberbullying determining that they experience difficulties focusing on their work, have increased rates of truancy, and have lower grades than students who were not involved as perpetrators or victims in cyberbullying. “Youth who report aggressor/target behavior are especially likely to also reveal serious psychosocial challenges, including problem behavior, substance use, depressive symptomatology, and low school commitment” (Ybarra & Mitchell, 2004, p.1314). Sourander et al. (2010) reported that “cyberbullies also had a high level of conduct problems, hyperactivity, frequent smoking and drunkenness, and low prosocial behavior” (p. 727). Ybarra & Mitchell (2004) address the likelihood that the students who are repeatedly involved in “Internet aggression” are “facing challenges on multiple fronts” (p.1314).

Lee (2012) determines that “most studies have not shown causality regarding whether such psychological and behavioural problems have preceded victimization or whether victimization has resulted in these problems” (p. 39). Beran & Li (2007) also raise the question of causality and determine that researchers, then are asked to consider the “socio-emotional behaviors” and the resulting outcomes, as potential co-contributors to their findings (i.e. did poor grades contribute to increased rates of cyberbullying by peers, or did cyberbullying by peers contribute to poor grades, or was it a cyclical pattern of preoccupation with responding to, or initiating cyberbullying attacks, which detracted from school work, and set into motion a perpetual cycle?). Similarly, “the psychosocial

makeup of and family dynamics surrounding particular minors are better predictors of risk than the use of specific media or technologies (ISTFF, 2008, p.5).

Some studies have determined that it is better to view psychopathological problems as consequences of bullying rather than causes” (Lee, 2012, p.39). One assertion related to an increased risk of bullying (i.e. in this instance cyberbullying is explicitly included in the original meaning of the applied term ‘bullying’) suggests that “children who may be perceived as ‘different’ are often at greater risk of being bullied than other children (such as minority ethnic groups, lesbian, gay, bisexual or transgender-LGBT young people, overweight children and those with perceived disabilities” (UNICEF Canada, 2012, pp. 2-3 vii).

### *Prevention*

Shea (1994) coined the term *Netiquette* (i.e. Internet etiquette) in an attempt to address the absence of rules for “the mass consensual hallucination in which humans all over the planet meet, converse, and exchange information (p.19). The efficient and effective use of emerging technologies by the human panoply, in the pursuit of a variety of goals and objectives, requires unified acceptance of, and adherence to, rules of online conduct (Shea, 1994). Prensky (2001) used the terms *Digital Natives* and *Digital Immigrants* in an attempt to contextualize the vast differences in experiences between student’s who have grown up with information and communication technology and “the ethics, politics, sociology, languages and other things that go with them”, and the “pre-digital” age teachers who were socialized offline and have adapted to incorporate new

modes of communication into their lives (pp. 3-5). The subsequent difference in levels of fluency as a “native speaker” of technology between Digital Natives (i.e. students raised with digital technology) and Digital Immigrants (pre-digital age teachers) contributes to dysfunctional adherence to outdated models by teachers, in their attempts to instruct and socialize students (Prensky, 2001). Instead, Prensky (2001) suggests using information and communication technology as a tool to directly demonstrate a lesson that is founded in the pre-digital age, thus reinforcing for students, the values and insights garnered from the past but locating them within the present modes of communication (e.g. such as developing a computer game where students learn the embedded technical skills and concepts to repair a computer in a familiar game format based on “Doom and Quake, called The Monkey Wrench Conspiracy”)(p.5). Along these lines, Ang et al. (2010) propose active participation and collaboration among students and staff, within the school setting to identify, resolve, and prevent cyberbullying (p. 2630). Bocij and McFarlane, (2003) determine that “Internet users take on the norms associated with the social group(s) to which they belong” (p.212). Espelage and Swearer (2003), discuss the many dimensions to be considered simultaneously when attempting to address bullying prevention strategies including family, peer group, school, and the community’s normative beliefs about aggression. Similarly, Cassidy, Jackson, & Brown, (2009) discuss how the fostering of *Netizenship* (i.e. Internet citizenship) among users of information and communication technology facilitates the exposure to and potential tolerance for diverse ideas, beliefs, and opinions that promote social responsibility “and

encourage caring and respectful interactions” (p. 384). Ang et al. (2011) similarly determines that the holistic culture (e.g. at school, home, in society, online etc.) influences the ways in which people interact on and offline and therefore requires participation in preventative efforts from a variety of stakeholders: “Cyberbullying prevention and intervention efforts should include modification of norms and beliefs supportive of the legitimacy and acceptability of cyberbullying” (Ang et al., 2011, Abstract p. vii ). Marlin-Bennett & Thornton, (2012) discuss how governance of social networking websites is a liminal process whereby the users of the site (within cyberspace) and the external entities (e.g. advertisers, law makers etc.) both influence what occurs within the website: “The extent to which a website conforms to or transgresses external legal requirements, social mores, and economic incentives will depend on the balance of powers and coincidence of interests among the various agents involved: governments, society (more diffusely), advertisers and investors, site owners, site users, and others” (Marlin-Bennett & Thornton, 2012, p. 494). Wang et al. (2012) discuss tailoring intervention and policy design for subgroups that address “the intensity and chronicity for their bullying and associated externalizing behaviors” (p.533). Further, Wang et al. (2012) consider how universal intervention designs inadequately address the “distinct patterns of co-occurring bullying behaviors” and, in addition to “greater accuracy of prevention and intervention efforts” the potential benefit of cost-effectiveness, may accompany the specificity (i.e. targeting subgroups instead of more generalized approaches) achieved through refinement of intervention design (p.533).



Wolak et al. (2007) similarly call for subgroup-based interventions of online harassment (i.e. a distinction is made by the authors that they are examining and addressing singular acts of online aggression) through age-appropriate education of topics such as technology skills and Internet social skills. The Internet Safety Technical Task Force (2008) determines that when considering online risks for minors it is necessary to factor in the “psychosocial makeup of and family dynamics surrounding particular minors” rather than assume uniformity of risk or increased likelihood associated with particular technologies (p.5). The underlying psychosocial problems experienced by perpetrators and victims of cyberbullying should be a fundamental focal point when addressing prevention and intervention (ISTTF, 2008, p.14). Williams and Guerra (2007) examining three predictors of bullying (with “Internet bullying” and verbal and physical forms) among 8-11<sup>th</sup> grade students, including the “normative orientation”, the typical setting and the actors involved in bullying experiences and they determined “the causal pathways to Internet bullying may not be unique; rather, it appears to share common causal pathways with other forms of bullying, particularly verbal bullying”(pp. S20-21). From this finding, Williams and Guerra (2007) suggest the prevention strategy of addressing normative beliefs about bullying while simultaneously addressing issues of trust and support among peers and at the school setting (p. S21).

Some prevention calls on information and computer technology industry leaders to do more, but King (2010) examining the Supreme Court ruling on the case *Zeran v. America Online, Inc.*, (1997) writes:

ISPs enjoy full immunity from civil liability as publishers and distributors of online speech, even when they receive notice that they are supporting tortious content. Consequently, even if a cyberbullying victim notifies an ISP about defamatory material available through its service, the ISP would be under no legal obligation to restrict access to the material, allowing it to remain on the Internet indefinitely. (p. 854)

The following excerpt of the U.N. funded IRC report appears hopeful but quixotic in contrast to King (2010) assessing the relative indemnity from U.S. prosecution website creators enjoy;

Under contemporary understanding of corporate responsibilities for respecting human rights, recently internationally articulated in the report entitled ‘Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework’, businesses have obligations both to respect human rights and to seek to prevent or mitigate adverse human rights impacts directly linked to their operations, products and services. Child abuse and exploitation are manifestly “adverse human rights impacts .” The industry has it in its powers to develop and introduce new tools to make the Internet safer for children. (UNICEF-IRC, 2011, p. vi)

It is unclear how the differences between international ideals and subsequent jurisprudence and domestic precedence through U.S. adjudication will ultimately be resolved, but several researches assert that focus on the potential technological solutions

to cyberbullying are misguided in addressing fundamental causes founded in human behavior (see Jones & Scott, 2012). The Internet Safety Technical Taskforce asserts that “a combination of technologies, in concert with parental oversight, education, social services, law enforcement, and sound policies by social network sites and service providers may assist in addressing specific problems that minors face online” (p.6). Fenaughty and Harré (2012) determine that the resolution of electronic harassment is not well suited to technical solutions except in preventing direct electronic aggression (e.g. blocking text messages or using privacy settings on social networking sites to limit access to content and protect privacy). Also though, confrontation and a typical response of ignoring online harassment are similarly both deemed ineffective by Fenaughty and Harré (2012). Instead, they assert “supporters of young people should be encouraged to respond with calm support, listen, empathize, not take control of the situation (unless such control is willingly ceded), to discourage ignoring as a strategy, and instead help them collect the electronic evidence and an adult or authority they can trust to both react compassionately and effectively to address the interpersonal features of the situation” (p.249). Contrast this suggestion though with the storied proximity bullying has assumed in the lives’ of adolescent students as articulated by Vaillancourt et al. (2008): “As evident in literary classics such as Charles Dickens’s *Oliver Twist* (1839/1966) and Thomas Hughes’ *Tom Brown’s School Days* (1857/1892), bullying has long been recognized as part of the human condition, particularly for children” (p. 486). The intervention strategy articulated by Fenaughty and Harré (2012) ties into President

Barack Obama's Anti-bullying "It Gets Better" speech (2010) directing youth to seek out their caregivers for help, and as a counterpoint to the temporal sustaining history bullying has occupied as articulated by Vaillancourt et al. (2008):

We've got to dispel the myth that bullying is just a normal rite of passage – that it's some inevitable part of growing up. It's not. We have an obligation to ensure that our schools are safe for all of our kids. And to every young person out there you need to know that if you're in trouble, there are caring adults who can help... You are not alone. You didn't do anything wrong. You didn't do anything to deserve being bullied. And there is a whole world waiting for you, filled with possibilities. There are people out there who love you and care about you just the way you are. And so, if you ever feel like because of bullying, because of what people are saying, that you're getting down on yourself, you've got to make sure to reach out to people you trust. Whether it's your parents, teachers, folks that you know care about you just the way you are. You've got to reach out to them, don't feel like you're in this by yourself. (President B. H. Obama, 2010, para. 1&4)

Jones and Scott (2012) address the socio-cultural environment within Canadian university classes and the larger academic community (i.e. involving online and face-to-face dynamics) as relevant to the prevalence and potential resolution of cyberbullying. The issues relating to cyberbullying among students attending a university are detailed by Jones and Scott (2012) in terms of "student conduct, safety (both in the learning environment and in cyberspace), privacy, the institution's responsibility to monitor and

intervene” (p.166). Jones and Scott (2012) determine that all “stakeholders” at the university (e.g. students, faculty etc.) need to be trained and instructed frequently with regards to “policies, processes, and programs” relating to the identification and successful mediation of online incivility (i.e. cyberbullying) including the rights and responsibilities of various parties involved or implicated in cyberbullying incidents (e.g. within the student code of conduct)(p.173). Jones and Scott (2012) discuss, upon analyzing the public websites of 27 Canadian universities, how the prohibitive policies addressing cyberbullying as “unacceptable behaviors” in the “information and technology resources usage guidelines” should also be extended to “harassment and student conduct policies” in order to bridge the potential limitations of non-university owned resources and address online incivility that may affect students and staff despite its “porous” origins (i.e. originating by students off campus), rather than strictly serving as controls for the university (p.174). Bird, Taylor, and Kraft, (2012) extend the assertion that university policies regarding cyberbullying (especially in the case of U.S. public schools) should not focus on preventing speech but instead focus on behaviors, as they are less likely to face legal challenges. Bird et al. (2012) discussing the delicate balance U.S. public colleges and universities (as extensions of a state, or local government), and to a lesser extent, private institutions of higher learning, in their attempt to both uphold the First Amendment right of protected speech, and foster an environment that is inclusive of diffuse perspectives, and encouraging of rigorous inquiry and scholarly debate, determine that student codes of conduct must be written not as “civility codes” which are

demonstrated to be readily challenged as threatening protected speech, but instead as committed to the health and safety of students and university employees (p. 196). Bird et al. (2012) conclude that while it is not against the law to hurt someone's feelings or embarrass someone, there are several categories of speech unprotected by the First Amendment, and limitations of protected speech based on the Tinker standard (i.e. speech that potentially, or actually, leads to a substantial disruption on campus) must all be considered when drafting prohibitions related to cyberbullying, or updating existing rules prohibiting harassment (pp. 189-191) (See also Appendix A). Jones and Scott (2012) determine that cyberbullying awareness among university students and in training with faculty is necessary to create the socio-cultural classroom environment which can be effectively guided by stakeholders. "To date, it appears that insufficient time and funding has been committed to achieve desired awareness levels of cyberbullying in the classroom" (Jones & Scott, 2012, p. 178).

### *Rationale*

There currently exists limited but burgeoning studies examining the cyberbullying behaviors (e.g. perpetrator, bully-victim, pure victim, and uninvolved) of college students (Hoff & Mitchell, 2008; Kowalski et al., 2012a; Paradise, 2012; Wankle & Wankle, 2012; Wildermuth & Davis, 2012). Of the U.S. cyberbullying studies examining ethnicity as a distinguishing criteria among respondents, Native Americans have often been excluded or overlooked in analysis (DeVoe & Murphy, 2011; Jones et al. 2012; Kupczynski, Mundy, & Green, 2013), underrepresented (Patchin & Hinduja, 2006;

Williams & Guerra, 2007) based on the current U.S. population ratio of 1.7% of self-identified Native American Indian and/or Alaska Native (see Norris, Vines, & Hoeffel, 2012), or subsumed into a category of “some other race” (i.e. not White, Black or Hispanic) (Ybarra, 2012, p. 54), or “other” (Wang, Iannotti, & Luk, 2012, p.530). There are no known studies focused on Native American cyberbullying rates, behaviors, or prevention strategies as influenced by the distinct languages, cultures, traditions, or values, among the 566 sovereign Native American political entities. This seems peculiar and insufficient particularly as other studies have both conducted pan-European, and cross-national studies, considered the extent that terms and constructs translate, the ways that ethnicity and culture influences outcomes, and assessed how distinct populations respond to computer-mediated communication, then directed practitioners to policies and strategies for prevention and limiting the effects of cyberbullying based on the specific findings from those studies (see Hasebrink et al. 2008; Smith & Monks, 2008; Dooley, Cross, Hearn, Treyvaud, 2009; Konishi et al., 2009; Sourander et al., 2010; Livingston et al. 2011; Menesini et al. 2012; Smith, Thompson, & Bhatti, 2012; Ólafsson, Livingstone, & Haddon, 2013). It is posited though that Native American-specific research should be conducted and incorporated into cyberbullying prevention policies and procedures for the benefit of Native American students citing findings that “27 % of American Indians and Alaska Natives alone 5 and older, ...spoke a language other than English at home, compared with 20.8 percent for the nation as a whole” (U.S. Census, 2012); and, “39% of AI/AN 8th graders knew some about their AI/AN history, and 32% knew about their

traditions and culture (U. S. Department of Education, 2011, p. 41); and, finally that in 2009-10, 13% of schools with less than 5% minority enrollment reported 12.8% “cyber-bullying” among students, compared with 5.3% “cyber-bullying” in schools with 50% or greater minority enrollment” (Robers, Kemp, & Truman, 2012, p.127). O’ Connor et al. (2009) discern that “with regard to Native Americans, their educational outcomes relative to other racial groups has been less cleanly defined, in part as a consequence of their small population size” (p.4). Similarly, Spriggs, Iannotti, Nansel, & Haynie (2007) examining demographic differences with the only national bullying data source for the U.S. (i.e. HBSC) determine that “the small number of students in other racial/ethnic groups precluded separate examination of these groups” but that to improve the effectiveness of bullying prevention programs, specific demographic-based considerations must be made (pp. 284-285). A considerable listing of statistics from a variety of sources compiled by the National Indian Education Association’s website [www.NIEA.org](http://www.NIEA.org) illustrates the many social and educational challenges Native American students face. At HSU, of the 371 graduate students enrolled in 2012, 5 were American Indian (1.34%) and of the 7,597 undergraduate students, 101 were American Indian (1.33%); both of these figures remain below the U.S. census finding of 1.7% nationally, 1.7% CA, and 6.0% for Humboldt County and relegate this population as underrepresented at HSU (HSU Factbook, 2012, pp. 8-11.). Reviewing data on “Six Year Graduation Rates Disaggregated by Race/Ethnicity” for the years 2004 & 2005, Native American rates of graduation were significantly below that of other underrepresented



minorities and whites (HSU Factbook, 2011, p.20). Cyberbullying is correlated with negative academic outcomes among students in grades 6-12 (Kowalski et al., 2013); and Kowalski et al. (2012a) found that a significant number of students report that their first cyberbullying incidents having occurred in college, and that the majority of cyberbullying incidents experienced by college students had occurred during college (i.e. as opposed to middle school); and while the cyberbullying studies which include Native American students (i.e. K-12 or in college) are inadequate in representation or focus to generalize or make recommendations specific to Native Americans, but data on Native American levels of matriculation and persistence demonstrate some of the lowest levels of any ethnic group, the proposed research may provide insight into how Federally mandated funding appropriated to increase Native American academic outcomes, might best be spent in regards to cyberbullying awareness and prevention efforts.

This study addresses the need for more demographically oriented (e.g. race, ethnicity, and culturally influenced) cross-population comparison as suggested by previous researchers (Spriggs, et al. 2007; Werner et al., 2010; Smith et al., 2012; Jones et al., 2012; Parris et al. 2012; Wang et al., 2012). Conversely, where studies do not overtly direct future research to address limitations in diversified demographic characteristics in the sample or for focus on demographic-based comparisons, they indirectly align with the assertion that this need exists when they cite the absence of diverse demographics reflective in the composition of their sample as potentially limiting the generalizability of their findings (e.g. Kowalski & Limber, 2013, p. S19).

Exploratory data collection is the aim of research question #1 from the study: What are the reported rates of cyberbullying among Native American students and students not Native American at Humboldt State University (HSU) for lifetime, last 30 days as a victim, and in various forums for victimization over the past 30 days; also for cyberbullying perpetration over the respondents' lifetime, both as independent findings but also in comparison with the specified "adherence to traditions group" (discussed below) for cross-population analysis of the potential effects from ethnicity, and gender (and below for culture); report on and compare with the literature on existing categories such as the extent of cell phone and Internet use examining ethnicity, gender and culture differences; report on the identity of the perpetrator and the role anonymity plays among this sample; report on the prevalence of cyberbullying victimization and perpetration among the types of technologies and environments most used as compared to the literature for the sample's sub-groups. Research question #2 is conceptualized based on personal communications with Native American guest speakers, faculty, students, and required readings from NAS courses at HSU, examining potential tribal reference points for limiting problematic behaviors, and resulting policies and practices to aid Native American undergraduates at HSU in their academic achievement and psychological well being: For Native American students, What, effects, if any, does the variable culture (defined in brief here and discussed in detail below as adherence to tribal traditions and values on bullying and interpersonal, intertribal, and extratribal relationships) have on cyberbullying outcomes? Specifically does adherence to tribal traditions related to

relationships and bullying have a significant effect on cyberbullying outcomes as determined by prevalence of victimization and perpetration, but also in regards to the motivations used in perpetration?

## CHAPTER THREE

### METHODOLOGY

#### *Introduction*

The primary questions and subsequent exploratory approach for my thesis took shape while attending an upper division class at HSU, in the Fall 2012, titled “Language and Communication in Native American Communities”. The guest speaker, Ms. Kathleen Vigil, a Yurok-Tolowa elder and Yurok language teacher at McKinleyville High School (CA) spoke to our class about her life as a Native American, as a Yurok language teacher, and by extension as a cultural revivalist. Ms. Vigil described accounts of friends and family sent to U.S. boarding schools in the past century. She discussed how English was the only language Native American students were allowed to speak at the boarding schools. When Indian students spoke their traditional languages at the boarding schools, some were beaten by their teachers and berated in front of their peers. She articulated how this act by the federally funded schools, of preventing indigenous language from being spoken, was an attempt to assimilate Indians into mainstream American society. She explained how language is a representation of the user’s worldview and culture, and that by continuing to teach students at McKinleyville high school the traditional language of some of the original inhabitants of this area, she was not only ensuring the survival of the language (projected by Berkley linguists to disappear by 2010), but she was also teaching students the nuanced details of the Yurok worldview and culture (personal communication, K. Vigil 11/13/12).

The example that prompted me to begin the current study was based in Ms. Vigil's description of observing Native American students bullying a student with developmental disabilities. She talked to the perpetrating students about how, in traditional Yurok culture, children were not raised to hate or bully other children, but rather to support one another (i.e. teach younger children appropriate social skills etc.) (personal communication, Kathleen Vigil, 11/13/12). I had heard similar accounts from other Native American lecturers and course related texts and media on Native American traditions that emphasized the well being of all people. I considered this elder's teachings and those from other sources and the potential implications they may have affecting outcomes in an emerging social phenomenon; Native American children might be taught one set of social norms specific to a particular context, but be required to respond to a different set of normative behaviors, and beliefs in an online context. What would the absence of reinforcement of their traditional behaviors and beliefs in a foreign context (e.g. online) be on their interactions with a global community? I began to hypothesize that among those Native Americans who knew of, and adhered to their tribes' traditional social norms, values, and behaviors, the cyberbullying prevalence rates (i.e. as perpetrator) would be quantifiably and significantly different than a) Native Americans who did not know or adhere to their tribal traditions, and b) from non-Natives; also, 2) that Native American individuals who knew their tribal traditions compared to a) Native Americans who did not know or adhere to their tribes' traditional social norms, values, and behaviors, and b) non-natives, would respond to incidents of cyberbullying, or be

motivated in their potential cyberbullying of others in quantifiable and significantly different ways.

My interest in cyberbullying had been piqued previously with national media coverage of several high-profile accounts resulting in suicide. As a regular Internet user I had observed what I would now classify as cyberbullying in various online environments such as in emails, on YouTube, and on blogs. Using Prensky's (2001) term, I would be classified as a "digital immigrant" (i.e. socialized and largely educated in a pre-information and communication technologies era) as, though I had adapted my communication to many online environments including participating in a recreational (though private) blog, maintaining regular family contact through emails, Skype, and some cell phone texting, I eschewed other online venues such as social networking sites, massive multiplayer online (synchronous) games, and uploading of video content on YouTube simply based on my personal preference for privacy, limited interest in various online environments, and varying degree of technological skills. In my experiences online, I did recognize the vast range of approaches to communication, discussed in the literature review, seemingly emboldened by anonymity, and occasionally enhanced by a user's ability to command language, technology, or both. I had a negative online experience with a close family member that demonstrated limitations to the advancements of information and communication technology, but also helped me refine the parameters of a usable definition of cyberbullying, as well as consider the need for third-party objective perspective when attempting to discern intent from textual content

and the larger communication context. As a father and as an enrolled member of a federally recognized tribe, I began to look for studies addressing cyberbullying among Native Americans. As my inquiry into the topic expanded I was perplexed that no attention had been paid to Native American students' rates or responses to cyberbullying. I talked with one of my Native American Studies' professors, Dr. Joseph Giovannetti about a proposed exploratory study aimed at gathering baseline data on the major categories represented in the cyberbullying literature. Also, I was interested in how the traditions and values that had sustained Native American peoples, despite centuries of assimilation, acculturation, and challenging circumstances would, if at all, effect cyberbullying perpetration and/or victimization responses among this subset of the population. As a student of the university, I also recognized that most literature addressed cyberbullying in the context of students in grades 6-12 (e.g. Patchin & Hinduja, 2006) but observed fellow university students regularly using information and communication technologies throughout the day, on-campus, so I was interested in the findings a study of university students would produce. Dr. Giovannetti was interested in assisting both in the formulation and refinement of my approach emphasizing Native Americans, and by allowing me access to the students enrolled in his Native American studies courses. I then discussed the proposal with Dr. Van Duzer, the chair of HSU's school of Education who also extended his support. As Dr. Van Duzer was teaching the "Quantitative Research Methods" class for graduate students in Education, we began the process of designing an instrument the following spring (2013) as a pilot study for the class.

Through the regular meetings with Dr. Giovannetti where we discussed past exploitative practices and abuses by researchers, as well as the misuse of research on Native Americans, I carefully proceeded, with faculty guidance, to construct an instrument to provide exploratory quantitative data as well as to begin to examine how, if at all, traditional beliefs may affect cyberbullying outcomes for Native American students by simultaneously collecting qualitative data.

#### *Development of Research Instrument*

In developing the 11 question, 78 item mixed-methods research instrument for the collection of quantitative and qualitative cyberbullying and demographic data, insufficiently or unrepresented for Native Americans but called for by researchers (see Spriggs, et al. 2007; Werner et al., 2010; Smith et al., 2012; Jones et al., 2012; Parris et al., 2012; Wang et al., 2012), I first submitted an externally produced and published questionnaire, for conceptual reference, to Dr. Van Duzer at the beginning of spring semester 2013. Sbarbaro & Enyeart Smith (2011) had conducted a study using a 50-item cyberbullying (victim and behavior) questionnaire among “educationally disadvantaged middle school students” but which had been adapted from the original version created by Hinduja & Patchin (2009). Though many instruments were available from other studies, the Hinduja & Patchin (2009) instrument was comprehensive in terms of types, methods and frequency of cyberbullying. The previously validated instrument includes both a broad measurement and a refined temporal range (i.e. “ever observed or been cyberbullied”, & “in the past 30 days”) allowing for greater cross-study comparison. The



adapted version of the questionnaire by Sbarbaro & Enyeart Smith (2011) was useful in demonstrating how to tailor the collection of data for a sub-group using an existing frame of reference (i.e. garnering results from the content of the original instrument developed by Hinduja & Patchin (2009), but also incorporating additional questions to further the inquiry). I attempted to contact Dr. Sbarbaro & Dr. Enyeart Smith to notify them that I would be using a modified version of their instrument, and upon discussing my intent with Dr. Sbarbaro, I then proceeded to incorporate the independent variable of identity into the existing questions on types, rates and environments of perpetration and victimization of cyberbullying. I incorporated a composite definition of cyberbullying into the introduction of the questionnaire though Ybarra et al. (2012) discuss how alignment by respondent with a provided definition requires some universal meaning associated with the experience, and definition of the examined behaviors may clarify constructs for respondents and prevent misclassifications, but it may also prevent association with the defined behaviors if the respondent's experiences fall beyond the definition. I used broad descriptions of cyberbullying behaviors and technologies in my composite definition based on definitions by David-Ferdon & Feldman (2007), Sbarbaro & Enyeart Smith (2011), and Willard (2012), but specifically excluded the Olweus (1993) criteria of power imbalance, not easily defend oneself, repetition and over time, as the modified survey accounts for these characteristics (e.g. Question 6a.2-k.2: repetition: "How many times did the bullying occur? & question 9e. power imbalance: ...to what extent did you hope to ...show how weak they were? etc.), as well as behaviors

associated with relational aggression (e.g. question 9 e. show how weak they were; or exclusion represented by question 9 f. “keep them out of your group”) because the questionnaire elicits responses to these criteria through various questions. Also though, as respondent fatigue was a concern, (with 11 questions representing approximately 78 individual items of the inquiry) the decision to limit the definition, thereby excluding the criteria was made. I also included an open-ended box for “other” comments in an attempt to elicit types, rates, environments, and aspects of the phenomenon not covered by the structured instrument with mutually exclusive categories. In particular a separate series of columns determining the identity or anonymity of the perpetrator associated with questions 6a1-k1 was included. Also with regards to the identity of the victim 8a2-k2, a single separate column was included in an attempt to determine the frequency of cyberbullying occurring by Native Americans on Native Americans in the established environments. Dr. Van Duzer assisted in the creation and modification of the 4 point Likert-type scales measuring both intent (Question 9a-f) and affect (Question 7a-f) of perpetrator and victim responses to cyberbullying. He also managed the finalized bi-directional, question layout for the survey, again with consideration to respondent fatigue, printing costs, and efficient storage and management of a multi-paged questionnaire (n=272).

