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A Survey of the Practices and Perceptions of Students in One Catholic High School on the Use of the Internet in Relation to Safety, Cyberbullying, and Sexting

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The University of San Francisco

A SURVEY OF THE PRACTICES AND PERCEPTIONS OF STUDENTS
IN ONE CATHOLIC HIGH SCHOOL ON THE USE OF THE INTERNET
REGARDING SAFETY, CYBERBULLYING, AND SEXTING

A Dissertation Presented
to
The Faculty of the School of Education
Leadership Studies Department
Catholic Educational Leadership Program

In Partial Fulfillment
of the Requirements of the Degree
Doctor of Education

by
Diana L. Murray
San Francisco
May 2014

UNIVERSITY OF SAN FRANCISCO
Dissertation Abstract

A Survey of the Practices and Perceptions of Students in One Catholic High School
on the Use of the Internet in Relation to Safety, Cyberbullying, and Sexting

Digital technology holds a powerful and ubiquitous place in society. The Internet provides today's students with unprecedented access to information. Its use in education has transformed educational paradigms, yet it also provides new challenges. While students do use the technology for schoolwork, they also use it in inappropriate ways. The Internet has provided a powerful and invasive weapon for cyberbullies and predators to prey on the vulnerable and the unsuspecting. The Pontifical Council for Social Communications (2002) affirmed that "[Y]oung people need to learn how to function well in the world of cyberspace, make discerning judgments according to sound moral criteria" (#7). Furthermore, John Paul II (1990a) espoused the importance of the power and potential of technology, especially for youth, and warned that technology be embraced only if the moral component drives its use.

A quantitative study was performed using the *Student Internet Use Survey* that was developed to investigate the practices and perceptions of students in a Catholic high school on the use of the Internet. Specifically, this study examined students' practices and perceptions related to general Internet usage, safety, cyberbullying, and sexting. An online survey was used to collect data from 483 students who were enrolled in a Catholic high school that employs 1-to-1 technology.

Survey data revealed that teens used the Internet everyday and 96% used social media. Eighty percent used privacy settings to protect their information, and nearly 8 of 10 were concerned that information posted online could negatively affect their future.

The threat of cyberbullying is a realistic danger, and over three-quarters of teens reported that adults should be involved when addressing the concerns of cyberbullying.

Additionally, 30% of teens engaged in sexting activities, informing the educational community that educators need to educate students about the dangers and long-term effects of sexting practices.

This study provides valuable information about students in Catholic high schools regarding their perceptions and practices on the use of the Internet. By gaining knowledge and understanding of students' practices and perceptions, administrators and educators will be able to create policies and design curriculum to address student and community needs.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

One of the most important goals in Catholic education is to empower students to discover and embrace the sacred in the secular world (Benedict XVI, 2009; Congregation for Catholic Education, 1997; Paul VI, 1965b, 1965c). Digital technology holds a powerful and ubiquitous place in society. In the ideal, it can be used to protect the dignity of all and to promote the common good. Technology provides access to the world's information and its inhabitants; it enables people to form connections that transcend the barriers of time, distance, and political boundaries.

Today's students must develop intelligent and creative measures to solve tomorrow's challenges. They must be given the tools to thrive in a global community, and educators must ensure that students are prepared. Many schools have incorporated technology use in the curriculum to better engage and transform their students; some schools have even instituted 1-to-1 technology programs. Irrespective of the manner of its availability, the tools of technology provide new challenges for educators. The omnipresence of unbridled information and images prove too great a temptation for some students when access to inappropriate material that was once difficult to obtain is now simply a click away.

Statement of the Problem

The use of computer technology in education is not new, but its partnership with the Internet has transformed educational paradigms and has propelled educational

pedagogy into the future. In 2003, Margaret Honey, the Director of the Center for Children and Technology stated,

Twenty years ago, the Internet was the stuff of science fiction, but education and government leaders had the foresight to develop a solid foundation on which the future of technology planning would rest. The stage is now set to create a plan that will help us chart the course for education technology for the next twenty years. (McMillan Culp, Honey, & Mandinach, p. 24)

In 2000, the number of United States Internet users exceeded 95 million. In 2012, the number exceeded 245 million, 78.1% of the country's population. In 2000, the number of global Internet users numbered nearly 361 million. In 2012, users numbered nearly 2.5 billion, 34.3% of the world's population (Internet World Stats.com, 2012). This growth testifies to the ever-increasing infusion of technology into human life. In 2005, 98% of public schools in the United States boasted Internet access. This was a 13% increase from 2000 (National Center for Educational Statistics, 2011). Additionally in 2005, a Pew Internet Project survey reported that teen use of the Internet in schools had grown 45% since 2000, and that 16 million teens accessed the Internet at school (Hitlin & Raine, 2005). Internet access at public high schools rose to 99% in 2008 (National Center for Educational Statistics, 2011). Unfortunately, there is no national clearinghouse for statistics regarding Internet use by Catholic students. Most studies focus on randomly chosen individual teens rather than focusing on specific school communities. However, several recent studies (Dowdell, Burgess, & Flores, 2011; Reich, Subrahmanyam, & Espinoza, 2012; Temple et al., 2012) coming out of the health industry have focused on public high school communities, and middle school students from a parochial school were included in the population of one of the studies (Dowdell,

Burgess, & Flores, 2011). These researchers have entreated others to continue original research in the areas of adolescents and technology.

The increase of technology use in schools has created a plethora of learning opportunities for students. History has proven that new and exciting technology usually comes with its negative aspects, and the Internet certainly has its dark side. Students are increasingly required to use technology for education both in and out of school. While students do use the technology for schoolwork, they also use it in inappropriate ways. Technology, then, has become a double-edged sword for education, providing incredibly powerful avenues for both learning and destruction. Teens use technology to do homework, communicate with friends, play music and video games, and shop; but they also use it to harass classmates, post inappropriate information, and share sexually explicit photos and videos, usually of themselves (Cox Communications, 2009; Lenhart et al., 2008; Lenhart, Madden, Macgill, & Smith, 2007; The National Campaign, 2008). Understanding the perceptions and practices of students regarding technology use is imperative for educators to fully prepare their students for the future (Goodstein, 2007).

Researchers (*A Nation Online*, 2002; Hitlin & Raine, 2005; Lenhart et al., 2008) continue to map the trends in increased technology use by teens. Studies also have reported how teens communicate online and how social networking has become the lifeblood of a majority of American teens (Lenhart, Madden, Macgill & Smith, 2007; Lenhart, Purcell, Smith, & Zickuhr, 2010; Lenhart, 2001). As teens become increasingly enamored by the Internet and social media, research has shown that parents believe that prolonged activity in cyberspace adversely affects face-to-face relationships (Lenhart, Rainie, & Lewis, 2001). Additionally, the Internet has provided a powerful and invasive

weapon for cyberbullies and predators to prey on the vulnerable and the unsuspecting. How youth identify themselves and communicate can compromise their personal safety. Researchers (Finkelhor, Mitchell, & Wolak, 2000, 2006; Hinduja & Patchin, 2009; Kiriakidis & Kavoura, 2010) have investigated the practices that expose teens to online dangers.

Although bullying is not new, researchers (Corbett, 2008; Cox Communications, 2009; Finkelhor et al., 2000, 2006; Hinduja & Patchin, 2009) have sought to investigate the phenomenon of cyberbullying. The practice of sexting has emerged as a too frequent practice among teens, and recent studies (Cox Communications, 2009; Lenhart, 2009; Temple et al., 2012; The National Campaign, 2008) have investigated this practice.

Researchers of educational technology continue to focus on the effectiveness of technology in the classrooms (Baker, 1999; Bakia, Means, Gallagher, Chen, & Jones, 2009; Hitlin & Raine, 2005; McMillan Culp et al., 2003; Means, Toyama, Murphy, Bakia, & Jones, 2009; U.S. Department of Education, 1996). Other studies have focused on the practices and perceptions of teens' uses of technology and how those uses impact their daily lives outside of the educational arena (Lenhart et al., 2008; Lenhart & Purcell et al., 2010; Zickuhr, 2010). There has been little research that blends these two areas. Moreover, in the Catholic arena, little formal research has been completed to investigate student technology use and little attention has been given to the moral aspect of technology.

Background and Need

The Internet provides today's students with access to an excess of information, providing a gateway to distant cultures, libraries, and databases. It is a tool for

collaborating, communicating, and networking with others. According to the International Society for Technology in Education (ISTE, 2011a),

Technology in education remains the backbone of school improvement. To truly improve our schools for the long term and ensure that all students are equipped with the knowledge and skills necessary to achieve in the digital age, education technology must permeate every corner of the teaching and learning process. (#2)

Moreover, Internet use in schools has been identified as an essential element of educational technology by the ISTE (2010) and the U.S. Department of Education (1996).

In 1998, ISTE introduced The National Educational Technology Standards (NETS). With their update in 2008, the NETS have provided the educational community with centralized technology standards that identify the technology skills that students need to successfully prepare for 21st century citizenship (ISTE, 2011b). The NETS for Students include six standards. (1) Creativity and Innovation focuses on using technology for creative thinking and exploration in order to construct knowledge and create original works. (2) Communication and Collaboration requires students to use technology to collaborate and problem solve with peers. (3) Research and Information centers on applying digital tools to gather and process information. (4) Critical Thinking calls for students to manage projects and develop solutions to today's challenges using digital tools. (5) Digital Citizenship invites students to demonstrate responsible and ethical behavior regarding the use of information and technology. (6) Technology Operations directs students to demonstrate understanding of digital applications and systems (ISTE, 2011b).

In addition to ISTE's NETS for Students, the Partnership for 21st Century Skills (2011), an organization dedicated to reading readiness for all students, provided its

Framework for 21st Century Learning. It identified four 21st century student outcomes: Core Subjects and 21st Century Themes; Learning and Innovation Skills; Life and Career Skills; and Information, Media, and Technology Skills. The critical importance of mastering technology life skills is illuminated in their framework as follows:

People in the 21st century live in a technology and media-suffused environment, marked by various characteristics, including: 1) access to an abundance of information, 2) rapid changes in technology tools, and 3) the ability to collaborate and make individual contributions on an unprecedented scale. To be effective in the 21st century, citizens and workers must be able to exhibit a range of functional and critical thinking skills related to information, media and technology. (para. 1)

Digital citizenship exceeds digital competency. Students must transcend the ability to operate the tools of technology.

Simply being able to use technology is no longer enough. Today's students need to be able to use technology to analyze, learn, and explore. Digital age skills are vital for preparing students to work, live, and contribute to the social and civic fabric of their communities. (ISTE, 2011b, para. 2)

Goodstein (2007) offered the following possible uses when technology is integrated into classrooms in a meaningful fashion:

- Teaching students to critically evaluate and leverage the infinite amount of information online for research and learning
- Connecting students in different classrooms, cities, and countries so they can learn from each other
- Motivating students by engaging them with multimedia projects
- Using social technologies to coax out shy students
- Preparing students for the workplace by using more collaborative work and project-based learning (p. 149)

One way that schools are infusing technology into their programs and trying to meet the NETS for Students and align with the Framework for 21st Century Learning is through the introduction of 1-to-1 technology programs. For the purpose of this research, 1-to-1 technology means that every student has a mobile technology device for use at school and at home.

According to Tapscott (2009), most schools in America provide Internet access for their students and, as technology proves educationally valuable (Bakia et al., 2009; Means & Olson, 1995; Means et al., 2009; Tapscott, 2009), the growing trend is the movement to 1-to-1 technology programs (Tapscott, 2009). According to the *America's Digital Schools* study, in 2003, only 4% of the school districts in the United States had begun to implement 1-to-1 technology programs (ADS 2006, 2006), but by 2006, at least 24% of districts were transitioning to 1-to-1 programs (ADS 2006, 2006; Tapscott, 2009). The growth of 1-to-1 technology programs will continue to provide a growing number of students with round-the-clock access to technology.

Many Catholic schools provide Internet and computer access for their students. Some Catholic schools have also implemented 1-to-1 technology programs, but there are no specific numbers available on a nationwide basis. The acquisition of technology and the establishment of 1-to-1 technology programs vary greatly in the Catholic arena (Brooks-Young, 2012).

Teen Tech Possibilities

Students are lured by the freedom and power that technology provides. Teen use of technology is steadily increasing (*A Nation Online*, 2002; Cox Communications, 2009; Lenhart et al., 2008; Lenhart & Purcell et al., 2010). Teens use technology to do homework, to shop, and to play music and video games (Lenhart et al., 2008; Lenhart, Madden, Magill & Smith, 2007) and, for a majority of American teens, online communication and social networking have become the preferred methods of connecting with others (Lenhart Madden, Macgill & Smith, 2007; Lenhart & Purcell et al., 2010).

Technology, however, has a dark side. Some teens use technology to harass

classmates, post inappropriate information, and share sexually explicit photos and videos, usually of themselves (Lenhart, Madden, Macgill & Smith, 2007; Lenhart, Madden & Smith et al., 2011; Lenhart, Rainie & Lewis, 2001; The National Campaign, 2008). Additionally, the Internet has provided a powerful and invasive weapon for malevolent predators to prey on the vulnerable and the unsuspecting (Finkelhor, Mitchell, & Wolak, 2000, 2003, 2006). Without appropriate education and intervention, teens will continue the practices that expose themselves and others to online dangers.

Challenges for Educators

For educators, the prolific use and ubiquitous nature of technology provides additional challenges and responsibilities that require them to take the time to learn how students perceive and use technology as they engage in the world. In his apostolic letter, *The Rapid Development*, Pope John Paul II (2005) explained the importance of this mission:

A vast work of formation is needed to assure that the mass media be known and used intelligently and appropriately....[W]ithout proper formation, these media run the risk of manipulating and heavily conditioning, rather than serving people. This is especially true for young people, who show a natural propensity towards technological innovations, and as such are in even greater need of education in the responsible and critical use of the media. (#11)

Therefore, educators have an obligation to consistently examine the activities of teens' use of technology in order to keep their students safe and to guide them in their appropriate development. For Catholic educators there is no greater obligation than to prepare their students to do God's work in the world, cyberspace included.

Palloff and Pratt (1999) believed that positive learning communities could be created in cyberspace, where students may excel and grow in a virtual environment. Pope Benedict (2011) claimed, "The web is contributing to the development of new and

more complex intellectual and spiritual horizons, new forms of shared awareness” (para.8). As educators continue to embrace technology and invite it into their classrooms, especially in the form of 1-to-1 technology programs, they are obliged to recognize the difficulties that technology use generates. In order to create a positive and safe learning environment that merges the physical classroom with cyberspace, it is important to discover the perceptions and practices of students regarding the use of technology both in and out of the classroom.

Purpose of the Study

The purpose of this study was to identify the practices and perceptions of students in Catholic high schools on the use of the Internet. Specifically, this study examined students’ practices and perceptions related to general Internet usage. In addition, it investigated their practices and perceptions concerning safety, cyberbullying, and sexting. An online survey was used to collect data from students who were in a Catholic high schools that employed 1-to-1 technology.

Research Questions

The following research questions shaped this study:

1. What are the practices and perceptions of students in Catholic high schools concerning general Internet usage?
2. What are the practices and perceptions of students in Catholic high schools concerning the safe use of the Internet?
3. What are the practices and perceptions of students in Catholic high schools concerning cyberbullying?
4. What are the practices and perceptions of students in Catholic high schools concerning sexting?

Conceptual Framework

The conceptual framework for this study is rooted in the recommendations of the Catholic Church. Although an extensive offering of the Church's writings will be presented in the Review of Literature, this overview will provide the framework of the Church's instruction that it is the duty of Catholic educators to prepare their students to be faith-filled leaders in both real and cyberspace.

The Congregation for Catholic Education (CCE, 1998) acknowledged that "Education today is a complex, vast, and urgent task. This complexity today risks making us lose what is essential, that is, the formation of the human person in its totality, particularly as regards the religious and spiritual dimension" (#4). The Church calls educators to prepare their students to meet modern-day challenges and looks to the educators to "foster the development of personal and social responsibility and the other civic virtues" (#10). The Church recognizes that "This is not an easy task in a secularized world, characterized by the fragmentation of knowledge and moral confusion" (#20). Yet, Pope Paul VI (1965b) described in *Gaudium et Spes* the transformational power of technology and recognized its importance (#5). He detailed the power of social communication and envisioned its effects (#6). He also proposed that every available resource be used to educate all youth, as modern times require carefully educated people of great faith and character (#31).

In *Gravissimum Educationis*, Paul VI (1965c) purported that Catholic schools must also provide a learning environment energized by the Gospel where students develop in knowledge and are informed by faith. The document is clear about the importance of teaching students how to live a sacred life in a secular world, and to

become the harbinger of the Gospel message to others.

So, indeed the Catholic school, while it is open, as it must be, to the situation of the contemporary world, leads its students to promote efficaciously the good of the earthly city and also prepares them for service in the spread of the Kingdom of God, so that by leading an exemplary apostolic life they become, as it were, a saving leaven in the human community. (#8)

This is a sacred and daunting task, but an awesome commission the Church has entrusted to its teachers. “Let teachers recognize that the Catholic school depends upon them almost entirely for the accomplishment of its goals and programs” (#8). Catholic educators have an additional duty to empower and inspire their students to live integrated lives, lives that are whole and holy. To meet this challenge, educators must understand how students live in this culture of technology.

In the pastoral instruction, *Communio Et Progressio*, Paul VI (1971) spoke of the “decline in moral standards” and explained how evidence of such was present in the “means of social communication” (#22). He acknowledged that the use of social communication should play a large part in re-establishing moral standards as its use pervades people’s daily lives and attitudes (#22). It was stated that the Church believed that social communication should be used as an instrument in the formation of Christian values.

Catholic schools and organizations cannot ignore the urgent duty they have in this field. These schools and institutions will take care to teach young people not only to be good Christians ... but also to be active in using all the aids to communication that lie within the media... So, young people will be true citizens of that age of social communication which has already begun. (#107)

In *The Church and Internet*, The Pontifical Council for Social Communications (2002) announced that “The Church now needs to understand the Internet. This is necessary in order to communicate effectively with people—especially young people—

who are steeped in the experience of this new technology” (#5). They also recommended that Catholic schools provide media education because “Media education helps people form standards of good taste and truthful moral judgment, an aspect of conscience formation” (#7). The Council affirmed that “[Y]oung people need to learn how to function well in the world of cyberspace, make discerning judgments according to sound moral criteria...for their integral development and the benefit of others” (#7). They recognized that “Young people, as has often been said, are the future of society and the Church. Good use of the Internet can help prepare them for their responsibilities in both. But this will not happen automatically” (#7). The Council understood that placing the tools of technology into the hands of the youth requires instruction and guidance.

In his *Message for the 24th World Communications Day–The Christian Message in a Computer Culture*, John Paul II (1990a) reiterated that the youth are the ones who adapt quickly to technological advances. This is good for the Church, he believed, and he spoke of the importance of the power and potential of technology while insuring that technology be embraced only if the moral component drives its use.

Significance

This study will provide valuable information for educators about students in Catholic high schools regarding their perceptions and practices on the use of the Internet. Educators, especially those in the Catholic arena, have a moral and ethical responsibility to give students the tools to succeed in the modern world. By gaining knowledge and understanding of students’ practices and perceptions, administrators and educators will be able to create policies and design curriculum to address student and community needs.

Existing studies have focused upon students’ use of the Internet; however, none of

these studies has focused directly on students in faith-based schools. This study focused on this population and specifically on students who are required to utilize technology on a daily basis. As more 1-to-1 technology programs appear throughout the country, understanding the practices and perceptions of these students is crucial to the planning of curriculum for these schools. The results of this study will aid these schools in their planning before launching a 1-to-1 program, thus enabling them to plan proactively rather than addressing issues as they emerge after deploying the technology.

This study will make a substantial contribution to the understanding of teen use of technology. Identifying and understanding teen use of technology is crucial to educators in preparing their students for success in the modern world.

Definition of Terms

- 1-to-1 technology: Educational program where every student has a mobile technology device (portable laptop, notebook, or tablet) for use at school and at home.
- 1-to-1 laptop program: Synonymous with 1-to-1 technology
- Cyberbullying: “Willful and repeated harm inflicted through the use of computers cell phones and other electronic devices” (Hinduja & Patchin, 2009, p. 5)
- Cyber harassment: Synonymous with cyberbullying
- Instant messaging: “A computer application which allows for communications in real time, a live chat and email service” (Dictionary.com, n.d.).
- Sexting: “Sexting is the slang term for the use of a cell phone or other similar electronic device to distribute pictures or video of sexually explicit images. It can also refer to text messages of a sexually-charged nature. (A combination of the words ‘sex’ and ‘texting.’)”. (About.com, n.d.).
- Social networking site: “Abbreviated as SNS a *social networking site* is the phrase used to describe any Web site that enables users to create public profiles within that Web site and form relationships with other users of the

same Web site who access their profile. Social networking sites can be used to describe community-based Web sites, online discussions forums, chatrooms and other social spaces online.” (Webopedia.com).

Social networking: “The use of a website to connect with people who share personal or professional interests, place of origin, education at a particular school, etc.” (Dictionary.com, n.d.).

As administrators and educators continue to embrace the use of technology and especially if they plan to require the use of 1-to-1 technology by their students, they must be prepared to accept the challenges this opportunity will bring. In the following chapter, an examination of existing research and literature will inform the educational community about the practices and perceptions of teens regarding their use of the Internet. This inspection will explore areas of safety concern regarding those practices and beliefs while also investigating the practices and insights of teens regarding cyberbullying. Additionally, the examination will explore the practices and perceptions of teens concerning sexting.

CHAPTER II

REVIEW OF THE LITERATURE

Restatement of the Problem

The use of the Internet has transformed educational paradigms and has propelled educational pedagogy into the future. The increased use of technology in schools has created a plethora of learning opportunities for students. History has proven that new and exciting technology usually comes with its negative aspects, and the Internet certainly has its dark side. Students are increasingly required to use technology for education both in and out of school. While students do use the technology for schoolwork, they also use it in inappropriate ways. Technology then has become a double-edged sword for education, providing incredibly powerful avenues for both learning and destruction. Teens use technology to do homework, communicate with friends, play music and video games, and shop; but they also use it to harass classmates, post inappropriate information, and share sexually explicit photos and videos, usually of themselves (Cox Communications, 2009; Lenhart et al., 2008; Lenhart, Madden Macgill, & Hitlin, 2007; The National Campaign, 2008). Understanding the perceptions and practices of students regarding technology use is imperative for educators to fully prepare their students for the future (Goodstein, 2007).

Overview

The review of literature provides a methodical inspection of the role that the Internet holds in the lives of teens today. This section is introduced by a systematic examination of the documents of the Catholic Church concerning the potential and perils of technology, the obligations of schools and the responsibility of educators, and the

significant role that technology will hold in the future of the Church. Next, an overview of the research studies on teen Internet usage is presented to serve as a framework for the literature included in the chapter. The remainder of the chapter is organized into four sections, each focusing on one of the four areas of study. The first section explores teen Internet practices and beliefs regarding their general Internet use. The second section examines online practices and beliefs of teens that sometimes lead to safety concerns. The third section investigates the practices and insights of teens in regard to cyberbullying. The final section explores the practices and opinions of teens concerning sexting, the sending or receiving of nude or semi-nude messages, photos, or videos by electronic means. This chapter concludes with a summary of the literature.