I based the question layout of respondents’ demographic characteristics on a survey produced by Willard (2012) and submitted them in modified form to Dr. Giovannetti for refinement. We established the criteria for Native American

identification, first by citing the Bureau of Indian Affairs definition, then by creating categories that have historically fallen beyond official recognition. The gold standard for identifying Native American students was fixed at enrollment in one of the 566 U.S. federally recognized sovereign Indian nations, of which, each determine the enrollment criteria for citizenship. However, with historical U.S. stigmatization and resulting individual shame associated with Indian identification, some families have covered-up the Indian heritage of their family ancestry, so in an attempt to account for this grey area of identity we created another designation of self-identification linked to descendants. This decision has tribal precedence whereby an enrolled member of the Cherokee Nation of Oklahoma need not demonstrate blood quantum for tribal enrollment and citizenship, rather, that an individual must demonstrate documented blood lineage (i.e. an Indian ancestor) to the U.S. issued Dawes Final Rolls 1899-1906 (see Cherokee Nation, 2014).

The logic being that if shame were, as in previous generations, associated with an Indian-based identity, the identity might easily be deemphasized, obscured, or overlooked with the passing of generations, though with the increasing accessibility to genealogy databases and records, an individual might determine links to an Indian ancestor eventually resulting in subsequent tribal enrollment and citizenship despite having no cultural or linguistic ties to the Indian nation. Another Native American identifying category was created for the inclusion of a citizen of an unrecognized tribe. As criteria are changing for federal recognition of tribes, and some tribes are currently being reviewed for federal recognition (see U.S. Department of the Interior “Washburn”, 2013)

some individuals may again be excluded based on our categories and we therefore determined this option would allow for greater representation but still be aligned with existing federal and individual tribal citizenship criteria. One distinction that was maintained however, was that regardless of orientation (i.e. enrolled in a recognized tribe, enrolled in an unrecognized tribe, not enrolled but self-identify) this study would only serve to represent Native American's and those self-identifying as from the 566 U.S. federally recognized tribes, or those tribes within the contiguous boundaries of the U.S. plus Alaska. The scope of investigation was limited to U.S. tribes on the basis of the expertise of advising committee member Dr. Giovannetti, as political and cultural issues beyond domestic Indian nations may have required additional advising faculty and resulting inquiry. Also inter-item reliability (Nardi, 2006, p. 62) was sought on the point of Native American identity, as four separate questions relating to identity were reviewed before including the respondent in the Native American classification (this is discussed in greater depth below).

I consulted with Dr. Giovannetti and Dr. David Ellerd regarding the open-ended questions eliciting qualitative data on respondents' knowledge of, and adherence to traditional teachings regarding interpersonal (e.g. with non-native or members of other Indian nations) and intrapersonal interactions (e.g. a member of the same entity, tribe, nation etc.). We attempted to map the exploratory statistical data the majority of the questionnaire was designed to collect (i.e. the "what"), but also endeavored to begin an analysis of why the dependent variable of cyberbullying was represented by exploring

potential correlations and the perceived role the independent variables (knowledge of and adherence to traditional teachings and values) served. I recruited several friends and associates then performed verbal protocols to modify irregularities and to increase face validity addressing language, format, logic, and order of categories. In toto, the study was deemed relevant and the goals achievable by advising committee members based on the resources I had available, and the time frame I had established.

In summary I hypothesized that a relationship would exist between knowledge of, and adherence to tribal traditions and the reported rates of cyberbullying among respondents, both in terms of perpetrator and victim roles. Also that among Native American individuals who knew and adhered to their tribal traditions, and those that did not, and between the “adherence group” and respondents that were not Native American there would be a statistically significant difference in rates of cyberbullying as perpetrator and victim. This hypothesis was postulated based on Ms. Vigil’s summary of her traditional worldview as well as on the information I encountered in completing the 9 units of specialized upper division Native American coursework, and 6 additional lower division units at HSU. The two open-ended qualitative questions (representing four individual components to the inquiry into and individual’s knowledge of and adherence to their tribe’s traditional teachings, and behavioral norms) were an attempt to explore this possible connection and difference to the independent variable of effect traditions play on the dependent variable of cyberbullying both in the perpetrator and victim context). The resulting instrument as seen in Appendix B is comprised of 3 demographic

questions, 2 usage of technology questions, 2 open-ended (with 4 total parts) questions on knowledge and description of traditions regarding inter/intratribal/extratribal interactions and behavioral norms regarding bullying and individual adherence to traditions.

This section described the development of the research instrument through conceptualization of the research question, refinement and utilization of existing instruments, defined terms used on the questionnaire, implementation of applied constructs and measurements with a pilot study, and discussed adjustments to the finalized version. The next section details the sampling strategy, the response rates for both spring and fall versions of the survey, and discusses problems encountered as well as presenting a finding positing the successful representation of Native American university student respondents which, as referred to in the cyberbullying literature by researchers, have referred future researchers to explore demographic-based and cross-population studies on cyberbullying behaviors.

### *Participants*

In the Spring 2013, I utilized the Native American Studies class listing to prepare 146 surveys matching the number of enrolled students in 5 classes, (2 lower division and 3 upper division) all but one taught by Dr. Giovannetti. The convenience sample strategy was an attempt to primarily test the instrument and protocol of the pilot study. Though this sample strategy limited generalizability of findings beyond HSU Native Americans, it was believed that this approach would garner a higher percentage of Native American students than from a similar approach in other general education classes. Of 146 surveys

submitted in the Spring 2013, a total of 106 were returned, but one of the surveys was voided, therefore 105 total surveys or 72% were returned with 17% (n=18) Native American respondents and 83% non-native respondents (n=87). The response rate (72%) and proportion of respondents as Native Americans students (17%) was regarded as sufficient by advising committee to meet the goals of this study.

Upon analyzing the initial data from the spring pilot study, Dr. Giovannetti, Dr. Van Duzer, and I regarded the instrument as viable in producing tangible data, and I consequently drafted an amended proposal to expand the study in the fall 2013. Upon receiving IRB approval, I conducted similar procedures for research in fall 2013, with 345 surveys submitted to 11 classes (5 lower division and 6 upper division), of which Dr. Giovannetti taught four, and two separate instructors taught the remaining seven classes. The convenience sampling protocol produced a 48.7% return rate in the fall 2013. However as the total number of surveys submitted was calculated at the beginning of the semester based on class enrollment (at 8/26/13) and some were not distributed by proctoring professors until December 2013, the actual number of students in the class may have decreased by the end of the semester (i.e. student dropped the class). Also one professor mistakenly did not distribute the surveys to two of the four assigned classes, representing approximately 71 surveys (i.e. professor oversight potentially accounting for 21% of the 345 total distributed and when added to the 48% returned would produce an average much closer to the 72% return rate reported in the spring pilot). Subtracting the questionnaires withheld on oversight (n=71) from the 345 total prepared for fall 2013,

results in the actual submission of 274 questionnaires, with 168 returned (61%), and 167 used. One final consideration for the low return rate is that we attempted to reduce double-counting of participants by explicitly stating in the script read by the proctoring professor, and stated in the informed consent signed by each respondent that if they had already participated in this survey, they should not complete another questionnaire.

The sampling strategy for the combined study (spring and fall  $n=420$ ) produced 274 returned questionnaires with 2 voided, for a total of 272 returned questionnaires and a return rate of 65%. Of this total, 58 Native American students or 21% of all respondents, were represented through their participation in this study. Though (at the time of this writing) enrollment totals are not available for the 2013-2014 academic year, the HSU Factbook 2012-2013, establishes the American Indian student demographic for the 2012 academic year at 1% ( $n=110$ ) of the 8,116 total student population (p.8). It is therefore posited that though limitations exist to the generalizability of the findings beyond the population examined, a statistically significant overrepresentation of an underserved demographic is addressed by this study and the sampling strategy detailed in this chapter.

This section detailed the sampling strategy, the response rates for both spring and fall versions of the survey, and discussed problems encountered as well as positing the successful representation of Native American university student respondents previously referred to in the cyberbullying literature by researchers requesting demographic based and cross-population studies on cyberbullying behaviors. The next section briefly



describes the submission to the IRB, modification to the instrument, and then details the documentation and the ensuing protocol by which the research was conducted. It concludes with a description of the methodological approach that was taken to analyze both the quantitative and qualitative data.

### *Procedure*

I submitted my proposal to the HSU Internal Review Board (IRB) and was approved in April 2013, for the pilot study. The research was conducted in April-May 2013 in the form of 1) anonymous surveys, 2) informed consent documentation and 3) a script read at the beginning of the survey by the proctoring professors. In September 2013, after modifying questions 4 & 5 relating to Internet and cell phone usage, I resubmitted the instrument to the IRB and was again approved to conduct research with additional students and the modified instrument. The second iteration of the anonymous survey was distributed and data collection occurred from September-December 2013, based on the approved protocol and the administrating professor's schedule.

The protocol was a relatively straightforward process whereby I contacted the other lecturers in the Native American Studies department at HSU, described my study and asked if they would conduct the survey in one class before the end of the semester. I requested that they only use 15 minutes of class time so as not to place undue burden on respondents or non-respondents. In the script, on the questionnaire and in the informed consent it was repeated that all respondents would remain anonymous as no identifying elements existed or would attempt to be constructed to determine an identity. Also it was

emphasized that all information would remain confidential and solely be used for the stated purposes and within the IRB approved terms. No incentives were offered except that the findings would be made available once concluded, and similarly no penalty would come to students who chose not to participate. I prepared several hundred documents in the form of a double-sided four-paged survey, and a four-page informed consent document, with a duplicate script for each class. I presented these to proctoring instructors and did a verbal walk-through on the protocol then answered any questions. I asked that first the script be read introducing the study, then participating students be given an informed consent document and asked to read, sign then return the signature page to a manila envelope before then taking a questionnaire. By signing the consent form the respondents were assenting to the possible risks and proceeding voluntarily and with the understanding of assured anonymity. I was not in the classroom when the surveys were conducted. A specific time frame was not given for administering the survey rather it was left to the instructor's discretion. I checked back intermittently, or was called back to the instructor's office when the surveys had been completed.

Upon receiving the completed surveys and informed consent documentation I began the data entry into an excel spreadsheet for quantitative analysis that was then transferred to Minitab statistical software (version 16) where a new worksheet was created. I entered the data in separate columns, and coded the respondents in rows for ethnicity (e.g. in this case simply Native American or Not); gender; adherence to traditions based on response to question 11 (discussed in detail below). I also summed

various questions like all cyberbullying victimizations (6a2-6k2& 8a1-8k1) to compare mean scores for victimization, perpetration and motivation separately. For the demographic questions 1-3, I created tables and graphs for the tabulated statistics. For questions 4 and 5 I generated tabulated statistics and analyzed then recorded differences examining effects for gender, ethnicity, and culture (i.e. I operationalized culture as an effect in the sub-grouping of Native American respondents that answered question 11 regarding adherence to traditions in the affirmative) for Internet and cell phone usage. I then created frequency tables and graphs for the generated statistics at the emphatic request of my committee members. For questions 6a1-6a3 (i.e. identity), and 6a2-6c2 (i.e. frequency) I again generated tabulated statistics for gender, ethnicity, and culture and analyzed the results for the possible effects the independent variables had on the corresponding dependent variables (i.e. lifetime observed, lifetime victimized, and last 30 days victimized). I concluded the exploration of the effect the independent variable gender had on cyberbullying outcomes at this point in the study as I had results to compare with the literature on rates of victimization and determined that as the data was readily organized, subsequent analysis on other questions regarding gender could be conducted at a later time results were tabulated, summed and standard deviation was calculated for all the following questions grouped separately for analysis of results based on ethnicity 6d1-6k1 (identity/anonymity); 6d2-6k2 (cyberbullying victimization frequency); 8a1-8k2 (cyberbullying victimization frequency in additional forums); 8a2-8k2 (cyberbullying perpetration frequency in additional forums). I created frequency

tables reporting the results and conducted a basic analysis reported in the text. As basic trends such as the universal use of social networking sites for victimization and perpetration were readily apparent, I immediately highlighted these for later reporting, however as the data is rich, extensive mining to evince useful commonalities or differences remains possible. As sufficient data was compiled for the scope of this thesis, as relayed by my committee members, a minimal examination was conducted examining the affect of victimization and motivation for perpetration (i.e. questions 7a-f and 9a-f). With Dr. Van Duzer's inestimable assistance I constructed an analysis strategy to group motivation categories from questions 9a-f based on related constructs reported in the literature. For questions 10 & 11, I coded the answers first for completion, and subdivided the Native American group between those that had completed these questions and those that did not. I then conducted ANOVAS between 3 groups, and 2 groups for effects on the mean scores of victimization and perpetration for the independent variables ethnicity, and culture (i.e. adherence to traditions). I also conducted t-tests with the same mean scores among the same pairings independently, in an effort to validate the original findings. These results are reported in the related tables and associated text.

This section briefly described the submission to the IRB, modification to the instrument, and then detailed the documentation and the ensuing protocol by which the research was conducted. It concluded with a description of the methodological approach to analyzing the data in both quantitative and qualitative forms.

*Conclusion*

This chapter detailed the methodology utilized in this study. It described the origins for the major hypotheses and the construction of the instrument. It detailed what was included in the survey and how the various components address aspects of the inquiry. The sampling strategy, with the subsequent response rates are described and the procedures by which the research was conducted are then elaborated on. The chapter concludes with the methodological approach to analyzing the quantitative and qualitative forms of data collected in the study.

## CHAPTER FOUR

### RESULTS AND ANALYSIS

#### *Findings for Questions 1-11*

Question 1 inquiring about the respondent's Native American status is detailed in chart 1 and table 1 as well in the following text: Of the 58 total Native American respondents reported on in this study of 272 respondents,

- 24 respondents reported being an enrolled member in a U.S. federally recognized tribe with 6 males and 18 females;
- 2 respondents reported being a citizen of an U.S. federally unrecognized tribe with 1 male and 1 female;
- 32 respondents reported not being enrolled in a U.S. federally recognized tribe but as a descendant of a Native American citizen (i.e. lineal descendant) with 16 males and 16 females.
- Of the 19 Native American respondents that reported adhering to traditions (Question 11 discussed below) 13 reported being enrolled members of a federally recognized tribe; 2 reported being a Native American citizen of an unrecognized tribe; 4 reported being not enrolled, but self-identified as a descendant of a Native American. Of these 19 Native American respondents, 8 were males and 11 were females (Figure1, Table 1)

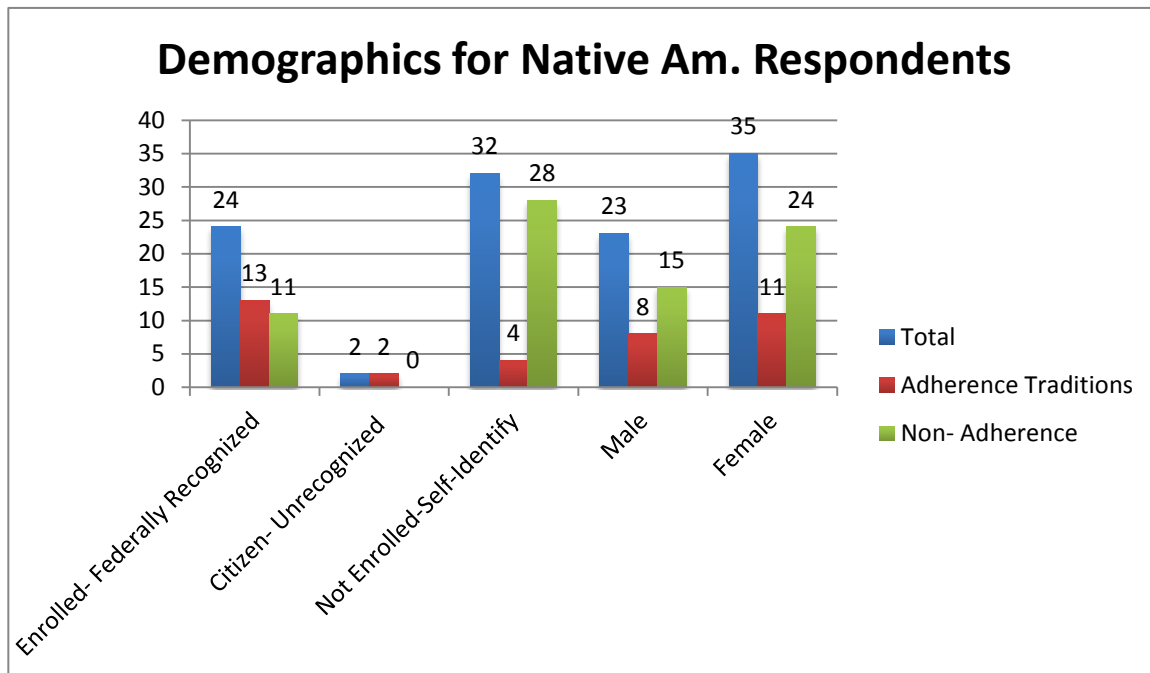


Figure 1. Demographics for Native American Respondents

Table 1 presents a summary of results from both question 2 addressing the Native American respondents' tribal affiliation, and the results for question 3 addressing the Native American respondent's gender. All demographic data are cross-tabulated with Question 11 regarding Native American respondent's adherence to traditions and values regarding bullying.

Table 1. Native American Demographics

Native American Demographics	The Present Study Total	Adherence to Traditions	Not Adhere to Traditions
	n (%)	n = (%)	n= (%)
Total	58 (100%)	19 (100%)	39 (100%)
Male	23 (40%)	8 (42%)	15 (39%)
Female	35 (60%)	11 (58%)	24 (62%)
Tribal Affiliation			
Aleut	1 (1.72%)	1 (5%)	
Apache	2 (3.45%)		2 (5%)
Blackfoot	1 (1.72%)		1 (3%)
Blackfoot &	1 (1.72%)	1 (5%)	
Chiricahua Apache	1 (1.72%)		1 (3%)
Cahuilla	1 (1.72%)		1 (3%)
Cherokee	9 (15.52%)	1 (5%)	8 (21%)
Cherokee &	3 (5.17%)		3 (8%)
Chinook	1 (1.72%)		1 (3%)
Chippewa	1 (1.72%)		1 (3%)
Choctaw	2 (3.45%)		2 (5%)
Choctaw &	1 (1.72%)		1 (3%)
Chumash	1 (1.72%)	1 (5%)	
Comanche	1 (1.72%)		1 (3%)
Hoopa/Hupa	5 (8.62%)	4 (21%)	1 (3%)
ITEPP	1 (1.72%)	1 (5%)	
Karuk	2 (3.45%)	2 (11%)	
Karuk &	1 (1.72%)		1 (3%)
Lakota	1 (1.72%)		1 (3%)
Mingo &	1 (1.72%)		1 (3%)
Mohawk	1 (1.72%)		1 (3%)
Ojibwe	1 (1.72%)		1 (3%)
Seminole &	1 (1.72%)	1 (5%)	
Western Shoshone	1 (1.72%)		1 (3%)
Shoshone &	1 (1.72%)		1 (3%)
Smith River/Tolowa	2 (3.45%)		2 (5%)
Tlingit	1 (1.72%)		1 (3%)
W. Mono	1 (1.72%)	1 (5%)	
Wailaki	1 (1.72%)		1 (3%)
Washoe	1 (1.72%)		1 (3%)
Wiyot	1 (1.72%)	1 (5%)	



Native American Demographics	The Present Study Total	Adherence to Traditions	Not Adhere to Traditions
	n (%)	n = (%)	n= (%)
Yaqui	2 (3.45%)	2 (11%)	
Yurok	6 (10.35%)	3 (16%)	3 (8%)
Yurok &	1 (1.72%)		1 (3%)

The sampling strategy for the combined study (spring and fall n=420) produced 274 returned questionnaires with 2 voided (due to overtly disingenuous responses by respondents including making derogatory comments in the open-ended questions), for a total of 272 returned questionnaires and a return rate of 65%. Of this total, 58 Native American students or 21% of the 272 overall respondents, were represented through their participation in this study. Of the 58 Native American respondents, 35 were female (60%) and 23 were male (40%). Of the 214 non-Native American respondents (spring and fall combined), 113 were female (53%) and 101 were male (47%). HSU Factbook 2012-2013 establishes the enrolled American Indian student demographic for the 2012 academic year at 1% (N=110) of the 8,116 total for enrolled students, with American Indian gender totals reported as 66 females (60%) to 44 males (40%), and HSU total enrolled females as 54 % of the 8,116 student body (HSU Factbook 2012-2013, p.8). This study's sample is therefore nearing a proportionate representation of the gender distribution (i.e. 40% male to 60% female) existing in the university among Native American respondents for 2012-2013, and similarly among the total population (i.e. 46% male to 54% female) for total gender distribution during the academic year 2012-2013 (see Table 2). It is therefore posited that though limitations exist as to the generalizability

of the findings beyond the population examined, a significant overrepresentation of an underserved student demographic (i.e. Native Americans students representing 1% of HSU enrollment and 21% of the present study's total sample) is addressed in this study as a result of the sampling strategy detailed in the previous chapter (see Chart 2).

Table 2 Demographics of the Present Study

Variable	HSU Total Student Population 2012-2013 n (%)	The Present Study Not Native American Respondents n (%)	HSU Total Native American Student Population 2012 n (%)	The Present Study Native American Respondents n (%)	The Present Study Native American Respondents Adhereing to Traditions n (%)
Male	3,734 (46%)	101 (47%)	44 (40%)	23 (40%)	8 (42%)
Female	4,382 (54%)	113 (53%)	66 (60%)	35 (60%)	11 (58%)
Total	8,116 (100%)	214 (100%)	110 (100%)	58 (100%)	19 (100%)

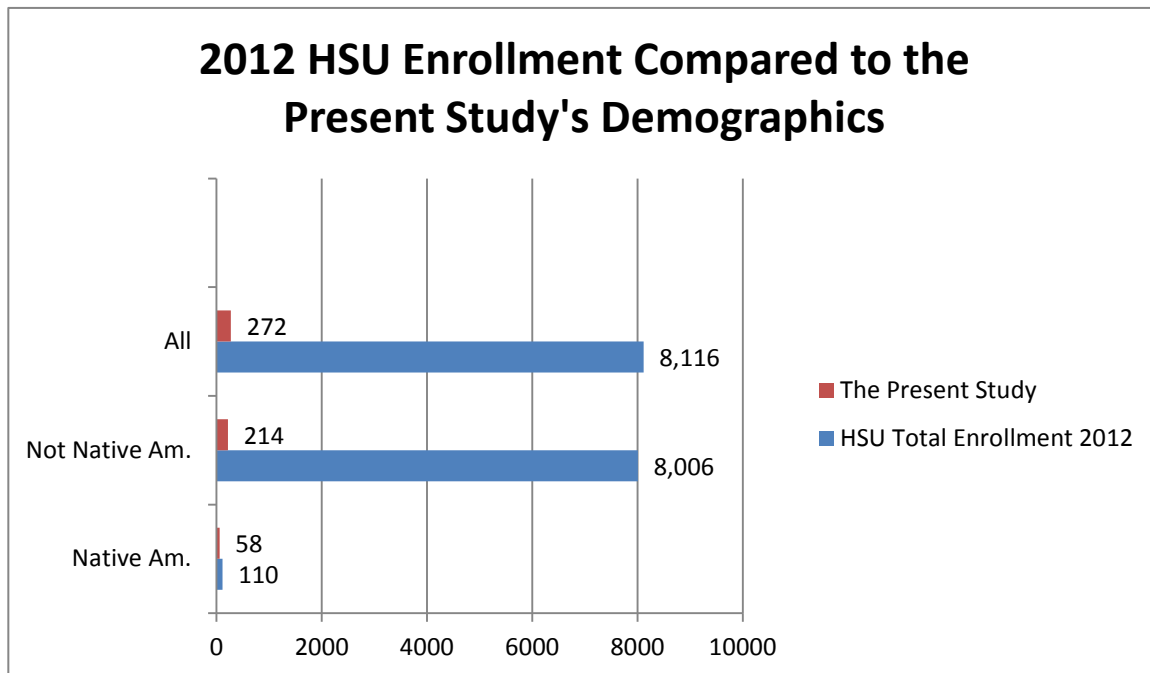


Figure 2. 2012 HSU Enrollment compared to the present study's demographics

Additional analysis of the Native American respondents produces the finding that of the 566 federally recognized tribal entities in the U.S., 23 distinct tribes are represented in this study (4%), with an additional 9 respondents reporting more than one tribal affiliation, and 1 respondent, apparently misunderstanding question 2, reporting tribal affiliation (but included based on the questionnaires inter-item reliability/construct validity design, achieved through multiple questions asking about a single construct or concept as in this instance a previous response to question 1, and subsequent responses to question 10.a-c, and 11) (see chart 3). Of the 566 U.S. federally recognized tribal entities, approximately 109 (see California Courts, 2014) are located in whole or in part in California (i.e. as the land and political base of some tribal entities extend beyond state borders), and this study represents 23 individuals from 9 CA tribal entities (see Chart 4).

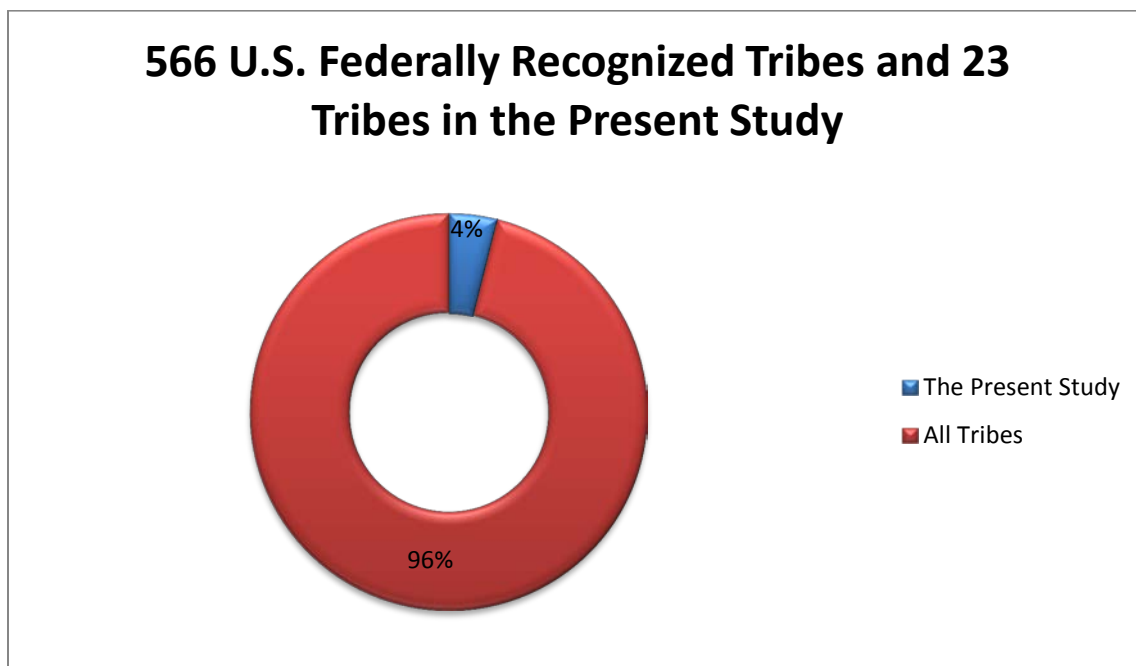


Figure 3. 566 U.S. Federally Recognized Tribes and 23 Tribes in the Present Study

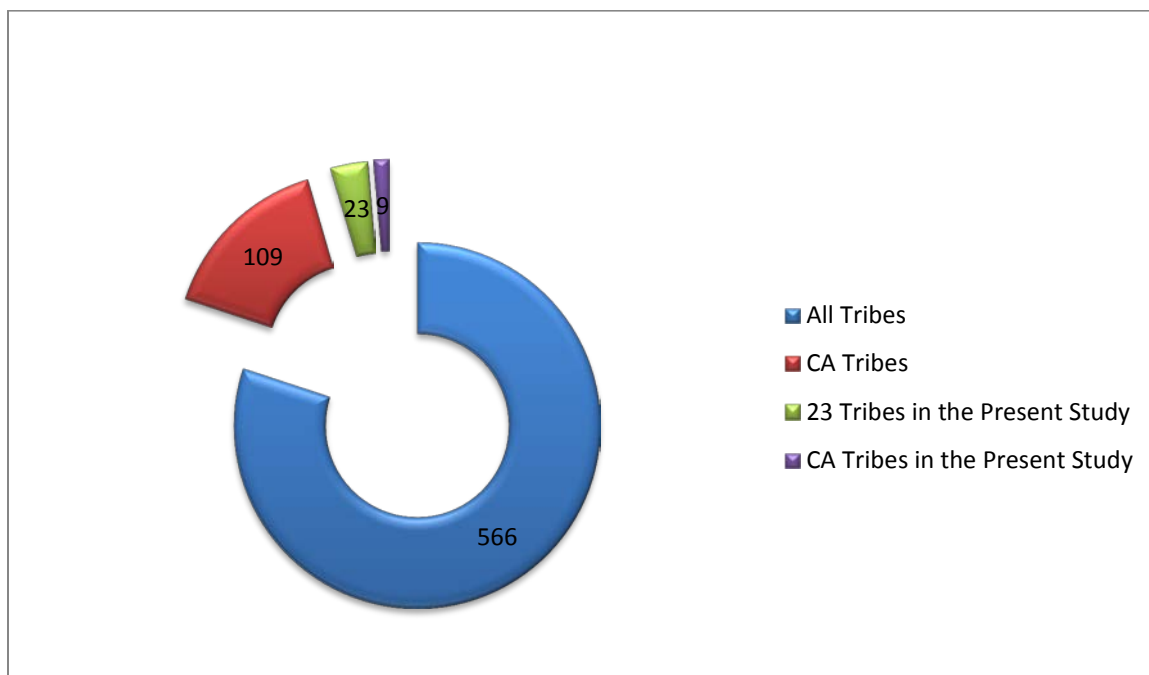


Figure 4. 566 Total U.S. Federally Recognized Tribes; 109 Total CA Tribes; 23 Tribes in the Present Study; 9 CA Tribes in the Present Study

Results from question 4 and 5 are reported in Table 3 below. However the total number of respondents is reduced in the findings as a result of the modification to questions 4 & 5 in the fall 2013 survey, based on the limited usefulness of the responses received to the original questions 4 & 5 appearing in the pilot study in the spring 2013. Specifically, questions 4 and 5 were rewritten asking respondents, in an open-ended question about their frequency of use for the respective technologies. The original multiple choice format in the spring 2013, produced frequency results that did not differentiate individuals or any meaningful trends in technology usage as nearly all respondents replied that they used the respective technologies at the scale's maximum

level (i.e. several times daily). Results for questions 4 &5 are reported below in table 3 (Internet use) and table 4 (cell phone use), as well as summarized in the text that follows.

Table 3. Daily Internet use

	The Present Study	1-4 Times Daily Use	5-9 Times Daily Use	10-14 Times Daily Use	15 > Times Daily Use
	n (%)	n (%)	n (%)	n (%)	n (%)
Total	167 (100%)	75 (45%)	51 (31%)	19 (11%)	22 (13%)
Male	85 (100%)	37 (44%)	25 (29%)	12 (14%)	11 (13%)
Female	82 (100%)	38 (46%)	26 (32%)	7 (9%)	11 (13%)
All Native Am. Respondents	40 (100%)	14 (35%)	11 (27.5%)	8 (20%)	7 (17.5%)
All Non-Native Am. Respondents	127 (100%)	61 (48.03%)	40 (31.5%)	11 (8.66%)	15 (11.81%)
Native Am. Respondents with Traditions	11 (100%)	5 (45.4%)	3 (27.3%)	1 (9.1%)	2 (18.2%)
Native Am. Respondents w./o. Traditions	29 (100%)	9 (31%)	8 (28%)	7 (24%)	5 (17%)

Question 4 (How often do you use the Internet?) produced the following data (see Table 3), of the 167 total respondents reporting on this question, 75 (45%) answered 1-4 times daily, 51 (31%) answered 5-9 times daily, 19 (11%) answered 10-14 times daily, and 22 (13%) answered 15 times or more daily. Gender and cross population comparison of daily Internet use produced the following results:

- A comparison of all males (n=85) and all females (n=82) in their reported daily Internet use showed that 44% of males to 46% of females use the Internet 1-4 times daily; 29% of males compared to 32% of females use the Internet 5-9 times daily, 14% of males to 9% of females use the Internet 10-14 times daily; 13% of males and 13% of females use the Internet more than 15 times daily.
- 48% of non-Native American respondents (n=127) compared to 35% of Native American respondents (n= 40) reported using the Internet 1-4 times daily;
- 31% of non-Native American respondents compared to 27% of Native American respondents reported using the Internet 5-9 times daily;
- 8% of non-Native American respondents compared to 20% of Native American respondents reported using the Internet 10-14 times daily;
- 11% of non-Native American respondents compared to 17% of Native American respondents reported using the Internet 15 times or more daily.

A further comparison of the daily Internet use of Native American respondents adhering to traditions (represented in this question as n=11), and Native American respondents “not adhering” to traditions (represented in this question as n=29) follows: 45% of the “adhering” group (n=11) reported 1-4 times daily Internet use compared to 31% of the “not adhering” group (n=29); 27% of the “adhering” group (n=11) reported 5-9 times daily Internet use compared to 28% (n=29); 9% of the “adhering” group (n=11) reported 10-14 times daily Internet use compared to 24% of the “not adhering” group (n=29); and 18% of the “adhering” group (n=11) reported

more than 15 times daily Internet use compared to 17% of the “not adhering” group (n=29).

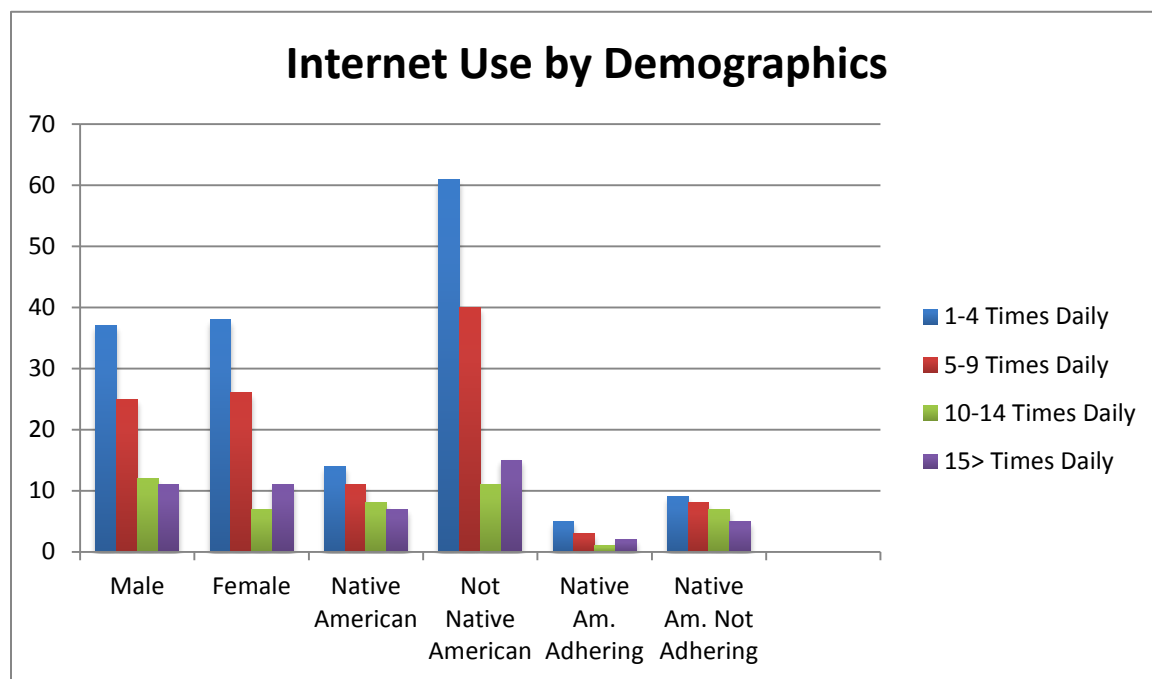


Figure 5. Internet usage by demographic composition

Question 5. How often do you use a cell phone daily?

Table 4. Daily cell phone use

	The Present Study n (%)	0 Times Daily Use n (%)	1-4 Times Daily Use n (%)	5-9 Times Daily Use n (%)	10-14 Times Daily Use n (%)	15 > Times Daily Use n (%)
Total	167 (100%)	4 (2%)	34 (20.35%)	34 (20.35%)	31 (19%)	64 (38.3%)
Male	85 (100%)	3 (3.53%)	20 (23.53%)	20 (23.53%)	17 (20%)	25 (29.41%)



	The Present Study n (%)	0 Times Daily Use n (%)	1-4 Times Daily Use n (%)	5-9 Times Daily Use n (%)	10-14 Times Daily Use n (%)	15 > Times Daily Use n (%)
Female	82 (100%)	1 (1.2%)	14 (17.1%)	14 (17.1%)	14 (17.1%)	39 (47.5%)
All Native Am. Respondents	40 (100%)	1 (2.5%)	10 (25%)	9 (22.5%)	6 (15%)	14 (35%)
All Non-Native Am. Respondents	127 (100%)	3 (2%)	24 (19%)	25 (20%)	25 (20%)	50 (39%)
Native Am. Respondents with Traditions	11 (100%)	1 (9.1%)	1 (9.1%)	2 (18.2%)	2 (18.2%)	5 (45.4%)
Native Am. Respondents w./o. Traditions	29 (100%)	0	9 (31%)	7 (24%)	4 (14%)	9 (31%)

Of the 167 respondents that reported on this question, 4 respondents (2%) reported not using a cell phone, 3 were non-Native American respondents with 2 being male and 1 female, and 1 was a Native American male; 34 (20%) of all respondents reported using a cell phone 1-4 times daily; 34 (20%) of all respondents reported using a cell phone 5-9 times daily; 31 (19%) of all respondents reported using a cell phone 10-14 times daily; 64 (38%) of all respondents reported using a cell phone 15 times or more daily. Gender and cross population comparison produced the following results:

- A comparison of all males (n=85) and all females (n=82) in their reported daily cell phone use showed that 3% of males to 1% of females did not report using a cell phone; 23% of males to 17% of females use their cell phones 1-4 times daily; 23% of males compared to 17% of females use their cell phones 5-9 times daily; 20% of males to 17% of females use their cell phones 10-14 times daily; 29% of males and 47% of females use their cell phones more than 15 times daily.
- 2% of non-Native American respondents (n=127) reported not using the cell phone at all compared with 2% of Native American respondents (n=40);
- 19% of non-Native American respondents reported 1-4 times of daily cell phone use compared to 25% of Native American respondents;
- 20% of non-Native American respondents reported 5-9 times daily cell phone use compared to 22% of Native American respondents;
- 20% of non-Native American respondents reported 10-14 times daily cell phone use compared to 15% of Native American respondents;
- 39% of non-Native American respondents reported 15 times or more of daily cell phone use compared to 35% of Native American respondents.
- A further comparison of the daily cell phone use of Native American respondents “adhering” to traditions (represented in this question as n=11), and Native American respondents “not adhering” to traditions (represented in this question as n=29) follows: 9% of the “adhering” group (n=11) reported not using a cell phone daily compared to the “not adhering” group (n=29) with zero respondents

not using a cell phone daily; 9% of the “adhering” group reported 1-4 times daily cell phone use compared to 31% of the “not adhering” group; 18% of the “adhering” group reported 5-9 times daily cell phone use compared to 24% of the “not adhering” group; 18% of the “adhering” group reported 10-14 times daily compared to 14% of the “not adhering” group; and 45% of the “adhering” group reported more than 15 times daily cell phone use, compared to 31% of the “not adhering” group.

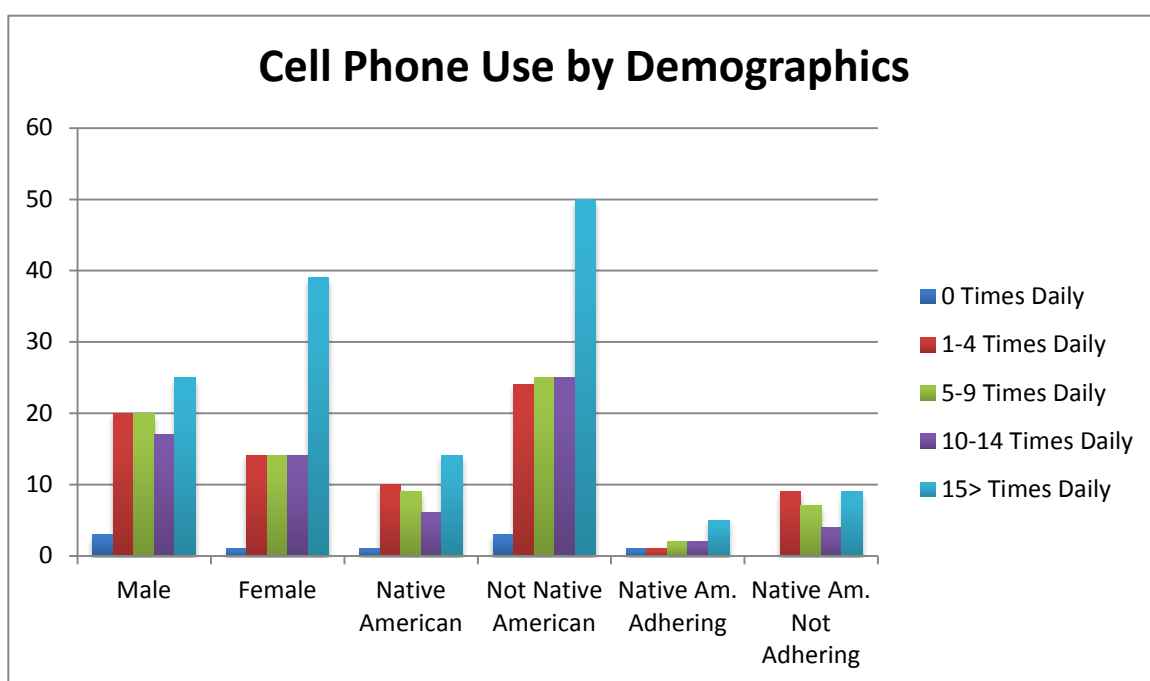


Figure 6. Cell phone usage by demographic composition

### *Anonymity*

Responses follow to question 6a1, (In my lifetime I have observed cyberbullying online; Was the cyberbully Native American?) for all Native American respondents, and respondents not Native American (see Tables 5 & 6):

- From the combined Native American respondents group (n=58), 42 respondents reported having observed cyberbullying in their lifetime; 17 times (30%) the perpetrator was anonymous; 19 times (33%) the perpetrator was not Native American; 4 times (7%) the perpetrator was Native American; 2 times (4%) the perpetrator was a member of the victim's tribe.
- From the respondents not Native American (n=214), 143 (67%) reported having observed cyberbullying in their lifetime; the perpetrator was anonymous 90 times (42%); the perpetrator was not Native American 51 times (24%); 2 times (<1%) the perpetrator was Native American.

Responses follow to question 6b1 (In my lifetime I have been cyberbullied; Was the cyberbully Native American?) for all Native American respondents, and respondents not Native American (see Tables 5 & 6):

- From the combined Native American respondents group (n=58), 29 respondents (50%) reported having been cyberbullied in their lifetime; 11 times (19%) the perpetrator was anonymous; 13 times (22%) the perpetrator was not Native American; 3 times (5%) the perpetrator was

Native American; 2 times (4%) the perpetrator was a member of the victim's tribe.

- From the students not Native American (n=214), 104 (49%) reported having been cyberbullied in their lifetime; the perpetrator was anonymous 54 times (25%); the perpetrator was not Native American 49 times (23%); 1 time (<1%) the perpetrator was Native American.

Responses follow to question 6c1, (In the last 30 days I have been cyberbullied; Was the cyberbully Native American?) for all Native American respondents, and respondents not Native American (see tables 5 and 6):

- From the combined Native American respondents group (n=58), 18 respondents (31%) reported having been cyberbullied in the last 30 days; 1 time (5%) the perpetrator was anonymous; 12 times (67%) the perpetrator was not Native American; 3 times (17%) the perpetrator was Native American; 2 times (11%) the perpetrator was a member of the victim's tribe.
- From the respondents not Native American (n=214), 72 respondents (34%) reported having been cyberbullied in the last 30 days, of these 72 respondents, 0 times the perpetrator was anonymous, 55 times (76%) the perpetrator was not Native American, 17 times (24%) the perpetrator was Native American.

Table 5. Native American Respondent - Identity of Perpetrator

Who was the cyberbully?;	n	Not			
		Unknown	Native. Am.	Native Am.	My Tribe
6a1. In my lifetime I have observed cyberbullying	42	17	19	4	2
6b1. In my lifetime I have been cyberbullied	29	11	13	3	2
6c1. In the last 30 days I have been cyberbullied	18	1	12	3	2
6d1. Comments online	19	11	5	2	1
6e1. Picture online	16	9	4	3	-
6f1. Video online	15	10	3	2	-
6g1. Web page about me	13	8	3	2	-
6h1. Rumors about me online	14	8	3	2	1
6i1. Threat of violence by cell phone	14	8	3	2	1
6j1. Threat of violence online	15	8	4	2	1
6k1. Imposter pretending to be me in any of the above	14	9	9	3	2
Mean(SD) for 6d1-6k1		9.09 (3.75)	7.09 (5.43)	2.54 (.68)	1.5 (0.53)
- Denotes no Responses Recorded					

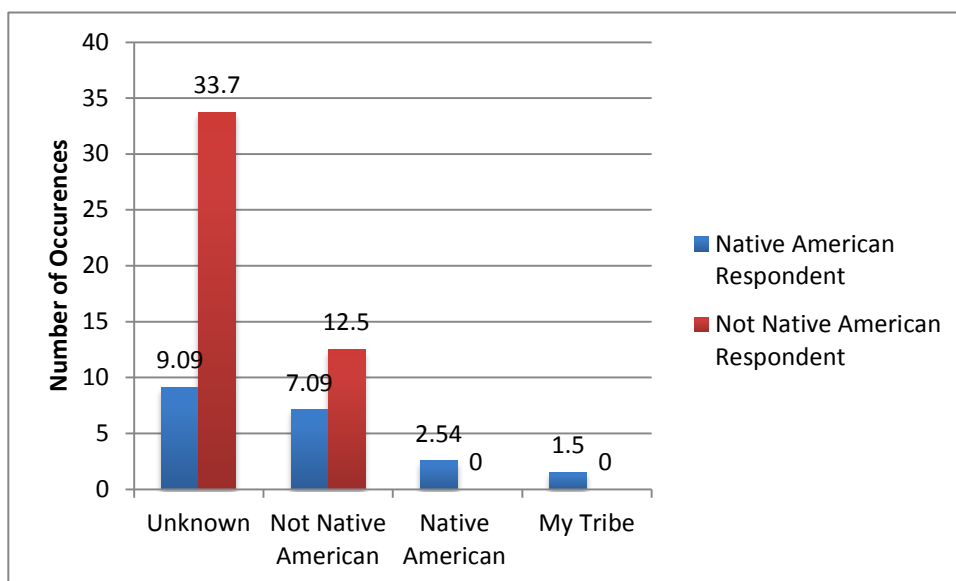


Figure 7. Mean perpetrator identity.

Table 6. Not Native American Respondent; Identity of Perpetrator

Who was the cyberbully?;					
Not Native American Respondent	n	Unknown	Not		
			Native Am.	Native Am.	My Tribe
6a1. In my lifetime I have observed cyberbullied	14 3	90	51	2	
6b1. In my lifetime I have been cyberbullied	10 4	54	49	1	
6c1. In the last 30 days I have been cyberbullied	72 *		55	17	
6d1. Comments online	47	34	13	-	
6e1. Picture online	47	34	13	-	
6f1. Video online	46	34	12	-	
6g1. Web page about me	45	33	12	-	
6h1. Rumors about me online	45	33	12	-	
6i1. Threat of violence by cell phone	44	32	12	-	
6j1. Threat of violence online	46	33	13	-	
6k1. Imposter pretending to be me in any of the above	47	34	13	-	
Mean(SD) for 6d1-6k1		33.37 (.74)	12.5 (.53)	0 (0)	0 (0)
Who was the cyberbully?;					
Not Native American Respondent	n	Unknown	Not		
			Native Am.	Native Am.	My Tribe
- Denotes no Responses Recorded					



*Victimization*

Responses follow to question 6a2, “In my lifetime I have observed cyberbullying online” for all Native American respondents, Native American respondents adhering to traditions, Native American respondents not adhering to traditions, respondents not Native American, and for gender (see tables 7, 8, and 9). All values reported in the Likert scales were summed and averaged then reported in the subsequent findings as “mean scores”:

- From the combined Native American respondents group (n=58), 48 respondents (83%) reported having observed cyberbullying in their lifetime, with 27 (47%) having observed it more than 5 times.
- Of the Native American respondents adhering to their traditions (n=19), 16 (89%) reported having observed cyberbullying in their lifetime, with 8 (42%) reporting having observed cyberbullying in their lifetime more than 5 times.
- Of the Native American students not adhering to their traditions (n=39), 32 (82%) reported having observed cyberbullying in their lifetime, with 19 (49%) reporting having observed cyberbullying in their lifetime more than 5 times.
- From the students not Native American (n=214), 155 (72%) reported having observed cyberbullying in their lifetime, with 73 (34%) reporting having observed cyberbullying in their lifetime more than 5 times.

- Gender comparison for all students (n=272) reporting on question 6a2 resulted in the finding that males' (n=124) mean scores for the combined frequency ranges (i.e. 1-2, 3-5, 5>) was 29 with a standard deviation of 13.52 compared to the females' mean scores (n=148) of 39 and a standard deviation of 17.21 (see table 7).

Table 7. Occurrence of Cyberbullying; All Respondents; Gender

How Many Times did the cyberbullying occur?	n	Never	1-2 Times	3-5 Times	More than 5 times	Total Mean(SD)
6a2. In my lifetime I have observed cyberbullying	248					
Male	110	23	30	15	42	29(13.52)
Female	138	22	33	25	58	39(17.21)
6b2. In my lifetime I have been cyberbullied	239					
Male	105	59	27	9	10	15.33(10.11)
Female	134	68	45	9	12	22(19.97)
6c2. In the last 30 days I have been cyberbullied	235					
Male	104	98	3	1	2	2(1)
Female	131	126	5	0	0	1.66(2.88)

Responses follow to question 6b2, “In my lifetime, I have been cyberbullied” for all Native American respondents, Native American respondents adhering to traditions, Native American respondents not adhering to traditions, respondents not Native American and for gender (see tables 7, 8, and 9). All values reported in the Likert scales were summed and averaged then reported in the subsequent findings as “mean scores”:

- From the combined Native American students group (n=58), 30 respondents (52%) reported having been cyberbullied in their lifetime, with 10 (17%) reporting having been cyberbullied in their lifetime more than 5 times.
- Of the Native American students adhering to their traditions (n=19), 10 respondents (53%) reported having been cyberbullied in their lifetime, with 4 (21%) reporting having been cyberbullied in their lifetime more than 5 times.
- Of the Native American students not adhering to their traditions (n=39), 20 respondents (51%) reported having been cyberbullied in their lifetime, with 6 (15%) reporting having been cyberbullied in their lifetime more than 5 times.
- From the students not Native American (n=214), 82 respondents (38%) reported having been cyberbullied in their lifetime, with 12 (6%) reporting having been cyberbullied in their lifetime more than 5 times.
- Gender comparison for all students (n=272) reporting on question 6b2 resulted in the finding that males' (n=124) mean scores for the combined frequency ranges (i.e. 1-2, 3-5, 5>) was 15.33 with a standard deviation of 10.11 compared to the females' (n=148) with a mean score of 22 and a standard deviation of 19.97 (see table 7).