The Catholic Church and Technology

Paul VI (1963) may not have predicted the presence and power of the Internet, but in the decree *Inter Mirifica*, he identified “the press, movies, radio, television and the like” (#1) as the media of social communication and the most important media tools of his time. He mourned the damage these media could do when ill-used, while recognizing their importance in support of the Kingdom of God. He cautioned all who chose to use these media, “especially the young” (#10), to practice moderation and self-control. He also declared, “Special care should be taken to safeguard young people from printed matter ... which may be harmful” (#12). Today, the Internet is a much more widespread delivery system of the printed matter of which Pope Paul spoke. He also called for the widespread increase of programs to instruct the proper use of social media to reflect Christian moral principles. He believed this was an imperative as he decreed, “This should be done in Catholic schools at every level” (#16).

The role of schools was further defined in *Gravissimum Educationis* (Paul VI, 1965c). The document showed that all appropriate support and services were to be used to fulfill its educational role. Albeit, catechetical instruction and full participation in the Church's rich liturgical heritage is paramount to the formation of all beings, the Church recognized the importance of social communication as belonging to "the general heritage of man and which are of great influence in forming souls and molding men" (#4). Catholic schools, like all others, have the responsibility to prepare their youth to take their place in society.

All teachers, as advised by the Church, have a fundamental duty to be appropriately prepared to meet the challenges to educate in modern times. "They [teachers] should therefore be very carefully prepared so that both in secular and religious knowledge they are equipped with suitable qualifications and also with a pedagogical skill that is in keeping with the findings of the contemporary world" (Paul VI, 1965c, #8). The contemporary world of today is imbued with the use of technology, and educators must acknowledge that the Kingdom of God exists in cyberspace.

Paul VI (1965a) decreed in *Apostolicam Actuositatem* that the laity had an expansive and deep obligation to provide living examples of Christianity in the modern world. (#6) He pointed out that the laity were the ones who primarily worked in fields with "continual progress in science and technology," and were obliged to use their expertise in service to the Church (#1). He recognized the challenges that consistently face an ever-changing society and the role of the laity in facing those trials:

Since, in our own times, new problems are arising and very serious errors are circulating which tend to undermine the foundations of religion, the moral order, and human society itself, this sacred synod earnestly exhorts laymen...to be more

diligent in doing what they can to explain, defend, and properly apply Christian principles to the problems of our era. (#6)

The document also displayed the concerns about challenges facing young people as they take their place in society.

Young persons exert very important influence in modern society (7)... Frequently they move too quickly into a new social and economic status. While their social...importance is growing from day to day, they seem to be unable to cope adequately with their new responsibilities. (#12)

However, because of their natural abilities, enthusiasm for life, and fervor to take on additional responsibility, they are perfectly suited as holy messengers, provided their “zeal is imbued with the spirit of Christ and is inspired by obedience and love for the Church” (#12). Young people must be prepared to carry the Gospel message “directly to other young persons, concentrating their apostolic efforts within their own circle, according to the needs of the social environment in which they live” (#12). For the young people of today the social setting includes both real and virtual environments.

In *Gaudium et Spes*, the final document of the Second Vatican Council, Pope Paul VI (1965b) recognized the profound impact future technology would make on the world and all its people. He stated, “Technology is now transforming the face of the earth, and is already trying to master outer space” (#5). He also understood that although increases in technological developments would provide widespread opportunities for new avenues of communication and community, he cautioned that intellectual formation should not be based solely on its mounting importance in society.

Pope Paul VI (1965b) challenged Catholics to maintain a Christian lens through which they must personally evaluate their own thoughts and practices and realize how those actions reflect the faith, especially in the light of modern advances:

Let them [the faithful] blend new sciences and theories and the understanding of the most recent discoveries with Christian morality and the teaching of Christian doctrine, so that their religious culture and morality may keep pace with scientific knowledge and with the constantly progressing technology. Thus, they will be able to interpret and evaluate all things in a truly Christian spirit. (#62)

As the lived reality of faith is both constant and consistently forming, youth must learn to live out their faith in both sacred and secular environments. For the educational community to fully prepare their students, it is imperative to understand the technological cyber-culture of youth.

In the pastoral instruction, *Communio Et Progressio*, Paul VI (1971) confirmed that the use of social communication could be of great use as long as these media are used with good will. If not, their use will produce negative effects that could damage “or corrupt the fundamental values of human life” (#9). He explained that those using the tools of social communication have a duty to master and employ those skills in an appropriate manner. This is especially important for those who teach (#15). Additionally, all who use the media to receive information should be taught to interpret their messages properly (#15). He held that, “The attempt to restore standards must involve the whole of society, its parents, teachers, pastors and all who care about the common good” (#22). He also commanded that in order for social communication to be better understood and to be used to its fullest extent, its uses “must be investigated” (#23).

In *To Teach as Jesus Did*, America’s educational charter for Catholic schools, the National Conference of Catholic Bishops (1972) reiterated the paramount importance of respecting and protecting the dignity of all people. They underscored the significance of educating the Catholic community to search for peace and justice in a world filled with

societal troubles (#10). They reminded all that Jesus used the language and imagery of his time to communicate his message. Therefore, the modern “Church, too, must use contemporary methods and language to proclaim the message of Christ to men and women today” (#18).

It was also recognized that “From a Christian perspective, integral personal growth, even growth in grace and the spiritual life, is not possible without integral social life” (USCCB, 1972, #24). Today’s educators must realize that due to Internet technology, the social arena for youth today has evolved beyond the scope earlier generations experienced. The social lives of teens now coexist in both real space and cyberspace; therefore, they must learn to exhibit Christian values in both real and cyberspace. “To understand this is a high form of learning; to foster such understanding is a crucial task of education” (#24).

When speaking of faith and technology, the bishops identified technology as “one of the most marvelous expressions of the human spirit in history” (USCCB, 1972, #33). However, they cautioned that, “It can enrich life immeasurably or make a tragedy of life” (#33). The bishops further admonished, “Technology threatens the unity and even the future of mankind....If this generation is, as some suggest, moving into a new era of global culture, it simultaneously risks losing the values of particular cultures which deserve to be preserved” (#36).

The educational mission of the Church has not changed, however, but as the use and advancement of technology continues to saturate contemporary culture, the importance of Catholic schools remains essential.

[The] integration of religious truth and values with life distinguishes the Catholic school from other schools. This is a matter of crucial importance today in view of

contemporary trends and pressures to compartmentalize life and learning and to isolate the religious dimension of existence from other areas of human life. (USCCB, 1972, #105)

Therefore, Catholic schools must maintain their ability to create learning communities that “foster the integration of religion with the rest of learning and living” (#106).

In *The Religious Dimension of Education in a Catholic School*, the Congregation for Catholic Education (1998) directed that

[Educators] should be attentive to the results of research with youth done at the local level, and they should be mindful of the fact that the young today are, in some respects, different from those that the Council had in mind. (#7)

Although they are speaking specifically about the religious attitudes of students, Christian values should be exhibited in all areas. Therefore, as the ubiquitous nature of technology impacts everything for youth, studying their perceptions and practices in the virtual environment should also have value, especially in light of the following: “The crisis [of giving up their religious practices] seems to occur more frequently in places where there is high economic development and rapid social and cultural change.... It has been called a ‘split between the Gospel and culture’” (#15).

In his *Message for the 24th World Communications Day—The Christian Message in a Computer Culture*, John Paul II (1990a) observed that youth are the ones who embrace technology and acclimatize well to its consistent transformations. Moreover, he declared that this affinity for technology is greatly beneficial to the Church, for it is their duty to use this technology to make connections across borders and boundaries to engage the world in conversation (para. 12).

It falls to them to search out ways in which [technology] can be used to assist in promoting greater universal justice, greater respect for human rights, a healthy development for all individuals and peoples, and the freedoms essential for a fully human life. (para. 12)

Again, John Paul II (1990a) declared that new technologies should be embraced by the faithful, as they provide powerful tools for moral and just leaders to do God's work.

Whether we are young or old, let us rise to the challenge of new discoveries and technologies by bringing to them a moral vision rooted in our religious faith, in our respect for the human person, and our commitment to transform the world in accordance with God's plan. (para. 13)

In *Redemptoris Missio*, John Paul II (1990b) likened social media to “the cultural center of the learned people of Athens” (#37c) and identified them as a new message center for the Gospel. He admitted that “The means of social communication have become so important as to be for many the chief means of information and education, of guidance and inspiration in their behavior as individuals, families and within society at large” (#37c). Special attention was revealed about youth when he said, “In particular, the younger generation is growing up in a world conditioned by the mass media” (#37c).

He identified social communication as an area of communication that has been neglected as a means of proclaiming the Gospel. Additionally, he made the point that it was not enough to merely use these media as a message platform, but that “It is also necessary to integrate that message into the ‘new culture’ created by modern communications” (John Paul II, 1990b, #37c). Christian values must be infused in all areas of life including social communication.

The Congregation for Catholic Education (1997), in *The Catholic School on the Threshold of the Third Millennium*, expounded further on the “crisis of values” that are “often exalted by the media” (#1) and the challenges to the Christian faith the media bring about. The CCE put forth that although youth must acquire technical skill and

appropriate knowledge needed to take their place in society, solid Christian faith formation is paramount (#8). For Catholic schools to meet the needs in the modern world, each individual's relationship with Christ must be nurtured and must exist across sacred and secular boundaries.

To meet these needs, new educational models and greater learning tools must be used to bridge the gap between the environment of the sacred and the culture of the secular.

In the Catholic school...there is no separation between time for learning and time for formation, between acquiring notions and growing in wisdom. The various school subjects do not represent only knowledge to be attained, but also values to be acquired and truths to be discovered. (CCE, 1997, #14)

Schools must teach their youth to practice those values in all arenas of life and to take their places as Christian leaders who seek the truth in the real world and in cyberspace.

John Paul II (2001) understood the paradox of social media, but he also saw its potential as a new platform for the gospel message. In his *Message for the 35th World Communications Day—"Preach from the Housetops": The Gospel in the Age of Global Communication*, he proclaimed, "Catholics should not be afraid to throw open the doors of social communications to Christ, so that his Good News may be heard from the housetops of the world" (#3). The Holy Father also pointed out that the Internet and other forms of media could reach beyond borders and barriers. "Such a wide audience would have been beyond the wildest imaginings of those who preached the Gospel before us" (#3). He hoped that "Catholics involved in the world of social communications preach the truth of Jesus ever more boldly and joyfully" (#4).

The Pontifical Council for Social Communications (PCSC, 2000) in *Ethics in Communication*, spoke about the benefits that come from the use of social media, but

they cautioned that “Technological change rapidly is making the media of communication even more pervasive and powerful” (#2). They commented, “The range and diversity of media accessible to people in well-to-do countries already are astonishing....The contents of this vast outpouring range from hard news to pure entertainment, prayer to pornography, contemplation to violence” (#2). The Council exhorted that it is difficult not to be affected by the influence of the media of social communication.

When speaking about the use of social communication technology in education, the Council conveyed that “The media are standard instructional tools in many classrooms. And beyond the classroom walls, the instruments of communication, including the Internet, conquer barriers of distance and isolation” (PCSC, 2000, #10). Adults have an obligation to help young people develop appropriate and discerning skills regarding this type of technology use. “According to their age and circumstances, children and young people should be open to formation regarding media, resisting the easy path of uncritical passivity, peer pressure, and commercial exploitation” (#25).

The Internet makes information and events accessible to vast numbers of people around the globe. “As interactivity increases, the distinction between communicators and recipients blurs. Continuing research is needed into the impact, and especially the ethical implications, of new and emerging media” (PCSC, 2000, #27).

In *The Church and Internet*, The Pontifical Council for Social Communications (2002) recognized that proclaiming the gospel message in today’s world should include using the Internet, not only as a tool of communication, but as a tool for education and formation. However, media education should occur in an intentional manner, especially

for youth, for young people, as they do not know a world without social technology, and the Council warns that it does not come without peril.

The Internet places in the grasp of young people at an unusually early age an immense capacity for doing good and doing harm, to themselves and others. It can enrich their lives beyond the dreams of earlier generations and empower them to enrich others' lives in turn. It also can plunge them into consumerism, pornographic and violent fantasy, and pathological isolation. (#7)

The Council advised that schools offer media education as a means to help students develop digital citizenship skills that will enable them to be faith-filled and faithful digital citizens in a world that does not yet understand the full effects of this culture of technology (#7).

The Internet is not merely a medium of entertainment and consumer gratification. It is a tool for accomplishing useful work, and the young must learn to see it and use it as such. In cyberspace, at least as much as anywhere else, they may be called on to go against the tide, practice counter-culturalism, even suffer persecution for the sake of what is true and good. (#11)

In his apostolic letter, *The Rapid Development*, John Paul II (2005) spoke of the Church's progress in harnessing the power of the media to promote the common good and areas of need that still must be addressed. When speaking of formation, he explained that the media must be used "intelligently and appropriately" (#11). He cautioned that without proper training and education "media run the risk of manipulating and heavily conditioning, rather than serving people" (#11). He continued, "This is especially true for young people, who show a natural propensity towards technological innovations, and as such are in even greater need of education in the responsible and critical use of the media" (#11).

In his *Message for the 43rd World Communications Day—New Technologies, New Relationships. Promoting a Culture of Respect, Dialogue and Friendship*, Pope

Benedict XVI (2009) encouraged Catholic youth to use the tools of their generation to spread the gospel message to the digital world. He understood that the lives of the youth of today are intertwined with technology in ways unique to their generation. These talents place today's youth in a unique position to assist the Church in its mission. This is explained by Benedict when he declared, "It falls, in particular, to young people, who have an almost spontaneous affinity for the new means of communication, to take on the responsibility for the evangelization of this 'digital continent'" (para. 9). Therefore, the Pope requested, "I ask you to introduce into the culture of this new environment of communications and information technology the values on which you have built your lives" (para. 9).

Benedict (2009) compared this new kind of evangelization to that of the Apostles, who used their knowledge of custom and culture to bring understanding and enlightenment to a contrasting environment. To proclaim Christ in today's environment also requires profound knowledge to move the mission of the Church forward. Thus, Benedict instructed the youth:

Be sure to announce the Gospel to your contemporaries with enthusiasm. You know their fears and their hopes, their aspirations and their disappointments: the greatest gift you can give to them is to share with them the "Good News" of God. (para. 9)

Catholics are called to share the Good News to all of the nations. To the youth of today, that includes cyberspace, a place where students spend much of their time.

In his *Message for the 45th World Communications Day— Truth, Proclamation and Authenticity of Life in the Digital Age*, Pope Benedict XVI (2011) explained how today's youth drive new forms of communication using social networks, creating new methods of self-discovery and personal formation. The challenge, he purported, includes

online behavioral expectations and the effects on the development of the person (para. 4).

He admonished:

Entering cyberspace can be a sign of an authentic search for personal encounters with others, provided that attention is paid to avoiding dangers such as enclosing oneself in a sort of parallel existence, or excessive exposure to the virtual world. In the search for sharing, for “friends”, there is the challenge to be authentic and faithful. (para. 4)

Benedict included a request that challenges the youth of today and imparts a great responsibility onto their teachers: “I invite young people above all to make good use of their presence in the digital world” (Benedict XVI, 2011, para. 10). Embedded in that invitation is the challenge to educators to stay informed of emerging technologies that their students use, and to reliably discover how students conduct themselves in cyberspace.

In his *Message for the 48th World Communications Day: Communication at the Service of an Authentic Culture of Encounter*, Pope Francis (2014) explained that communication is a human endeavor that requires patience and listening regardless of the technology involved. He exhorted that when proper strategies are employed, the Internet can be a tool of beauty enabling global neighbors to experience authentic personal encounters as well as providing a powerful voice to proffer the Gospel message. He simply stated, “The digital world can be an environment rich in humanity; a network not of wires but of people” (Francis, 2014, para. 7).

Using the Twitter screen name @Pontifex, Pope Francis challenged today’s youth to use their talents in service to God, and he encouraged them to exhibit their faith in both words and actions (2013b, 2014). Given that the Holy Father delivered his message via

social media, he provided a great model as he entreated, “Dear young people, always be missionaries of the Gospel, every day and in every place” (2013a).

Overview of Studies on Teen Internet Usage

The studies that are the primary sources for this review are described in the following section. Each study is introduced with a brief description of its purpose, sponsorship, and a succinct explanation of the methodology. Table 1 is included to illustrate which studies apply to each of the four sections of this review of literature: general use, safety, cyberbullying, and sexting.

Table 1

<i>Research Studies and Their Application to the Four Areas of Study</i>	General Use	Safety	Cyber-bullying	Sexting
<i>Online Victimization: A Report on the Nation's Youth (YISS-1)</i> (Finkelhor et al., 2000)	X			
<i>Online Victimization: ...Five Years Later (YISS-2)</i> (Finkelhor, Mitchell, & Wolak, 2006)	X	X	X	
<i>Teens and Cyberbullying</i> (Harris Interactive, 2007)	X		X	
<i>Teens and Social Media</i> (Lenhart, Madden, Macgill, & Hitlin, 2007)	X	X		
<i>Sex & Tech</i> (The National Campaign, 2008)				X
<i>Teens and Sexting</i> (Lenhart, 2009)				X
<i>Teen Online & Wireless Safety Survey</i> (Cox Communications, 2009)	X	X	X	X
<i>Social Media & Mobile Internet use Among Teens ...</i> (Lenhart & Purcell et al., 2010)	X			
<i>Youth Online Behavior Study</i> (McAfee/Harris Interactive, 2010)	X	X	X	
Adolescent and young adult victims of cyberbullying at increased risk of suicide (Romer, 2010)			X	
<i>Prevalence ...of Youth Sexting: A National Study (YISS-3)</i> (Mitchell, Finkelhor, Jones, & Wolak, 2011)				X

Study	General Use	Safety	Cyber-bullying	Sexting
<i>Online Social Networking Patterns Among Adolescents, ... and Sexual Offenders</i> (Dowdell et al., 2011)	X	X		X
<i>Teens, Kindness and Cruelty on Social Network Sites</i> (Lenhart, Madden, Smith et al., 2011)	X	X	X	
Teen sexting and its association with sexual behaviors (Temple et al., 2012)				X
<i>Social Media, Social Life: How Teens View Their Digital Lives</i> (Common Sense Media, 2012)	X	X		
<i>Teens, Social Media, and Privacy</i> (Madden et al., 2013)	X	X		

Initially, studies pertaining to the online practices of youth came out of the concerns for youth safety. Through congressional grants from the Office of Juvenile Justice and Delinquency Prevention and the National Center for Missing and Exploited Children, The Crimes Against Children Research Center produced the seminal study regarding the online safety of youth in America in 2000: *Online Victimization: A Report on the Nation's Youth*. The study consisted of telephone interviews conducted from August 1999 to February 2000 with 1,501 regular Internet users between the ages of 10-17 who were asked questions that made up the *Youth Internet Safety Survey (YISS-1)* (Finkelhor et al., 2000). This study provided the benchmarks for subsequent studies.

In 2005, Congress again funded a study to revisit the online risks to youths that were exposed in the 2000 study. As in 2000, and in order to maintain methodological consistency, *Online Victimization: A Report on the Nation's Youth: Five Years Later*, was produced by The Crimes Against Children Research Center. Again, this study consisted of telephone interviews conducted March to June 2005 with 1,500 regular Internet users between the ages of 10-17. Participants were given the second *Youth Internet Safety*

Survey (YISS-2). Most of the same questions were included from YISS-1 and comparisons were made to the results from that original 2000 study (Finkelhor et al., 2006).

In 2006, The National Crime Prevention Council commissioned the online study *Teens and Cyberbullying*. Harris Panel Online, part of Harris Interactive, polled 824 teens, ages 13 to 17, on their experiences with and reactions to cyberbullying. Teens were also asked about their perceptions regarding emotional reactions and cyberbullying prevention (Harris Interactive, 2007).

In 2006, the Pew Internet & American Life Project sponsored *The Parents & Teens 2006* survey. The sample population included 935 teens, ages 12 to 17, and their parents. Data were collected via telephone interviews conducted by Princeton Survey Research Associates International. The results of this study are detailed in the 2007 report, *Teens and Social Media* (Lenhart, Madden, Macgill, & Hitlin, 2007).

In 2008, The National Campaign to Prevent Teen and Unplanned Pregnancy combined with *CosmoGirl.com* to commission the *Sex & Tech* study to investigate teen behavior and attitude regarding sexting, the practice of sending nude or semi-nude images via the Internet. The research was conducted by TRU (formerly known as Techno-economic Research Unit), a company specializing in market research focusing on youth. The survey was given online to 1,280 participants, ages 13-19. This was the first public study to explore the concept of sexting (The National Campaign, 2008).

In 2009, Pew Research Center's Internet & American Life Project initiated a *Teens and Sexting* study. A phone survey was conducted by Princeton Survey Research International. Survey participants included 800 teens between the ages of 12 to 18 and

their parents. After the completion of the quantitative portion of the study, PEW partnered with the University of Michigan to further the investigation through a series of focus groups where 12 to 18-year-old teens completed a paper survey about their sexting experiences and attitudes toward sexting (Lenhart, 2009).

In 2009, Cox Communications partnered with the National Center for Exploited and Missing Children (NCEMC) when they commissioned a study to investigate the online behavior of teens, specifically regarding the areas of sexting and online bullying. Harris Interactive conducted the *Teen Online & Wireless Safety Survey*, and the participants included 655 teens, ages 13-17 (Cox Communications, 2009).

In 2009, the Pew Internet & American Life Project sponsored the *2009 Parent-Teen Cell Phone Survey*. Survey results were collected by Princeton Survey Research Associates International through telephone interviews. The population included a nationally representative sample of 800 teens, ages 12 to 17, and their parents. The findings were used in the 2010 publication, *Social Media & Mobile Internet use Among Teens and Young Adults* (Lenhart & Purcell et al., 2010).

In 2010, the *Youth Online Behavior Study* was commissioned by McAfee and was conducted by Harris International. The study's population included 1,357 U.S. teens ages 13-17 and tweens ages 10-12 who use the Internet. For the purpose of this review, only the trended results of the 955 older teens involved will be reported. The total included 593, teens 13-15 years old, and 362 teens, ages 16-17. Data were collected via an online survey. Data from this study are comparable to results from the 2008 study where the teen participants 13-17 years old numbered 529 (McAfee/Harris Interactive, 2010).

In 2010, the Adolescent Communications Institute (ACI), part of The Annenberg Public Policy Center, designed a survey to investigate cyberbullying and its relationship to suicide. The study was a phone survey with 596 respondents, ages 14-22. The results of the high school age (14-17 year old) population were the only data used for this report. There were 227 high school respondents (Romer, 2010).