Responses follow to question 6c2, "In my lifetime, I have been cyberbullied in the last 30 days" for all Native American students, Native American students adhering to traditions, Native American students not adhering to traditions, students not Native

American, and for gender (see tables 7, 8, and 9). All values reported in the Likert scales were summed and averaged then reported in the subsequent findings as “mean scores”:

- From the combined Native American students group (n=58), 6 respondents (10%) reported having been cyberbullied in the last 30 days, with 49 (85%) responding as not having been cyberbullied in the last 30 days.
- Of the Native American students adhering to their traditions (n=19), 4 respondents (21%) reported having been cyberbullied in the past 30 days, with 2 (11%) reporting having been cyberbullied in the past 30 days more than 5 times, and 14 (74%) reporting not having been cyberbullied in the past 30 days, 1 respondent did not answer.
- Of the Native American students not adhering to their traditions (n=39), 2 respondents (5%) reported having been cyberbullied in the past 30 days, with 0 reporting having been cyberbullied in the past 30 days more than 5 times, and 35 (90%) reporting not having been bullied in the past 30 days, 2 respondents did not answer.
- From the students not Native American (n=214), 5 respondents (2%) reported having been cyberbullied in the past 30 days, with 0 reporting having been cyberbullied in the past 30 days more than 5 times, and 175 (82%) reporting not having been cyberbullied in the past 30 days.
- Gender comparison for all students (n=272) reporting on question 6c2 resulted in the finding that the males’ (n=124) mean scores for the combined frequency

ranges (i.e. 1-2, 3-5, 5>) was 2 with a standard deviation of 1, compared to the females' (n=148) mean scores having a mean of 1.66 and a standard deviation of 2.88 (see table 7).

Table 8. Occurrence of Cyberbullying; Native American Respondent

How Many Times did the cyberbullying occur?	n	Never	1-2 Times	3-5 Times	More than 5 times
6a2. In my lifetime I have observed cyberbullying	57	9	14	7	27
6b2. In my lifetime I have been cyberbullied	56	26	15	5	10
6c2. In the last 30 days I have been cyberbullied	55	49	3	1	2
How Many Times did the cyberbullying occur?	n	Never	1-2 Times	3-5 Times	More than 5 times
6d2. Comments online	48	41	5	2	-
6e2. Picture online	47	42	3	2	-
6f2 Video online	46	45	1	-	-
6g2. Web page about me	46	45	-	1	-
6h2. Rumors about me online	45	43	-	2	-
6i2. Threat of violence by cell phone	40		2	4	-
6j2. Threat of violence online	46	41	2	3	-
How Many Times did the cyberbullying occur?	n	Never	1-2 Times	3-5 Times	More than 5 times
6k2. Imposter pretending to be me in any of the above	45	44	-	1	-
Mean (SD)		42.62 (1.92)	2.6 (1.51)	2.14 (1.06)	0 (0)

- Denotes no Responses Recorded

Of those Native American respondents (n=58) reporting on their cyberbullying experiences for questions 6d2-6k2, the majority of respondents had never been

cyberbullied in the designated forms with a range from 40-45 respondents but nearly 48% had been cyberbullied in some form in the past 30 days. Of the 28 instances of cyberbullying reported as having occurred in the last 30 days by Native American respondents for questions 6d2-6k2, 13 individuals (22%) reported it having occurred in the “1-2 times” range for 8 of the 11 forms ( $M= 2.6$ ,  $SD= 1.51$ ) and 15 individuals (26%) reported it having occurred in the “3-5 times” range for ( $M=2.14$ ,  $SD= 1.06$ ). There were no Native American respondents reporting having experienced cyberbullying more than 5 times from questions 6d2-6k2. Question 6d2 (victimized by comments posted online) had the highest frequency of total occurrence with 7 individuals (12%) reporting it having occurred in this form, and the highest frequency of occurrence in the “1-2 times” range with 5 individuals (9%) reporting it at this rate. Question 6i2 (victimized with the threat of physical violence by cell phone) had the highest frequency of reported cyberbullying occurrences in the “3-5 times” range with 4 individuals (7%) having reported it at this rate. Three questions reported the lowest total frequency of cyberbullying occurrence; question 6f2 (victimized by a video posted online), question 6g2 (victimized by a web page created about the individual) and question 6k2 all had 1 individual report being cyberbullied (2%) (see table 8).



Table 9. Occurrence of Cyberbullying Not Native American Respondent

How many times did the cyberbullying occur?	n	Never	1-2 Times	3-5 Times	More Than 5 Times
6a2. In my lifetime I have observed cyberbullying	19 1	36	49	33	73
6b2. In my lifetime I have been cyberbullied	18 3	101	57	13	12
6c2. In the last 30 days I have been cyberbullied	18 0	175	5	-	-
6d2. Comments online	16 1	147	6	4	4
6e2. Picture online	16 0	154	3	1	2
6f2. Video online	15 9	155	4	-	-
6g2. Web page about me	15 9	158	1	-	-
6h2. Rumors about me online	15 9	152	6	1	-
6i2. Threat of violence by cell phone	16 0	156	3	1	-
6j2. Threat of violence online	15 9	154	5	-	-
6k2. Imposter pretending to be me in any of the above	15 9	154	5	-	-
Mean(SD)		153.75 (3.24)	4.12 (1.72)	1.75 (1.5)	3 (1.41)

- Denotes no Responses

Of those respondents who were not Native American (n=214) reporting on their cyberbullying experiences for the questions 6d2-6k2, the majority of respondents had never been cyberbullied in the designated ways with a range of 147-158 individuals reporting never having been cyberbullied in the 8 designated forms. Of the 46 instances (22%) of cyberbullying reported by respondents not Native American for questions 6d2-6k2, 33 individuals (15%) reported that it had occurred in the “1-2 times” range (M= 4.12, SD= 1.72), 7 individuals (3%) reported that it had occurred in the “3-5 times” range (M= 1.75, SD= 1.5), and 6 individuals (2.8%) reported that it occurred in the “more than 5 times” range (M= 3, SD= 1.41). Question 6d2 (victimized by comments posted online) had the highest frequency of total cyberbullying occurrence with 14 individuals (7%) reporting it having occurred in this form. Question 6d2 (victimized by comments posted online) also had the highest frequency of cyberbullying occurrence in all three of the designated ranges with 6 individuals (2.8%) reporting it having occurred in the “1-2 times” range, 4 individuals (1.9%) reporting it having occurred in the “3-5 times” range, and 4 individuals (1.9%) reporting it having occurred in the “more than 5 times” range. There were 6 respondents (2.8%) in the not Native American demographic reporting having experienced cyberbullying “more than 5 times” range from questions 6d2-6k2, with the previous finding of 4 individuals (1.9%) at this frequency for question 6d2, and an additional 2 individuals (.93%) reporting cyberbullying having occurred at this

frequency for question 6e2 (victimized by having a picture posted online). Question 6g2 (victimized by having a web page created about the individual) was reported at the lowest total frequency with only 1 individual (.47%) reporting it in the “1-2 times” range (see table 9).

Table 10 details the findings for Native American respondents reporting on cyberbullying victimization experiences from the survey (questions 8a1-8k1).

Table 10. Occurrence of Cyberbullying; Native American Respondent

How many times cyberbullied?	n	Never	1-2 times	3-5 times	More than 5 times
8a1. Chat room	41	31	5	2	3
8b1. Email	42	34	3	3	2
8c1. Computer Instant Message	41	30	4	4	3
8d1. Cell Phone Text	41	28	7	3	3
8e1. Cell Phone	41	31	6	3	1
8f1. Social Networking Site	40	19	11	7	3
8g1. Twitter	40	37	3	-	-
8h1. YouTube	41	33	2	3	3
8i1. Virtual Worlds	41	39	-	1	1
8j1. Multiplayer Online Game	41	33	1	4	3
8k1. Online Game Device	41	31	1	2	7
Mean(SD)		31.45 (5.18)	4.3 (3.09)	3.2 (1.61)	2.9 (1.66)

- Denotes no Responses Recorded

Of those Native American respondents (n=58) reporting on their cyberbullying victimization experiences for questions 8a1-8k1, the majority of respondents had never been cyberbullied in the designated forums with a range of respondents from 19-39. Of the 104 reported instances of cyberbullying for Native American respondents in questions 8a1-8k1, 43 individuals (74%) reported it having occurred in the “1-2 times” range (M= 4.3, SD= 3.09), 32 individuals (55%) reported it having occurred in the “3-5 times” range (M= 3.2, SD= 1.61), and 29 individuals (50%) reported it having occurred in the “more than 5 times” range (M= 2.9, SD=1.66). Question 8f1 (victimized on a social networking

site) had the highest frequency of total cyberbullying occurrence with 21 individuals (36%). Question 8f1 (victimized on a social networking site) also had both the highest frequency of cyberbullying occurrence in the “1-2 times” range with 11 individuals (19%), and the highest frequency in the “3-5 times” range with 7 individuals (12%). Question 8k1 (victimized while playing online with Xbox, or similar device) had the highest frequency of reported cyberbullying occurrences in the “more than 5 times” range with 7 individuals (12%). Question 8i1 (victimized in virtual worlds) had the lowest reported frequency of cyberbullying occurrence with 2 individuals (4%). Question 8g1 (victimization on Twitter) had the second lowest reported frequency of cyberbullying occurrence with 3 individuals (5%) (see table 10).

Table 11 details the findings for respondents not Native American, reporting on cyberbullying victimization experiences from the survey (questions 8a1-8k1).

Table 11. Occurrence of Cyberbullying; Not Native American Respondent

How many times cyberbullied?	n	Never	1-2 times	3-5 times	More than 5 times
8a1. Chat room	158	128	19	7	4
8b1. Email	158	136	16	2	4
8c1. Computer Instant Message	158	125	20	7	6
8d1. Cell Phone Text	159	111	24	13	11
8e1. Cell Phone	158	123	19	8	8
8f1. Social Networking Site	161	104	37	10	10
8g1. Twitter	157	153	2	2	-
8h1. YouTube	157	150	2	1	4
8i1. Virtual Worlds	157	151	1	-	5
8j1. Multiplayer Online Game	158	143	6	1	8
8k1. Online Game Device	161	141	4	4	12
Mean(SD)	-	133.18 (16.43)	13.63 (11.56)	5.5 (4.14)	7.2 (3.04)

- Denotes no Responses Recorded

Of those respondents who were not Native American (n=214) reporting on their cyberbullying victimization experiences for the questions 8a1-8k1, the majority of respondents had never been cyberbullied in the designated forums with a range of 104-153 individuals. Of the 277 reported incidents of cyberbullying for questions 8a1-8k1, 150 individuals (70%) reported that the cyberbullying had occurred in the “1-2 times” range (M= 13.63, SD= 11.56), 55 individuals (26%) reported that it had occurred in the “3-5 times” range (M= 5.5, SD= 4.14), and 72 individuals (34%) reported that it had occurred in the “more than 5 times” range (M= 7.2, SD=3.04). Question 8f1 (victimized

on a social networking site) had both the highest frequency of total cyberbullying occurrences with 57 individuals (27%) reporting it having occurred in this forum, and the highest frequency of cyberbullying occurrence in the “1-2 times” range with 37 individuals (17%). Question 8d1 (victimization through cell phone text messages) had the highest frequency of cyberbullying occurrence in the “3-5 times” range with 13 individuals (6%). Question 8k1 (victimization while playing online with an Xbox or similar device) had the highest frequency of cyberbullying occurrence in the “more than 5 times” range with 12 individuals (5.6%). Question 8g1 (victimized on Twitter) was reported as the lowest frequency of cyberbullying occurrence with 4 individuals (47%). Question 8i1 (victimization in virtual worlds) had the second lowest frequency of cyberbullying occurrence with 6 individuals (3%) (see table 11).

### *Perpetration*

Table 12 details the findings for Native American respondents reporting on cyberbullying perpetration experiences from the survey (questions 8a2-8k2).

Table 12. Perpetration of Cyberbullying; Native American Respondent

How many times as a cyberbully perpetrator?	n	Never	1-2 times	3-5 times	More than 5 times
8a2. Chat room	43	33	6	2	2
8b2. Email	44	40	1	2	1
8c2. Computer Instant Message	43	39	1	2	1
8d2. Cell Phone Text	45	35	6	2	2
8e2. Cell Phone	43	34	6	1	2
8f2. Social Networking Site	42	31	5	3	3
8g2. Twitter	42	41	1	-	-
8h2. YouTube	43	39	1	-	3
8i2. Virtual Worlds	43	42	-	-	1
8j2. Multiplayer Online Game	43	40	-	1	2
8k2. Online Game Device	43	34	2	1	6
Mean(SD)		37.09 (3.75)	3.22 (2.43)	1.75 (.70)	2.3 (1.49)

- Denotes no Responses Recorded

Of those Native American respondents (n=58) reporting on their cyberbullying perpetration experiences for questions 8a2-8k2, the majority of respondents had never been cyberbullied in the designated forums with a range of respondents from 31-42. Of the 66 reported instances of cyberbullying perpetration for Native American respondents in questions 8a2-8k2, 29 individuals (50%) reported it having occurred in the “1-2 times” range (M=3.22, SD= 2.43), 14 individuals (24%) reported it having occurred in the “3-5 times” range (M=1.75, SD= .70), and 23 individuals (40%) reported it having occurred in the “more than 5 times” range (M= 2.3, SD= 1.49). For Native American respondents,



question 8f2, (perpetration on a social networking site) had the highest frequency of total cyberbullying perpetration with 11 individuals (19%). Question 8d2 was also one of 3 questions that had the highest frequency of reported cyberbullying perpetration in the “1-2 times” range with 6 individuals (10%); question 8a2 (perpetration through chat room), and question 8e2 (perpetration through cell phone) were also among the forums with the highest frequency in the “1-2 times” range, both with 6 individuals (10%). Question 8f2 (perpetration on a social networking site) had the highest frequency for cyberbullying perpetration in the “3-5 times” range with 3 individuals (5%). Question 8k2 (perpetrated while playing online with Xbox, or similar device) had the highest frequency of cyberbullying perpetration in the “more than 5 times” range with 6 individuals (10%). The forum with the lowest frequency of total cyberbullying perpetration was recorded in two questions; question 8i2 (victimized in virtual worlds) with 1 individual (1.7%), and question 8g2 (perpetration on Twitter) also had 1 individual (1.7%) (see table 12).

Table 13 details the findings for respondents not Native American reporting on cyberbullying perpetration experiences from the survey (questions 8a2-8k2).

Table 13. Perpetration of Cyberbullying; Not Native American Respondent

How many times as a cyberbully perpetrator?	n	Never	1-2 times	3-5 times	More than 5 times
8a2. Chat room	165	151	11	1	2
8b2. Email	165	159	4	1	1
8c2. Computer Instant Message	166	150	10	4	2
8d2. Cell Phone Text	165	143	12	4	6
8e2. Cell Phone	166	153	5	6	2
8f2. Social Networking Site	167	133	22	4	8
8g2. Twitter	165	163	-	1	1
8h2. YouTube	165	161	3	1	-
8i2. Virtual Worlds	165	160	4	-	1
8j2. Multiplayer Online Game	165	154	7	1	3
8k2. Online Game Device	165	146	5	4	10
Mean(SD)		152.09 (8.96)	8.3 (5.77)	2.7 (1.88)	3.6 (3.23)

- Denotes No Responses Recorded

Of those respondents in the not Native American (n=214) demographic reporting on their cyberbullying perpetration experiences for questions 8a2-8k2, the majority of respondents had never been cyberbullied in the designated forums, with a range of 133-163. Of the 146 reported instances of cyberbullying perpetration for respondents not Native American in questions 8a2-8k2, 83 individuals (39%) reported having perpetrated cyberbullying in the “1-2 times” range (M= 8.3, SD= 5.77), 27 individuals (13%) reported having perpetrated it in the “3-5 times” range (M= 2.7, SD= 1.88), and 36 individuals (17%) reported having perpetrated it in the “more than 5 times” range (M=

3.6,  $SD= 3.23$ ). Question 8f2 (perpetrated on a social networking site) had the highest frequency of total cyberbullying perpetration with 34 individuals (15.8%). Question 8f2 (perpetrated on a social networking site) also had the highest frequency of cyberbullying perpetration in the “1-2 times” range with 22 individuals (10%). Question 8e2 (perpetration through a cell phone) had the highest frequency of cyberbullying in the “3-5 times” range with 6 individuals (3%). Question 8k2 (perpetration while playing online with Xbox, or similar device) had the highest frequency of cyberbullying perpetration in the “more than 5 times” range with 10 individuals (5%). Question 8g2 (perpetration on Twitter) had the lowest total frequency of cyberbullying perpetration with 2 individuals (.94%). Question 8h2 (perpetration on YouTube) had the second lowest frequency of total cyberbullying perpetration with 4 individuals (1.9%) (see table 13).

#### *Statistical Analysis of Effects on Cyberbullying Victimization & Perpetration*

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of being cyberbullied. There was a significant effect of adherence to traditions on likelihood of being cyberbullied at the  $p < .05$  level for the three conditions [ $F(2, 204) = 5.95, p = 0.003$ ] (see table 15). Post hoc

comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = 12.07$ ,  $SD = 12.93$ ) was significantly different than the not Native American condition ( $M = 5.76$ ,  $SD = 5.91$ ) (see table 14). However, the without adherence but Native American condition ( $M = 7.44$ ,  $SD = 6.36$ ) did not significantly differ from the adherence to traditions & Native American, or not Native American condition (see table 14). Taken together, these results suggest that adherence to traditions does have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when Native American students adhere to their traditions, they are cyberbullied more than students that are not Native American. However, it should be noted that the absence of adherence to traditions in Native American students, does not appear to significantly affect an increase in rates of cyberbullying compared to Native American students that adhere to traditions.

Table 14. Descriptive Statistics; ANOVAS

	Native Am. With Adherence Mean (SD)	Native Am. Without Adherence Mean (SD)	Not Native Am. Mean (SD)	Native Am. Without Adherence & Other Mean (SD)	All Native Am. Mean (SD)	Total Mean (SD)
Cyberbullying Victimization	12.07 (12.93)	7.44 (6.36)	5.76 (5.91)	6.01 (5.99)	8.88 (9.01)	8.03 (2.57)
Cyberbullying Perpetration	4.00 (7.40)	2.07 (3.26)	1.46 (3.12)	1.55 (3.14)	2.73 (5.09)	2.35 (1.04)

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of being cyberbullied. There was a significant effect of adherence to traditions on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 205) = 10.26, p = 0.002$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = 12.07, SD = 12.93$ ) was significantly different than the without adherence combined population condition ( $M = 6.01, SD = 5.99$ ) (see table 14). Taken together, these results suggest that adherence to traditions does have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when Native

American students adhere to their traditions, they are cyberbullied more than other students (i.e. a combined group of students not Native American and Native American students without adherence to traditions). The difference in sample means compared to the variation within samples can account, for what appears on the surface to be confounding results.

Table 15. Results of One-Way Between ANOVA

Source	Sum of Squares	df	MS	F	p
Cyberbullying Victimization Between 3 groups	517.6	2	258.8	5.95	0.003
Cyberbullying Victimization Within 3 groups	8875.9	204	43.5		
Total	9393.5	206			
Cyberbullying Victimization Between 2 groups	447.6	1	447.6	10.26	0.002
Cyberbullying Victimization Within 2 groups	8945.9	205	43.6		
Total	9393.5	206			
Cyberbullying Victimization Between 2 groups	325.3	1	325.3	7.35	.007
Cyberbullying Victimization Within 2 groups	9068.2	205	44.2		
Total	9393.5	206			
Source	Sum of Squares	df	MS	F	p
Cyberbullying Victimization Between 2 groups	192.3	1	192.3	2.45	.126
Cyberbullying Victimization Within 2 groups	3142.1	40	78.6		
Total	3334.4	41			
Cyberbullying Perpetration Between 3 groups	98.2	2	49.1	3.76	0.025
Cyberbullying Perpetration Within 3 groups	2757.6	211	13.1		
Total	2855.8	213			

Cyberbullying Perpetration Between 2 groups	39.0	1	39.0	1.52	.224
Cyberbullying Perpetration Between 2 groups	1129.9	44	25.7		
Total	1168.9	45			
Cyberbullying Perpetration Between 2 groups	88.8	1	88.8	6.81	0.010
Cyberbullying Perpetration Between 2 groups	2767.0	212	13.1		
Total	2855.8	213			
Source	Sum of Squares	df	MS	F	p
Cyberbullying Perpetration Between 2 groups	59.2	1	59.2	4.49	.035
Cyberbullying Perpetration Between 2 groups	2796.6	212	13.2		
Total	2855.8	213			

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying victimization among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of being cyberbullied. There was a significant effect of adherence to traditions on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 205) = 10.26, p = 0.002$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to



traditions ( $M = 12.07$ ,  $SD = 12.93$ ) was significantly different than the without adherence combined population condition ( $M = 6.01$ ,  $SD = 5.99$ ) (see table 14). Taken together, these results suggest that adherence to traditions does have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when Native American students adhere to their traditions, they are cyberbullied more than other students (i.e. a combined group of students not Native American and Native American students without adherence to traditions).

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying victimization among groups as an effect of ethnicity to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying victimization among groups as an effect of ethnicity to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) ethnicity on (DV) the likelihood of being cyberbullied. There was a significant effect of ethnicity on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 205) = 7.35$ ,  $p = 0.007$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the Native American ( $M = 8.88$ ,  $SD = 9.01$ ) condition was significantly different than the not Native American condition ( $M = 5.76$ ,  $SD = 5.91$ ) (see table 14). Taken together, these results suggest that ethnicity does have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when students are Native American, they are cyberbullied more than other students (i.e. not Native American and Native American students). The difference in sample means

compared to the variation within samples can account for, what appears on the surface to be, confounding results.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of being cyberbullied. There was not a significant effect of adherence to traditions on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 40) = 2.45, p = .126$ ] (see table 15). These results suggest that adherence to traditions does not have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when Native American students adhere to their traditions, they are not cyberbullied more than Native American Students without adherence to their traditions.

#### *Perpetration ANOVAS*

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of cyberbullying others. There was a significant effect of adherence to traditions on likelihood of cyberbullying others at the  $p < .05$  level for the three conditions [ $F(2, 211) = 3.76, p = 0.025$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = 4.00, SD = 7.40$ ) was significantly different than the not Native American

condition ( $M = 1.46$ ,  $SD = 3.12$ ) (see table 14). However, the without adherence & Native American condition ( $M = 2.07$ ,  $SD = 3.26$ ) did not significantly differ from the adherence to traditions & Native American, or not Native American condition (see table 14). Taken together, these results suggest that adherence to traditions does have an effect on rates of cyberbullying perpetration. Specifically, these results suggest that when Native American students adhere to their traditions, they cyberbully others more than students that are not Native American. However, it should be noted that the absence of adherence to traditions in Native American students does not appear to significantly affect an increase in rates of cyberbullying perpetration compared to Native American students that adhere to traditions.

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of cyberbullying others. There was a significant effect of adherence to traditions on likelihood of cyberbullying others at the  $p < .05$  level for the two conditions [ $F(1, 212) = 6.81$ ,  $p = 0.010$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = 4.00$ ,  $SD = 7.40$ ) was significantly different than the no adherence combined population condition ( $M = 1.55$ ,  $SD = 3.14$ ) (see table 14). Taken together,

these results suggest that adherence to traditions does have an effect on rates of cyberbullying perpetration. Specifically, these results suggest that when Native American students adhere to their traditions, they cyberbully more than other students (i.e. a combined group of Native American students without adherence and students not Native American).

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying perpetration among groups as an effect of ethnicity.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying perpetration among groups as an effect of ethnicity.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) ethnicity on (DV) the likelihood of being cyberbullied. There was a significant effect of ethnicity on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 212) = 4.49, p = 0.035$ ] (see table 15). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the Native American ( $M = 2.73, SD = 5.09$ ) condition was significantly different than the not Native American condition ( $M = 1.46, SD = 3.12$ ) (see table 14). Taken together, these results suggest that ethnicity does have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when students are Native American, they are cyberbullied more than other students (i.e. not Native American and Native American students). The difference in sample means compared to the variation within samples can account for, what appears on the surface to be, confounding results.

Non-directional Hypothesis: there is a significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for cyberbullying perpetration among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood of being cyberbullied. There was not a significant effect of adherence to traditions on likelihood of being cyberbullied at the  $p < .05$  level for the two conditions [ $F(1, 44) = 1.52, p = 0.224$ ] (see table 15). Taken together, these results suggest that adherence to traditions does not have an effect on rates of cyberbullying victimization. Specifically, these results suggest that when students are Native American and adhere to their traditions they do not cyberbully more than Native American students that do not adhere to their traditions.

#### *Statistical Analysis for Relational Aggression*

Non-directional Hypothesis: there is a significant difference in the mean scores for the use of relational aggression as a motivation in cyberbullying perpetration among groups as an effect of adherence to traditions. Null Hypothesis: there is no significant difference in the mean scores for the use of relational aggression as a motivation in cyberbullying perpetration among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood for using relational aggression in cyberbullying. There was a significant effect of adherence to traditions on likelihood of

using relational aggression when cyberbullying at the  $p < .05$  level for the three conditions [ $F(2, 145) = 4.18, p = 0.017$ ] (see table 17). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = .92, SD = 1.14$ ) was significantly different than the no traditions & Native American condition ( $M = .21, SD = .58$ ) and the not Native American condition ( $M = .32, SD = .75$ ) (see table 16).

Table 16. Descriptive Statistics; ANOVAS

	Native Am. With Adherence Mean (SD)	Native Am. Without Adherence Mean (SD)	Not Native Am. Mean (SD)	Native Am. Without Adherence & Other Mean (SD)	Total Mean (SD)
Relational Aggression as a Motivation in Cyberbullying Perpetration	.92 (1.14)	.21 (.58)	.32 (.75)	.30 (.73)	

Non-directional Hypothesis: there is a significant difference in the mean scores for the use of relational aggression as a motivation in cyberbullying perpetration among groups as an effect of adherence to traditions.

Null Hypothesis: there is no significant difference in the mean scores for the use of relational aggression as a motivation in cyberbullying perpetration among groups as an effect of adherence to traditions.

A one-way ANOVA between subjects was conducted to compare the effect of (IV) adherence to traditions on (DV) the likelihood for using relational aggression in cyberbullying. There was a significant effect of adherence to traditions on likelihood of using relational aggression when cyberbullying at the  $p < .05$  level for the two conditions [ $F(1, 146) = 8.07, p = 0.005$ ] (see table 17). Post hoc comparisons using the Tukey HSD test indicated that the mean score for the adherence to traditions ( $M = .92, SD = 1.14$ )

was significantly different than the no traditions combined population condition ( $M = .30, SD = .73$ ) (see table 16).



Table 17. Results of One-Way Between ANOVA

Source	Sum of Squares	df	MS	F	p
Relational Aggression in Cyberbullying Perpetration Between 3 groups	5.115	2	2.558	4.18	.017
Relational Aggression in Cyberbullying Perpetration Within 3 groups	88.682	145	.612		
Total	93.797	147			
Relational Aggression in Cyberbullying Perpetration Between 2 groups	4.914	1	4.914	8.07	.005
Relational Aggression in Cyberbullying Perpetration Between 2 groups	88.884	146	.609		
Total	93.797	147			

Results follow for question 10 a-c and question 11. These questions were quantitative, open-ended and a brief discussion of the results follows: Of the Native American respondents answering these questions, 25 respondents (43%) reported some knowledge of, and adherence to their tribe's traditions and values regarding interpersonal relationships of both an intratribal and extratribal nature, and bullying, with a composition of 10 males (17%) and 15 females (26%). Of these 25 Native American respondents, 19 (33%) answered question 11 in the affirmative (i.e. adherence to tribal traditions and values regarding bullying) and were separated as a distinct group in subsequent statistical analysis. Eleven of these Native American respondents were female and nine were male. The remaining 33 Native American respondents (57%) reported not

knowing of, or adhering to their tribe's traditions and values regarding bullying and whose composition included 13 males (22%) & 20 females (35%). These 33 Native American students were separated in some statistical analysis as a group distinct from the 19 Native American students "with adherence" group, and the 214 not Native American students.