In 2010, the U.S. Department of Justice funded a study to again revisit the online risks to youths that were exposed in the 2000 study. As in 2000 and 2005, the study consisted of phone interviews with 1,560 regular Internet users between the ages of 10 to 17 and their parents. Youth participants were given the third *Youth Internet Safety Survey (YISS-3)*. The purpose of this study was to obtain national estimates of youth sexting activities. Results of the study were published in *Prevalence and Characteristics of Youth Sexting: A National Study* (Mitchell et al., 2011).

In 2010, researchers from the University of Texas Medical Branch continued the second wave of a longitudinal study to investigate the prevalence of sexting and to discover any relationship between sexting and risky sexual behavior in adolescents. The participants included 948 public school students from seven Houston area high schools. These 948 students appraised 93% of the 1,042 participants who were involved in the first wave of the study in Spring 2010. It is important to note that this study defined sexting as the sending and receiving of “naked pictures” rather than “nude,” “semi nude,” or “sexually explicit,” as defined by other studies (Temple et al., 2012).

It is also important to note that Temple et al. (2012) suggested that the Mitchell (2011) study *Prevalence and Characteristics of Youth Sexting: A National Study*, showed a bias, as 75% of the participants were white, 78% came from two-parent homes, and

30% lived in households with \$100,000 or greater. The Mitchell study used random digit dialing relying mostly on landline phones, and Temple et al. posited that population differences exist between households who rely mostly on landline phones versus households who rely mostly on cell phone service. Mitchell et al. suggest that these factors may explain the lower sexting participation percentages as compared to other similar studies and online surveys.

Temple et al. (2012) identified their own work by stating, “This study is among the first to examine the prevalence and nature of sexting in a racially and ethnically diverse school-based sample” (p. 829). When speaking of earlier studies, the authors appreciated the attention that earlier media-generated studies brought to the subject of sexting, but expressed concern regarding biased samples and low response rates. The authors also shared concerns that the existing studies came mostly from online or media generated sources. This was exhibited by inconsistencies, such as in the National Campaign’s (2008) *Sex & Tech* study where 20% of teens confessed to sexting whereas, in the 2009 Pew study *Teens and Sexting*, only 4% of teens sent sexts, but 15% admitted that they had received them. The purpose of Temple et al.’s study was to investigate the prevalence of sexting and to discover any association between sexting and sexual behaviors.

A 2011 article by Dowdell, Burgess, and Flores, *Online Social Networking Patterns Among Adolescents, Young Adults, and Sexual Offenders*, chronicles a study coming from the medical community, which sought to discover the relationship between Internet habits among teens and sexual predators. The population included students from middle school, high school, and college level, as well as adult sexual offenders. For this

review, data will be reported regarding the 2,077 high school students only. These students came from schools from the suburbs of Philadelphia, Boston, and South Maryland. The high school data were collected in 2009 through written questionnaires given to students at their schools. The instrument was a modified version of the *Youth Internet Safety Survey*, first used in the seminal 2000 study, *Online Victimization: A Report on the Nation's Youth*. This study was also funded in part by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the Office of Justice Programs, and the U.S. Department of Justice (Dowdell et al., 2011).

In 2011, Pew Research Center's Internet & American Life Project sponsored the *Teens and Digital Citizenship Survey*. Telephone interviews were conducted by Princeton Survey Research Associates International of 799 teens, ages 12 to 17, and their parents. Additionally, information was gathered from seven focus groups of teens, ages 12 to 19, from the Washington, D.C. metro area. This study explored the social experiences of teens and the emotional climate of social interactions on social networking sites. The results of this study are detailed in the 2011 report *Teens, Kindness and Cruelty on Social Network Sites* (Lenhart, Madden, Smith et al., 2011).

Social Media, Social Life: How Teens View Their Digital Lives presents the results of a study sponsored by Common Sense Media, an organization dedicated to the study and impact of media use by children and teens. This study focused on teen use of social media. Data were collected via a 2012 online survey of 1,030 randomly sampled 13 to 17-year-olds (Common Sense Media, 2012).

In 2012, Pew Research Center's Internet & American Life Project sponsored

the *Teens and Privacy Management Survey*. Telephone interviews were conducted at the Berkman Center for Internet & Society at Harvard University on a nationally representative population of 802 teens, ages 12 to 17, and their parents. Moreover, information was gathered from 24 on-ground focus groups and two online focus groups. The on-ground groups included 156 teens from the Boston area; Santa Barbara and Los Angeles, California; and Greensboro, North Carolina. The two online groups included one group of 11 younger teens (12-14) and one group of nine older teens (14-17). This study focused on the online experiences of teens especially regarding the sharing of personal information online and behaviors teens use to protect their reputations (Madden et al., 2013). This is a follow-up study to the research reported in the 2010 publication, *Social Media & Mobile Internet use Among Teens and Young Adults* (Lenhart & Purcell et al., 2010).

General Internet Use

This section will focus on the first area of study, general practices of teens online. The following research will examine the growth of technology use, general practices, and the development and socialization of teens in the cyber-environment.

In 1998, Tapscott explained how the Internet has become the cyber-playground for the young. Children are no longer safe to roam their hometowns freely and explore its treasures. Impromptu gatherings of neighbors, cousins, and classmates have been replaced by structured activities strictly scheduled and monitored by adults. The Internet has become today's attic where children play "dress up," make-believe, stretch their imaginations, and act out their childhood fantasies. The computer has become their gateway to a massive arena where they can play, create, and build (Tapscott, 1998).

Ito et al. (2010) suggested that youth today use social media to hang out with their friends in lieu of hanging out in person: “Teens can meet people, flirt, date, and break up beyond the earshot and eyesight of their parents and other adults while also doing these things in front of all of their online friends” (p. 145). Moreover, McAfee/Harris Interactive (2010) added, “Being online is both a normal and integral part of life today in the United States – especially for the youth population. They have been accessing the internet for most of their lives, and probably can’t imagine life without it” (p. 5).

Online and Internet Access

“Beyond its role as an indispensable communications hub, internet access connects users to reams of vital information, necessary for life management, health and civic engagement” (Lenhart & Purcell et al., 2010, p. 26). At the turn of the century, 73% of all teens used the Internet. Teen Internet use increased to 87% in 2004 and further expanded to 93% in 2007 (Lenhart, Madden, Macgill, & Hitlin, 2007). In 2010, it was declared that nearly all youth use the Internet, as 99% of teens reported using a desktop or laptop computer to access the Web (Lenhart, Madden, Smith et al., 2011; McAfee/Harris Interactive, 2010).

In a 2010 PEW study, researchers found that the computer remained the most common tech tool used by 93% of teens to access the Internet, with laptops becoming the popular choice over desktops (Lenhart & Purcell et al., 2010). Another 2010 study determined that 99% of teens used desktop or laptop computers to go online. Teens are also using less traditional means to go online. Access to the Internet is changing and is no longer computer or laptop dependent. In 2010, at least 1 in 5 teens revealed that they accessed the Internet via cell phones. Access to the Internet is equal between male and

female teens (McAfee/Harris Interactive, 2010). In the past 10 years, teens and young adults have consistently been the two groups that are most likely to go online (Lenhart & Purcell et al., 2010).

In 2000, 74% of teen Internet users accessed the Internet at home and 73% accessed it at school. By 2005, home access of the Internet by teens rose to 91% and school access increased to 90% (Finkelhor et al., 2006). The NCPC 2007 study revealed that 97% of teens 13-17 use the Internet at home and 79% use the Internet at school, rising to 81% for just the high school-aged participants (National Crime Prevention Council, 2007). In 2010, 85% of teens accessed the Internet somewhere other than at home, such as at school, the library, or somewhere with an open WiFi connection (McAfee/Harris Interactive, 2010). A 2013 PEW report showed that 96% of teens aged 14-17 accessed the Internet whereas 74% accessed the Internet using some type of mobile device (Madden et al., 2013).

Not only is the number of teens who use the Internet rising, so is the frequency they go online. In 2000, 42% of teens used the Internet at least once a day. This population steadily rose from 51% in 2004 to 61% in 2006. Of those, 34% admitted logging on multiple times daily (Lenhart, Madden, Macgill, & Hitlin, 2007). In 2011, 70% of online teens used the Internet at least once a day, up from 63% the year before. Moreover, 46% admitted that they go online several times a day; up from 36% the year before. Online teens who access the Internet only once a day decreased to 24%, down from 27% the year before (Lenhart, Madden, Smith et al., 2011; Lenhart & Purcell et al., 2010). On average, teens spend about five hours a day online (McAfee, 2012).

Online Activity

In the 2005 *Youth Internet Safety Survey* (YISS-1), overwhelmingly, the prime online activity of teens was web surfing with 99% participation. Using the Internet to do schoolwork increased from 85% in 2000 to 92% in 2005 (Finkelhor et al., 2006), and in 2009, about three-quarters of teens surveyed detailed that they used the Internet to do school research in the past month (Cox Communications, 2009).

By 2009, 91% of teens had their own email addresses and 80% of them had used them in the past month. Thirty-one percent of teens used the Internet to shop online, although girls (36%) appeared to use the Internet for shopping a bit more than boys (25%) (Cox Communications, 2009).

The results for teen use of IMing showed varying results. Some research revealed a steady decrease of IM use with 51% of teen use in 2008 continuing down to 45% of 13-17-year-olds in 2010 (McAfee/Harris Interactive, 2010). Yet, in a 2009 study, 52% of online teens used the Internet to send Instant Messages in a one-month period (Cox Communications, 2009). In a study of teens who use social media, 58% reported using IM or messaging through a social networking site in 2010 (Lenhart & Purcell et al., 2010). Additionally, other studies displayed that even more teens use the IM feature when active on social networking sites. In 2007, 75% of teens used IMing (Harris Interactive, 2007; National Crime Prevention Council, 2007) and the numbers of teens who IM rose to 88% in 2011 (Lenhart, Madden, Smith et al., 2011).

In the 2000 *YISS-1* safety study, 56% of teens frequented chat rooms. However, less than a third (30%) purported that they visited chat rooms in the YISS-2. Even by 2005, chat rooms seemed to have lost some popularity as some teens called them

unsavory and identified them as places frequented by those who purposefully go to meet teens for sexual reasons (Finkelhor et al., 2006). By 2007, 23% of online teens used chat rooms (National Crime Prevention Council, 2007). Although in 2009, of the 47% of teens who play video games online with chat features, boys (38%) far outnumbered girls (15%) (Cox Communications, 2009). Dowdell found in 2011 that girls (42.1%) and boys (41.6%) frequented chat rooms almost equally.

Social Networking

Social networking and online communication are inherently natural to teens. They are drawn to the freedom, creativity, and community that the technology of social media provides.

According to Lenhart, Madden, Macgill, & Hitlin (2011), In 2011, 95% of all teens, ages 12 through 17, were online. Of those online teens, 80% used social media. This was a rise from 2006, when it was first learned that 55% of online teens used social media (2011). In an earlier study in 2006, 70% of older girls, ages 15-17, used social networking sites as opposed to 54% of older boys of the same age. Similar amounts, of older girls (70%) and older boys (57%) had created a personal profile. Nearly half admitted that they visit a social networking site at least once a day (Lenhart, Madden, Macgill, & Hitlin, 2007). However, a recent study discovered that 73% of 14-17-year-olds visit social networking sites daily (Madden et al., 2013).

Also in 2006, nearly all teens used social media to keep up with friends and to make plans. Ninety-one percent of teens used social media to stay in touch with friends whom they saw frequently, and 17% declared that they used social media to flirt. Of social media users, 84% posted messages on friends' pages and 53% have shared artistic

work such as artwork, photos, stories, or videos online (Lenhart, Madden, Macgill, & Hitlin, 2007).

By 2009, 72% of teens had their own social networking profile. Of those, 58% frequented their sites to update their profile, 67% investigated others' profiles, and 63% posted or viewed photos. Girls (73%) were much more likely than boys (53%) to post photos of themselves online (Cox Communications, 2009). In 2013, it was reported that 94% of older teens ages 14-17 post photos of themselves on their sites (Madden et al., 2013).

By 2010, 73% of online teens, aged 12-17, used social networking sites. When looking at teens, ages 14-17, the number jumped to 82%. This is a significant increase from 55% in 2006 and 65% in of 2008 (Lenhart & Purcell et al., 2010). A recent study showed a continuation of this trend where it was reported that 89% of 14-17-year-olds use social networking sites. (Madden et al., 2013).

In a 2009 study of 2,077 high school students between the ages of 15-18, Dowdell (2011) found that 88% of the participants reported that they used social networks: (91.1% of girls; 84.1% of boys). Facebook was the most popular social media site with 68.5% of teen usage. This study is important as the population comes from several suburban high schools in the American Northeast rather than a sample recruited from a primarily online population. Although Facebook continues to be the favorite of most teens, its use among teens is decreasing as teens move to other sites less populated by adults (Madden et al., 2013).

By 2010, over 85% of 16-17-year-olds were involved in social networking. Since 2008, the number of teens who had a social networking account rose from 59% to

73% (McAfee/Harris Interactive, 2010). Girls (72%) were more likely to have a social networking account than boys (66%). As teens have become more involved with social networking, they update their *status* more frequently. Girls (42%) were more likely than boys (29%) to update their status frequently. Facebook was the preferred social networking site for all teens in this study (McAfee/Harris Interactive, 2010).

There has been a shift in how teens use social networking sites. Blogging has dropped from 28% to 14% from 2006 to 2009, although there has been a rise in the use of micro-blogging sites, such as Twitter (Lenhart & Purcell et al., 2010). Teen Twitter use is on the rise. When first measured in 2009, 8% of online teens used Twitter. That amount doubled to 16% in 2011 and now has increased again, as 24% of online teens use Twitter (Madden et al., 2013). Virtually all Twitter users are involved with other social network sites, such as Facebook or MySpace (Lenhart, Madden, Smith et al., 2011; McAfee/Harris Interactive, 2010).

It was also reported in 2012, that 27% of teens who use social media have also used Twitter, and more than 1 in 5 teens (22%) have a Twitter account. Eleven percent of teen social media practitioners use Twitter at least once a day. Girls (33%) use Twitter more than boys (22%) (Common Sense Media, 2012).

Responsible Internet Behavior

Generally speaking, most teens rely on adults for advice regarding responsible Internet behavior with 86% of teens reporting that they received advice from their parents, and 70% looked to their teachers or another adult at school for assistance. Almost 6 of 10 teens (58%) online maintained that their parents are their greatest

influence on their online conduct, whereas 18% reported their greatest influence comes from their friends (Lenhart, Madden, Smith et al., 2011).

Nevertheless, over three-quarters of teens expressed some level of concern that posting personal information online could negatively affect their own future. On the other hand, nearly a quarter (24%) of teens were not concerned at all that posting personal information online could negatively affect their futures. Older teenage boys were the least concerned of all (Cox Communications, 2009).

However, in a later study, teens appeared to consider how their present digital actions might reflect upon them in the future. Of the teens who used social media, 55% reported that they did not post something online that they believed might have a negative effect on their future. Of those, 67% were 17-years old and perhaps college bound (Lenhart, Madden, Smith et al., 2011).

A recent study shows this trend continuing with 67% of teens ages 16-17 who reported that they had not posted something online because they were concerned about the possible negative effect on their reputation. Even younger teens admit this concern, as 52% of teens ages 14-15 confessed that they also had not posted something online for the same reasons (Madden et al., 2013).

Internet Safety

This section will focus on safety, the second area of study. The following research will examine the online practices that expose teens to dangers including posting personal information online and interacting with strangers. Furthermore, the research will examine the perceptions of teens regarding their thoughts about the safety of teen Internet practices.

The Internet provides teens with the opportunity to act out or act up on a worldwide stage. For many teens, it is a place of complete freedom and anonymity with unlimited possibilities and little supervision. Moreover, the Internet provides a powerful and invasive weapon for cyberbullies and predators to prey on the vulnerable and the unsuspecting. “Today, the easiest way for an offender to meet and engage a child or teen for the purpose of sexual abuse, pornography, or prostitution is through the Internet” (Dowdell et al., 2011, p. 35).

In order to insulate minors from the exposure to harmful websites, the U.S. Congress enacted the Children’s Internet Protection Act (CIPA) in 2000. CIPA requires all schools and libraries to install filtering software on all computers accessible to children as a condition for eligibility for the E-Rate discount (Federal Communications Commission, 2000). The E-Rate program was created in 1996 through the Telecommunications Act. This program provides funds for schools so they may access the Internet for as much as a 90% discount. The amount of the discount is based on the number of students whose families qualify for financial assistance (Lenhart, Rainie, & Lewis, 2001).

In order to provide protections for children using the Internet, the U.S. Congress passed the Children’s Online Privacy Protection Act (COPPA), which went into effect in April 2000. COPPA is enforced by the U.S. Federal Trade Commission, and is intended for people who operate websites that act as hosts where individuals can post their personal websites on an online community. If one’s site is designed to gather personal information from children, or is directed toward or is attractive to children, one must comply with the law. However, COPPA defines children as 13 years old and younger

(Federal Trade Commission, 1998). To circumvent the law, individuals and companies offering these services have included a step in the subscription process that requires new patrons to simply click a box stating that they are older than 13 years of age, thus releasing the site provider of liability when children under 13 years of age subscribe to the service.

In 2008, Congress added an amendment to CIPA, the Protecting Children in the 21st Century Act, which further delineated the student educational requirements that schools must provide regarding appropriate online behavior. The law states that, as of July 1, 2012, “schools’ Internet safety policies must provide for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms and cyberbullying awareness and response” (Federal Communications Commission, 2011, para. 5).

In 2013, the Federal Trade Commission issued changes to COPPA that took place on July 1. Presently,

“some third-party advertisers and other ‘plug-ins’ [must now] comply with COPPA, and the definition of *personal information* has been expanded to include geolocation information, photos and videos. Persistent identifiers such as IP addresses and mobile device IDs are also now covered under the COPPA rule” (Madden et al., 2013).

It is important to note that 16% of teens using social media purposefully set their accounts to automatically include their location when they post (Madden et al., 2013).

Although the U.S. government has made some effort to protect and educate children regarding online safety issues, the global autonomy of cyberspace makes regulation difficult. “The Internet is a proverbial open window, allowing adults relatively

easy access to children and adults” (Dowdell et al., 2011, p. 36). Teens are lured by the freedom, anonymity, and power that technology provides.

Posting Personal Information Online

According to Cox Communications (2009), of the teens who used social networking sites, 9% post places they go; 41% post their city name, 45% post the name of their school, and 49% post their real age with 18% admitting to posting a fake age. Nearly three-quarters (72%) have online personal profiles, and many of those (62%) post photos of themselves and post personal information about themselves and others. Nearly half (49%) of teens admit to posting photos of their friends. Girls, at 73%, are much more likely to post photos of themselves online than boys (53%).

In another poll of online youth ages 10 -17, 36% admitted that they share their first name online, 28% share their age, and 19% share their email address. Approximately 10% reported that they share additional information such as their last name, the name of their school, their cell phone number, or a photo. However, when looking solely at the 13 to 17-year-old respondents, 12% confessed that they have given their cell phone number online. This is a 4% increase from 2008 (McAfee/Harris Interactive, 2010). In the Cox (2009) study, 14% admitted that they post their own cell phone numbers and 4% post their true addresses.

In a 2013 study (Madden et al.), this trend continues in every comparable area. Researchers found that 89% of teens ages 14-17 had a social networking site where 94% confessed that they post photos of themselves, 93% admitted that they post their real names, and 83% affirmed that they post their date of birth. Furthermore, 76% claimed that they share the name of their school and 72% shared that they post their city of

residence. Additionally, 53% state that they shared their email address, 24% purport that they post videos of themselves, and 23% detailed that they post their cell phone numbers. Of social network using teens ages 12-17, 53% professed that they post their address online (Madden et al., 2013).

Of the teens who used social networking sites, nearly half (49%) admitted to misrepresenting their true age. More than 4 in 10 teens (44%) pretended that they were older in order to access online services or websites (Lenhart, Madden, Smith et al., 2011). This amount dropped slightly to 39% in the follow-up study (Madden et al., 2013).

Over a third (34%) of teens 13 to 15 years old reported that they included their physical location in their status updates *often* or *always*. This percentage declined to 29% with older teens. However, respondents, ages 10 -17, balked at giving out information, such as the names of their parents, their home address, or their school address. There was no discernable difference in these results since 2008, and percentages hovered around 3% (McAfee/Harris Interactive, 2010).

Nearly half (46%) of online youth, ages 10 -17, confessed that they had given their personal information to someone online whom they did not know. As youth got older, they were more likely to divulge this information. Well over half (56%) of the 16 to 17-year-olds polled gave out their personal information online to someone whom they did not know (McAfee/Harris Interactive, 2010).

Perceptions of Posting Personal Information

A majority of teens who used social networking sites were aware that posting personal information online might put them at risk. Irrespective of this, they did it anyway. In fact, only 7% of teens believed that posting personal information and photos

on a social networking site was very safe. Nearly 6 in 10 teens (59%) believed that posting such information was unsafe. A quarter of younger teens, ages 13-15, believed it was *Very Unsafe* to post personal information or photos, whereas only 14% of older teens, ages 16-18, believed so (Cox Communications, 2009). Moreover, only 17% of social network using teens felt scared or uncomfortable when someone they did not know contacted them online (Madden et al., 2013).

Unwanted Sexual Solicitations

In the *YISS-2* study in 2005, 1 in 7 youth (13%) were exposed to unwanted sexual solicitations online. Of those, 70% were girls. Of the 4% of youth who received aggressive solicitations, 79% were girls. Solicitations were considered aggressive when teens were asked to meet solicitors offline, when teens received phone calls, or when teens were gifted with presents or money. Youth who received online sexual solicitations were asked to identify the gender of their solicitors. Of the 216 sexual solicitors, 73% were male, 16% were female, and 11% were unknown. Of the 68 aggressive solicitors, 84% were male and 16% were female. The youth polled also identified 43% of the solicitors as under 18 years old. As for the aggressive solicitors, 73% were identified as under 18-years old (Finkelhor et al., 2006).

Furthermore, in the *YISS-2* study, of the youth who received sexual solicitations online, 86% met their solicitors online. Of those who received aggressive solicitations, 75% met them online. Also, in the *YISS-2* study, 23% of the youth polled who received sexual solicitations and 75% of those who received aggressive sexual solicitations were asked to meet somewhere offline. Thirty-four percent of the aggressive sexual solicitors

called their target on the phone, and 18% went to the youth's home (Finkelhor et al., 2006).

Meeting Strangers Online

There is early evidence when comparing both YISS studies that youth are possibly more cautious online with those unknown to them offline, as there was a 6% drop (40% to 34%) in the numbers of youth who used chat rooms, email, or IM, with people they did not know. There was also a 6% decrease (40% to 34%) in the amount of people who youth knew only in an online environment (Finkelhor et al., 2006).

However, some teens (22%) continued to involve themselves with people they knew only online. Girls (25%), especially 16-17 year old girls (43%), were more likely than boys to chat with people they only knew online (McAfee/Harris Interactive, 2010).

Such was the experience of 13-year-old Megan Meier, who had formed an online relationship with a boy, Josh Evans, via MySpace. The relationship abruptly ended, and she and Josh argued heatedly. Others learned of the breakup and Megan began receiving cruel messages on her account. One message read, "The world would be a better place without you" (Maag, 2007, para. 3). In October of 2006, thinking Josh had rejected her, she went upstairs and hanged herself. Later, it was discovered that "Josh" was actually a 47-year-old neighbor, Lori Drew, whose daughter had once been a close friend of Megan's (Maag, 2007).

In a study that included 926 high-school boys, 146 answered the questions about meeting strangers online. Of the 1,151 high-school girls in the same study, 157 answered the questions about meeting strangers online. Of those, over a third of the girls (33.6%) and 12.8% of the boys confessed that they had met a stranger on the Web. Twenty

percent of the teens who met strangers online did so through instant messaging; 11.3% of the boys and 6.4% of the girls stated that they had met strangers in chat rooms. Of those who used social networks, most teens believed that they visited in chat rooms with other teens. Less than 2% (1.7%) of boys maintained that they used chat rooms to speak with older women (Dowdell et al., 2011).

Of the 146 boys who admitted meeting strangers online, 51 (34.9%) reported that they eventually met their online strangers face-to-face. Thirty-three (22.6%) admitted that “something sexual” happened at the meeting, but it was consensual. Ten (6.8%) reported that they had been threatened or sexually assaulted as a result of the meeting. Likewise, of the 157 girls who admitted meeting strangers online, 58 girls (36.9%) reported they met their online strangers face-to-face. Twenty-one (13.4%) admitted that “something sexual” happened at the meeting, but it was consensual. Seven girls (4.5%) expressed that they had been threatened or sexually assaulted as a result of the meeting (Dowdell et al., 2011).

It may be important to note that 466 adult male sexual offenders were included in this study. Of those, 113 were online sexual offenders. Forty-one percent reported that they frequented teen chat rooms, and most online sexual offenders showed a preference to chat with teen girls. Of the online sexual offenders, 29.4% asserted that they identified themselves honestly online, but nearly 60% (58.8%) confessed that they had disguised their name or age (Dowdell et al., 2011).

Privacy Settings and Protections

Social networking sites have not always provided many opportunities for privacy protection for personal information. As technology and consumer demand has advanced,

privacy protection options have become more robust. One of four teens conveyed that they knew someone who had a negative experience due to information posted online. However, only 1% admitted that it had happened to them (Cox Communications, 2009).

Lenhart, Madden, Macgill, and Hitlin (2007) showed that of the teens who restricted access to their own photos, 39% restricted access *most of the time*, but 21% admitted that they *never* restricted access to their own photos and videos. Of the teens who restricted access to their own videos, 19% restricted access *most of the time*, but 46% *never* restricted access to their videos. They wanted their videos to be seen, and the Internet provides the vehicle for availability. Dowdell (2011) found that of the teens who used social networks, more girls than boys used the privacy setting, with 81.4% of girls versus 61.6% of boys who made their sites available only to *friends*.

Lenhart, Madden, Smith et al. (2011) discovered that 62% of teens who used social networks made their sites visible only to *friends*, whereas 19% made their sites available only to *friends of friends*. However, 17% of social network using teens made their sites totally *public*. Teens who set high privacy settings (12%) were less likely to have negative online experiences than those with no filters who averaged 23%. Common Sense Media (2012) revealed that three-quarters of teens with social networking sites believed that they at least understood their site's privacy policies *somewhat* (49%) or *very* (27%) well.

Although, Madden et al. (2013) determined that teens reported feeling confident in their ability to use online privacy protections to protect their information, 60% reported that they use the highest setting to keep their profile private. A quarter of teens claimed that they maintain a partially private profile, yet, 14% acknowledged that they keep their

profile completely public. Girls (70%) are more likely than boys (50%) to maintain a private profile that is only available to *friends*.

Moreno and Whitehill (2012) contended that social media provides new challenges for the future. Adults must understand that social media is ubiquitous to teens, items posted can be published and distributed widely, and teen activity online is mostly unsupervised. Additionally, time spent online by teens is expansive and, as such, provides teens increased exposure to online dangers.

Cyberbullying

This section will focus on cyberbullying, the third area of study. The following research will investigate the practice of cyberbullying and will inspect the types and levels of teen involvement in cyberbullying. Additionally, the perceptions of teens regarding cyberbullying will also be examined.

Bullying is no longer about the strong picking on the weak in the schoolyard. The physical assault has been replaced by a 24 hour per day, seven days a week online bashing. Savvy students are using Instant Messaging, e-mails, chat rooms and websites they create to humiliate a peer. No longer can parents count on seeing the telltale physical signs of bullying: a black eye, bloody lip, torn clothes. But the damage done by cyber bullies is no less real, and can be infinitely more painful. (i-Safe America, 2004, para. 2)

Not only can the actions of some teens be considered unwise and unsafe, they are illegal in most states. Forty-nine states in the United States have some type of legislation concerning bullying. Forty-seven of those states have provisions that include “electronic harassment” or bullying by “electronic means.” However, only 18 states intentionally specify “cyberbullying” in the language of their statute (Hinduja & Patchin, 2012).

Publicity in recent years has drawn much-needed attention to the devastation attributed to cyberbullying. Unfortunately, there have been many highly publicized teen

suicides that have gotten media attention, in part, due to the astonishing details of online cruelty that contributed to the actions of the young victims. The following provide a small glimpse into the power and devastation that misuse of the Internet can allow.

One of the first incidents to draw national media attention was the case of 13-year-old Ryan Halligan whose father had no idea what his son had been experiencing online until after his son had hanged himself on October 7, 2003. Ryan had received months of IM's from callous and vicious tormentors who left links to suicide searches and taunts like "You're a loser." Ryan had threatened to kill himself as a response to their taunts. When he posted his final message, "Tonight's the night," he received the reply, "It's about time" (Pappas, 2005, para. 1-5).

Phoebe Prince, a 15-year-old freshman and Irish immigrant in Massachusetts, experienced unconscionable torment both online and at school by a group of "popular" girls who went to the same school. Phoebe's transgression was that she had briefly dated a senior football player. Phoebe obviously did not know her place in the social structure according to this small group of girls, so they victimized Phoebe with a barrage of insults and slurs over phone and online, and they bullied her in person at school. "One of the last text messages Prince sent was 'I can't take much more. ...'" (Webley, 2011, para. 10) On January 14, 2010, she hanged herself. Her tormentors even posted disparaging remarks on a memorial page set up in her honor on Facebook (Kotz, 2010). Nine teens were indicted for a range of actions that contributed to Phoebe's death. Five teens agreed to plea deals, one teen was charged with statutory rape (Kotz, 2010).

Fourteen-year-old freshman Jamey Rodemeyer questioned his sexuality, shared his thoughts about it, and paid a high price. Jamey found community support online as he

was involved with the *It Gets Better Project*, a video sharing community site supportive of LGBT teens (It Gets Better Project, 2010). He made his own video, and found some compassion and encouragement through the responses of others. However, it was not well received by everyone both online or in person. “‘JAMIE IS STUPID, GAY, FAT ANND [sic] UGLY. HE MUST DIE!’ an anonymous commenter said on Formspring. ‘I wouldn't care if you died. No one would. So just do it :) It would make everyone WAY more happier!’ said another” (Hughes, 2011, para. 7). On September 18, 2011, after being taunted and bullied at school and after receiving anonymous online messages suggesting that he should die, Jamey killed himself.

The much-publicized 2013 case of Rebecca Sedwick exposed another tragic aspect of cyberbullying. After 12-year-old Rebecca jumped to her death from a tower at an abandoned cement plant in Lakeland, Florida, her 14-year-old tormentor posted, "Yes ik [I know] I bullied REBECCA nd she killed her self but IDGAF [I don't give a f***]" (Glasser, 2013). The girl who posted the message and a 12-year-old collaborator were arrested on felony aggravated stalking charges. Although the case brought wide-spread attention to the issue and a frightening warning to parents, the discovery of the bullying came much too late for Rebecca.

These tragic cases illuminate the different avenues that cyberbullying can take. They are tragic and heart-rending, but they unfortunately, are not unique. For every Ryan, Phoebe, Jamey, and Rebecca, there are too many others. This section will examine the research surrounding the practice of cyberbullying.

Cyberbully Involvement

As in the previous two sections, the NCEMC study will be used as the starting point for existing research. There was a 50% increase in incidents of online harassment of youth from the *YISS-1* in 2000 and the *YISS-2* in 2005 where 1 of every 11 teens (9%) reported being a victim. It was reported in the *YISS-2* that at least 58% of the harassers were under the age of 18. One in 10 of those harassed received photos of their harasser, and 1% of the photos was sexual. Nearly 1 in 4 (23%) of those harassed were asked to send their photo to their harasser. Eight percent wanted a sexual photo, but no youth complied (Finkelhor et al., 2006).

As reported in the *YISS-2*, 49% of youth removed themselves from the situation and 17% told the harasser to stop. Only 5% of youth called law enforcement, and 5% of youth had parents, guardians, or teachers handle the situation (Finkelhor et al., 2006).

Victims, Bullies, and Bystanders

In a 2007 study of 824 youths, ages 13 to 17, 43% of those polled experienced some form of cyberbullying in the previous year (Harris Interactive, 2007). This experience was most prevalent in the 15 to 16-year-olds in which more than half had been cyberbullied, and the experience was higher in females. Forty-six percent of high school students experienced some cyberbullying in the previous year, and about 3 of 4 eventually discovered the identity of the bully who was often a friend or school mate. Twenty-three percent of teen victims were bullied by someone they did not know via chat rooms where cruel or mean things were said or where they received cruel or threatening emails, IMs, or text messages (Harris Interactive, 2007). More than 1 in 10 (12%)

reported that they have been approached online by someone they did not know off-line (McAfee/Harris Interactive, 2010).

By 2009, at least 33% of teens reported that they had either experienced cyberbullying, participated in it, or knew friends who had some sort of involvement. Over a third (34%) admitted to having been both an online bully and cyberbullying victim. It was also learned that cyberbullies were more likely to be girls (59%) than boys (41%). Those bullied online were more likely to be girls (25%) than boys (14%). Girls (76%) more than boys (60%) thought that cyberbullying was a serious problem (Cox Communications, 2009). In this study, researchers found that nearly 1 in 10 (9%) teens reported that they had received a message consistent with cyberbullying. In keeping with earlier studies, girls reported higher frequencies of these occurrences than boys (McAfee/Harris Interactive, 2010). Teens who bullied others online tended to spend more time online than other teens overall (38 hours vs. 26 hours per week) (Cox Communications, 2009).

Almost half of the teens who reported being victims of cyberbullying purported that the bully had been caught. However, of those who admitted cyberbullying others (a small number - 68 total teens), only 28% admitted that they had ever been caught, and most of those maintained that they were caught by their victim (13%). Twelve percent were caught by a parent, and 5% by another adult (Cox Communications, 2009).

In keeping with earlier studies, the Annenberg Public Policy Center found that among those in high school, girls (18%) were the victims of cyberbullying more than twice as high as their male counterparts (7%). One in ten girls reported cyberbullying others versus 4% of males. More than 7% of girls admitted being both bully and victim,

compared to 2% of boys (Romer, 2010). At least 14% of teens, 13-17 years old, confessed engaging in some type cyberbullying activity in both 2008 and 2010 (McAfee/Harris Interactive, 2010).

Of the 77% of teens who used social media, 4 of 5 teens (80%) witnessed people being mean or cruel. Of those 80%, 12% witnessed this behavior *frequently* versus 47% who witnessed it *once in a while*, and only 11% reported they had *never* witnessed cruelty via social networking sites (Lenhart, Madden, Smith et al., 2011).

Over a third (33%) of teens, 13-17 years of age, revealed that they knew someone who had mean or hurtful messages posted about them online. However, less than 1 in 10 (9%) revealed that someone had posted mean or hurtful messages about them online. Over a third (32%) of teens, 13-17 years of age, revealed that they knew someone who had rumors spread about them, whereas, less than 1 in 10 (9%) confirmed that they personally had rumors spread about them online (McAfee/Harris Interactive, 2010).

Fifteen percent of teens, 13-17 years of age, reported they knew someone who had received threatening messages. Conversely, only 5% disclose that they had received threatening messages. At least 1 in 10 teens ages 13 to 17 reported that they knew someone who had been stalked online by someone they did not know in person. Yet, just 2% in 2010 and 5% in 2008 expressed that they had been stalked online by someone they did not know in-person (McAfee/Harris Interactive, 2010).

There was a great difference between the numbers of teens who purported witnessing online cruelty versus those who revealed having had personal experiences of online cruelty. Of social media-using teens, 15% reported being a victim of online

meanness in the previous year. Therefore, 85% of social media-using teens were free of cyberbullying experiences (Lenhart, Madden, Smith et al., 2011).

Nearly 1 in 5 (19%) teens who used social networking sites reported being bullied using digital media by text (9%), online (8%), or by phone (7%). Of that 19%, half of those were bullied in multiple ways. Online bullying happened via email, IM, or over a social networking site. Girls were more likely than boys to report online bullying. It may be important to note that although any incident of bullying is tragic, more teens (12%) reported being bullied in person than being bullied online (Lenhart, Madden, Smith et al., 2011).

Of the teens using social networking sites, 41% claimed at least one negative outcome because of an online experience. One quarter asserted that an online conflict led to a face-to-face confrontation, and 13% were nervous going to school the next day. Eight percent contended that they got into physical fights because of an online exchange, and 6% purported that they got into trouble at school because of an experience on a social network (Lenhart, Madden, Smith et al., 2011).

Witnesses

Nearly all (95%) teens who observed online cruelty usually ignored it at least *once in a while*. Over half (55%) reported that they observed online cruelty *frequently*. Although, of those who had witnessed online cruelty, 84% asserted that they had witnessed others defend the victim. Over a quarter (27%) professed to have witnessed this *frequently*, and 83% declared that they had seen others tell the bully to stop. However, only 20% maintained that they witnessed others intervene *frequently* (Lenhart, Madden, Smith et al., 2011).

Unfortunately, two-thirds of teens who used social media admitted that they witnessed others join in the cruelty. Nearly 1 in 5 teens (19%) purported that they witnessed others join the cruelty *frequently* and almost a quarter (23%) witnessed it *sometimes* (Lenhart, Madden, Smith et al., 2011).

Of teens who used social media, 9 of 10 (90%) admitted that they had seen and ignored online cruelty at least *once in a while*; 35% confessed that they had done this *frequently*. However, 4 of 5 teens (80%) asserted that they had defended the victim, with 25% doing this *frequently*. Nearly 4 of 5 teens (79%) who use social media reported telling the bully to stop, 20% of whom did this *frequently*. Over two-thirds (67%) of teens who used social media admitted watching others join the bullying, and 21% conveyed that they had joined the cruelty themselves: 12% *once in a while* and only 2% joined *frequently* (Lenhart, Madden, Smith et al., 2011).

Teens Seeking Advice

When witnessing cyberbullying, over a third (36%) of teens who used social media claimed that they sought advice. Girls (51%) reported that they sought advice more often than boys (20%). Of those who asserted that they sought advice, 92% declared that the advice was *helpful*. Over half (53%) sought advice from their peers, and over a third (36%) queried their parents (Lenhart, Madden, Smith et al., 2011).

Teen Perceptions about Cyberbullying

When asked why teens think others cyberbully, 81% believed that bullies *think it's funny* (81%), or *don't like the person* (64%), or the bullies *don't think their actions are a big deal* (58%), or think there will be no consequences (47%), think *the victim is a loser* (45%), or believe they *will not get caught* (45%) (Harris Interactive, 2007).

Victims of cyberbullying supposed that they were harassed out of meanness or jealousy, for entertainment, or as a means for the bully to show off. Bullies, however, rationalized their actions as retribution toward those who deserved it (Cox Communications, 2009). The reasons that teens believed they had been cyberbullied online or by text include *to be mean* (75%), *for fun or entertainment* (56%), *to show off to their friends* (41%), *out of jealousy* and *to get back at me/someone* (32%). The top two reasons that teens cyberbully others online or by text were to *get back at someone* and because *they deserved it*. Both averaged 58% (Cox Communications, 2009).

Of social media-using teens, 1 in 5 (20%) believed that teens were *mostly unkind* to each other online. On the contrary, over two-thirds (69%) of online teens believed that teens were *mostly kind* to each other. Interestingly, 1 in 3 (33%) teen girls, aged 12-13, reported that in their experience, people were *mostly unkind*. Only 9% of 12-13 year old boys reported the same. Of teens, 14-17 years old, 18% of the boys and 20% of the girls claimed that that their peers were *mostly unkind* (Lenhart, Madden, Smith et al., 2011).

Most teens (81%), believed it was easier to get away with cyberbullying than bullying in person, and many (80%) also believed it was easier to hide cyberbullying from parents than hide traditional bullying. A third (33%) of teens believed that cyberbullying was worse than bullying in person. Over two-thirds (68%) believed that cyberbullying was a serious problem and three-quarters (75%) believe stricter rules about it should exist. Nearly half (49%) thought that there should be *serious legal consequences* for those caught cyberbullying (Cox Communications, 2009).

When asked how to prevent cyberbullying, 71% believed that the most effective way was to block communication. Sixty-two percent believed another effective way was

to refuse to pass along messages. Fifty-six percent thought that Internet Service Providers (ISPs) should be able to block *cyberbully messages*. Fifty-six percent also believed that teens should tell their friends to stop. Forty-five percent thought that parents should tell their teens that it was wrong, and 43% thought that cyberbullying should be reported to an adult (Harris Interactive, 2007).

Teens believed that cyberbully prevention was not particularly effective on the school level, but 37% supposed that schools should have rules against it. Over a third (33%) believe schools should supply cyberbullying education, and nearly a third (32%) thought that adults should have training to teach youth how to stop cyberbullying (Harris Interactive, 2007).

When asked what teens would do to stop cyberbullying, 64% were *extremely likely* or *very likely* to refuse to pass along cyberbully messages and 44% were *extremely likely* or *very likely* to tell a friend to stop. Less than 25% were *extremely likely* or *very likely* to tell an adult (Harris Interactive, 2007).

Sexting

This section will focus on sexting, the fourth area of study. The following research will examine the practice of sexting among teens and will investigate teen sexting practices. In addition, the research will examine the perceptions of teens regarding sexting practices.

The activity of sexting has emerged into the forefront of modern culture with the combination of wireless technology and its unsupervised use by teens. Its effects have been chronicled in the courts where laws that predate the technology do not fit these new actions. In 2009 in western Pennsylvania, child pornography charges were brought

against three female teens who sent sexually explicit photos of themselves to three male classmates. The photos were discovered when a cell phone was confiscated in violation of school policy. For schools that provide technology service and repair to their 1-to-1 devices, inadvertent discovery of sext photos and messages is certainly a possibility. Pennsylvania has now passed legislation that has categorized the sending of sexually explicitly photographs as a second-degree misdemeanor. Minors will now risk fines or community service rather than a felony conviction and a sex offender label (Schiller, 2011).

By 2014, 20 states enacted state laws that included sexting. At least 12 of those states allow the consideration of sexting as a misdemeanor, and 12 states provide a diversionary option where minors can be required to participate in community service, attend remedial education, or receive counseling (Hinduja & Patchin, 2013; National Conference of State Legislatures, 2014).

Some recent studies coming out of the medical community show that teens who engage in sexting practices are more likely to engage in risky sexual behavior (Moreno & Whitehill, 2012; Temple et al., 2012). For girls, sexting “is associated” with “risky sexual behaviors.” Thus, it was recommended that “Pediatricians may consider sexual disclosures in a social media setting as an expression of adolescents’ offline sexual intentions or behaviors” (Moreno & Whitehill, 2012, para. E1).

As many states struggle to find balance between inappropriate behavior and child pornography, and adults attempt to provide adequate support and services to raise healthy teens, for now, sexting seems to be entrenched in today’s modern culture, and it can have devastating effects. The much-publicized suicide of 18-year-old Jessica Logan brought

to light the devastating mixture of sexting and cyberbullying. On July 3, 2008, Jessica hanged herself after her former boyfriend distributed sext photos and messages she had sent to him earlier in the relationship. After their break-up, he forwarded those messages and photos to others. Subsequently, some high-school girls cruelly used those once-private messages and photos to mercilessly harass Jessica (Celizic, 2009). This section will present the research surrounding the practice of sexting.

Teen Sexting Practices

In 2008, the *Sex & Tech* study was the first that investigated the practice of sexting. It provided the first glimpse into this fairly new technology trend. Regarding photos and videos, it was revealed that 1 of every 5 teens expressed that they posted nude or semi-nude photos or videos of themselves. Slightly more teen girls (22%) posted nude or semi-nude photos or videos than teen boys (18%). Of girls, ages 13-16, 11% admitted posting similar photos or videos. (The National Campaign, 2008)

Regarding messages, nearly 4 of 10 teens (39%) admitted they sent or posted sexually suggestive messages. Slightly fewer girls (37%) reported that they sent or posted sexually suggestive messages more than boys (40%). Nearly half (48%) of all teens polled admitted they receive sexually suggestive messages (The National Campaign, 2008).

Of the teens who admitted that they sent sexually suggestive messages, 71% of teen girls and 67% of teen boys professed that they sent them to a boyfriend or girlfriend. Twenty-one percent of teen girls and 39% of teen boys reported that they sent sexually suggestive messages to someone they wished to date. However, 15% of teens who sent

sexually suggestive messages admitted that they sent them to someone they only knew online (The National Campaign, 2008).

In the 2009 Cox study, a sext was defined as a “sexually suggestive” message or a “nude or nearly-nude/sexually suggestive photo” sent by text or email. In this study, approximately 20% of teens (1 in 5) reported that they had participated in sexting. Nearly 1 in 5 teens (19%) reported having experience with sext messages and photos. This was consistent with the earlier *Sex & Tech* study. Of those, 9% declared having sent sext messages and 17% affirmed receiving such messages or photos. Only 3% admitted that they had forwarded a sext they had received from someone else. Eight of 10 teen sexters (80%) were under 18 years of age, nearly a quarter of all sexters were 17-years-old, and nearly 1 of 10 teen sexters (9%) was 13-years-old (Cox Communications, 2009).

A year later, in a 2009 study of 2,077 high school students between the ages of 15-18, almost a third (32%) claimed that they knew someone who had participated in sexting activities; nearly a third of girls (34%) and boys (30%) asserted that they knew someone who had been sexted. However, only 15% of high school students reported that they had actually been sexted. More boys (17%) than girls (13%) confirmed that they had been sexted (Dowdell et al., 2011).

An important aspect of this study was the inclusion of both public and private school students. The results showed that 32% of public school students admitted that they knew someone who had been sexted, and 35% of private school students asserted that they knew someone who had been sexted. However, 16% of public school students purported that they had been sexted, and just over 6% of private school students conveyed that they had been sexted (Dowdell et al., 2011).