In terms of coding the answers for questions 10 a-c, and 11, the answers were simply coded as a "1" for answered, or "0" for not answered, in the Excel worksheet then transferred as such to the Minitab worksheet for cross tabulation and further analysis. This was regarded as a compromise on the responses and subsequent grouping of respondents as some responses to question 10 a-c were qualitatively rich and descriptive and yet question 11 was left blank. Because question 11 was regarding adherence to traditions on bullying and the decision was made to separate groups based on the answer to question 11, some respondents who clearly knew of their traditions based on their answers to questions 10 a-c were excluded from the adherence grouping simply because they left question 11 blank. This decision though was justified with the logical rationale that one might know their tribe's traditions but not adhere to them, and as the research question was posited based on knowledge of, and adherence to traditions, the latter was deemed the essential criteria. Question 11 was the last (i.e. the 81<sup>st</sup>) item in the questionnaire, and yet it was one of the essential points of group distinction (i.e. to adhere or not adhere to traditions was the primary distinction for future statistical analysis among the Native American respondents) and it is recognized at this stage in the analysis

that respondent fatigue may have been a major limitation to this study in its attempt to elicit and record the respondents' adherence to traditions regarding bullying. A suggestion then, for future researchers, would be to place the questions of primary importance at the beginning of the survey in an attempt to avoid the effect of fatigue on respondents' willingness to respond, and increase the subsequent validity of findings drawn from those responses.

### *Summary of Findings*

#### *Technology usage linked to cyberbullying.*

An analysis among the 167 respondents reporting on daily Internet use (85 males to 82 females) follows. Gender as an independent variable and possible effect on daily Internet use was tested and determined to have no effect at the scale's lower range (near identical for both genders at the 1-4 and 5-9 times daily range, to 5% difference at the 10-14 times daily range, to identical use at the 15> times daily range with 100% of respondents reporting daily Internet use. All respondents (100% of the sample) reported daily Internet use and nearly half (45%) of all respondents (n= 167) reported having used the Internet 1-4 times daily with 44% of males and 46% females reporting this rate of use. Contrast this with the finding from the literature reporting that 86% of Americans use the Internet (up from 66.9% reported in 2000) with a gender difference of 87% of men to 84% of women (see The Digital Future Report, 2013). The finding from the present study of 100% of respondents' daily Internet use and above reported levels of daily use for females is noteworthy in that it potentially demonstrates the effectiveness of

HSU's attempt to provide access to all students with computer and information technology as well as the CSU's larger mission outlined in the Integrated Technology Strategy, but also demonstrates that this is a good fit for the present study's research goals and sampling strategy (see HSU's Information and Technology Plan, 2000; and CSU's Integrated Technology Strategy, 1996). This finding may also however, pose further limitations to the present study's generalizability as it likely does not represent the demographics beyond what are detailed in the study.

A similar examination of gender as an independent variable with a potential effect on daily cell phone use was conducted with the significant finding that for daily cell phone use, differences were averaged at 5% for the scale's 3 lower daily use ranges with males (n=85) using cell phones more than females (n=82) in the 1-4, 5-9, and 10-14 times daily ranges. However, females reported daily cell phone use in the 15> range at 47%, compared to males use in this range at 29%, resulting in a finding of significant difference of 18% for female daily cell phone use at this range. Further analysis of cell phone cyberbullying along gender differences was not conducted but may prove insightful to examine if the 18% difference in daily usage of cell phones at the 15> rate is linked to higher rates of cell phone-based cyberbullying in the victimization or perpetration roles. One hypothesis from the literature proposed that higher usage of information and communication technology by individuals was correlated with higher exposure to, and consequently higher involvement in, cyberbullying both as the perpetrator and the victim (see Ybarra & Mitchell, 2004; Juvonen, & Gross, 2008; Smith,

et al., 2008; H.R. 1966, 2009; Walker, Sockman, & Koehn, 2011). Based on findings reported below for gender differences in lifetime incidents of cyberbullying victimization (see below the finding in gender victimization where females reporting 45% lifetime cyberbullying victimization compared to males 37% lifetime cyberbullying victimization) it is clearly a hypothesis worth further investigation and as the data is compiled in a useable form it may be analyzed at a later time.

Ethnicity was also compared along similar lines of gender to determine if significant difference existed between Native American respondents (n=40) and those not Native American (n=127) for daily Internet and cell phone use. For daily Internet use comparing ethnicity, Native American respondents (n=40) used the Internet at the 1-4 times daily range 13% less than respondents not Native American (n=127), but 6% more at the 15+ times daily range. For the comparison examining daily cell phone use with ethnicity as the independent variable, the largest difference was 6% at the 1-4 times daily range with 25% of Native Americans reporting use at this rate compared to 19% of respondents not Native American using cell phones daily at this rate. One hypothesis articulated in the literature regarding outcomes related to an individual's SES (social economic status) and often corresponding with a minority ethnicity is that in previous years affluence enabled access to technology which was then correlated to higher rates of cyberbullying, but in recent years minority populations have acquired computer and information technology leveling discrepancies in rates of usage and associated rates of cyberbullying (see Werner et al. 2010; Lopez, Gonzalez-Barrera, & Patten, 2013; The

Digital Future, 2013). As the sample population in the present study is ethnically diverse (and potentially economically diverse also), but the affluence factor (and by extension the access to basic computer and Internet technology) posited in the hypothesis is likely minimized with access to computer labs at Humboldt State this hypothesis is likely nullified in the University setting. A definitive conclusion can only be alluded to in this analysis as in depth investigation remains unfulfilled based on available resources, despite the data being presently organized for additional analysis.

Adherence to traditions among Native American respondents was then examined as an independent variable in relation to the effect on the rate of daily Internet and cell phone use but results are cautiously presented as the “adherence group” represented 11 Native American individuals compared to 29 Native American individuals not adhering to their traditions for these questions. The significant difference between Native Americans adhering to their traditions (n=11) and Native Americans not adhering to their traditions (n=29) was 22% and found at the 1-4 times of daily Internet use with the Native Americans with adherence group reporting 9% to the Native Americans without adherence reporting 31%. Interestingly though, the Native Americans with adherence group used the Internet daily in the 15+ times range at 45% compared to 31% for the Native Americans without adherence to their traditions. This finding suggests that heavy use of the Internet daily, occurs among the present study’s sample of Native Americans with adherence to their traditions while Native Americans without adherence to their traditions in the present study, use the Internet daily but less frequently. As related to the

hypothesis posited previously correlating information and communication technology with increased occurrence of cyberbullying, the present finding coupled with the ANOVAS reported previously begin to establish the inferential pattern of a positive correlation between Internet use and cyberbullying. Additional analysis was not conducted to determine the extent gender, ethnicity and adherence to traditions effected technology use or the larger point of technology use linked to cyberbullying, however it is deemed worth investigating as some differences in technology usage as a potential effect of gender, ethnicity, and adherence to traditions can be observed, and the data is readily available for ethnicity comparison in table 12 and 13.

#### *Anonymity*

Nearly one third of Native Americans 31% (n=18) and 34% of respondents not Native American (n=72) reported having been cyberbullied in the last 30 days in question 6c1. The pooled data from questions 6d2-6k2 however produced even higher rates of cyberbullying in the past 30 days for Native American respondents reporting 28 total instances (48%) but a lower rate from respondents not Native American with 46 instances (22%) reported. The difference in reported instances is potentially a result of the two-sided survey design being confusing to the respondents (i.e. as noted in the margins by a few respondents), and/or because the question of the perpetrator's identity (6a1-6k1) potentially poses less burden in responding than the questions of how many times the victimization occurred (6a2-6k2). Anonymity reported in question 6c1, was not a relevant factor in the majority of cyberbullying instances in the last 30 days for Native American

respondents (n=58) with 95% of the victimizations having occurred from a known perpetrator. Of cyberbullying instances in the last 30 days reported by Native American respondents, the majority (67%) were perpetrated by someone other than a Native American. Similarly, anonymity was not a relevant factor in the majority of cyberbullying instances reported by the respondents that were not Native American (n=214) in question 6c1 with 100% of the victimizations reported, as having occurred from a known perpetrator. The perpetrator was not Native American in the majority (76%) of cyberbullying instances in the last 30 days as reported by respondents not Native American. Native American perpetrators of cyberbullying represented 17% (n=18) and 24% (n=72) of the known identity of instances having occurred in the last 30 days for the Native American respondents and respondents not Native American respectively. The results from the present study relating to anonymity of the cyberbullying perpetrator in incidents occurring in the past 30 days regard this variable as a nonfactor. This finding is aligned with the literature in that Ybarra et al. (2012) and Cassidy (2013) similarly determine anonymity in cyberbullying a nonfactor. For most incidents of cyberbullying reported in the present study occurring in the last 30 days (95% for Native American respondents, and 100% for respondents not Native American) the perpetrator's identity was known. This finding is also a unique and a useful contribution to the literature and the dedicated researchers that have begun to form theory and constructs based on the dynamics of anonymity in computer-mediated communications including the deindividuation of an anonymous person (see Zimbardo,



1969; Keisler et al., 1984); suspension of inhibitive behaviors in anonymous communications but present in face-to-face communication (see Baldasare et al. 2012); and moral disengagement (see Bandura, 1999; Renati et al. 2012). If respondents are being cyberbullied by known perpetrators how do current theories based on the premise of anonymity in cyberbullying expand to incorporate the findings from the present study of victims' reports of a near absence of anonymity but a significant degree of cyberbullying victimization (i.e. In the last 30 days of the total reported instances of cyberbullying by all Native Americans only 1 of 18 instance was anonymous, and of all instances of cyberbullying in the past 30 days reported by respondents not Native American, the perpetrator was known in 100% of the 72 total instances of cyberbullying emphasizing the reduction of effect for anonymity in this section of the study)? Additional inquiry into the role an absence of anonymity has on cyberbullying is a worthwhile endeavor. Clearly theory building for this phenomenon is at the early stages and existing models appear insufficient for this data set as additional explanation is required.

#### *Victimization and Gender*

Proceeding from the determination that more than a third (33%) of the study's total population (n=272) experienced cyberbullying victimization in the last 30 days based on responses to question 6c1, a comparison of gender differences for this question was attempted but as additional analysis and data organization (e.g. conducting additional coding configurations on a Minitab worksheet) was required to produce useful results the

approach consistent with the preceding comparison of anonymity was not pursued. Therefore rates of lifetime victimization measured in question 6b2 were examined instead of victimization in the last 30 days (6c2), for the potential effects of the independent variable of respondent's gender. From all male respondents (n=124) 46 males (37%) reported having been cyberbullied in their lifetime, and of all females (n=148), 66 (45%) reported having been cyberbullied in their lifetime. Again while the literature reports mixed results on the effect the variable gender has on rates of cyberbullying victimization, the consensus is that males tend towards higher rates of physical bullying (see Olweus 1993; Crick & Grotpeter, 1995; Robers et al., 2013) and females tend towards higher rates of relational bullying which are more common in their characteristics (i.e. not face-to face) to cyberbullying, therefore females would likely have higher rates of cyberbullying both as perpetrators and victims (Slojne and Smith, 2008, p.149; Kowalski, Limber, & Agatston, 2012b; Cassidy, 2013). Our analysis of the gender variable was limited based simply on time constraints, however we can determine that among our sample of all respondents (n= 272) reporting on lifetime cyberbullying victimization experiences, 8% of females (45%) experienced cyberbullying more than males (37%). This finding is consistent with those reported by Pornari & Wood (2010), and Jones (2012) of females being victimized at higher rates than males, however neither of the cited studies' samples were of a similar age range to that of the present study and therefore it is suggested that conservative estimate of alignment with these findings be drawn. Also though the opportunity for, and the usefulness of future research addressing

this inquiry into gender differences of victimization is present and required for more robust conclusions to be drawn on this inconclusive point.

### *Victimization and Traditions*

A continuation of the analysis from question 6b2 (i.e. cyberbullying victimization in one's lifetime) of the potential effect of the independent variable produced the following; Of the Native American respondent's adhering to their traditions (n=19), 53% reported experiencing cyberbullying in their lifetime, and 51% of Native Americans not adhering to traditions (n=39) also reported this experience. In terms of lifetime cyberbullying frequency reported at the scale's maximum level of "5+ times", of the 10 Native Americans with adherence to their traditions responding to this question (i.e. 6b2), 21% reported the frequency of lifetime cyberbullying at 5+ times, and 15% of the 20 Native Americans not adhering to traditions also reported lifetime victimization at 5+ times. Additional analysis of ethnicity and victimization from question 6b2 determine that 38% of the respondents that were not Native American (n=214) reported as having been cyberbullied in their lifetime, and 6% reporting having been cyberbullied in their lifetime more than 5 times. The higher level of lifetime cyberbullying (53%) among Native Americans with adherence to their traditions compared to the 51% and 38% (Native American without adherence and respondents not Native American) reported, is consistent with the results from the ANOVA and t-test statistical analysis conducted, determining a significant effect of adherence to traditions on levels of cyberbullying victimization. The question not answered in this analysis is "why do Native Americans

experience victimization of cyberbullying (and as discussed below, perpetrate cyberbullying) at a higher rate than Native Americans not adhering to their traditions, and significantly more than respondents, from this sample, who are not Native American?”. It is possible that the current sample is unique in their experience of this phenomenon. A qualitative approach to elicit the respondent’s perspectives on the reported incidents of cyberbullying is advised to accompany the extensive quantitative approach exhibited in the present study. It is understood now that greater clarity might be gained by following the suggestion discussed by Vandebosch & Van Cleemput, (2009) of examining three perspectives (i.e. sender’s intent, receiver’s interpretation, and third-party perspective on message content and context as normative or norm violating) and deemphasizing the limitations inherent to a singular interpretation by the message recipient. By discussing the cyberbullying incidents with the victims based on the present finding of Native Americans with adherence to their tribal traditions experiencing cyberbullying at higher rates than other students, through the framework of multiple perspectives, the question of a skewed sample and resulting differences, might be addressed (i.e. Are Native American students in this sample with adherence to tribal traditions perceiving incidents of cyberbullying differently than other students in this sample?). As with most aspects of this inquiry, more questions arise with each reported result. Before examining perpetration it is worth reporting that among the entire population of the present study (n=272), the most victimization occurred in the forum “social networking sites” (question

8f2) at 19% for Native American respondents (n=58) and 15.8% for respondents not Native American (n=214).

### *Perpetration*

As there were no corresponding questions distinguishing lifetime observation of cyberbullying (question 6a2), lifetime victimization (question 6b2), or last 30 days victimization (question 6c2) for the respondents' perpetration, rather just questions relating to perpetration in various forums without a specific timeframe, a direct comparison cannot be conducted with the analysis of victimization. Also though as it was determined by a committee member that the limited usefulness of the small number of recorded instances from the Native Americans adhering to traditions (n=19) reporting on perpetration would be better served in a different study, though these numbers were compiled and are able to be reported at the request of the author, they are excluded here. Also excluded then, is the specific discussion of findings from the comparison of perpetration rates and forums used by Native Americans adhering to traditions and Native Americans not adhering to traditions as well as the corresponding rates of perpetration in each forum. Instead what follows is a brief supplemental summary of perpetration differences based on ethnicity as an independent variable and as reported in tables 12 and 13 intending to highlight significant findings from the study based on a comparison with the literature. For all Native American respondents (n=58) cyberbullying perpetration occurred in social networking sites (question 8f2) at the highest recorded level at 19%. Playing online games with Xbox, or similar device (question 8k2) had the highest

frequency of cyberbullying perpetration in the “more than 5 times” at 10%. Respondents not Native American (n=214) reported cyberbullying perpetration at the highest recorded level in the forum social networking site (question 8f2) at 15.8%. Playing online games with Xbox, or similar device (question 8k2) had the highest frequency of cyberbullying perpetration in the “more than 5 times” at 5%. With these findings we can conservatively conclude that among our sample, ethnicity as an independent variable does not appear to have an affect on the types of forums where cyberbullying perpetration occurs most. Also though, as these forums (social networking sites and online games with Xbox type devices) are identical forums in the comparison of total incidents and highest frequency of incidents, we must consider how these forums contribute to cyberbullying perpetration. A refinement of the comparison, in an attempt to further specify what social networking websites and what gaming devices specifically are identified as being most commonly used in cyberbullying perpetration is not discernable from the resulting data in the present study, however it is an area where future researchers might specifically contribute to the literature. Also of significance for our sample is the forum Twitter which (in question 8g2) was reported as the forum with the lowest incidence of cyberbullying perpetration among the respondents not Native American, at <1%, and one of two forums among Native American respondents with the lowest incidence of cyberbullying perpetration at 1.7% (the other being reported in question 8i2 for the forum virtual worlds also at 1.7%). A natural question that occurs is “why perpetration on

Twitter was so low?” This is another specific area of future investigation that may help inform cyberbullying prevention on other social networking sites.

Our results differed from the often cited Smith et al. (2008) study which determined that cyberbullying through phone calls and instant messages were reported at higher frequencies than the other modalities (i.e. through text messaging, pictures/photos or video clips, email, chat rooms, instant messaging, and websites (pp. 377-383). Though too, social networking sites were not specifically mentioned in the Smith et al 2008 study, and nearly six years has passed between the two studies with sample differences including respondent age (i.e 11-16 year olds in Smith et al., 2008) and potentially cultural differences (i.e. in the U.K. for Smith et. al. 2008). In the other two times an iteration of this instrument was used, social networking was not reported as the significant forum of perpetration, however both previous samples were drawn from considerably younger populations and the variable of age as an effect on forums might be examined for trends in use and correlations with perpetration (see Patchin and Hinduja, 2010; Sbarbaro and Enyeart Smith, 2011). On the point of forums used to cyberbully in the present study, the hypothesis about normative beliefs discussed by O’Sullivan and Flanagin (2003) relating to prevalence, causes, and social consequences of problematic messages online may be relevant. If the social networking sites maintain a culture of disrespect, through the generation and dissemination of user-based content, and consequences for violation of terms and conditions are lax or nonexistent, an experimental design incorporating controls for the independent variables “swift

punishment,” and “zero tolerance for abuse” (i.e. a culture of respect) could provide some useful data and resulting conclusions for the effects of these variables on cyberbullying occurrences within this specific forum. Also though the normative beliefs theory may be relevant to this subgroup of the population that potentially observes distinct beliefs and responses to aggression, and in the forum of a social networking site, may be reinforced as appropriate group oriented behaviors and objectives further influencing the content and context of the computer-mediated communications (see Spears & Lea, 1992; O’Sullivan & Flanigan, 2003, p. 88; Christopherson, 2007). This hypothesis of the appropriateness of a normative behavior theory, linking group patterns of behavior, group objectives, and group membership with online behavior is furthered in the examination of ANOVA findings on relational aggression for Native American respondents with adherence to traditions.

#### *Relational Aggression ANOVA*

Two ANOVAS were conducted between Native American respondents that adhere to their traditions and Native Americans that do not adhere to their traditions and respondents not Native American in test 1, then in test two between the “adherence group” and a combined group of Native Americans without adherence to their traditions and respondents not Native American. The effect of adherence to traditions was found to be statistically significant as compared to both of the groups in both of the ANOVAS. This finding is fundamental to the present and continued examination of the phenomenon of cyberbullying among Native American students for comparison with future samples



with this sample as a statistically and measurably distinct group in regards to cyberbullying perpetration mean scores, in the pursuit of distinguishable goals (i.e. mean scores for motivation as relational aggression, as opposed to inciting fear, or seeking revenge) by taking action to achieve these goals within specific forums and thereby maintain group-based membership and identity. The finding comes after testing in separate ANOVAS for significant differences in mean scores for separate motivations in cyberbullying including fear, and revenge, of which none were found for Native Americans with adherence to traditions. One hypothesis is posited attempting to synthesize the finding of relational aggression being the primary motivation for Native American students with adherence to traditions that are found in the present study to perpetrate cyberbullying at higher rates than the other students surveyed, in all forums but specific to the forum of social networking sites: among the “adherence group” (n=19), females (n=11) outnumber males (n=8) and though gender was not controlled for in the social network analysis, relational aggression is demonstrated in previous studies (see Slojne & Smith, 2008; Robers, Kemp, & Truman, 2013) to be more prevalent among females, but also of consideration is that in online communication occurring such as that on social networking sites, a normative set of behaviors that are distinct to the group perpetrating cyberbullying emerge, reflective in part as a function of cultural discontinuity (i.e. operationalized as attitudes, beliefs, and values existing and reinforced in one context, such as among peers in a private setting, but not in another, such as on an international platform like the World Wide Web, see Tyler et. al., 2008), but alternately

as a form of group membership and alignment with the group objective of resisting oppression from those perceived as non-group members. If the primary goal of relational aggression, as discussed by Jackson, Cassidy, & Brown (2009), is the intended attacking and damaging of relationships including, as detailed by Crick et al. (1999) “all hostile acts in which relationships are the vehicle of harm” then social networking sites are a natural fit as the forum in which to attack relationships (p.79). However, Native Americans with adherence to their tribal tradition among this sample are not attacking relationships to instill fear or exact revenge, something else is prompting the statistically significant perpetration of cyberbullying among this sub-group of the sample’s population, using the statistically significant motivation of relational aggression in the universally endorsed forum of social networking sites (social networking sites are statistically significant in uniform adoption across the ethno-cultural demographic spectrum of this study’s sample as the forum with the highest rates of perpetration and victimization).

At this point in the analysis the next logical step would seem to be to ask the respondents what they made of the statistical findings. Would these students see in their computer-mediated communications a group-oriented, goal directed, forum specific behavior, consistent with their tribal traditions and values related to bullying, or interpersonal, intertribal, and extratribal relations?

## CHAPTER FIVE

### CONCLUSION

Cyberbullying affects individuals across the demographic spectrum as demonstrated in this study. Themes arose in the data and were considered first among the minority population, which has been underrepresented in previous studies. The present study's resulting data was compared to the larger sample as well as the trends reported in the literature. When Native American students from the present study's sample adhere to their traditions and values regarding bullying they are both victimized through cyberbullying at significantly higher levels than students that are not Native American and to a less statistically significant degree those students that are Native American but that do not adhere to their traditions. The Native American students that adhere to their traditions regarding bullying in our sample also perpetrate cyberbullying at significantly higher levels than students who are not Native American students and to a less statistically significant degree those students that are Native American but that do not adhere to their traditions regarding bullying. Exploration of motivation for cyberbullying ranging from fear to annoyance to the use of relational aggression, demonstrated that there was a statistically significant difference between Native American students that adhere to their traditions regarding bullying in the use of relational aggression compared with all other students. The variable of anonymity in cyberbullying experiences reported as having a significant effect on computer-mediated communications in the cyberbullying literature, was universally regarded among this sample across demographic groups as

being nearly absent in the cyberbullying experiences from the past 30 days. This is significant in that it requires researchers to continue challenging assumptions about this emerging phenomenon as they begin to observe patterns and create predictive models. A large body of work and theory has been created or applied to explain communication dynamics that result from computer-mediated communication as incorporating anonymity such as Bandura's (1999) mechanisms of moral disengagement, disinhibition detailed by Buba (2001); deindividuation discussed by Zimbardo, (1969); and, Spears and Lea (1992) "SIDE" theory (i.e. the social identity model of deindividuation effects). Similar to the refutation of anonymity's sway in the dynamics of the phenomenon, addressing cyberbullying as an age-specific construct and the argument from the literature that cyberbullying is not a significant phenomenon after high school, can readily be determined invalid among the present study's population.

Trends relating to modalities and forums though were also evinced in the exploratory design of the present study; Social networking sites as a forum of universal victimization and perpetration among our population was demonstrated to be resistant to the effects of demographics. Also the near absence of victimization or perpetration on Twitter bears specific examination as to how a social network site was diametrically shunned by a sample that otherwise emphasized the importance of social networking forums for cyberbullying victimization and perpetration. As can be observed by the extensive data tables available for perusal, there are many trends left unreported for modality, forum, and environment-specific findings across the demographic spectrum.

These findings are important contributions to the literature as individual findings, however the larger significance of these findings might be lost on the casual observer. In the literature there exists an open call for more studies to examine the potential effects of demographic differences on cyberbullying outcomes to better inform cyberbullying prevention. The present study examined the demographic variables of age, ethnicity, and culture, and can state conclusively that measureable differences exist among diverse comparisons of the demographic subgroups from this sample. Confirmation of significant effects of these variables on cyberbullying outcomes will require additional study among other samples informed also by other methods of inquiry and instruments of data collection. However it is not enough to simply examine these variables and discern measurable difference among some of the demographic comparisons. Additional work is needed to conduct cross-study analysis of similar demographic-based studies and report the mean findings so that the literature will begin to incorporate the fact, as exhibited in the present study that similarities and differences along demographic-based comparisons such as forums with which perpetration occurs, technologies utilized, and patterns of victimization can be acknowledged and incorporated into the tailoring of group-oriented policy. In essence to assume one-size-fits-all in the creation and implementation of bullying prevention policy is to ignore the possibility of statistically measurable trends among sub-groups that might inform the precise tailoring of bullying prevention policies, efforts to minimize cyber-abuse and netiquette online codes of conduct for schools of all levels, web-based businesses, and organizations' utilizing or creating information and

computer technologies. Put simply, the literature review opened at a Congressional subcommittee hearing specifically to demonstrate that experts in the field of cyberbullying research were asked for their opinions on a bill that was being proposed addressing two approaches to cyberbullying legislation. The present study is a single example of a demographically-based, cross-population study that has been requested by previous researchers. The need for this model of study to be replicated is a direct answer to the dearth in the literature and will inform future researchers and policymakers so that vital resources can be effectively utilized. Ignoring the findings of the present study that demonstrate significant effect for cultural influence does not diminish the findings or the demographic differences that are represented therein, rather, to ignore the possibility that differences exist in cyberbullying behaviors and outcomes as an effect of the demographic-based variable of culture is to ignore the reality that better policy and informed legislation can be crafted with careful consideration of all available sources of data. When next Congress invites experts to inform their members on cyberbullying, the present study will be accessible on the Internet and it will be one example of exploring demographics as a variable with potential effects on cyberbullying behaviors. When underserved and minority students, as well as students with diverse cultures, traditions and languages are asked about their behaviors and the results of their report are factored into the creation of policy affecting those students, a major stride toward inclusion and away from marginalization can be said to have occurred. This study has endeavored to address this paucity of demographic-based cross population studies called for in the

literature. Also though by highlighting Native American responses within a larger exploratory study of University students, this study has attempted to examine potential effect of ethnicity on cyberbullying behaviors. By conducting a limited comparison of the effects for gender on cyberbullying this thesis has endeavored to address the present void. By conducting an exploration of the sub-group of Native Americans with adherence to traditions and values related to bullying, interpersonal and intertribal as well as extra tribal relationships, this thesis has attempted to contribute to the present gap in the literature.