That same year, at least 30% of teens reported that they had friends who had sent or received a sext. Boyfriends or girlfriends were the most common recipients. However, approximately 10% of teens who had sent sexts admitted that they had sent them to someone they did not know. (Cox Communications, 2009)

Six of 10 teen sexters reported that they sent their messages or photos of themselves to their boyfriends or girlfriends. Nearly 1 of 5 teens (19%) reported sending a sext message or photo to their ex-boyfriends or ex-girlfriends. However, 18% admitted to sending sexts to friends. Three-quarters of those who received sext messages and photos believed that sexters sent sexually suggestive messages and photos to their boyfriends or girlfriends. However, nearly half (49%) thought sexters sent them to those they *had a crush on*. Less than a quarter (23%) believed that sexts were sent to friends, and 20% believed that they were sent to ex-boyfriends or ex-girlfriends and best friends (Cox Communications, 2009).

Not all messages end up with their intended recipients. In fact, 44% of teens polled conveyed that it was common for sext messages to be shared with others than the intended recipient. In addition, 39% of teens expressed that it was common for sext photos to be shared with others than the intended recipient. Moreover, 38% of girls and 39% of boys claimed that they had received sext messages meant for someone else. A quarter of girls and a third of boys maintained that they had received sext photos meant for someone else (The National Campaign, 2008).

Thirty percent of teens reported that a friend's sext was forwarded to an unintended recipient. In contrast, 2% of teen sexters admitted that a sext of theirs was forwarded to an unintended recipient (Cox Communications, 2009).

In the 2010 *YISS-3* study, only 2.5% of the youth polled sent or forwarded nude or semi-nude photos or videos. When asked about sexually explicit images, the definition was defined as showing *naked breasts, genitals, or bottoms*, and 1% of youth admitted that they had sent or forwarded images of that kind. Over 7% maintained that they had received nude or nearly nude images, whereas nearly 6% asserted that they had received sexually explicit images (Mitchell et al., 2011). The results of this study show lower sexting totals than other comparable studies as the researchers attempted to define clearly the nuances of creating and sending sext images. They expressed concern with the results of previous studies, taking exception with the broad application of the definition of sexting and the methodology of online data gathering.

Of the 110 teens who received sext images, over half (55%) were 16 or 17 years old and 56% were girls. Of the 39 respondents who appeared in their own sext photos or videos, nearly three-quarters (72%) were 16 or 17 years old, and 61% were girls (Mitchell et al., 2011).

It is imperative to understand that the following study defined sexting as the sending and receiving of “naked pictures” rather than nude, semi-nude, or sexually explicit images, as defined by other studies (Temple et al., 2012). Therefore, the results must be viewed through a narrow lens. Even with such a disquieting classification of sexting, 27.6% of teens (27.5% of girls; 27.8% of boys) reported that they had sent naked pictures of themselves via email or text. Twenty-one percent of girls and 46% of boys reported they had asked someone else to send naked pictures of themselves via email or text. Over 68% of girls and 42% of boys reported that they were asked by someone else to send naked pictures of themselves via email or text (Temple et al., 2012).

Of those who were asked to send a naked picture of themselves, it bothered 27% of the girls *a great deal* versus only 3% of the boys. Older teens were more likely to send naked pictures of themselves and were less likely to be bothered when they were asked to do so. The action of asking someone else to send a naked picture peaked with 61.5% of 16-year-olds, although followed closely by 60.4% of the 17-year-olds. There was a decrease to 53.3% for teens at least 18-years-old (Temple et al., 2012).

Overall, more than 1 in 4 teens (27.6%) maintained that they had sent naked pictures of themselves. About half had been asked to send a naked picture, and about a third had asked others to send them a naked photo of themselves. Boys were more likely to ask someone to send them a sext photo, whereas girls were more likely to be asked to send a sext photo (Temple et al., 2012).

The researchers noted that their results were markedly higher than other recent data, but they explained that the higher results could be due to the inclusion of older teens in their population. The authors also cautioned that the frequency of sexting does not make it acceptable with teens, as all girls who were asked to send a naked photo were bothered by the request, and of boys asked to send a sext photo, at least half were bothered at least *a little*. Temple et al. (2012) determined that even when sexting is defined as solely pertaining to *naked* pictures, it is prevalent with today's teens.

Why Teens Sext

For some teens, sexting has become an element of dating. Thirty-eight percent of teens claimed that they believed exchanging sexts made dating easier, and 29% of teens stated that they believed teens who exchanged sexts are expected to date (The National Campaign, 2008).

Teens sent sexually suggestive content for a variety of reasons. Two-thirds of teen girls (66%) and 60% of teen boys suggested that they sent sexually suggestive content to flirt. Over half of teen girls (52%) admitted that they sent sexually suggestive content as a *sexy present* to their boyfriends. Forty-four percent of teens purported that they sent sexually suggestive content in response to receiving sexually suggestive content from others. Of teen girls, 40% reported that they sent similar content *as a joke* and 34% of teen girls professed that they sent sexually suggestive content to *feel sexy* (The National Campaign, 2008).

Not all teens practiced sexting behavior for positive reasons. Over half of teen girls (51%) shared that girls sext because boys pressured them. Only 18% of teen boys claimed that boys sext because girls pressured them. Nearly a quarter of teen girls (23%) and teen boys (24%) admitted to being pressured by friends to send or post sexual content (The National Campaign, 2008). The most popular reasons for sexting were to add romance to a relationship, to start a relationship, or as a joke (Mitchell et al., 2011).

Teen Perceptions About Sexting

Even though three-quarters of teens (75%) declared that they believed that sexting *can have serious negative consequences*, nearly 2 of 5 teens (39%) admitted that they had sent sext messages, and 1 in 5 teens (20%) related that they had posted sext photos (The National Campaign, 2008). Although 14% of sexters confessed that they had been caught sending or receiving sext messages, 9% of sexters admitted that they had been caught by their parents. Surprisingly, 90% of teen sexters asserted that they had never had a negative experience due to their sexting practices (Cox Communications, 2009). Over a quarter of youth (28%) who sent, and an equal number of those who received, sext

images either reported the activity to or were caught by an adult in authority (Mitchell et al., 2011).

The majority of teens (74%), including 50% of those teens who confessed that they participate in sexting, believed that sexting is wrong for people under the age of 18. However, 80% of teens who confessed that they participated in sexting were under 18. Although 70% of teens believed that their age group was too young to be sexting, approximately 50% believed that they were old enough to make their own decisions regarding the appropriateness of sexting. Although three-quarters of teens (74%) thought sexting was wrong, only half (48%) thought it should be illegal, and over half (55%) stated that they believed that serious legal consequences exist for those who get caught. However, teens supposed that only a small number of sexters ever are caught (Cox Communications, 2009).

A vast majority of teens (90%), even those who admitted to being sexters, reported that they believed sexting was dangerous. Conversely, a very small amount of teens (3%) declared that they believed there was nothing wrong with the practice of sexting, and less than a quarter (23%) asserted that they believed it was acceptable to sext if it was consensual to both sender and receiver. Furthermore, almost half (48%) of teens believed that adults overreact about sexting (Cox Communications, 2009).

Summary

Internet technology is ubiquitous. It is the lifeblood of most teens, and it has become an integral part of the educational landscape. As some schools require students to use these powerful tools on a daily basis, it is important for educators to know how students are using these devices. This is especially important for educators in Catholic

schools, as they are called to prepare those who will lead the mission of the Church into cyberspace.

The review of literature began with an examination of appropriate Church documents beginning with *Inter Mirifica* (Paul VI, 1963) through to Pope Francis's Message for the 48th World Communications Day (2014). These writings defined and illustrated the importance of the use of communication technology to promote the Church's mission. The authors also emphasized the crucial part that youth will play in proclaiming the Gospel message in both the real world and cyberspace, as well as the essential responsibility assigned to educators to prepare their students for the future. Literature was examined that related to the four areas of study: General Internet use, safety, cyberbullying, and sexting. The literature provided an inspection of the omnipresence of technology in the life of teens. The literature revealed that the Internet is where teens shop, game, explore, and meet. It is also where some share personal identifying information, post insults and threats, and send sexually explicit photos. Although existing studies have focused upon teen Internet use, few have included Catholic school students in their sample population. Moreover, none have focused exclusively on students in Catholic schools, especially schools that operate a 1-to-1 technology program.

CHAPTER III

METHODOLOGY

Restatement of the Purpose of the Study

The purpose of this study was to identify the practices and perceptions of students in Catholic high schools on the use of the Internet. Specifically, this study examined students' practices and perceptions related to general Internet usage. In addition, it investigated their practices and perceptions concerning safety, cyberbullying, and "sexting." An online survey was used to collect data from students in a high school that employs 1-to-1 technology.

Research Questions

The following research questions were investigated in this study:

1. What are the practices and perceptions of students in Catholic high schools concerning general Internet usage?
2. What are the practices and perceptions of students in Catholic high schools concerning the safe use of the Internet?
3. What are the practices and perceptions of students in Catholic high schools concerning cyberbullying?
4. What are the practices and perceptions of students in Catholic high schools concerning sexting?

Research Design

This study quantified the perceptions and practices of Catholic high school students regarding Internet safety, cyberbullying, and sexting by using survey research methodology. Data gathered by means of survey research supplied the opportunity to discover the behaviors, attitudes, and opinions of this specific population of Internet users (Creswell, 2008). Data was gathered for this study by means of an online survey. In

these areas of study, data gathered during initial and some subsequent studies have been collected via telephone surveys (Finkelhor et al., 2000, 2006; Lenhart, 2009; Lenhart, Madden, Macgill, & Smith, 2007; Lenhart, Madden, & Smith et al., 2011; Romer, 2010). However, studies that employ the Internet as a means to collect data have become more prevalent (Common Sense Media, 2012; Cox Communications, 2009; McAfee/Harris Interactive, 2010; National Crime Prevention Council, 2007; The National Campaign, 2008).

Online survey research has been found to be beneficial when there is a large sample, especially when targeting a closed population, and in particular, one with reliable Internet access. The speed of gathering data online is superior, as online surveys may be made accessible to a large number of participants in a short period of time. In addition, respondents may easily complete and “return” their surveys electronically, allowing for a high speed of return (Fowler, 2009; Sue & Ritter, 2007). Additional benefits to the researcher include the low cost and simplicity of using an online survey. No special expertise is needed to employ online surveys, and there are relatively low cost online services available. More importantly, the use of online survey research provides important benefits to the respondents. Online surveys provide some protection for the participants as off-site encrypted software makes it highly unlikely to pinpoint a particular comment to any particular student. Online instruments also provide participants with privacy, especially when self-reporting potentially sensitive information. Moreover, online surveys may provide interactive features, as for contingency questions, that can individualize the survey according to pre-programmed instructions (Fowler, 2009; Sue & Ritter, 2007).

Sample Population

The population for the study included approximately 1,130 female and male students, ages 14-19, who attended a San Francisco Bay Area Catholic high school with a 1-to-1 technology program. Convenience cluster sampling was used to determine the sample. The sample population included 20 clusters (religion classes) of students, with an average of 25 students per cluster. Clusters of students were distributed to include a minimum of 100 students from each grade level. All levels exceeded 100 except for the junior class in which 89 students were included in the sample. The final sample totaled 480 student participants from a pool of 1,129 students. The sample population exceeded what is needed to generalize the results to this specific population (Fowler, 2009).

Every semester, all students are required to enroll in a religion class. Therefore, the survey was completed during the religion classes, in which all students, except those enrolled in one online religion class and those enrolled in five classes taught by the researcher, had an equal opportunity to be chosen to participate in the study.

Ethical Considerations

Permissions

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) categorized this study as exempt (Appendix A). Therefore, this study was conducted according to the Review Board's guidelines appropriate for this designation. These steps ensured protection for all participants. The researcher received permission from the diocesan superintendant and the school's principal (Appendix B).

Because the participants were private high school students, all students, even those over 18-years-old, were required to obtain parental permission (Appendix C). The

classroom teachers were responsible for obtaining signed permission forms from each student.

Protections

All parties were assured of the following protections built into the study. Even with the appropriate permission, student participants were given the opportunity to opt out of the study at any time. Additionally, they could skip any questions they did not wish to answer on the survey. Furthermore, students who chose not to participate or who did not return a permission form were given an alternate activity so no negative attention was drawn to them.

Additional protections for the participants included the manner of data collection and the ethical handling of all personal information and data collected. The participants were informed of the steps taken to ensure their comfort and privacy with the subject matter, the anonymity of the survey results, and the security and ethical handling of the overall results. An online survey afforded the participants personal privacy while completing the survey. Participant anonymity was ensured, as identifying data on the survey was limited to grade level, age, and gender. The survey was hosted by *Survey Monkey*[®], an online survey service independent of the school's data delivery system, *Blackboard*[™]; therefore, no email address will be linked to their individual responses. The overall results of the survey were initially stored in a password-protected file accessed through the survey host website. The contents of the file were also downloaded by the researcher and copied onto an external data file. The original data file was deleted from the online service.

Research Settings

This study included students in a Catholic high school in the San Francisco Bay Area who had a well-established 1-to-1 technology program. The school is a four-year college preparatory institution located in an urban environment and, at the time of this study, enjoyed an enrollment with a coeducational student body of 1,029 students.

The school was chosen for its commitment to the use of technology in education through the implementation of their 1-to-1 technology program. The school requires all incoming freshman and transfer students to acquire and maintain a wireless device for daily use at school. The students may purchase or lease a specific model of computer that is pre-loaded with software specific to the educational needs of the community, or they may choose the option to Bring Your Own Device (BYOD), pay a fee for the school to image their device, and accept full responsibility for maintenance and repair.

An Internet safety component is included in the freshman orientation program. Each year students participate in a yearly *Safe Environment* unit that also includes Internet safety and etiquette education.

Instrumentation

The *Student Internet Use Survey* (Appendix D) includes items that reflect information arising from the literature, from the fundamental studies regarding teen use of the Internet, and from researcher experience. The survey includes, with permission, items from Cox Communication's (2009) *Teen Online and Wireless Safety Survey* that was completed in partnership with the National Center for Exploited and Missing Children (NCEMC) who commissioned the study to investigate the online behavior of teens, specifically regarding the areas of sexting and online bullying (Appendix E).

Additionally, 10 specific survey items included opportunities for participants to provide their own anecdotal evidence. Participants had the opportunity to add their own personal narrative explanations to their survey answers. The survey was employed using *Survey Monkey*[®], an online survey service.

Survey Items

Survey items focused on the areas of general behavior, safety practices, cyberbullying, and sexting, and while it is important to discover the specific practices of students' Internet usage, students' thoughts about the actions of others are also important. Therefore, the survey included items concerning both practice and perception. Survey items queried students about their own personal practices and their knowledge of the practices of others. Moreover, survey items solicited from students what they thought about their own Internet practices and what they thought about the Internet practices of others. In addition, demographic information was gleaned from survey items #31 through #33 which inquired into respondents' grade, age, and gender. Various items of the survey were designed to focus on more than one area of study, and those items are indicated in bold text in Table 2. The survey items and their relation to the four research questions are presented in Table 2.

Table 2

Internet Use Survey Items and Their Relation to the Four Areas of Study

	Research Questions			
	1. General Practices	2. Internet Safety	3. Cyberbullying	4. Sexting
Practice	2, 3, 4, 7, 8, 9, 15 , 20	5, 6, 10, 15, 18, 19	18, 19 , 22, 23	27, 28, 30
Perception	13 , 14, 16, 21	11, 12, 13, 17	17 , 24, 25, 26	29, 30

Note: Participant consent is item 1. Demographic items include items 31, 32, and 33.

Validity

In order to validate the content of *the Student Internet Use Survey*, a panel of 12 educational experts was asked to evaluate the survey items. Of the 12 original panelists enlisted to participate, eight complied. Four additional educational experts were then invited to contribute; all four accepted. The 12 member panel (Appendix F) included three high-school administrators who have experience with student technology use, three high-school technology coordinators and two other educational technology experts, three additional high-school personnel, and one professor of education who specialized in private school law.

The panel completed the *Validity Questionnaire* (Appendix G), which included questions regarding the content, construct, and face validity of the instrument. Furthermore, the members were asked to comment on the clarity of the confidentiality and security statement, the survey directions, and the length of time it took to complete the survey. Panelists were also queried for any additional suggestions that would improve the survey. The responses from the validity panel substantiated that the survey had content, construct, and face validity. Panel members provided the researcher with valuable information, and minor changes were made to improve the instrument.

Reliability

The reliability of the *Student Internet Survey* was measured using the test-retest method. The survey was given to a convenience sampling of 46 students from a Bay Area Catholic High School that employed a 1-to-1 technology program with iPads. Two weeks later, the same students, except for five absent students, took the survey again. To protect the identity of the students as much as possible, all students were given a three

digit code to identify themselves in lieu of their names. Each student used the same identifying code both times the survey was taken. The on-site Director of Technology managed the administration of students and identification codes and facilitated the administration of the survey to the students.

An additional item was added to the second survey asking respondents if they had experienced anything in the intervening weeks that may have caused them to answer any item differently. Seven students answered this item in the affirmative.

Pearson Product-Moment correlation coefficients were calculated for 208 survey choices to determine the strength of the relationship of each item between the two test results (N=41). Correlations were also calculated without those 7 aforementioned students (N= 34).

The *Student Internet Use Survey* was designed where duplicate lists of answers were employed for multiple survey items. In order to remain consistent between items, nine answer choices with correlations that ranged from .21 to .34 were retained because the correlations of those same answer choices ranged from .42 to .81 on paired items. Three answer choices were retained because each correlation was significant with 34 students or the relationship strength was moderately positive and deemed acceptable ($r = .38$ to $.47$). Thirteen answer choices were removed due to weak correlations ($r < .33$). The correlation coefficients for all other item choices indicated reliability.

Data Collection Preparation

The cooperation of the onsite technology director was crucial to this study, as he needed to ensure that the infrastructure was working properly so that Internet access was readily available for students to access, complete, and submit the survey. The researcher

spoke with the technology director to discuss the project timeline and survey launch details.

The religion department chair was critical to the participation of the department members and the success of the study. As the researcher was a member of the religion department, no liaison was needed to intercede with the participating department members who administered the survey. The department chair allowed time during department meetings for the researcher to inform all participating members of the project details: purpose and significance of the study, university IRBPHS requirements, time line and instructions for employing the survey, provision of permission forms and student instruction script, and possible concerns. Additional information and inquiries were addressed via email and through informal encounters.

The researcher provided a preview version of the survey and encouraged participating teachers to take the online survey so they could gain familiarity with what their students would be taking. Three of the four participating teachers completed the preview survey.

Data Collection

Via email, each teacher received permission packets that included a script to read to their students outlining the details of the survey, a copy of the Subjects' Bill of Rights according to the Institutional Review Board for the Protection of Human Subjects and a Parental Permission Form (Appendix C). The teachers projected the Subjects' Bill of Rights and read the scripted instructions to each class explaining the project, its benefits, and possible concerns. The teachers either posted the forms to their classes' sites on *Blackboard™* or printed hardcopies and gave them to their students. Regardless of the

manner of distribution, all students were required to return a signed permission form before the scheduled survey.

All students were required to provide written permission from their parents or guardians before they could participate. As an incentive to students, the teachers offered points for returning the permission forms, and students received full credit for returning their forms whether permission was granted or not. All permission forms were collected by the teachers and were given to the researcher.

The survey was launched by the researcher via *Survey Monkey*[®], and the link was emailed to the participating teachers who agreed to have their students complete the survey any day between February 6 and February 12. During that week, each teacher administered the survey to all students whose parents provided approval. At the beginning of each designated class, students were given appropriate time to power up their laptops, and teachers read the scripted instructions (Appendix H), explaining the access procedures, survey format, survey instructions, and additional instructions for opting out at any time. Students who did not participate were provided with an alternate in-class activity provided by each teacher. All teachers fulfilled their survey obligations by February 12, and the researcher took the survey off-line.

Data Analysis

This study primarily investigated frequency rates and percentages. Frequency and percentages were identified for all four research questions. Data was compared in frequency distributions and joint frequency distributions. Relationships were further examined for specific items in three areas of study: Internet safety, cyberbullying, and sexting, to determine the extent that student perceptions influence student practices,

namely, the direction and the strength of the relationship. Phi correlation coefficients were used to measure the strength of relationships between cross-tabulated data. Additional *t*-tests were performed on data comparing gender differences in the areas of cyberbullying and sexting.

As this project is a survey of one particular population taken from a convenience sample, results cannot be generalized to any other group beyond a casual similarity to this population. Application to other populations would require additional study.

Limitations

The sample population posed several limitations to this study. Participants were chosen by their attendance at a single Catholic high school where the researcher was employed, thus representing a limited geographic area.

Since data was collected using an online survey, several potential areas for difficulties existed that could have affected the numbers of students who were able to complete the survey. Technology infrastructure and on-site connectivity issues, students without functioning computers, and student absences were limitations beyond the control of the researcher. Another area that could have affected the sample size was the sensitive nature of the subject matter. Some of the behaviors and information in question could be construed as negative and might have deterred some parents from allowing their children to participate in the study. Another limitation that restricts the generalizability of the results is that the study was limited to students in schools with 1-to-1 technology programs; not all students in Catholic high schools have unlimited availability to computers and consistent access to the Internet.

Other possible limitations involve the online availability of the survey. Because

the survey was administered over a weeklong period, the survey was available on the each class's *Blackboard*[™] site beyond each group's scheduled time. Even though participants were asked to take and submit the survey only once, and the survey was accessible only once per computer, it was not possible to limit students' access to the survey if they chose to access the survey using a computer other than their school laptop.

Closing Statement

As more 1-to-1 technology programs appear throughout the country, an understanding of how students use the technology is crucial to the planning of curriculum for these schools. The methodology of this study provided the researcher with excellent and timely access to an important population. The results of this study, as presented in the following chapter, provide valuable information for educators about students in Catholic high schools regarding their perceptions and practices on the use of the Internet.

CHAPTER IV

RESULTS

Overview

The purpose of this study was to identify the practices and perceptions of students in Catholic high schools on the use of the Internet. Specifically, this study examined students' practices and perceptions related to general Internet usage. In addition, it investigated their practices and perceptions concerning safety, cyberbullying, and sexting. An online survey was used to collect data from students who are in Catholic high schools that employ 1-to-1 technology.

The following research questions were used to guide this study:

1. What are the practices and perceptions of students in Catholic high schools concerning general Internet usage?
2. What are the practices and perceptions of students in Catholic high schools concerning the safe use of the Internet?
3. What are the practices and perceptions of students in Catholic high schools concerning cyberbullying?
4. What are the practices and perceptions of students in Catholic high schools concerning sexting?

This chapter includes demographic information on the respondents and their environment, data relevant for each research question, and a general summary of the findings of the study.

Demographics

At the time of this study, the student population pool totaled 1,129, with a nearly equal division of females and males (566 and 563). The sophomore class was the largest

with 312 members followed by the freshman class with 293. The senior and junior classes included 275 and 249 respectively.

The sample for this study was gathered using a convenience cluster sampling method, and initially numbered 487 students. However, four respondents submitted completely blank surveys, and those were omitted from the analysis. Therefore, the sample population ultimately included 483 students, 43% of the total population. Although 483 students began the survey, three students entered no demographic information for survey items #31, #32, and #33 regarding grade level, age, and gender. Although there was a close division of females and males (246 and 234), the Junior class was somewhat underrepresented. Table 3 displays a comparison of the sample to the population according to gender.

Table 3

<i>Sample Totals and Percentages Regarding Gender (n=483)</i>		
	Sample Totals	Percent of Sample
Female	246	50.9
Male	234	48.5
Unidentified	3	0.6

Table 4 displays a comparison of the sample to the population according to grade.

Table 4

<i>Sample Totals and Percentages Regarding Grade (n=483)</i>		
	Sample Totals	Percent of Sample
9 th	127	26.3
10 th	115	23.8
11 th	89	18.4
12 th	149	30.9
Unidentified	3	0.6

Table 5 displays a comparison of the sample to the population according to age.

Table 5

<i>Sample Totals and Percentages Regarding Age (n=483)</i>		
	Sample Totals	Percent of Sample
14	81	16.8
15	112	23.2
16	96	19.9
17	132	27.3
18	56	11.6
19	3	0.6
Unidentified	3	0.6

Research Question #1: General Internet Use

This section addresses the first research question: What are the practices and perceptions of students in Catholic high schools concerning general Internet usage?

The following data were collected to investigate teen Internet access, online activity, and teen perceptions about those actions.

Online and Internet Access

As reported in item #4 (n=483), 82.6% of respondents (399) shared that, in a typical week, they go online *everyday* to do non-schoolwork. Nine percent (45) stated that they use the Internet *every 2 to 4 days*, and 8.0% (39) access the Internet *every 5 to 7 days*. No teens reported that they *never* go online.

Online Activity

Item #2 and item #3 both probed the online activities of teens. Although similar, item #2 inquired into what activities teens had ever done online, and item #3 investigated the ways in which teens spent most of their time when online.

When asked in item #2 (n=483) what actions they have ever done on the Internet, nearly all respondents reported that they have surfed the web for non-school related activities (99.6%, 481), go online to do research for school (99.2%, 479), and have used

the Internet to send emails (97.1%, 469). A large majority affirmed that they have used the Internet to update their online profile (89.2%, 431), to check out someone else's online profile (88.2%, 426) and to shop online (87.8%, 424). A sizeable amount of teens reported that they have used the Internet to download music (86.1%, 416), yet only a third admitted that they have shared music online (34.6%, 167).

Many teens stated that they have gone online to post images (85.3%, 412) and to play games (83.0%, 401). Nearly three-quarters conveyed that they have posted messages online (74.9%, 399), have sent an Instant Message (74.7%, 362) and have used a webcam (74.7%, 361). Almost two-thirds of respondents stated that they have talked to someone on a chat site (62.3%, 301), but less than a third admitted that they have visited an anonymous chat site (27.3%, 132). Very few teens disclosed that they have ever visited an online dating or romance site (2.8%, 14).

When asked in item #3 (n=482) how they spend most of their time online, 85.3% of the teen respondents (411) declared that they spend the most time surfing the web doing non-school related activities, whereas a majority of teens (67.2%, 324) also reported that they spend much of their time online doing research for school. There was a decrease in the amount of all other activities: 40.2% (194) admitted that they spend the most time online shopping. About a third of the respondents declared that they spend their time checking others' online profiles (34.4%, 166) and updating their own online profiles (32.6%, 157). More than a quarter of the teens reported that they spend most of their time posting photos or videos (27.8%, 134) and sending Instant Messages (27.0%, 130). About one-fifth of the respondents shared that they spend the most time playing games (21.8%, 105) and posting messages (20.5%, 99). Frequenting chat sites was

reportedly a favorite activity for 18.7% of the teens (90), yet only 2.3% (11) divulged spending the most time visiting anonymous chat sites. Sending emails (70) or using a webcam (68) was the choice of approximately 14.1% of the respondents. Only 7.3% of the participants (35) shared that they spend the most time sharing music online, and less than 1% of teens (2) admitted that they spend the most time visiting an online dating or romance site.

Social Networking

Participants were polled about their participation on social networking sites. On the *Student Internet Use Survey*, social networking websites included blog sites, micro-blogging, photo and video sharing sites, and chat sites. Respondents were instructed to *check all that apply* when reporting their activities, as it was believed that teens participate on a variety of sites.

Nearly all of the teen respondents reported in item #8 (n=483) that they had a personal social networking website. Almost three-quarters of the teens relayed that they have multiple social networking websites: 27.3% (132) had two sites, 26.3% (127) had three sites, and 22.4% (108) had four or more sites. However, 20.1% of the teens (97) stated that they had only one site, and only 3.9% of teens (19) declared that they had no social networking website of their own.

Privacy Settings and Protections

As reported in item #7 (n=475), a majority of respondents held that they employ some of the privacy protections available to them on their social networking sites. Of the 96% of respondents who affirmed that they have personal social networking sites, 84.8% (403) reported that they restrict access to their site to their *friends*, and 65.1% (309) stated

that they allow only their family to access their site. Nearly 1 in 4 (37.9%, 180) disclosed that they allow access to *friends of friends*, and 3.8% (18) divulged that they make no restrictions, thus allowing everyone access to their social networking sites.

Responsible Internet Behavior

More than three-fourths (78.5%, 377) of respondents admitted in item #14 (n=480) to feeling some level of concern that posting personal information online could have a negative effect on their future. Less than a quarter of teens (21.5%, 103) surveyed affirmed that they were *not at all concerned* that their online activities could affect their future negatively. A large majority (82.3%, 394) of the respondents to item #15 (n=479), shared that they have chosen not to post something online that they thought might have a negative effect on their future. In fact, half (242) of all teens surveyed in item #16 (n=482) professed to have a friend who had something negative happen to her or him because of information or photos shared online. Nearly half (48.3%, 233) admitted knowing *someone else* who had a similar negative experience, and 6.0% (29) shared that the experience happened to a family member. Less than a quarter of the respondents (21.6%, 104) reported that they knew no one who had something negative happen to them because of information or photos on the Internet. However, 28 students (5.8%) confessed that they have experienced something negative due to information or photos shared online.

Research Question #2: Internet Safety

This section addresses the second research question: What are the practices and perceptions of students in Catholic high schools concerning the safe use of the Internet? The following data were collected to investigate the online practices that expose teens to

dangers, including the posting of personal information online, interacting with strangers, and altering their online personas. Additional data were collected to examine the perceptions of teens regarding their thoughts about the safety of teen Internet practices. Furthermore, anecdotal evidence was collected through comments that students voluntarily supplied on the survey. This evidence will provide additional insight to teen perceptions regarding potentially unsafe practices, safety versus privacy, and online identities.

Teen Concerns About Safety

Three-quarters of the teens surveyed admitted in item #12 (n=482) that they worry about their personal safety while they are using the Internet. Over half (54.8%, 264) disclosed that they worry *sometimes*, 13.9% (67) shared that they *often* worry about their personal safety, and 6.8% (33) divulged that they *always* worry about their personal safety. However, nearly a quarter (24.5%, 118) of the respondents declared that they *never* worry about their personal safety while online.

The following is a comparison of item #12 and item #7 (n=474) identifying the degree to which teens worry about their personal safety when online in comparison to their privacy settings on their social networking site(s). Of the 33 teens who *always* worry about their personal safety while using the Internet, only two students acknowledged that they allow *everyone on the Internet* to access their social networking site. Of the 65 teens who *often* worry about their personal safety while using the Internet, 47.8% (31) revealed that they set their privacy settings for *friends of friends*, and 20.0% (13) disclosed that they allow *everyone on the Internet* to access their social networking sites. Of the 256 respondents who *sometimes* worry about their personal safety while

using the Internet, 35.9% (93) claimed that they set their privacy setting for *friends of friends*, and 14.3% (37) professed that they allow *everyone on the Internet* to access their social networking site. Only 24.8% (29) of the 117 teens who *never* worry about their personal safety while using the Internet reported that they allow *everyone on the Internet* to access their social networking site. In fact, the majority (77.8%, 91) of respondents who *never* worry about their safety online relayed that they restrict access to their social networking site to their friends only.

Posting Personal Information Online: Practices and Perceptions

When asked in item #5 (n=482) what personal information they had ever posted on the Internet, a large majority of respondents reported that they had posted their real name (90.7%, 437), photos or videos of themselves (85.7%, 413), and photos or videos of friends (84.6%, 408). Approximately three-quarters of the teens surveyed shared that they had posted the name of their school (78.6%, 379), their real age or date of birth (72.6%, 350), or their city of residence (71.0%, 342). A majority of the teens stated that they named local sports teams including their school teams (62.9%, 303), as well as the names of local cities (54.6%, 263). A minority of those surveyed admitted that they had posted their cell phone numbers on the Internet (38.0%, 183). Fewer of the teens surveyed relayed that they posted the names of a teacher (19.7%, 95), and fewer still reported that they posted their home address (13.1%, 63). Only 2.1% (10) affirmed that they had never posted any of the listed information on the Internet.

The following is a comparison of item #12 and item #5 (n=481) identifying the degree to which teens worry about their personal safety when online in comparison to their online activities. Of the 33 respondents who *always* worry about their personal

safety while using the Internet, 27 teens (81.8%) admitted that they posted their real name on the Internet, 26 teens (78.8%) revealed that they posted personal photos or videos online, and 19 students (57.6%) held that they posted photos or videos of their friends online. Of the 67 respondents who *often* worry about their personal safety while using the Internet, 56 teens (83.6%) confessed that they posted their real name on the Internet, 58 teens (86.6%) revealed that they posted personal photos or videos online, and 58 students (86.6%) shared that they posted photos or videos of their friends online. Of the 263 respondents who *sometimes* worry about their personal safety while using the Internet, 242 teens (92.0%) confessed that they posted their real name on the Internet, 226 teens (85.9%) identified that they posted personal photos or videos online, and 232 students (88.2%) purported that they posted photos or videos of their friends online. Of the 118 respondents who *never* worry about their personal safety while using the Internet, 111 teens (94.1%) revealed that they posted their real name on the Internet, 102 teens (86.4%) shared that they posted personal photos or videos online, and 99 students (83.9%) asserted that they posted photos or videos of their friends online.

When asked in item #11 (n=480) what personal information they thought could be unsafe to use anywhere on the Internet, nearly all respondents identified their home addresses (97.7%, 469), and 82.5% (396) mentioned their cell phone numbers. Over half of those surveyed shared that the following could be unsafe: the name of their school and city of residence (60.2%, 289), personal photos and videos (57.1%, 274), true age and birth date (53.8%, 258), and their real name (50.7%, 243). Almost half of those surveyed (49.2%, 236) stated that the names of their teachers could be unsafe to post. Fewer teens identified that using photos and videos of friends (40.8%, 196), naming local cities

(30.6%, 147), and using the names of local sports teams, including their school teams, (27.1%, 130) could also be unsafe. Only 2.9% (14) asserted that none of the information listed above could be unsafe to use anywhere on the Internet.

Nineteen respondents (3.9%) listed additional information through comments. Of those 19 comments, seven teens identified their *Social Security Number* as information that they think could be unsafe to use anywhere on the Internet. See Table 6 for additional respondent comments.

It is important to note that all comments offered in this chapter are presented in the original form provided by the respondents. All punctuation, grammar, and spelling have been left in its original form. Comments included in this chapter were selected to fairly represent grade level, age, gender, and a broad range of perspectives. A complete listing of all comments for each applicable survey item is included in Appendix I.

Table 6

<i>Representative Sample of Comments of Respondents (n=19) for Item #11 on Information That Could Be Unsafe to Use on the Internet</i>	
1	<i>where you will be at a specific time[.]</i> Sophomore, female, age 16
2	<i>It isn't safe to share any info with someone you've never met.</i> Junior, male, age 17
3	<i>financial information[.]</i> Senior, male, age 18
4	<i>All of them [referring to options listed on survey] because I've googled myself before and I can find my address with just my first and last name.</i> Senior, female, age 18

A large majority (97.7%) of respondents (469) identified that posting their home addresses online could be unsafe, and only 13.0% (63) admitted that they had ever posted their address. However, 82.5% of those surveyed (396) acknowledged that posting their

cell phone number could be information unsafe, yet 37.9% (183) disclosed that they had posted their cell phone numbers. Even though 60.2% of teens (289) believed that using the name of their school and the city where they live could be unsafe online, 78.6% (379) have used their school name and 70.9% (342) have posted their city of residence.

Table 7 presents the results of cross-tabulated data between Item #11 and Item #5. The phi coefficient was calculated to test the strength of the relationship between behaviors that teens identified could be unsafe with behaviors that teens admitted they perform online. The data demonstrated statistically significant findings of weak negative correlations for all except *the names of any local cities*.

Table 7

Information Teens Believe Could Be Unsafe to Post Online (Item #11) and Information Teens Post Online (Item #5) (Percentages and Correlations; n = 483)

Information	Posted		Did Not Post		Φ
	Did Not Identify as Unsafe	Identified as Unsafe	Did Not Identify as Unsafe	Identified as Unsafe	
Real name	47.8	42.7	1.9	7.7	-.195*
Personal images	46.8	38.7	4.6	9.9	-.098*
Images of friends	52.4	32.1	7.0	8.5	-.123*
The name of school	34.2	44.3	6.0	15.5	-.131*
Real age or date of birth	37.9	34.6	8.7	18.8	-.185*
City of residence	33.7	37.1	6.4	22.8	-.238*
Names of local sports (and school) teams	49.1	13.7	24.0	13.3	-.150*
Names of any local cities	39.8	14.7	29.8	15.7	-.082
Personal cell phone number	10.8	27.1	7.2	54.9	-.211*
Name of a teacher	11.8	7.9	39.3	41.0	-.088
Personal home address	1.0	12.0	1.9	85.1	-.116*
None	1.2	0.8	95.9	2.1	.322*

*significant at $p < .05$

Nearly 62.9% (293) of respondents stated in item #13 (n=466) that they believe their rights to privacy outweigh their parents' and teachers' concerns for safety. Over a fifth of the respondents (96) felt compelled to add a comment, in which 17 teens identified that both held equal value or that a balance of both were important. Forty-four respondents (9%) offered other explanations. See Table 8 for additional respondent comments.

Table 8

Representative Sample of Comments of Respondents (n=96) for Item #13 on the Importance of Adults' Concern for Safety Versus Children's Rights to Privacy

- | | |
|---|--|
| 1 | <i>I think the kids should have the responsibility to be safe themselves.</i> Freshman, male, age 14 |
| 2 | <i>I think child/student's rights are important because sometimes a parent or teacher's concerns are unnecessary and it is them just worrying about things that are most likely not going to happen.</i> Freshman, female, age 14 |
| 3 | <i>I think a lot of students know the risks of the internet and know what to do to stay safe without an adults guidance[.]</i> Freshman, female, age 14 |
| 4 | <i>Most parents and teachers don't understand the way talking online goes. Personally I only talk to people online when either they only know my first name and or gamertag (username). Also parents don't understand that online safety is natural to most of us because we grewup with the emersion of social networking sites as well as other sites that host interaction between people all across the country and the globe.</i> Sophomore, male, age 16 |
| 5 | <i>I believe as we grow older, the lessons and teachings they teach us will become more realistic. Right now as a teenager, sometimes the concerns they have do not make sense, but parents always know best. Parents want to make sure that our safety is in check.</i> Junior, male, age 17 |
| 6 | <i>Being almost 18, I do value privacy, however, I do not think that young children or preteens should have any right to privacy because they do not have knowledge of how to be safe online[.]</i> Senior, female, age 17 |
| 7 | <i>I think parents need to work on talking to their kids about making safe online decisions as opposed to freaking out and banning it altogether.</i> Senior, female, age 18 |
-

Online Identities, Practices and Perceptions

Items #20 (n=480) and #21(n=470) provided information about teens altering online identities. A majority of respondents (63.5%, 305) reported that they had never pretended to be a different age or gender. However, 17.9% of students (84) thought that it was *okay* to log on to the Internet as someone older, while, 34.8% (167) admitted that they have done so. Only 6.8% (32) believed that it was *okay* to log on as someone younger, and 3.8% (18) admitted that they had done so. Furthermore, 11.9% of respondents (56) reported that it was *okay* to log on as a different gender, yet 6.0% (29) stated that they had pretended to be a different gender online.

Twenty-four respondents offered reasons as to why they had pretended to be a different age or gender online. Of those 24 comments, 11 (46%) shared that they represented themselves as older to gain access to a particular website, such as MySpace or Facebook which have an age requirement; six students (25%) explained that they altered their age to access and play video games or to shop. Only two teens explained that they had altered their age or gender for security purposes. See Table 9 for additional respondent comments.

Items #18 (n=475) and #21(n=470) provided information about teens adopting anonymous or false online identities. More than half of the teens surveyed (51.5%, 242) believed that it was *not okay* for people to log on to the Internet anonymously. Even though 42.3% of teen respondents (199) believed that it was *okay* for people to log on to the Internet anonymously, 62.7% (298) reported that they had never done so. Of those who admitted that they had logged on anonymously, 23.4% (111) identified that they wanted to hide their identities while gaming, 11.4% (54) revealed that they wanted to

Table 9

Representative Sample of Comments of Respondents (n=24) for Item #20 on Pretending to Be a Different Age or Gender on the Internet

1	<i>I like to troll^a[.]</i> Freshman, male, age 14
2	<i>I always create a anonymous gaming name, or I say who I am. When I was younger I played on my Mom's account.</i> Freshman, male, age 15
3	<i>I round up. Like if i turn 17 in september and its july, ill round up so i seem older[.]</i> Sophomore, female, age 16
4	<i>I play call of duty and to download the dlc (Downladable content) you have to be 18. Even if your parent sets up your account and allows all content Xbox live won't let you download content rated M until you turn 18.</i> Sophomore, male, age 16
5	<i>I couldn't have a MySpace before i was "14" years old, so when I was around 12 years old I put that I was 14. NBD[No Big Deal.]</i> Senior, male, age 18
6	<i>facebook wasnt available for my age in middle school and i wanted one[.]</i> Senior, female, age 17

^aTo **troll** on the Internet means to post a deliberately provocative message with the intention of causing maximum disruption and argument. (<http://www.urbandictionary.com/define.php?term=troll>)

play a joke on someone, while only 3.2% (15) divulged that they remained anonymous in order to say something mean about someone. See Table 10 for additional respondent comments.

Table 10

Representative Sample of Comments of Respondents (n=39) for Item #18 on Logging on to the Internet Anonymously

1	<i>My friends have this site ask.fm where people anonymously can ask other people questions. So i asked my friends dumb questions anonymously.</i> Freshman, female, age 14
2	<i>it wasn't rude or anything though i posted a nice message anonymously on tumblr^a[.]</i> Sophomore, female, age 15
3	<i>Yes but not to be cruel or say mean things, simply to keep my identity secret.</i> Sophomore, female, age 16
4	<i>Sites like reddit^b value anonymity thus there is no actual information connected to your account just a non identifying username and password.</i> Senior, male, age 17
5	<i>Yes, because I wanted to anonymously compliment someone[.]</i> Senior, female, age 18

- 6 *I wanted to give a helpful message to somebody as a serendipitous act[.]* Senior, female, age 18

^a**Tumblr** is a microblogging and social networking site that enables users to share and customize text, photos, and video. (<http://www.tumblr.com/about>)

^b**Reddit** is a website that allows its online community to vote on content. Users provide all of the site's content and vote for their preferences; therefore, the "Front Page" is constantly changing. (<http://www.reddit.com/wiki/faq>)

Although 16.8 % of respondents (79) thought that it was *okay* to create a fake identity online, 66.2% (317) reported that they had never done so. Of those who disclosed that they had created a fake identity, 19.4% (93) explained that they wanted to hide their identity while gaming, 10.6% (51) admitted that they used a fake identity because they wanted to play a joke on someone, and two respondents confessed that they did so in order to say something mean about someone. See Table 11 for additional respondent comments.

Table 11

Sample of Comments of Respondents (n=34) for Item #19 on Creating a Fake Identity on the Internet

- 1 *No because lying is bad, and creating a fake identity is illegal[.]* Freshman, male, age 14
- 2 *I use it for things that I think might be unsafe.* Freshman, male, age 14
- 3 *YES I AM A CATFISH!^a* Sophomore, female, age 16
- 4 *yes because i wasn't allowed by my parents to have a Facebook[.]* Sophomore, female, age 15
- 5 *Purely out of privacy concerns, I create fake identities for companies I do not trust.* Senior, male, age 17
- 6 *amazon prime free trials with every new email address[.]* Senior, male, age 17
- 7 *Yes, so its much harder for employers to search me.* Senior, male, age 18

^aA **catfish** is someone who "pretend[s] to be someone you're not online by posting false information, such as someone else's pictures, on social media sites usually with the intention of getting someone to fall in love with you." (<http://www.mtv.com/shows/catfish/series.jhtml>)

Perceptions of Online Safety

When asked in Item #17 (n=465), what online behaviors make them feel unsafe, a majority of respondents (60.6%, 282) admitted that they feel unsafe when someone writes mean or cruel things about them. Less than half of those surveyed revealed that they feel unsafe when they get a “friend request” from someone they do not know (45.2%, 210) and when someone uses sexually explicit language (43.2%, 201); a third of the students (29.9%, 139) relayed that they feel unsafe when someone asks their name. Although 22.4% (104) of the teens reported that they feel unsafe when someone comes online, e.g. chat rooms, who they do not know, 13.7% (65) of teens revealed in Item #22 (n=475) that someone they did not know joined them online without their permission. Only 15.9% of the teens (74) shared that they always feel safe on the Internet.

The following is a comparison of item #12 and item #17 (n=464) identifying the degree to which teens worry about their personal safety when online in comparison to what makes them feel unsafe on the Internet. Of the 256 respondents who *sometimes* worry about their personal safety while using the Internet, 67.2% (172) disclosed that they feel unsafe when someone online says mean or cruel things about them. Of the 65 respondents who *often* worry about their personal safety while using the Internet, 67.7% (44) reported that they feel unsafe when someone online says mean or cruel things about them. Of the 65 respondents who *often* worry about their personal safety while using the Internet, 61.5% (40) revealed that they feel unsafe when they get a “friend request” from someone they do not know. Of the 33 respondents who *always* worry about their personal safety while using the Internet, 68.8% (22) declared that they feel unsafe when they get a “friend request” from someone they do not know and when someone asks their

name. Of the 111 teens who identified that they *never* worry about their personal safety while using the Internet, only 38.7% (43) claimed that they always feel safe when online.

Thirty-two teens offered qualifying comments about behaviors that make them feel unsafe online. Of those, remarks about feeling unsafe from nine respondents (28%) involved contact from people whom they do not know. See Table 12 for additional respondent comments.