#### *Limitations of the Research*

A major limitation to the research is that a convenience sample derived from a single university was used. Generalizability of results and conclusions therefore is reduced to the current sample. However as little research exists for a statistically significant representation of Native Americans in cyberbullying behaviors the present study's sample limitation is also a point of reference for future demographically-based studies. The sample size of the Native American respondents with adherence to traditions (n=19) was reduced further depending on the question. Therefore again, all conclusions must be considered conservatively and replicated in future studies with additional samples. On the point of sample size for Native American respondents with adherence to their traditions a major flaw in the survey (discussed previously in Chapter 4) format was to have question 11 regarding adherence at the end of the survey. Respondent fatigue likely contributed to several of the Native American respondents not answering the

critical adherence question (i.e. question 11) thereby potentially skewing the findings, though as the Native American respondent's without adherence group had high mean scores for both perpetration and bullying it remains inconclusive which direction any respondents from this group that failed to answer question 11 may have skewed the results. While the instrument had been used in previous studies and the Cronbach's alpha was stated by the researchers to be sufficient in both instances (Patchin & Hinduja, 2010 victimization scale Cronbach's  $\alpha = .736$ , and perpetration scale Cronbach's  $\alpha = .761$ ; Sbarbaro & Enyeart Smith, 2011 victimization scale Cronbach's  $\alpha = .91$ , and perpetration scale Cronbach's  $\alpha = .91$ ) however no additional analysis was done in the present study to determine if this was reliable based on the modifications or if the additional constructs and larger survey detracted from or enhanced the previously established internal consistency. The addition of a qualitative component to data collection would have potentially informed the quantitative results. This fact was apparent to the researcher before data collection had been completed but limited resources prevented action in this direction. Finally while the survey was conducted in an anonymous manner with the researcher not in the class at any point during the semester that the survey was administered, and as great lengths of informed consent, IRB review of all related documentation, committee review of materials, the University has less than 10,000 students enrolled and therefore it is not unlikely that some students responding may have known the researcher. It is not suggested that this inherently influences the results, however it bears mentioning as a potential limitation to the results of the present study.



*Implications for Future Research*

Future research must continue along the lines endeavored herein with demographic-based cross-population studies conducted to produce a wealth of data where the current void currently exists so that consistent measures and resulting predictive accuracy can be more closely achieved. As expounded previously, this exploratory study is unique in its focus but it is over ambitious in its goals, and future efforts must be refined with a very few specific goals or linked to a single distinct hypothesis across the determined demographic spectrum. While the present study has produced more data than what is needed for the scope of the present product it can be analyzed further at a later time but the process for a single individual is unnecessary and therefore it is suggested that if the present approach is attempted it be done so with research teams or at the least that dyads be formed to appropriately utilize the collected data. Another suggestion as touched on in the limitations of the present study is for future researchers to conduct mixed methods of data collection producing a more complete description of the data (e.g. Attempting to produce and explore questions that articulate more completely the answers “what and why” of the phenomenon’s manifold facets.). While the present study is robust in quantitative findings, the collection of qualitative data and subsequent analysis is insufficiently explored. As a few major hypotheses exist in the cyberbullying literature, but many of the studies conducted have a nonrepresentative sample of minority respondents the challenge for future researchers is to take the trends that have presented themselves in studies conducted among the non- ethnically diverse samples and put the

trends, the hypotheses, the instruments to the test. One of the most useful comments received from the respondents on a submitted survey was, “this survey was confusing.” In retrospect category proliferation is evident and future iterations will likely benefit from the lesson learned in the present study; namely to simplify and refine or funnel the instrument and resulting data collection.

## APPENDIX A

### *Cyberbullying Legislation*

The Internet has only been commercialized and thus accessed by the general population since the mid-1990s (Greenstein, 2001). Cyberbullying as a byproduct of increased Internet use and the legislative response designed to protect Internet users from this form of abuse are both correspondingly new (Frederick & Arguinzoni, 2010; Slonje & Smith, 2008). While the U.S. Congress has not been able to pass an anti-cyberbullying law, individual state legislatures have been successful in drafting specific laws aimed at curtailing cyberbullying (Stuart-Cassel, Bell, & Springer, 2011). Forty-nine states have laws pertaining to bullying (Hinduja & Patchin, 2012). Thirty-six states specifically address the prohibition of cyberbullying or bullying through electronic means (Stuart-Cassel, Bell, & Springer, 2011).

Closer examination of the rapid increase of legislation related to bullying reveals that more than 120 bills between 1999 and 2010 have been enacted or amended by state legislatures addressing bullying and similar behaviors in schools (Stuart-Cassel, Bell, & Springer, 2011). The state of Montana remains the only state in the U.S. without a bullying law (Hinduja & Patchin, 2012). However, Montana does have statutes addressing related behaviors of harassment (Mont. Code Ann. 2011, § 45-5-220) and threats via electronic communication (Mont. Code Ann. 2011, § 45-8-213). Also, Montana's approach to anti-bullying in schools can be further analyzed, as it is one of the few states that has developed a state model bullying policy absent a legislative mandate

to do so (Stuart-Cassel, Bell, & Springer, 2011). In another example of variation in legislation, only thirteen state laws included a provision addressing the extension of school jurisdiction to include acts of bullying off-campus (Stuart-Cassel, Bell, & Springer, 2011). These examples of variation amongst states' legislative approaches toward addressing bullying and narrowing language to focus on cyberbullying are demonstrative of a larger ongoing debate involving issues such as emerging trends in adolescent bullying behavior through the utilization of new technologies, updated research directing anti-bullying policy, degree of autonomy granted school districts in the implementation of bullying prevention policies, and states criminalizing bullying behavior through the development of legislation in the particular state's criminal code (Stuart-Cassel, Bell, & Springer, 2011). As general consensus does not exist among states regarding what constitutes cyberbullying, what actions should be taken in the prevention and enforcement of anti-bullying policies, and who should direct such efforts, existing Civil Rights legislation, U.S. jurisprudence, and the Constitution inform the discussion in and among the legislative, judicial, educational, and civilian realms.

*Federal Civil Rights Act and Title IX of the Educational Amendments of 1972.*

The Civil Rights Act signed on July 2, 1964, by President Lyndon Johnson prohibited discrimination in public places, outlawed segregation of schools and public facilities, and prevented employment discrimination (Civil Rights Act of 1964). This legislation directs the discussion of legal issues on cyberbullying in public schools, which, because they receive federal funds, are required to conform to the law. The

legislation broadens its scope of protection through its inclusion of “race, color, religion, and national origin” as specific criteria linked to the prohibited act of discrimination in public places (Civil Rights Act of 1964, § 201). Advancing the list of criteria, Title IX of the Educational Amendments of 1972 included the prohibition of discrimination based on sex: “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance...” (Education Amendments of 1972, §1681). Discrimination based on these codified criteria at public schools becomes the touchstone for censuring and reprimanding acts of cyberbullying, which violate civil rights when those acts occur at a public school (Hinduja & Patchin, 2011). U.S. State and Federal Case law with their concomitant Constitutional interpretation is used to further unsnarl legal complexities related to acts of cyberbullying when the bullying actions transpire off of school property, occur on school property but which are not in apparent violation of civil rights, and are presently unaddressed due to the recent and rapid advancements and accessibility in technology, all of which fall beyond the purview of this legislation (Walker, Sockman & Koehn, 2011).

*Case law and constitutional interpretation.*

Just as scant federal legislation exists that addresses cyberbullying, a corresponding dearth of U.S. Supreme Court guidance exists on related topics, and no case specifically addressing cyberbullying has been heard by the land’s highest court (Hinduja & Patchin, 2011). However, a few landmark Supreme Court cases have helped

guide the lower Federal and State courts' rulings (Aftab, 2011). The administrators charged with the responsibility to safely and efficiently manage schools but not impinge on students' rights must tread a careful but purposeful path through the thorny landscape which comprises cyberbullying case law (Aftab, 2011). To effectively accomplish this, staff counsel must draw from existing legal precedent and advise educators and administrators on the prevailing legal themes as they chart a course of prevention and action forward (Aftab, 2011). School employees and the policies that direct them must account for the following legal issues: cyberbullying that occurs beyond school temporal and spatial boundaries, methods and purpose of student searches related to acts of cyberbullying, limitations on student rights as interpreted by the judiciary, and legal obligations of schools to exercise authority when acts of cyberbullying have been observed and/or reported (Aftab, 2011).

The U.S. Constitutional Amendment I, was added in 1791 but is relevant in contemporary legal discussions concerning cyberbullying. The First Amendment of the U.S. Constitution states, "Congress shall make no law...abridging the freedom of speech..." (U.S. Const. amend. I). *Tinker v. Des Moines Independent School District*, a 1969 Supreme Court case is one of the most referenced precedents in contemporary legal discussions on cyberbullying in schools (Hinduja & Patchin, 2011). The case involves students' First Amendment right to freedom of speech violating the authority of a public school and brings into focus, among other points, school administrators' responsibility for maintaining an orderly learning environment, while simultaneously protecting

students' rights (*Tinker v. Des Moines Independent Community School Dist.*, 1969). In 1966, the Fifth Circuit Court of Appeals established the precedent referred to in and subsequently validated by the Supreme Court in the *Tinker* case when it determined that schools "cannot infringe on their students' right to free and unrestricted expression as guaranteed to them under the First Amendment to the Constitution, where the exercise of such rights in the school buildings and schoolrooms do not materially and substantially interfere with the requirements of appropriate discipline in the operation of the school" (*Burnside v. Byars*, 1966). Much has been made of the reference to "materially and substantially interfere" as used in *Tinker* for upholding students' First Amendment rights, as it vaguely denotes the criteria and extent of disruption a student's speech must embody before the speech may be prohibited. This point is epitomized in the now classic line, "It can hardly be argued that either students or teachers shed their constitutional rights to freedom of speech or expression at the schoolhouse gate" (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 506). School personnel as extensions of the State are charged with protecting the individual's Constitutional rights while "maintaining appropriate discipline in the operation of the school" (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 513). Student speech "which might reasonably have led school authorities to forecast substantial disruption of or material interference with school activities..." can be censured and disciplined by school officials (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 514).

The balancing act for school administrators in cases of cyberbullying is often linked to the substance of this ruling as the effects of cyberbullying must be determined to meet the Tinker standard (i.e., materially and substantially interfere with normal school activities) or to be “colliding with the rights of others” (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 513). This predicted outcome of material and substantial interference must definitively be “more than a mere desire to avoid the discomfort and unpleasantness that always accompany an unpopular viewpoint” (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 509). However, in a contemporary lower court ruling, the Tinker standard is shown to be open for interpretation by the courts regarding off-campus student speech and the inconsistent threshold applied to the speech in determining school authority and appropriate disciplinary action when the speech is likely to or actually does find its way on-campus (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). The case of *JC v. Beverly Hills* (2010) also outlines several categories of student speech that have been successfully restricted by schools, irrespective of the likelihood of substantial disruption to school as the primary qualification for restriction and admonishment, and therefore merits review (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

In *Tinker*, the school suspended three students for black armbands worn at school as a protest to the Vietnam War, and the lower court supported the discipline (*Tinker v. Des Moines Independent Community School Dist.*, 1969). However, the Supreme Court overturned the ruling as the students’ actions were deemed not “materially or



substantially” disruptive to the operation of the school and were not “colliding with the rights of others,” therefore the discipline was unwarranted and was a violation of the protesting students’ First Amendment rights (*Tinker v. Des Moines Independent Community School Dist.*, 1969). Aligning with this precedent, *JC v. Beverly Hills* (2010) demonstrates the variability in interpreting the Tinker standard but also the specific requirements and limitations of a school to discipline a student for off campus speech (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

The cyberbullying speech in *JC v. Beverly Hills* (2010) emanated from the student JC who made a disparaging video off of school grounds with other students, attacking CC, a student who attended their school (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). JC then posted the video on the video host site Youtube.com (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). The bullying student JC informed other students that evening about the video she had made, and she also informed the bullied student, CC, which led CC’s parents to escort her to school the next day and inform school staff of the video (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). School staff counseled CC and after a short time convinced her to go to class, discussed discipline with school legal counsel, and suspended JC from school for two days (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). Though the school had filters on their computers preventing access to Youtube.com, and it was against school policy to use cell phones on campus, some phones could access the website; however, it was not

determined if this actually occurred while students were on campus (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

Presiding over *JC v. Beverly Hills* (2010) District Court, Judge Stephen V. Wilson ruled that the disruption caused by the video did not meet the Tinker standard for “substantial and material disruption,” nor did it impinge on CC’s rights under Tinker to be “let alone” (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, citing *Tinker v. Des Moines Independent Community School Dist.*, 1969, pp. 1122-1123). The speech was not defamatory of student CC “on the basis of a core identifying characteristic such as race, religion, or sexual orientation” (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p. 1123, citing, *Harper v. Poway Unified School Dist.*, 2007, p. 1178). The speech was deemed to be “hurtful” and “meanspirited,” but this definition did not have supporting precedent to uphold the school’s disciplinary actions, rather it was designated as protected speech under the First Amendment (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p.1122). The Court viewed the discipline and censorship to be an overreaction by school staff in the suppression of a childish rant directed at another student (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). The Court cited a lack of Supreme Court guidance related to the facts and context of the case, then itself refused to establish a precedent whereby a student’s emotional well-being is assigned primary consideration as linked to the student rights’ standard vaguely addressed in Tinker (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). The School’s actions to censure and discipline student JC for her video were found not to be based on evidence or facts

indicating “a reasonably foreseeable risk of substantial disruption,” another prong of the Tinker standard (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p.1117). The Court cited several cases in which evidence and factual context did indicate a likelihood of future disruption meeting the Tinker standard justifying a school’s disciplinary procedures and student speech censorship (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, citing, *West v. Derby Unified School District No. 260*, 2000, and *Chalifoux v. New Caney Independent Sch. Dist.*, 1997).

The Defendants in this case argued unsuccessfully that a material and substantial disruption occurred and that such a disruption was likely to occur as a result of the student speech (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). The Court ruled that the threshold for establishing this point, as outlined in Tinker, was not met based on the limited number of students impacted by the events, and by the relatively normal functioning of the school despite the episode’s emotional impact on student CC (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). Though the defendants failed to argue the point successfully in this case, schools’ disciplinary response and censorship of student speech has repeatedly been upheld by the Courts along the line of argument in which the likelihood of a foreseeable and substantial disruption could occur when the student’s speech is linked to actual physical violence or the overt threat of violence, or can be reasonably interpreted as a threat to students or staff affiliated with a school (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

*True threats.*

“True threats” as a type of speech falling beyond the protection of the First Amendment was established in a 1969 Supreme Court precedent in which eighteen-year-old, anti-war protester Robert Watts proclaimed at a public rally at the Washington Monument, “If they ever make me carry a rifle the first man I want to get in my sights is L.B.J.” (*Watts v. United States*, 1969). Watts was arrested and charged with violation of a 1917 statute, which prohibits “knowingly and willfully” threatening the President (*Watts v. United States*, 1969, citing 18 U. S. C. § 871 (a)). After being heard in District Court and upheld in the Court of Appeals, the Supreme Court reversed the ruling and determined that the lower courts erred as Watts’ speech was essentially political hyperbole (*Watts v. United States*, 1969). While it has been left to lower courts to further define the 1969 precedent, true threats have become increasingly significant in the wake of school violence associated with student-speech foreshadowing the violence (*JS v. Bethlehem Area School Dist.*, 2002). The violence component was not shown to be present in the student speech in *JC v. Beverly Hills* (2010). Therefore, the door for interpretation was left open to the District court in determining the likelihood for, or actual occurrence of, material and substantial disruption covered in the Tinker standard (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

Barring the Supreme Court’s acceptance thus far to hear a case involving student speech manifest in cyberbullying, the 1969 symbolic speech precedent articulated in Tinker results in lower courts’ assorted and differentiated interpretations of the Tinker

standard (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). Despite the disparate interpretations of existing precedent applied in cases with analogous or significantly similar facts regarding schools authority and student speech, three other types of student speech, ruled on by the Supreme Court, assist in clarifying the course ahead for jurisprudence adjudicators and school administrators (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

*Three categories of non-protected student-speech.*

The first of the three types of speech subject to school authority regardless of its relationship to the Tinker standard involved a speech given by Matthew N. Fraser at a Bethel High School assembly which described his friend and student body candidate, using sexual innuendo and metaphor to 600 teenaged students (*Bethel School District v. Fraser*, 1986). Fraser was suspended as he violated the Bethel high school's disciplinary rule prohibiting the use of obscene language (*Bethel School District v. Fraser*, 1986). Fraser filed a lawsuit against the school district on the grounds that his First Amendment rights had been violated, and while the United States District Court for the Western District of Washington ruled in favor of Fraser, the Supreme Court overturned the decision (*Bethel School District v. Fraser*, 1986). Upholding the school's suspension of the student, the Court declared, "The schools, as instruments of the state, may determine that the essential lessons of civil, mature conduct cannot be conveyed in a school that tolerates lewd, indecent, or offensive speech and conduct such as that indulged in by this confused boy" (*Bethel School District v. Fraser*, 1986, p. 683).

Reviewing the opinion in his separate ruling (*JC v. Beverly Hills*), Judge Wilson elaborated, “There is no First Amendment protection for lewd, vulgar or patently offensive speech that occurs in school,” but he did not find the YouTube video posted on the internet from a home computer after school by student JC, addressing/demeaning student CC, and viewed on-school grounds by administrators with the possibility of it having been viewed by some students on-campus, to meet Fraser’s definition of in-school speech (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p.1101). It is worth noting though that another court given the same circumstances and facts could interpret any part of the Tinker standard, the Fraser precedent, or, as will be discussed later, the “sufficient nexus” between the student speech and the school in a geographical boundaries argument to determine that the cyberbullying speech was directed by analogous Supreme Court precedent (*J.S. ex rel. Snyder v. Blue Mountain School Dist.*, 2010, p. 302, citing *JS v. Bethlehem Area School Dist.*, 2002, p. 847).

A second category of speech, ruled on by the Supreme Court to be under the purview of public schools’ authority to restrict and impose discipline, involves speech that a school promotes through its curriculum (*Hazelwood School Dist. v. Kuhlmeier*, 1988). Three students who were contributing authors of the school newspaper at Hazelwood East High School in Missouri brought suit against the Hazelwood School District, its principal, and the temporary instructor for a journalism class (*Hazelwood School Dist. v. Kuhlmeier*, 1988).

The case revolves around the school sponsored newspaper and the authority of a school to exercise editorial control over student speech when the student speech bears the “imprimatur” of the school but fails to meet standards set by the school such as “ungrammatical, poorly written, inadequately researched, biased or prejudiced, vulgar or profane, or unsuitable for immature audiences” (*Hazelwood School Dist. v. Kuhlmeier*, 1988, p. 271). The paper, as part of the curriculum for the journalism class, was created and issued with school funds, during school hours, on school property, by students and school staff, with 4,500 copies disseminated to the school community and the general public (*Hazelwood School Dist. v. Kuhlmeier*, 1988). The principal issued an assessment upon reviewing the newspaper prior to the official printing that two students who authored articles had such significant issues as to justify being excluded from that edition of the school paper, prompting the involved students to file suit claiming their First Amendment rights had been violated (*Hazelwood School Dist. v. Kuhlmeier*, 1988). The United States District Court for the Eastern District of Missouri determined that no violation of the students’ First Amendment rights had occurred, and while the U.S. Court of Appeals for the Eighth Circuit overturned the decision and ruled in favor of the three respondents, the U.S. Supreme Court reversed the ruling and delivered judgment for the petitioners (*Hazelwood School Dist. v. Kuhlmeier*, 1988). The Court held “that educators do not offend the First Amendment by exercising editorial control over the style and content of student speech in school-sponsored expressive activities so long as their actions are reasonably related to legitimate pedagogical concerns” (*Hazelwood School*

*Dist. v. Kuhlmeier*, 1988, p. 273). This ruling clarifies one category of censorable student speech by schools and shows it is not in violation with the First Amendment when the speech is linked to a school's curriculum, resources, and titular association (*Hazelwood School Dist. v. Kuhlmeier*, 1988). As the facts and circumstances differed significantly from those Judge Wilson reviewed in *JC v. Beverly Hills* (2010), *Hazelwood v. Kuhlmeier* (1988) was not cited as a basis for precedent on point, but rather it was highlighted as another example where 1) the Supreme Court's decision to hear a cyberbullying case would assist interpretation of such a case directly, as opposed to in an analogous assessment of facts and circumstances, and 2) specific categories of student-speech exist which are subject to public school authority as established in a limited number of Supreme Court cases (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

A third category of speech determined by the Supreme Court to be subject to limitations by school authority involves speech promoting illicit drug use (*Morse v. Frederick*, 2002, 2006, 2007). Student Joseph Frederick brought a banner to a school sponsored event that said, "Bong Hits for Jesus," and the school principal Deborah Morse confiscated the banner and suspended Frederick (*Morse v. Frederick*, 2007, p. 2622). Respondent Frederick filed suit against petitioner Morse and the Juneau School District Board of Education, alleging a violation of his First Amendment rights (*Morse v. Frederick*, 2007). The District Court ruled in favor of Morse, but the Ninth Circuit overturned the decision before the Supreme Court set the precedent where a public school may restrict student speech at a school function, when that speech is generally perceived



as promoting illegal drug use (*Morse v. Frederick*, 2007). This category of student-speech determined by the Supreme Court to be subject to school discipline and censure did not weigh in Judge Wilson's ruling except to demonstrate the need for the Supreme Court to hear a case involving the new category of student-speech in the form of cyberbullying and establish parameters that lower courts and by extension school administrators can follow (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

The 1969 Tinker ruling and three other Supreme Court rulings serve inadequately as precedents and guides for cyberbullying cases until a case directly involving cyberbullying as student speech is accepted for review by the Supreme Court (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

*Geographic location of student-speech.*

A final element determined in *JC v. Beverly Hills*, 2010 which is germane to administrators' responses to future cyberbullying incidents is the argument related to the geographic location in which the student-speech originates, is accessed and observed, or received (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). Again needing Supreme Court guidance, the lower courts take different approaches to the issue with some relegating geographic location to a secondary position of importance, assigning primacy to the Tinker "substantial disruption" standard, while other courts consider the geographic location of the student speech in relation to the larger context of facts and circumstances pertaining to the case (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p. 1104). The "nexus" to which several courts have referred to involves the cyberbullying

on/off-campus, student/nonstudent-speech and the possibility for that speech to reach and disrupt school (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p. 1104).

Judge Wilson outlined the argument against geographic relevancy when a student cyberbullies another student or a member of school staff from beyond the domain of school property, unrelated to a school-promoted activity, and the cyberbullying speech either does cause or can be “reasonably” predicted to cause a “material and substantial disruption of school activities” (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p. 1103). The lower courts’ precedents cited for this issue included cases that met the *Tinker* standard of student speech as the primary consideration, and cases that considered the geographic location as relevant but first required an accounting for a possible nexus between the speech and the likelihood of the speech reaching school (*JC ex rel. RC v. Beverly Hills Unified School*, 2010). Attorneys for the Plaintiff JC unsuccessfully argued, “If the publication of a student's speech does not take place on school grounds, at a school function, or by means of school resources, a school cannot punish the student without violating her First Amendment rights” (*JC ex rel. RC v. Beverly Hills Unified School*, 2010, p. 1105).

Among several similarly decided lower court cases, Judge Wilson cited a 3<sup>rd</sup> Circuit ruling which held “off-campus speech that causes or reasonably threatens to cause a substantial disruption of or material interference with a school need not satisfy any geographical technicality in order to be regulated pursuant to *Tinker*” (*J.S. ex rel. Snyder v. Blue Mountain*, 2010, p. 301). In contrast are court rulings’ with similar circumstances

and facts as those reviewed in *JC v. Beverly Hills* (2010), decided by courts with equal judicial authority (e.g., Circuit and District courts, etc.), but that have given the geographic location of cyberbullying speech initial consideration before applying the Tinker substantial disruption test (*J.S. v. Bethlehem Area School District*, 2002).

Aaron Wisniewski, a student at Weedsport Middle School, New York, created on his parents' home computer, an icon for his instant messenger (IM) account on America Online (AOL) of his English teacher getting shot with the words "Kill Mr. VanderMolen" (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007, p. 35). The icon, viewable by Aaron's contacts on the real-time IM software, included several students who also attended Weedsport, and while the icon was viewable for three weeks it was not determined by the court that the icon was accessed by students at school (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). The nexus between the speech and the school was determined to be sufficient enough to withstand Aaron's contention that his First Amendment rights were violated (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). Contributing to the nexus were the facts that the subject of the icon and threatening slogan, Mr. VanderMolen, was a teacher at Weedsport, Aaron and 15 recipients of the icon were students who observed the icon over a three week period of time while they were concurrently enrolled in the school, and the students attended classes taught by Mr. VanderMolen (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). Another student eventually showed the icon to Mr. VanderMolen, and disciplinary action ensued, but despite the unintended distribution to

the teacher, the court established the fundamental question related to the nexus: Was it “reasonably foreseeable” that the icon would make its way to the school? (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007, p. 40).

Establishing the nexus among the student-speech, the intended audience, and the likelihood that the speech would reach a school’s campus whereby it might then contribute to and be held subject to Tinker’s material and substantial or foreseeable disruption test was central to this case but will also be a fundamental aspect to future cyberbullying/protected speech legal challenges (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). Arguments surrounding the nexus among geographic boundaries, students, schools, First Amendment protected speech, and cyberbullying speech divided the Second Circuit court in this case and are likely to defy consensus with other courts absent Supreme Court clarification (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). Until such time, Judge Wilson concluded that the majority of lower court rulings align in favor of the schools and their discipline of students, when the Tinker standard is met, regardless of the geographic location of the student-speech and its origin where it is accessed and observed or received (*JC ex rel. RC v. Beverly Hills Unified School*, 2010).