Table 12

Sample of Comments of Respondents (n=32) for Item #19 on Behaviors That Make Teens Feel Unsafe on the Internet

- | | |
|----|--|
| 1 | <i>when someone i dont know uses sexual or explicit language.</i> Freshman, female, age 15 |
| 2 | <i>When a person you don't know asks about your friends.</i> Freshman, male, age 15 |
| 3 | <i>I feel unsafe whenever someone I do not know talks or asks me anything.</i> Freshman, male, age 15 |
| 4 | <i>naked pictures[.]</i> Sophomore, female, age 15 |
| 5 | <i>i dont always feel safe on the internet because of malware^a and viruses but in the sense of strangers asking me information, that never happens to me because I avoid it.</i> Sophomore, female, age 16 |
| 6 | <i>I dont interact online with people i do not know, so i dont feel unsafe and am not put in unsafe situations where people i dont know can see who i am. The only site i use is facebook, and i know everyone who can see my profile.</i> Sophomore, female, age 16 |
| 7 | <i>I am never on a site without an alias and fake information that has this kind of interaction. Most of the time I witness this type of behavior though is in online games from people venting.</i> Sophomore, male, age 16 |
| 8 | <i>I only get worried when I see cybe bullying otherwise people are just being friendly or funny in my cases.</i> Junior, male, age 16 |
| 9 | <i>When they ask about personal information[.]</i> Junior, male, age 17 |
| 10 | <i>If someone I don't know chats me online[.]</i> Senior, female, age 17 |
-

^a**Malware** is a term derived from truncating the words “*malicious software*”, malware refers to software designed specifically to damage or disrupt a system, such as a virus or a Trojan horse.” (<http://www.webopedia.com/TERM/M/malware.html>)

Meeting Strangers Online

A majority of the teens surveyed (58.6%, 282) professed that they *never* talk to people online who they have never met face-to-face (Item #10; n=481). Nearly a third of the respondents (34.3%, 165) disclosed that they *sometimes* talk to people online who they have never met face-to-face. A much smaller minority (4.2%, 20) reported that they *often* talk to people online who they have never met face-to-face, and even fewer students (2.9%, 14) admitted that they *frequently* talk to people online who they have never met face-to-face.

The following is a comparison of item #12 and item #10 (n=480) identifying the degree to which teens worry about their personal safety when online in comparison to the frequency that teens talk to people online who they have never met face-to-face.

Of the 264 respondents who identified that they *sometimes* worry about their personal safety while using the Internet, 33.7% (89) admitted that they *sometimes* talk to people online who they have never met face-to-face. Six teens (2.3%) who also *sometimes* worry about their personal safety while using the Internet disclosed that they *frequently* talk to people online who they have never met face-to-face.

Of the 67 teens who *often* worry about their personal safety while using the Internet, 37.3% (25) confessed that they *sometimes* talk to people online who they have never met face-to-face. Three (4.5%) respondents stated that they *often* worry about their personal safety while using the Internet and *often* talk to people online who they have never met face-to-face. Two teens (3.0%) divulged that they *often* worry about their personal safety while using the Internet, yet *frequently* talk to people online who they have never met face-to-face.

Of the 33 teens who declared that they *always* worry about their personal safety while using the Internet, 36.4% (12) disclosed that they *sometimes* talk to people online who they have never met face-to-face. One student (3.0%) who *always* worries about personal safety admitted to speaking *often* with people online who they have never met face-to-face.

Three-fourths of the respondents (74.6%, 356) declared that they never use anonymous video chat sites (Item #9; n=477), whereas nearly a quarter of those surveyed (23.7%, 113) admitted that they *sometimes* use anonymous video chat sites. Only seven students (1.5%) admitted that they *frequently* use anonymous video chat sites, and only one student (0.2%) uses anonymous video chat sites *often*.

When asked in Item #6 (n=470) to identify information that they have ever posted or sent to someone they never met face-to-face, 44.7% (210) of the respondents confessed that they have posted their real name online. A third of those surveyed admitted that they posted or sent the name of their city of residence (30.0%, 141) and their real age or date of birth (29.4%, 138) to someone they never met face-to-face. Although nearly a quarter of those surveyed (23.4%, 110) reported that they posted or sent personal photos or videos to someone they never met face-to-face, fewer of the teens (15.5%, 73) revealed that they had executed the same with photos or videos of their friends. Additionally, about a quarter of the students reported that they posted or sent the name of their school (25.1%, 118) and their cell phone number (22.6%, 106) to someone they never met face-to-face. A fifth of the students acknowledged that they posted or sent the names of local or school sports teams (20.4%, 96) and the names of local cities (19.6%, 92) to someone they never met face-to-face. A small minority of teens reported

that they posted or sent the name of a teacher (4.0%, 19) or their home address (3.0%, 14) to someone they never met face-to-face. Although not a majority, 42.1% (198) of the respondents asserted that they have never posted or sent any of the listed information to someone they never met face-to-face.

The following is a comparison of item #12 and item #6 (n=469) identifying the degree to which teens worry about their personal safety when online in comparison to information that teens have posted online or sent to someone who they have never met face-to-face.

Of the 33 respondents who *always* worry about their personal safety while using the Internet, 30.3% (10) disclosed that they posted or sent their real name to someone they never met face-to-face, while 24.2% (8) admitted that they posted or sent photos or videos of themselves. Although the percentage is modest, it is important to note that of those same 33 teens who *always* worry about their personal safety while using the Internet, five students (15.2%) divulged that they posted or sent their cell phone number and two teens (6.1%) stated that they posted or sent their home address to someone they never met face-to-face.

Of the 66 teens who *often* worry about their personal safety while using the Internet, 50.0% (33) confessed that they posted or sent their real name to someone they never met face-to-face. Twenty-one (31.8%) of the 66 teens divulged that they posted or sent their real age or date of birth and their city of residence to someone they never met face-to-face. Eighteen teens (27.3%) acknowledged that they posted personal photos or videos, and 15 teens (22.7%) who *often* worry about their personal safety while using the Internet, confessed that they posted their cell phone number to someone they never met

face-to-face. No students reported that that they posted or sent their home address to someone they never met face-to-face.

Of the 257 teens who *sometimes* worry about their personal safety while using the Internet, 42.4% (109) respondents declared that they posted or sent their real name to someone they never met face-to-face. However, 28.0% (72) admitted that they posted or sent their city of residence and 26.5% (68) shared that they posted or sent their real age or date of birth to someone they never met face-to-face. Nineteen percent (50) divulged that they posted or sent their cell phone number, and 18.3% (47) stated that they posted or sent personal photos or videos to someone they never met face-to-face. Only two teens identified that they posted or sent their home address to someone they never met face-to-face.

Of the 113 teens who *never* worry about their personal safety while using the Internet, 50.4% (57) disclosed that they posted or sent their real name, and 38.1% (43) divulged that they posted or sent their real age or date of birth to someone they never met face-to-face. Additionally, 36.3% (41) admitted that they sent or posted their city of residence, and 31.9% (36) confessed that they posted or sent their cell phone number to someone they never met face-to-face. Ten students (8.9%) stated that they posted or sent their home addresses to someone they never met face-to-face.

Table 13 presents the results of cross-tabulated data between Item #11 and Item #6. The phi coefficient was calculated to test the strength of the relationship between behaviors that teens identified could be unsafe with the information that teens posted or sent to people they never met face-to-face. All relationships were found to be weak

negative with statistically significant findings for 7 of the 12 correlations. Those found significant are noted on Table 13.

Table 13

Information	Identified as Unsafe		Did Not Identify as Unsafe		Φ
	Posted	Did not Post	Posted	Did Not Post	
Real name	18.6	31.7	24.8	24.8	-.131*
Personal images	11.2	45.5	11.6	31.7	-.084
Images of friends	5.6	35.0	9.5	49.9	-.031
The name of school	12.4	47.4	12.0	28.2	-.104*
Real age or date of birth	11.0	42.4	17.6	29.0	-.190*
City of residence	12.4	47.4	16.8	23.4	-.226*
Names of local sports (and school) teams	5.0	21.9	14.9	58.2	-.022
Names of any local cities	4.3	26.1	14.7	54.9	-.080
Personal cell phone number	13.9	68.1	8.1	9.9	-.259*
Name of a teacher	1.0	47.8	2.9	48.2	-.091*
Personal home address	2.3	94.8	0.6	2.3	-.191*
None	1.0	1.9	40.0	57.1	-.019

*significant at $p < .05$

Research Question #3: Cyberbullying

This section addresses the third research question: What are the practices and perceptions of students in Catholic high schools concerning cyberbullying? The following data were collected to investigate the practice of cyberbullying and to inspect the teen involvement in cyberbullying. Data examining the perceptions of teens regarding cyberbullying were also collected. Moreover, anecdotal evidence will provide additional insight into teens' beliefs about why teens bully others online, what should be done about it, and what they are likely to do themselves to stop cyberbullying.

Cyberbully Victimization

In Item #22 (n=475), students were asked to identify negative behaviors that they have experienced online initiated by both someone they knew or by someone they did not know. It is important to recall that nearly two-thirds of respondents admitted in Item #17 that they feel unsafe when someone says mean or cruel things about them online.

Item #22's results demonstrated that more than a quarter of the respondents (26.5%, 126) disclosed that someone they knew posted mean or cruel things about them online. A similar amount of teens (25.3%, 120) admitted that someone they knew sent them a mean or cruel instant message (IM). Additionally, some students reported that someone they knew sent them a mean or cruel email (14.7%, 70) and 1 in 10 teens (10.7%, 51) divulged that they were threatened online.

When asked to identify negative behaviors that they have experienced coming from someone they did not know (also, Item #22), 13.7 % (65) of students acknowledged that someone joined them online, e.g. chat rooms, without their permission, and 12.8% (61) of respondents revealed that someone they did not know or that someone anonymously posted mean or cruel things about them online. Fewer teens reported that someone they did not know had sent them a mean or cruel IM (8.4%, 40) and email (6.3%, 30). Moreover, 5.9% (28) of students divulged that someone they did not know threatened them online. It is important to note that over half of all respondents (54.3%, 258) shared that they had never experienced any of the listed negative online behaviors. Table 14 shows a comparison of cyberbully actions that happened to teens by someone **known** to them side-by-side with actions initiated by someone **unknown** to teens.

Table 14

<i>Frequencies of Cyberbully Actions That Happened to Teens by Someone Known and Unknown (Item #22; n=475)</i>				
	By Someone Known to Teen		By Someone Not Known to Teen	
	<i>f</i>	%	<i>f</i>	%
Posted mean or cruel things about teen online	126	26.5	61	12.8
Were sent a mean or cruel IM	120	25.3	40	8.4
Were sent a mean or cruel email	70	14.7	30	6.3
Were threatened online	51	10.7	28	5.9

An independent-samples t-test was performed to compare the responses of females and males for responses where the frequencies between genders differed by at least 20%. The *t* scores are accompanied by Cohen's *d* to provide comparison between the means of both genders. A further explanation will be provided for the first occurrence.

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #22. Concerning the 70 respondents who reported that someone they knew sent them a mean or cruel email, 65.7% were female compared to the 34.3% who were male. There was a significant difference in the overall proportions for female ($M=.19$, $SD=.391$) and male ($M=.10$, $SD=.304$) respondents regarding those who reported that someone they knew sent them a mean or cruel email; $t(478)=2.633$, $p=.009$; $d=0.256$). The Cohen's *d* represents a quarter of a standard deviation difference, a small effect size. This suggests that girls are more likely to receive mean or cruel emails from people known to them than boys.

Concerning the 120 respondents who reported that someone they knew sent them a mean or cruel Instant Message, 61.7% were female compared to the 38.3% who were male. There was a significant difference in the overall proportions for female ($M=.30$,

SD=.460) and male ($M=.20$, $SD=.398$) respondents regarding those who reported that someone they knew sent them a mean or cruel Instant Message; $t(478)=2.650$, $p=.008$; $d=0.232$). This suggests that girls are more likely to receive mean or cruel Instant Messages from people they know than boys.

Concerning the 126 respondents who reported that someone they knew posted mean or cruel things about them online, 65.9% were female, and 34.1% were male. There was a significant difference in the overall proportions for female ($M=.34$, $SD=.474$) and male ($M=.18$, $SD=.388$) respondents regarding those who reported that someone they knew posted mean or cruel things about them; $t(478)=3.875$, $p=.000$; $d=0.368$). This suggests that girls are more likely than boys to have people they know post mean or cruel information about them online.

Concerning the 51 respondents who reported that they were threatened online by someone they know, 60.8% were female, and 39.2% were males. However, there was **no** significant difference in the overall proportions for female ($M=.13$, $SD=.333$) and male ($M=.09$, $SD=.280$) respondents regarding those who reported that someone known to them threatened them online; $t(478)=1.441$, $p=.150$; $d=0.130$). This suggests that girls are no more likely than boys to be threatened online.

Cyberbully Involvement

When asked about their own participation ($n=462$) in cyberbullying activity in Item #23, 14.3% (66) of the respondents reported that they have posted something mean or cruel about someone they knew, and 8.0% (37) revealed that they have done the same online anonymously. Additionally, 4.3% (20) of students surveyed divulged that they have posted something mean or cruel about someone they did not know, and 2.6% (12)

admitted that they have done the same online anonymously. However, only 1.1% (5) of teens shared that they have used a fake identity to post something mean or cruel about someone they knew, and less than 1% (2) stated that they have used a fake identity to post something mean or cruel about someone they did not know. It is important to note that over three-quarters of all respondents (77.1%, 356) asserted that they have never participated in any of the listed behaviors. Table 15 presents a comparison of cyberbully actions that teens have done to someone **known** to them side-by-side to cyberbully actions that teens have done to someone **unknown** to them.

Table 15

<i>Frequencies of Cyberbully Actions That Teens Have Done to Someone Known and Unknown (Item #23; n=462)</i>				
	To Someone Known to Teen		To Someone Not Known to Teen	
	<i>f</i>	%	<i>f</i>	%
Posted something mean or cruel	66	14.0	20	4.0
Anonymously posted something mean or cruel	37	8.0	12	3.0
Posted something mean or cruel using a fake identity	5	1.0	2	0.4

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #23. Concerning the 66 respondents who reported that they posted something mean or cruel online about someone they knew, 62.1% were female, and 37.8% were male. However, there was **no** significant difference in the overall proportions for female ($M=.17$, $SD=.373$) and male ($M=.05$, $SD=.212$) respondents regarding those who reported that they posted something mean or cruel online about someone they knew; $t(478)=1.906$, $p=.057$; $d=0.175$). This suggests that girls are **no** more likely than boys to post something mean or cruel online about someone they know.

Concerning the 37 respondents who reported that they anonymously posted something mean or cruel online about someone they knew, 70.3% were female, and 29.7% were male. There was a significant difference in the overall proportions for female ($M=.11$, $SD=.308$) and male ($M=.05$, $SD=.212$) respondents regarding those who reported that they anonymously posted something mean or cruel about someone they knew; $t(478)=2.419$, $p=.016$; $d=0.226$). This suggests that girls are more likely than boys to anonymously post something mean or cruel about people they know.

Additional comparisons were completed to examine the overlap between respondents who admitted that they had initiated cyberbully actions with those who were recipients of the actions of others. Table 16 presents the results of cross-tabulated data between Item #22 and Item #23. The phi coefficient was calculated to test the strength of the relationship between teens who posted mean or cruel information about someone they know and teens who were the object of cruel or mean information **posted by someone they know**. The data demonstrated statistically significant findings of strong positive correlations for all actions.

Table 16

*Teens Who Posted Mean or Cruel Information Online About Someone Known (Item #22) and Teens Who Were Targeted Online by **Someone Known** (Item #23) (Percentages and Correlations; $n = 483$)*

Type of Communication	Did Post Something Mean or Cruel About Someone Known		Did Not Post Something Mean or Cruel About Someone Known		Φ
	Received	Did Not Received	Received	Did Not Received	
Mean or cruel email	5.2	8.5	9.3	77.0	.264*
Mean or cruel IM	7.7	6.0	17.2	69.2	.287*
Mean or cruel info posted	9.1	4.6	17.0	69.4	.368*

*significant at $p < .05$

Table 17 presents the results of cross-tabulated data between Item #22 and Item #23. The phi coefficient was calculated to test the strength of the relationship between teens who posted mean or cruel information about someone they do not know and teens who were the object of cruel or mean information **posted by someone they do not know**. All relationships were found to be weak positive and statistically non-significant.

Table 17

*Teens Who Posted Mean or Cruel Information Online About Someone Unknown (Item #22) and Teens Who Were Targeted Online by **Someone Unknown** (Item #23), (Percentages and Correlations; n = 483)*

Type of Communication	Did Post Something Mean or Cruel About Someone Known		Did Not Post Something Mean or Cruel About Someone Known		Φ
	Received	Did Not Receive	Received	Did Not Receive	
Mean or cruel email	0.4	3.7	5.8	90.1	.033
Mean or cruel IM	0.8	3.3	7.5	88.4	.088
Mean or cruel info posted	1.0	3.1	11.6	84.3	.077

*significant at $p < .05$

Teen Perceptions About Cyberbullying

When asked why they think their peers cyberbully (Item #24; n=474), 8 of 10 respondents reported that the bullies think that their actions are *funny* (80.2%; 380). Over three-quarters of teens held that the bullies do not see their actions as a *big deal* (77.4%; 367), and that the bullies want to *get back at someone* (76.4%; 362). Moreover, nearly 7 of 10 teens believed that bullies are *jealous* (69.6%; 330), that bullies want to *show off to their friends* (65.4%; 310), that bullies *view their victim as a loser* (64.6%; 306), and almost 6 of 10 thought that bullies *don't believe consequences exist* for their actions (59.3%; 281).

Forty-four respondents (9.3%) offered additional explanations. Twenty-one students commented that bullies have issues related to insecurity and low self-esteem, as well as abusive relationships and home lives. Six students commented that bullies feel safe behind the anonymous nature of a computer screen. See Table 18 for a sample of those comments.

Table 18

Representative Sample of Comments of Respondents (n=44) for Item #24 on Why “Kids” Cyberbully

- | | |
|---|---|
| 1 | <i>Parents have not taught them how to respect technology, and use it affectively[.]</i>
Freshmen, female, age 15 |
| 2 | <i>some people do things that are out of line and no one steps up to call them out and they continue to do what they are doing. For example, there are people who constantly bully people online but no one says anything about it until they post something about the bully. I think sometimes it is very okay to post things about other people when its saving other people from being embarrassed or hurt. The bully might not even know what he or she is doing until someone calls them out on it.</i> Freshmen, female, age 15 |
| 3 | <i>The main reason kids cyberbully in my opinion is because they have something against the person. If they do it to someone random, it is out of anger out of their own life, maybe they think it is funny if they are pulling a joke with friends. Many people are ignorant to the consequences of cyberbullying and the effect it can have on someone else.</i> Freshmen, male, age 15 |
| 4 | <i>this allows bullies today to constantly bully their victems and never let them escape the torture that endure everyday at school. They want to get in their victem's head and destroy them as much as possible and the internet has allowed them to do that much more than before[.]</i> Sophomore, female, age 16 |
| 5 | <i>They as a person are struggling and have their own problems, and take their anger out on other behind the safety of a screen.</i> Sophomore, male, age 16 |
| 6 | <i>Many times thye get back from school and being a jerk online helps them feel better. Most of the time to people in the lobby will join in on your venting and that helps relieve everyones stress. People who do not enjoy that behavior leave the lobby and join a new one. No harm done.</i> Sophomore, male, age 16 |
| 7 | <i>They want to have control over the victim and exploit all possible opportunities and things.</i> Junior, male, age 17 |

- 8 *they think they cant be touched because they are behind a computer screen[.]*
Junior, male, age 17
- 9 *They are bored and have the time[.]* Senior, female, age 17
- 10 *there is not a system to hold students accountable. hard to see what is going on*
at home[.] Senior, female, age 17
- 11 *I would say that it probably has more to do with a disjointed or broken home life*
than any of the above. They don't respond well emotionally to things not going
their way[.] Senior, male, age 17
-

When asked in Item #25 (n=473) about what they think should be done to stop cyberbullying, 78.9% of respondents (373) reported that they believe the cyberbully should be blocked, and over three-quarters (77.6%, 367) thought that someone should stand up for the victim of cyberbullies. If a friend cyberbullies someone, nearly 7 of 10 respondents (68.3%, 323) reported that they should tell their friend to stop; in addition, over two-thirds of teens (67.2%, 318) held that cyberbullying should be reported to an adult. Nearly 6 of 10 students decreed that parents should talk to their children about cyberbullying.

Nearly half (48.2%, 228) of the students surveyed revealed that if people see cyberbullying online, they should send a message telling the person that it is wrong. More than half (53.3%; 252) affirmed that cyberbullying should be reported to Internet service providers, and nearly a half (47.4%, 224) of all students asserted that Internet service providers should stop cyberbullies. Thirty-three (7.0%) respondents suggested other options and insights into what should be done to stop cyberbullying. See Table 19 for a sample of those comments.

When asked in Item #26 (n=475) about what they are likely to do to stop cyberbullying, over three-quarters (76.8%, 365) of respondents proclaimed that they

would be likely to block a cyberbully, and more than 6 in 10 teens (65.9%, 313) reported that if their friend cyberbullies someone, they would tell him/her to stop. Over half

Table 19

Representative Sample of Comments of Respondents (n=33) for Item #25 on What Should Be Done to Stop Cyberbullying

- 1 *I think the blame ultimately rests on the bully, not on the Internet Service Provider[.]* Freshman, male, age 14
 - 2 *You can't[.]* Freshman, male, age 14
 - 3 *stop teaching kids to be so hateful. people aren't born hating. hatred is taught. stop raising kids to be so mean.* Sophomore, female, 15
 - 4 *you need to be smart about who you interact with, the good part about not face to face is that you can just log off and get away from what they are saying, it is much easier to get away then if they were face to face before[.]* Sophomore, female, age 16
 - 5 *The kids should be able to handle it themselves[.]* Sophomore, male, age 16
 - 6 *I really believe that internet providers possess a very limited capability to influence cyberbullying[.]* Junior, female, age 17
 - 7 *Being able to remain anonymous online allows people to ridicule others with no consequences. This level of power while seemingly small is quite large and can lead to many problems that parents, service providers and friends can't do anything about. Kids should learn from other people who traverse the internet about how to ignore cyber bullying. Ignoring those who bully online is the most proficient way leave those who bully powerless.* Junior, male, age 17
 - 8 *In today's tech-savvy world, all kids will use the internet. I think that all schools should require an Internet safety class/course that really digs deep into consequences of cyberbullying.* Senior, female, age 17
 - 9 *Teachers should explain the harm and consequences caused by cyberbullying in a way that teenagers can relate to[.]* Senior, female, age 17
 - 10 *talk to the site manager to observe conversations with certain derogatory words and catch cyberbullying.* Senior, male, age 18
-

(54.1%, 257) of those surveyed asserted that if they know a cyberbully victim, they would tell him/her they are sorry it happened, and over a third (34.7%, 165) of teens affirmed that if they see cyberbullying happening online that they are likely to send a message telling the person it is wrong. Over a third (37.9%; 180) divulged that they would report cyberbullying to an adult, and 32.6% (155) revealed that they are likely to report cyberbullying to an Internet service provider. It is important to note that 28 respondents (5.9%) professed that they are not likely to do any of the listed actions to stop cyberbullying.