It bears reiterating that,

...the Court in *Tinker* established that although a student does not shed his or her constitutional right to free speech in the school setting, a school district might, within constitutional bounds, prohibit speech and punish a student for speech, if

the school sustains its burden of establishing that the student speech materially disrupts class work, creates substantial disorder, invades the rights of others or it is reasonably foreseeable that the speech will do so. (*J.S. v. Bethlehem Area School District*, 2002, p. 862)

The decision by the Court to hear a cyberbullying case will relieve the accumulated tension amongst educators, adjudicators, parents, and children by directly addressing legal arguments that incorporate the unique aspects, facts, and circumstances of student-speech related to school authority and Constitutional rights in a digital age. Until that time, *Tinker* remains the touchstone case for cyberbullying that is determined to be student-speech, holding that "conduct by the student, in class or out of it, which for any reason—whether it stems from time, place, or type of behavior—materially disrupts classwork or involves substantial disorder or invasion of the rights of others is, ...not immunized by the constitutional guarantee of freedom of speech" (*Tinker v. Des Moines Independent Community School Dist.*, 1969, p. 513). Other Supreme Court direction comes from cases involving a possible "true threat" in cyberbullying student-speech, the context and speech will be subject to the "knowingly and willfully" requirement (*Watts v. United States*, 1969, p. 708). The Court determined that "lewd, indecent, or offensive speech" conducted by a student is not protected under the First Amendment and is subject to school censorship, authority and disciplinary actions (*Bethel School District v. Fraser*, 1986, p. 683).

Student-speech promoting illegal drug use is also subject to school censorship and discipline (*Morse v. Frederick*, 2007). Schools do not violate students' First Amendment right when in a school sponsored "expressive activity" such as a school newspaper that bears the school's name, it exercises editorial control over the content of student-speech therein (*Hazelwood School Dist. v. Kuhlmeier*, 1988, p. 273). The geographic location of a student's cyberbullying speech is often not viewed as primary if the Tinker standard is met, otherwise lower courts have examined the nexus among the student-speech, the targeted audience and the likelihood the speech would arrive at campus, to then consider the disruption or likelihood of disruption aspects contained in the Tinker standard (*Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 2007). In sum, because cyberbullying can involve all the precedents discussed here, in addition to the geographic location argument which has not yet been ruled on by the Court, as well as issues of fact and law surrounding cyberbullying amongst students and schools which are still emerging with the rapid developments of technology and the innovative use and abuse of information and computer technologies, it is critical that clarity be enacted through the Court's acceptance of a cyberbullying student-speech case.

## APPENDIX B

### *Cyberbullying Survey*

Cyberbullying is a form of electronic aggression; it includes any kind of aggression perpetrated through technology “any type of harassment or bullying (teasing, telling lies, making fun of someone, making rude or mean comments, spreading rumors, or making threatening or aggressive comments) that occurs through email, a chat room, instant messaging, a website (including blogs), or text messaging” (David-Ferdon & Feldman, 2007, p. S2); Cyberbullying can include pictures, written comments/text, icons and videos (Sbarbaro & Smith, 2011); Cyberbullying can occur anywhere information and communications technologies can be accessed, i.e. anywhere there is access to the Internet or cell phone reception/transmission is available (Willard, 2012).

**Native American** is defined herein as “... someone who has blood degree from and is recognized as such by a federally recognized tribe or village (as an enrolled tribal member) and/or the United States (Department of the Interior, 2013, section IV., para.1).

1. I am (**mark one**):

- a). An enrolled member in a federally recognized tribe \_\_\_\_\_
- b). A Native American citizen of an unrecognized tribe \_\_\_\_\_
- c). Not enrolled, but self-identify as a descendant of a Native American \_\_\_\_\_
- d). Not Native American \_\_\_\_\_

2. What is/are your tribal affiliation(s) \_\_\_\_\_

3. What is your gender? \_\_\_M\_\_\_ F\_\_\_

4. How often do you use the Internet?

Please describe how often (e.g. **I log onto the Internet 7 times daily**):

---

5. How often do you use a cell phone?

Please describe how often (e.g. **12 times daily with texts and calls combined**):

---



This portion of the survey examines types and rates of cyberbullying, and perceived affiliation of the offender as a Native American.

**Was the Cyberbully a Native American?**

6.If you have been cyberbullied answer this section:  
 If known, please indicate on the *left* scale whether or not the cyberbully was a Native American (check all that apply).  
 On the *right*, please indicate how many times the bullying occurred.

**How many times did the bullying occur?**

Unknown	American Native American			tribe		Never	How many times did the bullying occur?		
	1	2	3				4	1 - 2 Time	3 - 5 Times
1	2	3	4		a) In my lifetime, I have observed cyberbullying online.	0	1	2	3
1	2	3	4		b) In my lifetime, I have been cyberbullied.	0	1	2	3
1	2	3	4		c) In the last 30 days, I have been cyberbullied.	0	1	2	3
<b>In the last 30 days I have been cyberbullied through:</b>									
1	2	3	4		d) comments posted online.	0	1	2	3
1	2	3	4		e) a picture posted online.	0	1	2	3
1	2	3	4		f) a video posted online.	0	1	2	3
1	2	3	4		g) a web page created about me.	0	1	2	3
1	2	3	4		h) someone spreading false rumors about me online.	0	1	2	3
1	2	3	4		i) being threatened with physical violence by cell phone.	0	1	2	3
1	2	3	4		j) being threatened with physical violence online.	0	1	2	3
1	2	3	4		k) someone pretending to be me online w./any of the actions above.	0	1	2	3

Other? Please explain but do not use actual names.

The next portion of the survey examines your experiences and feelings in the cybervictim context.

7. If you were victimized in the actions above (question 6. a-

k) to what extent did you feel:

	Not at all	A little	Somewhat	Very much
a. Scared by the person	0	1	2	3
b. As though the aggressor was trying to get revenge	0	1	2	3
c. Just annoyed	0	1	2	3
d. Intimidated enough to make you change your behavior	0	1	2	3
e. Weak	0	1	2	3
f. Excluded from a group	0	1	2	3

The next portion of the survey examines where cyberbullying occurs and by whom.

<p><b>How many times did OTHERS bully you?</b></p> <p>Never 0</p> <p>1 - 2 Times 1 2</p> <p>3 - 5 Times 3 4</p> <p>More than 5 Times 5</p>	<p>8. If you have been cyberbullied or done so to others answer this section:</p> <p>Please indicate the rates of cyberbullying when others did it to you (on the left), based on the environments in the middle column, and indicate the rates, if relevant, that you have cyberbullied others (on the right).</p> <p>In the Orange column, place a check in the corresponding box when the victim was a Native American;</p> <p>If unknown, leave the box blank.</p> <p>a) In a chat room.</p> <p>b) Through email.</p> <p>c) Through computer instant messages.</p> <p>d) Through cell phone text messages.</p>	<p><b>How many times have YOU bullied others online?</b></p> <p>Never 0</p> <p>1 - 2 Time 1 2</p> <p>3 - 5 Times 3 4</p> <p>More than 5 Times 5</p>
	<p>Were they Native American?</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	

0	1	2	3	e) Through cell phone.		0	1	2	3
0	1	2	3	f) On a social networking site (MySpace or Facebook or other).		0	1	2	3
0	1	2	3	g) On Twitter.		0	1	2	3
0	1	2	3	h) On YouTube.		0	1	2	3
0	1	2	3	i) In virtual worlds such as Second Life, Gaia, or Habbo Hotel.		0	1	2	3
0	1	2	3	j) While playing a massive multiplayer online game such as World of Warcraft, Guild Wars, or Runescape.		0	1	2	3
0	1	2	3	k) While playing online with Xbox, Playstation, Wii, or similar device.		0	1	2	3
Other? Please explain but do not use actual names.									

The next portion of the survey examines your motivations in the cyberbully context.

9. If you were engaged in the actions above (question 8. a-k)

to what extent did you hope to:

	Not at all	A little	Somewhat	Very much
a. Scare the person	0	1	2	3
b. Get revenge	0	1	2	3
c. Just to annoy someone	0	1	2	3
d. Intimidate them to make them change their behavior	0	1	2	3
e. Show how weak they were	0	1	2	3
f. Keep them out of your group	0	1	2	3

The final portion of the survey includes questions about your adherence to traditional teachings of your tribe, and Native American identity as a factor in cyberbullying. If you do not have tribal affiliation, or do not know about your tribe's traditions then skip these questions.

10. Please describe your tribe's traditions and/or teachings concerning:

a) Person to person interactions among tribal members.

b) Person to person interactions with non-tribal members.

c) Bullying.

11. To what extent do you adhere to your tribe's traditions and values regarding bullying?

**Your responses to this survey are anonymous and confidential. You may also choose not to respond to this survey.**

**Thank You for your assistance!**

## REFERENCES

- Aftab, P. (2011). U.S. schools and the U.S. Constitution: A cyberbullying legal guide.  
Retrieved from  
[https://www.wiredsafety.org/pdf/US\\_Schools\\_and\\_Constitution\\_Legal\\_Guide.pdf](https://www.wiredsafety.org/pdf/US_Schools_and_Constitution_Legal_Guide.pdf)
- Aftab, P. (2013). *What is cyberbullying, exactly?* Retrieved from  
[http://stopcyberbullying.org/what\\_is\\_cyberbullying\\_exactly.html](http://stopcyberbullying.org/what_is_cyberbullying_exactly.html)
- Aftab, P. (2013). *Cyberbullying*. Retrieved from <http://www.aftab.com>
- Agatston, P.W., Kowalski, R., & Limber, S. (2007). Students' perspectives on cyber bullying. *Journal of Adolescent Health, 41*, S59–S60.  
doi:10.1016/j.jadohealth.2007.09.003
- Anderson, C.A., & Bushman, B. J. (2002). Human aggression. *Annual Review Psychology, 53*(1), 27–51.
- Ang, R. P., Tan, K. A., & Mansor, T. A. (2010). Normative beliefs about aggression as a mediator of narcissistic exploitativeness and cyberbullying. *Journal of Interpersonal Violence, 26*(13), 2619–2634.  
doi: 10.1177/0886260510388286
- Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'? *Psychological Medicine, 40*(5), 717-729. Retrieved from  
[http://journals.cambridge.org/abstract\\_S0033291709991383](http://journals.cambridge.org/abstract_S0033291709991383)  
doi: 10.1017/S0033291709991383

- Baldasare, A., Bauman, S., Goldman, L., & Robie, A. (2012). Cyberbullying?: Voices of college students. In L. A. Wankle & C. Wankle (Eds.), *Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)* (pp. 127-155). Bingley, UK: Emerald Group Publishing Limited.  
doi: 10.1108/S2044-9968(2012)0000005010
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3(3), 193-209.  
doi: 10.1207/s15327957pspr0303\_3
- Bauman, S. (2013). Cyberbullying: What does research tell us? *Theory Into Practice*, 52(4), 249-256. doi: 10.1080/00405841.2013.829727
- Belsey, B. (2006). Bullying.org: A learning journey. *Bulletin – Newfoundland and Labrador Teachers Association*, 49(4), 20-21. Retrieved from [https://www.nlta.nl.ca/files/documents/bulletins/bultn\\_jan\\_feb06.pdf](https://www.nlta.nl.ca/files/documents/bulletins/bultn_jan_feb06.pdf)
- Belsey, B. (2011). *Always on? Always aware!* Retrieved from [www.cyberbullying.org](http://www.cyberbullying.org)
- Benbenishty, R., & Astor R. A., (2011). Making the Case for an International Perspective on School Violence: Implications for Theory, Research, Policy, and Assessment. In S. R. Jimerson, A. B. Nickerson, M. J. Mayer, and M. J. Furlong (Eds.), *The handbook of school violence and school safety: International research and practice*. New York, NY: Routledge. Retrieved from [http://safesupportivelearning.ed.gov/sites/default/files/sssta/20110322\\_DoE3BenbenishtyAstorInternationalmonitoring02072011.pdf](http://safesupportivelearning.ed.gov/sites/default/files/sssta/20110322_DoE3BenbenishtyAstorInternationalmonitoring02072011.pdf)

- Beran, T., & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32(3) 265-277.
- Beran, T., & Li, Q. (2007). The relationship between cyberbullying and school bullying. *Journal of Student Wellbeing*, 1(2), 15-33.
- Bethel School District v. Fraser*, 478 U.S. 675, 684-85, 106 S.Ct. 3159, 92 L.Ed.2d 549 (S. Ct.1986).
- Bird, L. E., Taylor T., Kraft K. M. (2012). Student conduct in the digital age: When does the First Amendment protection end and misconduct begin? In C. Wankel & L. Wankel (Eds.), (*Misbehavior online in higher education, Volume 5*). (pp. 183-205). Bingley, UK: Emerald Group Publishing doi: 10.1108/S2044-9968(2012)0000005012
- Biocca, F. (2000). New media technology and youth: Trends in the evolution of new media. *Journal of Adolescent Health* 27S(2), 22-29. Retrieved from <http://mindlab.org/images/d/DOC696.pdf>
- Bocij, P., & McFarlane, L. (2003). Cyberstalking: The technology of hate. *The Police Journal*, 76, 204-221.
- Buba□, G. (2001) *Computer Mediated Communication Theories and Phenomena: Factors that Influence Collaboration over the Internet* [Paper presented at the 3rd CARNet Users Conference, Zagreb]. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.11.822&rep1&type=pdf>
- Burnside v. Byars*, 363 F. 2d 744, (S. Ct. 1966).

Butler, D., Kift, S., & Campbell, M. (2009). Cyber bullying in schools and the law: Is there an effective means of addressing the power imbalance? *eLaw Journal: Murdoch University Electronic Journal of Law*, 16(1), 84-114.

California Rural Indian Health Board, California Tribal Epidemiology Center. (2009).

*United Indian health services community health profile*. Retrieved

from

[http://www.crihb.org/files/UIHS\\_Community\\_Health\\_Profile\\_2010\\_FINAL\\_Electronic.pdf](http://www.crihb.org/files/UIHS_Community_Health_Profile_2010_FINAL_Electronic.pdf)

California State Board of Trustees, Office of the Chancellor. (1996). *Committee of the whole status report on the integrated technology strategies initiative*.

(BOT Status Report 031996). Retrieved from

<http://www.docstoc.com/docs/129418316/BOT-Status-Report-031996>

California State University. (2005). *Measures of Success VII*. Retrieved from

[http://its.calstate.edu/documents/Data\\_Collection/I\\_Reports\\_MOS/mos7\\_2005/03-MOS2005-Introduction.pdf](http://its.calstate.edu/documents/Data_Collection/I_Reports_MOS/mos7_2005/03-MOS2005-Introduction.pdf)

California State University. (2011). *Access to excellence: Progress report*. Retrieved

from

[http://www.calstate.edu/accesstoexcellence/accountability/documents/BOT\\_A2E\\_ProgressReport\\_Oct2011.pdf](http://www.calstate.edu/accesstoexcellence/accountability/documents/BOT_A2E_ProgressReport_Oct2011.pdf)



California State University, Office of the Chancellor, Information Resources and

Technology. (n.d.) *Integrated Technology Strategy; Planning and Implementation Process*. Retrieved from

[http://its.calstate.edu/systemwide\\_it\\_resources/its\\_report.pdf](http://its.calstate.edu/systemwide_it_resources/its_report.pdf)

California Courts. (2014). *California Tribal Communities*. Retrieved from

<http://www.courts.ca.gov/3066.htm>

Carlyle, K. E., & Steinman, K. J. (2007). Demographic differences in the prevalence, co-occurrence, and correlates of adolescent bullying at school. *Journal Of School Health, 77*(9), 623-629. doi:10.1111/j.1746-1561.2007.00242.x

Cassidy, W., Jackson, M., & Brown, K. N. (2009). *School Psychology International August, 30*(4) 383-402. doi: 10.1177/0143034309106948

Cassidy, W., Faucher, C., & Jackson, M. (2013). Cyberbullying among youth: A comprehensive review of current international research and its implications and application to policy and practice. *School Psychology International, 34*(6), 1-38. Retrieved from

<http://spi.sagepub.com/content/early/2013/05/01/0143034313479697>

doi: 10.1177/0143034313479697

Cherokee Nation. (2014). *Citizenship*. Retrieved from

<http://www.cherokee.org/Services/TribalCitizenship/Citizenship.aspx>

*Chalifoux v. New Caney Independent Sch. Dist.*, 976 F.Supp. 659 (S.D. Tx. 1997).

- Christopherson, K. M. (2006). The positive and negative implications of anonymity in Internet social interactions: “On the Internet, Nobody Knows You’re a Dog”. *Computers in Human Behavior*, 23, 3038–3056. doi:10.1016/j.chb.2006.09.001
- Churchill, W. (2003). *Perversions of Justice: Indigenous peoples and Angloamerican law*. San Francisco, CA: City Lights.
- Civil Rights Act of 1964. Pub. L. No. 88-352, 78 Stat. 241 (1964).
- Crick, N. R. & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710–722.
- Crick, N., Werner, N., Casas, J., O’Brien, K., Nelson, D., Grotpeter, J., & Markon, K. (1999). Childhood aggression and gender: A new look at an old problem. In D. Bernstein (Ed.), *Nebraska symposium on motivation* (pp. 75-141). Lincoln NE: University of Nebraska Press.
- Cyberbullying and Other Online Safety Issues for Children: Hearing before the Subcommittee on Crime, Terrorism, and, Homeland Security of the Committee on the Judiciary*, 101<sup>st</sup> Congress 1, U.S. (2009).
- Cyberbullying Hurts: Respect for Rights in the Digital Age*. The Standing Senate Committee on Human Rights, 41st Parliament – 1st Session, Canada (2012). Retrieved from <http://www.parl.gc.ca/Content/SEN/Committee/411/ridr/rep/rep09dec12-e.pdf>
- David-Ferdon, C., & Feldman, H.M. (2007). Electronic media, violence, and adolescents: An emerging public health problem. *Journal of Adolescent Health*, 41, S1-S5.

- David-Ferdon, C., & Hertz, M. F. (2009). *Electronic Media and Youth Violence: A CDC Issue Brief for Researchers*. Atlanta (GA): Centers for Disease Control. Retrieved from [http://www.cdc.gov/violenceprevention/pdf/electronic\\_aggression\\_researcher\\_brief-a.pdf](http://www.cdc.gov/violenceprevention/pdf/electronic_aggression_researcher_brief-a.pdf)
- Deloria, V. (1988). *Custer died for your sins*. Norman, OK: University of Oklahoma Press.
- Dehue, F., Bolman, C., & Vollink, T. (2008). Cyberbullying: Youngsters' experiences and parental perception. *CyberPsychology and Behaviour, 11*, 217-223.  
doi:10.1089/cpb.2007.0008
- Dehue, F. (2013). Cyberbullying research: New perspectives and alternative methodologies. *Journal of Community & Applied Social Psychology, 23*, 1–6.  
doi: 10.1002/casp.2139
- DeVoe, J., & Murphy, C. (2011). Student reports of bullying and cyber-bullying: Results from the 2009 school crime supplement to the national crime victimization survey. *American Institutes for Research*. U.S. Department of Education (ED-05-CO-0044).
- Dooley, J., Cross, D., Hearn, L., Treyvaud, R. (2009). *Review of existing Australian and international cyber-safety research*. Child Health Promotion Research Centre. Perth, Australia: Edith Cowan University.

Dooley, J., Pyzalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying:

A theoretical and conceptual review. *Zeitschrift fur Psychologie/Journal of Psychology*, 217(4), 182–188. doi: 10.1027/0044-3409.217.4.182

Education Amendments of 1972 (Title IX) 20 U.S.C. §1681.

Espelage, D. L., & Swearer, S. M. (2003). Research on school bullying and victimization:

What have we learned and where do we go from here? *School Psychology Review*, 32(3), 365–383.

Erdur-Baker, Ö. (2010). Cyberbullying and its correlation to traditional bullying,

gender and frequent and risky usage of internet-mediated communication tools.

*New Media and Society*, 12(1), 109–125. doi: 10.1177/1461444809341260

Evans, S. (2002). *American Indians in American History 1870-2001*. Westport, CT:

Praeger.

Facebook statistics. (2011). Retrieved from <http://newsroom.fb.com/Key-Facts>

Fenaughty, J., & Harré, N. (2013). Factors associated with young people's successful

resolution of distressing electronic harassment. *Computers & Education*, 61(1), 242–250.

Feshbach, N. (1969). Sex differences in children's modes of aggressive responses toward

outsiders. *Merrill Palmer Quarterly*, 15(3), 249-258.

Feshbach, N. D., & Sones, G. (1971). Sex differences in adolescent reactions to

newcomers. *Developmental Psychology*, 4(3), 381–386.

Frederick, S., & Arguinzoni, J. (2010). *Cyberbullying and the states*. Retrieved from

<http://www.ncsl.org/issues-research/justice/cyberbullying-and-the-states.aspx>

Friedman, M. A. (2013). *The harmful psychological effects of the Washington football*

*mascot*. Retrieved from [http://www.changethemascot.org/wp-](http://www.changethemascot.org/wp-content/uploads/2013/10/DrFriedmanReport.pdf)

[content/uploads/2013/10/DrFriedmanReport.pdf](http://www.changethemascot.org/wp-content/uploads/2013/10/DrFriedmanReport.pdf)

Fukuchi, A. (2011). A balance of convenience: The use of burden-shifting devices in

criminal cyberharassment law. *Boston College Law Review* 52(1), 289-338.

Retrieved from <http://search.proquest.com/docview/896357940?accountid=11532>

Geen, R. G. (2001). *Human aggression*. (2<sup>nd</sup> ed.), Philadelphia, PA: Open University

Press. Retrieved from

[www.mcgraw-hill.co.uk/openup/chapters/0335204716.pdf](http://www.mcgraw-hill.co.uk/openup/chapters/0335204716.pdf)

Gillespie, A. A. (2006). Cyber-bullying and harassment of teenagers: The legal

response. *Journal of Social Welfare and Family Law*, 28(2), 123-136.

Gini G., & Pozzoli T. (2009) Association between bullying and psychosomatic

problems: A meta-analysis. *Pediatrics*, 123(3), 1059-1065. Retrieved from

<http://pediatrics.aappublications.org/content/123/3/1059.full.pdf>

doi: 10.1542/peds.2008-1215

- Gradinger, P., Strohmeier, D., & Spiel, C. (2010). Definition and measurement of cyberbullying. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 4(2), article 1. Retrieved from <http://cyberpsychology.eu/view.php?cisloclanku1/42010112301&article=1#>
- Greenstein, S. (2001). Commercialization of the Internet: The interaction of public policy and private choices or why introducing the market worked so well. In A. Jaffe, J. Lerner & S. Stern (Eds.), *Innovation Policy and the Economy* (Vol. 1) (pp. 151-186). Retrieved from <http://www.nber.org/chapters/c10779.pdf>
- Grigg, D. W. (2010). Cyber-aggression: Definition and concept of cyberbullying. *Australian Journal of Guidance and Counseling*, 20(2), 143-156.
- Greene, M.B. (2000). Bullying and Harassment in Schools. In R.S. Moser & C.E. Franz (Eds.), *Shocking Violence: Youth Perpetrators and Victims: A Multidisciplinary Perspective* (pp. 72–101). Springfield, IL: Charles C. Thomas.
- Harper v. Poway Unified School Dist.*, 549 U.S. 1262, 127 S. Ct. 1484, 167 L.Ed.2d 225 (S. Ct. 2007).

- Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011). *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online. Retrieved from [http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20I%20\(2009-11\)/EUKidsOnlineIIRports/D5%20Patterns%20of%20risk.pdf](http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20I%20(2009-11)/EUKidsOnlineIIRports/D5%20Patterns%20of%20risk.pdf)
- Hazelwood School Dist. v. Kuhlmeier*, 484 US 260 (S. Ct. 1988).
- Hemphill, S. A., Kotevski, A., Tollit, M., Smith, R., Herrenkohl, T. I., Toumbourou, J. W., & Catalano, R. F. (2012). Longitudinal predictors of cyber and traditional bullying perpetration in Australian secondary school students. *Journal of Adolescent Health, 51*(1), 59–65. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3763991/>. doi: 10.1016/j.jadohealth.2011.11.019
- Hertz, M.F., & David-Ferdon, C. (2008). *Electronic media and youth violence: A CDC issue brief for educators and caregivers*. Atlanta (GA): Centers for Disease Control. Retrieved from <http://www.cdc.gov/violenceprevention/pdf/ea-brief-a.pdf>
- Hinduja, S., & Patchin, J. (2009). *Cyberbullying and online aggression survey instrument 2009 version*. Retrieved from <http://www.cyberbullying.us/research.php>
- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research, 14*(3), 206-221. doi: 10.1080/13811118.2010.494133
- Hinduja, S., & Patchin, J. (2011). Cyberbullying: A review of the legal issues facing educators. *Preventing School Failure, 55*(2), 71-78.

- Hinduja, S., & Patchin, J. (2012). State cyberbullying laws: A brief review of state cyberbullying laws and policies. Retrieved from [http://www.cyberbullying.us/Bullying\\_and\\_Cyberbullying\\_Laws.pdf](http://www.cyberbullying.us/Bullying_and_Cyberbullying_Laws.pdf)
- Hinduja, S. & Patchin, J. (2013). *State Cyberbullying laws: A brief review of state cyberbullying laws and policies*. Retrieved from [http://www.cyberbullying.us/Bullying\\_and\\_Cyberbullying\\_Laws.pdf](http://www.cyberbullying.us/Bullying_and_Cyberbullying_Laws.pdf)
- Holt, T. J., Bossler, A. M., & May, D. C. (2012). Low self-control, deviant peer associations, and juvenile cyberdeviance. *American Journal of Criminal Justice*, 37(3), 378-395. doi: 10.1007/s12103-011-9117-3
- Hoff, D. L., & Mitchell, S.N. (2009). Cyberbullying: Causes, effects and remedies. *Journal of Educational Administration* (47)5, 652-665.  
doi: 10.1108/09578230910981107
- Hoxie, F. E., & Iverson P. (Eds.). (1998). *Indians in American history: An introduction* (2<sup>nd</sup> ed.). Wheeling, IL: Harlan Davidson, Inc.
- H.R. 482--113th Congress: The Tyler Clementi Higher Education Anti-Harassment Act of 2013. (2013). Retrieved January 11, 2014, from <http://www.govtrack.us/congress/bills/113/hr48>
- H.R. 1966--111th Congress: The Megan Meier Cyberbullying Prevention Act. (2009). Retrieved January 11, 2014, from <http://www.govtrack.us/congress/bills/111/hr1966>



- Huesmann, L. R., & Guerra, N. G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology*, 72(2), 408-419. doi: 10.1037/0022-3514.72.2.408
- Huang, Y. Y., & Chou, C. (2010). An analysis of multiple factors of cyberbullying among junior high school students in Taiwan. *Computers in Human Behavior*, 26(6), 1581-1590. doi: 10.1016/j.chb.2010.06.005
- Humboldt State University. (2000). *Information technology plan*. Retrieved from <https://www.humboldt.edu/its/sites/its/files/docs/itplan.pdf>
- Humboldt State University. (2012) *2011-2012 Fact book*. Office of Institutional Research and Planning. Retrieved from [http://www.humboldt.edu/irp/FactBook/HSU.%282011%29.Fact\\_Book.pdf](http://www.humboldt.edu/irp/FactBook/HSU.%282011%29.Fact_Book.pdf)
- Humboldt State University. (2013) *2012-2013 Fact Book*. Office of Institutional Research and Planning. Retrieved from [http://www.humboldt.edu/irp/FactBook/HSU.\(2012\).Fact\\_Book.pdf](http://www.humboldt.edu/irp/FactBook/HSU.(2012).Fact_Book.pdf)
- Internet World Statistics. (2012). *North America Internet usage and population*. Retrieved from <http://www.internetworldstats.com/stats.htm>

- Internet Safety Technical Task Force [ISTTF]. (2008). *Enhancing child safety and online technologies: Final report of the Internet Safety Technical Task Force to the Multi-State Working Group on Social Networking of State Attorneys General of the United States*. Cambridge, Mass: Berkman Center for Internet & Society at Harvard University, Retrieved from [http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/\\_les/ISTTF\\_Final\\_Report.pdf](http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/_les/ISTTF_Final_Report.pdf).
- Jackson, M., Cassidy W. and Brown, K. N. (2009). You were born ugly and you'll die ugly too": Cyber-bullying as relational aggression. *In Education*, 15(2), 68-82. Retrieved from <http://ineducation.ca/ineducation/article/view/57/539>
- Jaimes M. A. (Ed.). (1992) *The state of Native America: Genocide, colonization, and resistance*. Boston, MA: South End Press.
- JC ex rel. RC v. Beverly Hills Unified School*, 711 F. Supp. 2d 1094 (C.D. Ca. 2010).
- Joinson, A. (1999). Social desirability, anonymity and Internet-based questionnaires. *Behavior Research Methods, Instruments and Computers*, 31(3), 433-438.
- Jones, J. C., & Scott, S. (2012). Cyberbullying in the university classroom: A multiplicity of issues. In L. A. Wankle & C. Wankle (Eds.), *Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)* (pp. 157-182). Bingley, UK: Emerald Group Publishing Limited.
- doi: 10.1108/S2044-9968(2012)0000005011

- Jones, L. M., Mitchell, K. J., & Finkelhor, D. (2012). Trends in youth Internet victimization: Findings from three youth Internet safety surveys 2000-2010. *Journal of Adolescent Health, 50*(2), 179-186. doi: 10.1016/j.jadohealth.2011.09.015
- J.S. ex rel. Snyder v. Blue Mountain*, 593 F.3d 286, 301 (3rd. Cir.2010).
- JS v. Bethlehem Area School Dist.*, 807 A. 2d 847 (Pa. S. Ct. 2002).
- Juvonen, J., & Gross, E. F. (2008). Extending the school grounds? — Bullying experiences in cyberspace. *Journal of School Health, 78*(9), 496–506.
- Keisler, S., Siegel, J., & McGuire, T. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist, 39*(10), 1123–1134.
- Kenworthy, A. L., Brand, J. E., & Bartrum, D. (2012). The ripple effect of positive change: Raising awareness of cyberbullying through a community-based service-learning project. In L. A. Wankle & C. Wankle (Eds.), *Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)* (pp. 81-103). Bingley, UK: Emerald Group Publishing Limited.  
doi :10.1108/S2044-9968(2012)0000005008
- King, A. V. (2010). Constitutionality of cyberbullying laws: Keeping the online playground safe for both teens and free speech. *Vanderbilt Law Review, 63*, 845.  
Retrieved from <http://www.vanderbiltlawreview.org/articles/2010/05/King-Constitutionality-of-Cyberbullying-Laws-63-Vand.-L.-Rev.-845-2010.pdf>

- Konishi, C., Hymel, S., Zumbo, B. D., Li, Z., Taki, M., Slee, P., Pepler, D., Sim, H., Craig, W., Swearer, S., Kwak, K. (2009). Investigating the comparability of a self-report measure of childhood bullying across countries. *Canadian Journal of School Psychology, 24*(1), 82-93. doi: 10.1177/082957350933161
- Kowalski, R. M., Giumetti, G.W., Schroeder, A.W., & Reese, H. H. (2012a). Cyber bullying among college students: Evidence from multiple domains of college life. In C. Wankel & L. Wankel (Eds.), *Misbehavior online in higher education. Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)* (pp. 293-321 ). Bingley, UK: Emerald Group Publishing Limited.
- Kowalski, R. M., Limber, S. P., & Agatston, P.W. (2012b). *Cyberbullying: Bullying in the digital age* (2nd ed.). Malden, MA: Wiley-Blackwell.
- Kowalski, R. M., Morgan, C. A., & Limber, S. P. (2012c). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International, 33*(5), 505-519. doi: 10.1177/0143034312445244
- Kowalski, R. M., & Limber, S.P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health, 53*(1), S13-S20. doi: 10.1016/j.jadohealth.2012.09.018
- Kraft, E. M., & Wang, J. (2009). Effectiveness of cyber bullying prevention strategies: A study on students' perspectives. *International Journal of Cyber Criminology, 3*(2), 513-535.

- Kupczynski, L., Mundy, M. A., Green, M. E. (2013). The prevalence of cyberbullying among ethnic groups of high school students. *International Journal of Educational Research*, 1(2) 48-53. Retrieved from <http://ijer.ijssse.com/?q=v1i2-2013>
- Langos, C. (2012). Cyberbullying: The challenge to define. *Cyberpsychology, Behavior, And Social Networking*, 15(6), 285-289. doi: 10.1089/cyber.2011.0588
- LaVine v. Blaine School District*, 257 F.3d 981 (2001).
- Law, D. M., Shapka, J. D., Hymel, S., Olson, B. F., Waterhouse, T. (2012). The changing face of bullying: An empirical comparison between traditional and internet bullying and victimization. *Computers in Human Behavior*, 28(1), 226-232. doi: 10.1016/j.chb.2011.09.004
- Lee, S. (2012) *Bullying-like Behaviours in South Korea: Terms used, Origins in Early Childhood, and Links to Moral Reasoning*. (Doctoral dissertation). Retrieved from <http://eprints.gold.ac.uk/id/eprint/6440>. (6440)
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). *Social media & mobile internet use among teens and young adults*. Pew Internet & American Life Project. Retrieved from [http://67.192.40.213/~media/Files/Reports/2010/PIP\\_Social\\_Media\\_and\\_Young\\_Adults\\_-Report\\_Final\\_with\\_toplevels.pdf](http://67.192.40.213/~media/Files/Reports/2010/PIP_Social_Media_and_Young_Adults_-Report_Final_with_toplevels.pdf)
- Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, 23(4), 1777-1791. doi: 10.1016/j.chb.2005.10.005

- Li, Q., Cross, D., & Smith, P. K. (Eds.) (2012). *Cyberbullying in the global playground: Research from international perspectives*. Malden, MA: Wiley-Blackwell.
- Livingstone, S., Haddon, L., Görzig, A., & Ólafsson, K. (2011). *Risks and safety on the Internet: The perspective of European children: summary*. EU Kids Online, Deliverable D4. EU Kids Online Network, London, UK. Retrieved from [http://eprints.lse.ac.uk/33731/1/Risks%20and%20safety%20on%20the%20internet\(lsero\).pdf](http://eprints.lse.ac.uk/33731/1/Risks%20and%20safety%20on%20the%20internet(lsero).pdf)
- Lopez, M. H., Gonzalez-Barrera, A., Patten, E. (2013). Closing the digital divide: Latinos and technology adoption. Pew Research Center. Retrieved from <http://www.pewhispanic.org/2013/03/07/closing-the-digital-divide-latinos-and-technology-adoption/>
- MA Code 269 §14A (2010). Retrieved from <https://malegislature.gov>
- Marlin-Bennett, R., & Thorton, N. E. (2012). Governance within social media websites: Ruling new frontiers. *Telecommunications Policy*, 36, 493–501.  
doi:10.1016/j.telpol.2012.01.002
- Menesini, E., Nocentini, A., Palladino, E. B., Frisé n, A., Berne, S., Ortega-Ruiz, R., Calmaestra, J., Scheithauer, H., Schultze-Krumbholz, A., Luik, P., Naruskov, K., Blaya, C., Berthaud, J., & Smith, P. K. (2012). Cyberbullying definition among adolescents: A comparison across six European countries. *Cyberpsychology, Behavior, and Social Networking*, 15(9). doi: 10.1089/cyber.2012.0040

- Menesini, E., Nocentini, A. and Camodeca, M. (2013). Morality, values, traditional bullying, and cyberbullying in adolescence. *British Journal of Developmental Psychology*, 31(1), 1–14. doi: 10.1111/j.2044-835X.2011.02066.x
- Mishna, F., Khoury-Kassabri, M., Gadalla, T., Daciuk, J. (2012). Risk factors for involvement in cyber bullying: Victims, bullies and bully–victims. *Children and Youth Services Review*, 34(1), 63–70.
- Mitchell, K. J., Ybarra, M., & Finkelhor, D. (2007). The relative importance of online victimization in understanding depression, delinquency and substance use. *Child Maltreatment*, 12(4), 314-324. doi: 10.1177/1077559507305996
- Modecki, K. L., Barber, B. L., & Vernon, L. (2013). Mapping developmental precursors of cyber-aggression: Trajectories of risk predict perpetration and victimization. *Journal of Youth and Adolescence*, 42, 651–661. Retrieved from <http://download.springer.com/static/pdf> doi: 10.1007/s10964-012-9887-z
- Mont. Code Ann., § 45-5-220 (2011). Retrieved from <http://law.justia.com/codes/montana/2011/title45/chapter45-5/part45-5-2/section45-5-220>
- Mont. Code Ann., § 45-8-213 (2011). Retrieved from <http://law.justia.com/codes/montana/2011 /title45/chapter45-8/part45-8-2/section45-8-213>
- Morse v. Frederick* 551 U.S. 393, 403, 127 S.Ct. 2618, 168 L.Ed.2d 290 (S. Ct. 2007).
- Nardi, P. M., (2006). *Doing Survey Research*. Boston, MA: Pearson Education, Inc.

- National Conference of State Legislatures [NCSL]. (2012). *State Cyberstalking And Cyberharassment Laws*. Washington, DC. Retrieved from:  
<http://www.ncsl.org/research/telecommunications-and-information-technology/cyberstalking-and-cyberharassment-laws.aspx>
- National Congress of American Indians. (n.d.) *An introduction to Indian Nations in the United States*. Retrieved from [http://www.ncai.org/about-tribes/Indians\\_101.pdf](http://www.ncai.org/about-tribes/Indians_101.pdf)
- Nocentini, A., Calmaestra, J., Schultze-Krumboltz, A., Scheithauer, H., Ortega, R., & Menesini, E. (2010). Cyberbullying: Labels, behaviours and definition in three European countries. *Australian Journal of Guidance and Counselling*, 20, 129–142. doi: 10.1375/ajgc.20.2.129#
- Norris, T., Vines, P.L., & Hoeffel, E. M. (2012). The American Indian and Alaska Native Population: 2010. *2010 Census Briefs*. U.S. Department of Commerce Economics and Statistics Administration, U.S. Census Bureau (C2010BR-10). Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf>
- Obama, B.H. (2010). *It Gets Better*. Retrieved from <http://www.whitehouse.gov/it-gets-better-transcript>
- O'Connor, C., Hill, L. D., & Robinson, S. R. (2009). Who's at risk in school and what's race got to do with it? *Review of Research in Education*, 33(1), 1-34.  
doi: 10.3102/0091732X08327991



- Ólafsson, K., Livingstone, S., & Haddon, L. (2013). *Children's Use of Online Technologies in Europe. A review of the European evidence base*. LSE, London: EU Kids Online. retrieved from [http://eprints.lse.ac.uk/50228/1/\\_Libfile\\_repository\\_Content\\_Livingstone,%20S\\_Children's%20use%20of%20online%20technologies%20in%20Europe\(lsero\).pdf](http://eprints.lse.ac.uk/50228/1/_Libfile_repository_Content_Livingstone,%20S_Children's%20use%20of%20online%20technologies%20in%20Europe(lsero).pdf)
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. New York, NY: Blackwell.
- Olweus, D. (1995a). Bullying or peer abuse at school: Facts and intervention. *Current Directions in Psychological Science*, 4(6), 196-200.  
doi: 10.1111/1467-8721.ep10772640
- Olweus, D. (1995b). A useful evaluation design, and effects of the Olweus Bullying Prevention Program. *Psychology, Crime & Law*, 11(4), 389-402.  
doi: 10.1080/10683160500255471
- Olweus, D. (2012). Comments on cyberbullying article: A rejoinder. *European Journal of Developmental Psychology*, 9(5), 559-568.
- Ohio Revised Code, §3313.666 (2012). Retrieved from <http://codes.ohio.gov/orc/3313.666>
- O'Sullivan, P. B., & Flanagan, A. J. (2003). Reconceptualizing "Flaming" and other problematic messages. *New Media & Society*, 5(1), 69-94. Retrieved from <http://nms.sagepub.com/content/5/1/69> doi: 10.1177/1461444803005001908

- Paradise, A. (2012). Picture perfect?: College students' experiences and attitudes regarding their photo-related behaviors on Facebook. In L. A. Wankle & C. Wankle (Eds.), *Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)* (pp. 127-155). Bingley, UK: Emerald Group Publishing Limited. doi: 10.1108/S2044-9968(2012)0000005015
- Parris, L., Varjas, K., Meyers, J., & Cutts, H. (2012). High school students' perceptions of coping with cyberbullying. *Youth Society, 44*(2), 284–306. doi: 10.1177/0044118X11398881
- Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice, 4*(2), 148–169. doi: 10.1177/1541204006286288.
- Patchin, J.W., & Hinduja, S. (Eds.). (2012). *Cyberbullying prevention and response: Expert perspectives*. New York, NY: Routledge.
- Pepler, D. J., & Rubin, K. H. (Eds.). (1991). *The development and treatment of childhood aggression*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Perren, S., Dooley, J., Shaw, T., & Cross, D. (2010). Bullying in school and cyberspace: Associations with depressive symptoms in Swiss and Australian adolescents. *Child and Adolescent Psychiatry and Mental Health, 4*, 1–10. Retrieved from [http:// www.capmh.com/content/4/1/28](http://www.capmh.com/content/4/1/28). doi: 10.1186/1753-2000-4-28

- Pornari, C. D., & Wood, J. (2010). Peer and cyber aggression in secondary school students: The role of moral disengagement, hostile attribution bias, and outcome expectancies. *Aggressive Behavior, 36*(2), 81-94. doi: 10.1002/ab.20336
- Priebe, G., Mitchell, K. J., & Finkelhor, D. (2013). To tell or not to tell? Youth's responses to unwanted Internet experiences. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 7*(1), article 6. doi: 10.5817/CP2013-1-6
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon, 9*(5), 1-6. Retrieved from <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>
- Prucha, P. F. (Ed.). (2000). *Documents of United States Indian Policy* (3<sup>rd</sup>. ed.). Lincoln, NE: University of Nebraska Press.
- Raskauskas, J., & Stolz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology, 43*(3), 564 –75. doi: 10.1037/0012-1649.43.3.564
- Renati, R., Berrone, C., Zanneti, M. A. (2012). Morally disengaged and unempathetic: Do cyberbullies fit these definitions? An exploratory study. *Cyberpsychology, Behavior, and Social Networking, 15*(8), 391-398. doi: 10.1089/cyber.2012.0046

- Robers, S., Kemp, J., and Truman, J. (2012). *Indicators of School Crime and Safety: 2012* (NCES 2013-036/ NCJ 241446). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. Retrieved from <http://nces.ed.gov/pubs2013/2013036.pdf>
- Sbarbaro, V., & Enyeart Smith, T.M. (2011). An exploratory study of bullying and cyberbullying behaviors among economically/educationally disadvantaged middle school students. *American Journal of Health Studies*, 26(3), 139-151.
- Schwartz, D., Dodge, K.A., Pettit, G. S., & Bates, J.E. (1997). The early socialization of aggressive victims of bullying. *Child Development*, 68, 665–675.
- Seals, D. & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence*, 38(152), 735-747.
- Shariff, S. (2008). *Cyber-bullying: Issues and solutions for the school, the classroom and the home*. New York, NY: Routledge.
- Shea, V. (1994). *Netiquette*. San Francisco: Albion Books. Retrieved from <http://www.albion.com/netiquette/book/index.html>
- Slonje, R. & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian Journal of Psychology*, 49, 147–154. doi: 10.1111/j.1467-9450.2007.00611.x

- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S. and Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376–385. doi: 10.1111/j.1469-7610.2007.01846.x
- Smith, P. K., & Monks, C. P. (2008). Concepts of bullying: Developmental and cultural aspects. *International Journal of Adolescent Medicine and Health*, 20(2), 101-112.
- Smith P. K., Thompson, F., & Bhatti S. (2012). Ethnicity, gender, bullying and cy-berbullying in English secondary school. *Studia Edukacyjne nr 23*, pp. 7-18. Retrieved from [https://repozytorium.amu.edu.pl/jspui/bitstream/10593/5886/1/studia\\_eduk\\_23\\_s\\_7-18.pdf](https://repozytorium.amu.edu.pl/jspui/bitstream/10593/5886/1/studia_eduk_23_s_7-18.pdf)
- Spears, R., & Lea, M. (1992). Social influence and the influence of the “social” in computer-mediated communication. In M. Lea (Ed.) *Contexts of computer-mediated communication*. (pp. 30-65). Hemel-Hempstead: Harvester-Wheatsheaf.
- Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health*, 41, 283–293. doi:10.1016/j.jadohealth.2007.04.009

- Sourander, A., Brunstein Klomek, A., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., Ristkari, T., & Helenius, H. (2010). Psychosocial risk factors associated with cyberbullying among adolescents: A population-based study. *Archives of General Psychiatry*, *67*(7), 720-728. Retrieved from <http://archpsyc.jamanetwork.com/>
- Stannard D. E. (1992). *American holocaust: The conquest of the New World*. New York, NY: Oxford University Press.
- Stuart-Cassel, V., Bell, A., & Springer, F. J. U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2011). *Analysis of state bullying laws and policies*. Washington D.C. (Contract No. ED-CFO-10-A- 0031/0001). Retrieved from U.S. Department of Education website: <http://www2.ed.gov/rschstat/eval/bullying/state-bullying-laws/state-bullying-laws.pdf>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*(3), 277–287.
- Trochim, W. M. K. (2006) *Analysis*. Retrieved from <http://www.socialresearchmethods.net/kb/analysis.php>

Tyler, K. M., Uqdah, A. L., Dillihunt, M. L., Beatty-Hazelbaker, R., Conner, T., Gadson, N., Henchy, A., Hughes, T., Mulder, S. Owens, E. Roan-Belle, C. Smith, L. T., & Stevens, R. (2008). Cultural discontinuity: Toward a quantitative investigation of a major hypothesis in education. *Educational Researcher*, 37(5), 280-297.  
doi 10.3102/0013189X08321459

UCLA Center for Communication Policy. (2003). *The UCLA Internet report: Surveying the digital future: Year three*. Retrieved from  
<http://images.forbes.com/fdc/mediaresourcecenter/UCLA03.pdf>

United Nations Children's Fund, Innocenti Research Centre. (2011). *Child safety online: Global challenges and strategies*. Retrieved from  
[http://www.unicef-irc.org/publications/pdf/ict\\_eng.pdf](http://www.unicef-irc.org/publications/pdf/ict_eng.pdf)

United Nations Children Fund Canada. (2012). *Bullying and cyberbullying: Two sides of the same coin*. Retrieved from  
[http://www.unicef.ca/sites/default/files/imce\\_uploads/TAKE%20ACTION/ADVOCATE/DOCS/cyberbullying\\_submission\\_to\\_senate\\_committee.pdf](http://www.unicef.ca/sites/default/files/imce_uploads/TAKE%20ACTION/ADVOCATE/DOCS/cyberbullying_submission_to_senate_committee.pdf)

*United States v. Kelner*, 534 F. 2d 1020 - Court of Appeals, (2d Cir. 1976).

U.S. Const. amend. I

USC Annenberg School Center for the Digital Future. (2013). *The 2013 digital future report: Surveying the digital future: Year eleven*. Retrieved from  
<http://www.digitalcenter.org/wp-content/uploads/2013/06/2013-Report.pdf>

- U.S. Department of Education. (2011) National Indian education study.  
Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/studies/2012466.pdf>
- U.S. Department of the Interior, Bureau of Indian Affairs. (2013). *Washburn announces consideration of revisions to Federal acknowledgment regulations*. Retrieved from <http://www.bia.gov/cs/groups/public/documents/text/idc1-022124.pdf>
- U.S. Department of the Interior, Bureau of Indian Affairs. (2013). *Who is an American Indian or Alaska Native?* Retrieved from <http://www.bia.gov/FAQs/index.htm>
- U.S. Department of Justice. (1999). *Cyberstalking: A new challenge for law enforcement and industry*. Retrieved from <http://www.usdoj.gov/criminal/cybercrime/cyberstalking.htm>.
- U.S. Census Bureau. (2012). *American Indian and Alaska Native Heritage Month: November 2012*. Retrieved from [http://www.census.gov/newsroom/releases/pdf/cb12ff-22\\_aian.pdf](http://www.census.gov/newsroom/releases/pdf/cb12ff-22_aian.pdf)
- Utah Code, § 76-9-201 (2009). Retrieved from [http://le.utah.gov/code/TITLE76/htm/76\\_09\\_020100.htm](http://le.utah.gov/code/TITLE76/htm/76_09_020100.htm)
- Utah Code, § 53A-11a-102 (2011). Retrieved from <http://le.utah.gov/~2011/bills/sbillenr/sb0304.pdf>
- Tinker v. Des Moines Independent Community School Dist.*, 393 US 503 (S. Ct. 1969).
- Thomas v. Board of Educ.*, 607 F.2d 1043, 1057 (2d Cir.1979).



- Vaillancourt, T., McDougall, P., Hymel, S., Krygsman, A., Miller, J., Stiver, K., & Davis, C. (2008). Bullying: Are researchers and children/youth talking about the same thing? *International Journal of Behavioral Development*, *32*(6), 486–495. doi: 10.1177/0165025408095553
- Valkenburg P. M., Peter J. (2009). Social consequences of the Internet for adolescents: A decade of research. *Current Directions in Psychological Science*, *18*(1), 1–5. doi:10.1111/j.1467-8721.2009.01595.x.
- Vandebosch, H., & Van Cleemput, K. (2009). Cyberbullying among youngsters: profiles of bullies and victims. *New Media & Society*, *11*(8), 1349-1371. doi: 10.1177/1461444809341263
- Virginia Code, §18.2-60(A)(1), (B), (2002). Retrieved from <http://vacode.org/18.2-60/>
- Virginia Code, 431§ 22.1-279.6(1)(A), (2009). Retrieved from <http://vacode.org/22.1-279.6/>
- Von Marées, N., & Petermann, F. (2012). Cyberbullying: An increasing challenge for schools. *School Psychology International*, *33*(5), 467-476. doi: 10.1177/0143034312445241
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002). *The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States*. Retrieved from [http://www.secretservice.gov/ntac/ssi\\_final\\_report.pdf](http://www.secretservice.gov/ntac/ssi_final_report.pdf)

- Walker, C. M., Sockman, B. R., & Koehn, S. (2011). An exploratory study of cyberbullying with undergraduate university students. *TechTrends: Linking Research and Practice to Improve Learning*, 55(2), 31-38.
- Wang, J., Iannotti, R. J., Luk, J. W. (2012). Patterns of adolescent bullying behaviors: Physical, verbal, exclusion, rumor, and cyber. *Journal of School Psychology*, 50(4), 521-534. doi:10.1016/j.jsp.2012.03.004
- Wankel, C., & Wankel, L. (Eds.), (2012). *Misbehavior online in higher education (Cutting-edge Technologies in Higher Education, Volume 5)*. Bingley, UK: Emerald Group Publishing Limited.
- Watts v. United States*, 394 US 705 (S. Ct. 1969).
- Werner, N. E., Bumpus, M. F., & Rock, D. (2010). Involvement in Internet aggression during early adolescence. *Journal of Youth and Adolescence*, 39(6), 607-19. doi 10.1007/s10964-009-9419-7
- West v. Derby Unified School District No. 260*, 206 F.3d 1358 (10th Cir. 2000).
- Willard, N. (1997). *Moral development in the information age*. Retrieved from <http://tigger.uic.edu/~Inucci/MoralEd/articles/willard.html>
- Willard, N. (2005). Cyberbullying and cyberthreats. *Center for Safe and Responsible Use of the Internet*. Retrieved from <http://bcloud.marinschools.org/SafeSchools/Documents/BP-CyberBandT.pdf>

- Willard, N. (2007). Educator's guide to cyberbullying and cyberthreats. *Center for Safe and Responsible Use of the Internet*. Retrieved from <http://www.councilofcollaboratives.org/files/cbcteducator.pdf>
- Willard, N. (2012). *Cyberbullying survey*. Retrieved from <http://kernstopbullying.org/wp-files/kernstopbullying.org/2012/07/cyberbullyingStudentIntermediateGrades-survey.pdf>.
- Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of Internet bullying. *Journal of Adolescent Health, 41*(6), S14–S21. doi:10.1016/j.jadohealth.2007.08.018
- Wisniewski v. Board of Educ. of Weedsport Cent. School Dist.*, 494 F. 3d 34 - Court of Appeals, (2d Cir. 2007).
- Wolak, J., Mitchell, K. J., & Finkelhor, D. (2007). Does online harassment constitute bullying? An exploration of online harassment by known peers and online-only contacts. *Journal of Adolescent Health 41*, S51–S58. doi: 10.1016/j.jadohealth.2007.08.019
- Wong-Lo, M., & Bullock, L. M. (2011). Digital aggression: Cyberworld meets school bullies. *Preventing School Failure, 55*(2), 64–70. doi:10.1080/1045988X.2011.539429

- Xie, H., Swift, D. J., Cairns, B. D., & Cairns, R. B. (2002). Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. *Social Development, 11*(2), 205-24. doi: 10.1111/1467-9507.00195
- Ybarra, M. L. (2004a). Linkages between depressive symptomatology and Internet harassment among young regular Internet users. *Cyberpsychology and Behavior, 7*(2), 247–57.
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry, 45*(7), 1308-1316.
- Ybarra, M. L., Boyd, D., Korchmaros, J. D., & Oppenheim, J. (2012). Definition and measuring cyberbullying within the larger context of bullying victimization. *Journal of Adolescent Health, 51*(1), 53–58. doi: 10.1016/j.jadohealth.2011.12.031
- Zapf, D. (1999). Organisational, work group related and personal causes of mobbing/bullying at work. *International Journal of Manpower, 20*(1/2), 70-85.
- Zapf, D., & Einarsen, S. (2001). Bullying in the workplace: Recent trends in research and practice-an introduction. *European Journal of Work and Organizational Society, 10*(4), 369-373. doi: 10.1080/13594320143000807

Zhou, Z., Tang, H., Tian, Y., Wei, H., Zhang, F., & Morrison, C. (2013). Cyberbullying and its risk factors among Chinese high school students. *School Psychology International, 34*(6), 630-647. doi: 10.1177/0143034313479692

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order vs. deindividuation, impulse, and chaos. In W. J. Arnold & D. Levine (Eds.). *Nebraska symposium on motivation* (Vol. 17). (pp. 237–307). Lincoln: University of Nebraska Press.