The following is a comparison of item #25 and item #26 (n=461) identifying what teens believe should be done to stop cyberbullying in comparison to what actions they are likely to do to stop it. Of the 372 teens who believe that cyberbullies should be blocked, 85.2% (317) asserted that they were likely to block them. In addition, 322 teens identified *if a friend cyberbullies someone, tell him/her to stop*. Of those, 79.5% (256) declared that they were likely to tell their friend to stop. Moreover, 227 teens believed that if people see cyberbullying online, they should send a message telling the person it is wrong. Of those, 53.7% (122) proclaimed that they would be likely to do it. Of the 317 teens who believed that cyberbullying should be reported to an adult, only 54.3% (172) revealed that they would be likely to report an incident to an adult. Of the 251 teens who believed that cyberbullying should be reported to the Internet Service provider, 54.6% (137) admitted that they were likely to make the report.

Fourteen respondents (3.2%) offered other options and insights into what they would most likely do to stop cyberbullying. See Table 20 for a sample of those comments.

Table 20

Representative Sample of Comments of Respondents (n=15) for Item #26 on What Teens Are Likely to Do to Stop Cyberbullying

- 1 *I would stand up to the bully face to face or if thats not possible i would call them out on the site that they are bullying people on.* Freshman, female, age 15
- 2 *virtually beat the crap out of the cyber bully[.]* Freshman, male, age 15
- 3 *I would most likely not care, as I feel fairly strong and I believe in myself. I would not care if someone said something rude about me online; in fact, I would likely ask them what's going on in their life. However, as I am not in that position, I am unsure. I do know there is a girl who says very rude and untrue things about me to other people via texting, and I challenged her on that, so that makes good precedent, I guess.* Freshman, male, age 15
- 4 *Bully the cyberbully. They are often just looking for conflict and giving it to them helps them vent and feel better[.]* Sophomore, male, age 16
- 5 *Tell them to get off of whatever social media platform they are on.* Senior, female, age 17
- 6 *Confront the ass hole in person in from of all of his or her friends.* Senior, male, age 18
- 7 *If I know the person, deal with it face to face.* Senior, male, age 18
-

The respondents believed that both blocking a cyberbully and telling a friend to stop cyberbullying are the two leading actions that not only should be done to stop cyberbullying, but they are also most likely to do to stop cyberbullying. Table 21 presents the results of cross-tabulated data between Item #25 and Item #26. The phi coefficient was calculated to test the strength of the relationship between actions that teens think should be taken to stop cyberbullying and those actions that teens are most likely to do. The data demonstrated statistically significant findings of strong positive correlations for all coefficients.

Table 21

Actions Teens Believe Should Be Taken to Stop Cyberbullying (Item #25) and Actions Teens Are Willing to Take (Item #26) (Percentages and Correlations; n = 483)

Action	Identified as <i>Should be Done</i>		Did Not Identify as <i>Should be Done</i>		Φ
	<i>Likely To Do</i>	Not <i>Likely To Do</i>	<i>Likely To Do</i>	Not <i>Likely To Do</i>	
Block cyberbully	65.6	11.6	9.9	12.8	.404*
Tell to stop	53.0	13.9	11.8	21.3	.430*
Support a victim	46.2	29.8	7.0	17.0	.269*
Reprimand bully	25.3	21.9	8.9	43.9	.386*
Report to adult	35.6	30.2	1.7	32.5	.483*
Report to ISP	28.4	23.8	3.7	44.1	.498*

*significant at $p < .05$

Research Question #4: Sexting

This section addresses the fourth research question: What are the practices and perceptions of students in Catholic high schools concerning sexting? The following data were collected to investigate the practices of sexting among teens, including the sending and receiving of sexting messages, photos, and videos. In addition, the researcher examined the perceptions of teens regarding the practice of sexting among teens. Furthermore, anecdotal evidence provided additional insight to teen experiences regarding consequences after sexting incidents.

Teen Sexting Practices

As reported earlier in Item #17 (n=465), 43.2% (201) of teens surveyed admitted that they feel unsafe when someone uses sexually explicit language online. Additionally, nearly half of the respondents (47.9%, 221) revealed in Item #27 (n=461) that they have received a sexually suggestive message. Over a third (34.1%, 157) disclosed that a sexually suggestive message that was originally meant to be kept private was shared with

them. Also reported in Item #27, 29.5% (136) of teens shared that they have sent a sexually suggestive message to someone, and 10.6% (49) disclosed that they have shared, or forwarded, a sexually suggestive message with someone other than its intended recipient(s). It is important to note that only 45.1% (208) of the respondents affirmed that they have never sent or posted sexually suggestive messages, and 37.1% (171) asserted that they have never received or shared a sexually suggestive message from someone else.

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #27. Concerning the 49 respondents who reported that they shared a sexually suggestive message with someone other than the one(s) for whom it was originally meant, 36.7% were female, and 63.2% were male. There was a significant difference in the overall proportions for female ($M=.07$, $SD=.261$) and male ($M=.13$, $SD=.340$) respondents regarding those who reported that someone known to them threatened them online; $t(478)=-2.151$, $p=.032$; $d=-0.199$). This suggests that boys are more likely than girls to pass along sexually suggestive messages that they receive.

In response to Item #28 ($n=467$), 40.5% of teens surveyed (189) reported that they have received at least one nude or semi-nude picture/video from someone, and 36.8% (172) shared that they have had at least one nude or semi-nude photo that was meant to be private shared with them. Furthermore, 17.8% (83) disclosed that they have sent at least one nude or semi-nude picture/video of themselves to someone, and 11.3% (53) of students divulged that they have shared at least one nude or semi-nude picture/video with someone other than for whom it was originally meant. It is important to note that nearly

6 of 10 (57.6%, 269) teens surveyed asserted that they have neither sent nor posted a nude or semi-nude picture/video of themselves, and more than 4 of 10 teens (43.5%, 203) purported that they have never received or shared a nude or semi-nude photo of someone else.

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #28. Concerning the 188 respondents who reported that they received a nude or semi-nude sext image from someone (of herself/himself), 42.6% were female, and 57.5% were male. There was a significant difference in the overall proportions for female ($M=.33$, $SD=.469$) and male ($M=.46$, $SD=.500$) respondents regarding those who received a sext image from someone; $t(478)=-3.082$, $p=.002$; $d=-0.268$). This suggests that boys are more likely than girls to receive a sext image.

Concerning the 53 respondents who reported that they shared a nude or semi-nude image with someone other than the one(s) for whom it was originally meant, nearly a third (30.1%) were female, and more than two-thirds (69.8%) were male. There was a significant difference in the overall proportions for female ($M=.07$, $SD=.247$) and male ($M=.16$, $SD=.366$) respondents regarding those who shared a nude or semi-nude image; $t(478)=-3.282$, $p=.001$; $d=-0.290$). This suggests that boys are more likely than girls to pass along a sext image. Table 22 displays the results for teen sexting practices in a side-by-side comparison of the numbers of teens who have received and sent a sext message or sext image.

Table 22

Comparison of Teens Who Have Received or Sent a Sexually Explicit Message and Nude or Semi Nude Photos or Videos

	Sexually Explicit Messages (n=461)		Nude or Semi Nude Photos or Videos (n=467)	
	%	<i>f</i>	%	<i>f</i>
Received a sext	47.9	221	40.5	189
Received a sext originally meant to be private	34.1	157	36.8	172
Sent a sext	29.5	136	17.8	83
Sent a sext originally meant to be private	10.6	221	11.3	53
Never Sent a sext	45.1	208	57.6	269
Never received a sext	37.1	171	43.5	203

Teen Perceptions About Sexting

The respondents were asked in Item #29 (n=458) about their perceptions regarding sexting. In response, 55.7% (255) of teens disclosed that they think it is dangerous to engage in sexting, and 32.1% (147) of students reported that they think people under the age of 18 are too young to engage in sexting. Nearly half of those surveyed, 49.3% (226) revealed that they think sending nude or semi-nude images of someone under 18 years of age is wrong, and 39.7% (182) affirmed that they think sending sexually suggestive messages about someone under 18 years of age is wrong. However, 41.0% (188) of respondents reported that they think people under the age of 18 are old enough to decide for themselves if sexting is okay, and 36.0% (165) professed that they think adults overreact about sexting.

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #29. As displayed in Table 23, girls are more likely than boys to believe that sexting is dangerous. Girls are also more likely to believe that sending a sext message about someone under 18 years of age is wrong, that sending

nude or semi-nude images of someone under 18 years of age is wrong, and that those under the age of 18 are too young to engage in sexting. Boys are more likely than girls to believe that adults overreact about sexting.

Table 23

<i>Comparison of Means Regarding Teen Perceptions About Sexting Actions (Item #29) for Females and Males</i>						
	female		male		t(478) ¹	d
	M	SD	M	SD		
Sending sexually suggestive messages about someone under 18 years of age is wrong (n =181)	.45	.498	.30	.461	3.277	0.312
Sending nude or semi-nude images of someone under 18 years of age is wrong (n =225)	.61	.488	.32	.466	6.827	0.607
People under the age of 18 are too young to engage in sexting (n =146)	.40	.491	.21	.405	4.695	0.421
It is dangerous to engage in sexting (n =255)	.65	.477	.40	.491	5.722	0.517
Adults overreact about sexting (n =165)	.23	.423	.46	.500	-5.450	-0.498

¹p < .05 for all comparisons

Sexting Consequences

The respondents were asked in Item #30 (n=425) about their experiences subsequent to a sexting experience. In response, 62.6% (266) of teens disclosed that the photo was forwarded to someone to whom the sender did not want to see it, and 32.5% (138) revealed that the photo was forwarded to an authority figure and the sender got into trouble. In addition, 28.7% (122) of teens relayed that the photo was posted online where many people could see it, and 31.1% (132) reported that the person to whom the photo was sent made fun of the sender. Furthermore, 24.0% (102) of those surveyed admitted that the person to whom the photo was sent threatened to send it to someone else. It is important to note that 23.5% (100) of respondents maintained that they do not know anyone who has ever sent a sext message or photo. Thirty-five respondents (8.2%)

provided additional versions of their sexting experiences. See Table 24 for a sample of those comments.

Table 24

Representative Sample of Comments of Respondents (n=35) for Item #30, on What Happened After Teens or Someone Known to Them Had Sent a Nude or Semi-Nude or Sexually Suggestive Photo via Text Message or Email

- | | |
|----|---|
| 1 | <i>They sent it to other people in the school and almost the entire school ended up seeing her.</i> Freshman, female, age 14 |
| 2 | <i>The image was sent over snapchat^a which deletes forever after 10 seconds.</i> Freshman, female, age 14 |
| 3 | <i>the photo was found by her best friend and she told her mom[.]</i> Freshman, male, age 14 |
| 5 | <i>The picture was sent to a lot of the senders peers.</i> Freshman, male, age 14 |
| 5 | <i>nothing happened they were just like oh cool nudes thanks[.]</i> Sophomore, female, age 15 |
| 6 | <i>People all over the bay area, in different cities and schools saw the nude picture a girl sent to her boyfriend.</i> Sophomore, female, age 16 |
| 7 | <i>We brought it to an adult and they didn't do anything about it[.]</i> Sophomore, female, age 15 |
| 8 | <i>the photo got sent around to other people and alot of people ended up getting it[.]</i> Junior, male, age 17 |
| 9 | <i>the photos stay between the two people[.]</i> Junior, male, age 17 |
| 10 | <i>her whole group of friends found out and now don't respect her[.]</i> Senior, female, 17 |
| 11 | <i>The photos get sent around to many people, i.e. in a school[.]</i> Senior, female, age 17 |
| 12 | <i>nothing really happened. two people can just share sexts without abusing trust or showing it to anyone else[.]</i> Senior, male, age 18 |
| 13 | <i>None of the above. I deleted the photo after a while.</i> Senior, male, age 18 |

^a**Snapchat** is a photo and video messaging application that allows users to send photos to other users with the *expectation* that the image will “self-destruct” after a few seconds (<http://webtrends.about.com/od/Iphone-Apps/a/What-Is-Snapchat.htm>).

An independent-samples t-test was performed to compare the responses of females and males for responses to Item #30. When asked what had happened *after you or someone you personally knew sent a text message or email with a nude, semi-nude, or sexually suggestive photo*, 121 respondents reported that the photo was posted online where many people could see it. Of those, 61.1% were female, and 38.8% were male. There was a significant difference in the overall proportions for female ($M=.30$, $SD=.460$) and male ($M=.20$, $SD=.401$) respondents regarding those who reported that a sext photo of him or herself or someone they knew was posted online where many people could see it; $t(478)=2.533$, $p=.012$; $d=0.231$). This suggests that girls are more likely than boys to have their sext photo or the sext photo of someone they know to be posted online where it is visible to many others.

When asked what had happened *after you or someone you personally knew sent a text message or email with a nude, semi-nude, or sexually suggestive photo*, 265 respondents reported that the photo was forwarded to someone the sender did not want to see it. Of those, 58.5% were female, and 41.5% were male. There was a significant difference in the overall proportions for female ($M=.63$, $SD=.484$) and male ($M=.47$, $SD=.500$) respondents regarding those who reported that a sext photo of them or someone they knew was forwarded to someone the sender did not want to see it; $t(478)=3.562$, $p=.000$; $d=0.325$). This suggests that girls are more likely than boys to have their sext photo or the sext photo of someone they know to be forwarded to someone the sender do not want to see it.

When asked what had happened *after you or someone you personally knew sent a text message or email with a nude, semi-nude, or sexually suggestive photo*, 131

respondents reported that the person to whom the photo was sent made fun of the sender. Of those, 60.3% were female, and 39.7% were males. There was a significant difference in the overall proportions for female ($M=.32$, $SD=.468$) and male ($M=.22$, $SD=.417$) respondents regarding those who reported that the person to whom the photo was sent made fun of the sender; $t(478)=2.442$, $p=.015$; $d=0.225$). This suggests that girls are more likely than boys to be ridiculed or know someone who may be ridiculed by the recipient of their sext image.

Summary of Results

The following represents a summary of the major results of the study. Today's teens are fluent users of the Internet and social media to search and discover information, to post photos and videos, and to communicate. Some teens demonstrate a realization that posting inappropriate items can have a long-term effect on their futures. Some teens are changing their online behaviors to insure that there is no negative effect.

Teens are also realizing that Internet usage is not risk-free. Some teens are taking some precautions to protect themselves, but the efforts are inconsistent. Teens will continue to put themselves in harm's way when populating social networking sites. Even though teens do not feel safe online, they will continue to use the Internet and frequent social networking sites. They will also post personal information and images even when they know it is potentially unsafe.

The threat of cyberbullying is a realistic danger. In the attempt to provide students with the most powerful learning tools available, due to misuse by others, some have inadvertently been put in peril. For the 14% of students who admitted posting cruel information, there is a disconnect between their actions and the behavioral expectations

of Catholic high school students. Because students in Catholic schools receive consistent religious education does not mean that they all refrain from negative online behavior.

Even though teens believe an adult should know about incidents of cyberbullying, they are not likely to tell an adult themselves. Some teens believe that nothing can be done to stop cyberbullying, and that they should learn how to take action on their own, preferably by blocking the cyberbully or standing up for a victim.

The practice of sexting has led to some embarrassing situations and has compromised the reputation of some students in this study, and a considerable number of teens engage in sexting activities. Even though more girls than boys believe that sexting is wrong for those under age 18, girls and boys believe evenly that they should decide for themselves whether they should participate in sexting.

The results of this study provided valuable information into teen Internet use and the respondent comments supplied meaningful insight into teen perception of others' online practices. Chapter 5 will focus on the implications of this study's results and provide recommendations for future action.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary of the Study

The use of the Internet has transformed educational paradigms and has propelled educational pedagogy into the future. The increased use of technology in schools has created a plethora of learning opportunities for students. History has proven that new and exciting technology usually comes with its negative aspects, and the Internet certainly has its dark side. Students are increasingly required to use technology for education, both in and out of school. While students do use the technology for schoolwork, they also use it in inappropriate ways. Technology, then, has become a double-edged sword for education, providing powerful avenues for both learning and destruction. Teens use technology to do homework, communicate with friends, play music and video games, and shop; but they also use it to harass classmates, post inappropriate information, and share sexually explicit photos and videos, usually of themselves (Cox Communications, 2009; Lenhart et al., 2008; Lenhart, Madden Macgill, & Hitlin, 2007; The National Campaign, 2008). Understanding the perceptions and practices of students regarding technology use is imperative for educators to fully prepare their students for the future (Goodstein, 2007).

The Congregation for Catholic Education (CCE, 1998) acknowledged that “Education today is a complex, vast, and urgent task. This complexity today risks making us lose what is essential, that is, the formation of the human person in its totality, particularly as regards the religious and spiritual dimension” (#4). The Church calls educators to prepare their students to meet modern-day challenges and recognizes that

"This is not an easy task in a secularized world, characterized by the fragmentation of knowledge and moral confusion" (#20). The Pontifical Council for Social Communications (2002) affirmed that "[Y]oung people need to learn how to function well in the world of cyberspace, make discerning judgments according to sound moral criteria...for their integral development and the benefit of others" (#7). The Council understood that placing the tools of technology into the hands of youth requires instruction and guidance.

The purpose of this study was to identify the practices and perceptions of students in Catholic high schools on the use of the Internet. Specifically, the areas of general Internet usage, safety, cyberbullying, and sexting were examined. The following research questions were investigated:

1. What are the practices and perceptions of students in Catholic high schools concerning general Internet usage?
2. What are the practices and perceptions of students in Catholic high schools concerning the safe use of the Internet?
3. What are the practices and perceptions of students in Catholic high schools concerning cyberbullying?
4. What are the practices and perceptions of students in Catholic high schools concerning sexting?

The *Student Internet Use Survey* (Appendix D) was used to collect the data. The validity of the survey was examined by a panel of educational experts and practitioners (Appendix F). Additionally, the reliability of the instrument was assessed using the test-retest method by students in another Bay Area Catholic high school that employed a 1-to-1 iPad program.

A convenience sample of 483 high school students participated in the study. All students attended one San Francisco Bay Area Catholic high school with a 1-to-1 technology program. Data were collected via an online survey over a weeklong period using *Survey Monkey*[®].

Results demonstrated that teens are fluent users of the Internet, and nearly all teens go online every day. Evidence showed that some teens understand that their online activities can negatively affect their reputations and possibly compromise their safety. However, the threat of cyberbullying is a realistic danger, and a considerable number of teens engage in sexting activities. There appeared to be a gap between the behavioral expectations of some Catholic high school students and the online actions and perceptions of some of those students.

Conclusions and Implications

Based upon the data elicited from the *Student Internet Usage Survey*, the following conclusions and implications were drawn regarding teen perceptions and practices on Internet use. The conclusions are presented according to the order of the research questions.

General Internet Usage

According to most studies (Cox Communications, 2009; Dowdell et al., 2011; McAfee, 2012; McAfee/Harris Interactive, 2010), teen activity on the Internet has been increasing steadily. Although all of the participants in this study were required to use laptop technology at their school, most teens (82.6%) went online everyday. Almost all participants (96.1%) had at least one personal social networking site, and many of those

reported that they had more than one. These results add to the trend suggested in the research (Common Sense Media, 2012; Lenhart et al., 2011; McAfee/Harris Interactive, 2010) that teen use of the Internet is ubiquitous.

Furthermore, most teens (96.2%) who used social networking sites used privacy protections and did so at the same rate that recent research showed (Madden et al., 2013) and did so at a greater rate than participants did in earlier studies (Dowdell et al., 2011; Lenhart et al., 2011). However, this study revealed a substantially higher percentage of teens (84.4%) who used the highest privacy setting for their social networking profile than did teens in previous studies (Lenhart et al., 2011; Madden et al., 2013).

This study demonstrates that teens are understanding that they must be proactive online and discriminating in what information and images they post in order to preserve a positive online reputation. Numerous teens (78.5%) felt some level of concern that posting personal information online could have a negative effect on their future. This perception increased slightly in comparison to the Cox (2009) study at 76%. Moreover, many teens (82.3%) chose not to post something online for fear it would negatively affect their future, and nearly half reported knowing someone who had something negative happen due to information they had posted online. This is a considerable increase from previous studies (Cox Communications, 2009; Lenhart et al., 2011; Madden et al., 2013). Anecdotal evidence provided insight into teen perceptions. When asked if he had ever created a fake identity on the Internet, a senior, age 18, added, “Yes, so it[’]s much harder for employers to search me.”

Internet Safety

The data revealed weak negative, yet statistically significant relationships ($p < .05$) when examining information teens believe could be unsafe to post online and information that they actually post online (Table 7). Teens understood that posting personal information online could be unsafe. Yet, a majority of teens posted personal information online that could potentially jeopardize their safety. They posted their name, personal photos, school name, birth date, and city of residence. Teens also posted or sent personal information to people they had never met face-to-face including their real name, city of residence, personal photos, and cell phone number (Table 13). These practices are not uncommon and the results share commonalities with existing research (Cox Communications, 2009; Madden et al., 2013; McAfee/Harris Interactive, 2010).

Many teens (75.5%) worried to some degree about their safety while online. Fewer than 2 in 10 teens reported that they felt safe all of the time when on the Internet. Anecdotal evidence confirmed that some teens took precautions online to protect themselves, such as purposefully altering their online identity while gaming or to gain access to a site and by employing privacy settings for their social networking sites. This trend is on the rise (Dowdell et al., 2011; Lenhart et al., 2011; Madden et al., 2013). This study demonstrates that teens consider their safety when online, and teens are beginning to use proactive techniques to protect their personal information and increase their safety. When asked to identify any behaviors that make him feel unsafe, one sophomore, age 16, explained, “I am never on a site without an alias and fake information that has this kind of interaction. Most of the time I witness this type of behavior though [it] is in online games from people venting.”

Cyberbullying

Over a quarter of teens in this study experienced cyberbullying. Twenty-seven percent of teens had mean or cruel messages posted about them online by someone they knew. Eleven percent of teens had been threatened online. Fourteen percent of teens admitted that they posted mean or cruel messages online about or to others (Table 16). The data demonstrated strong positive statistically significant relationships ($p < .05$) between teens who were victims of online cruelty and those who targeted others.

Girls were more likely than boys to receive mean or cruel messages online or have mean or cruel information posted about them. Although more girls than boys had posted mean or cruel information or had been threatened online, there was no statistical significance that the difference was gender-related. However, regarding anonymous posting, girls were significantly more likely than boys to post mean or cruel information online. In keeping with previous research, girls were more likely to be bullied online, as well as bully others (Cox Communications, 2009; Harris Interactive, 2007; McAfee/Harris Interactive, 2010; Romer, 2010).

The data demonstrated strong positive statistically significant relationships ($p < .05$) between what teens believe should be done to stop cyberbullying and what they are likely to do themselves (Table 21). Teens were not likely to turn to adults for assistance if they become aware of cyberbullying incidents. As with earlier studies (Finkelhor et al., 2006; Harris Interactive, 2007), over three-quarters of teens believed that the best action to combat cyberbullies was to block them. Although 67% of teens agreed that cyberbullying should be reported to an adult, only 38% reported that they would tell an adult about a cyberbullying incident. Even though these results are somewhat higher than

those in a comparable study (Harris Interactive, 2007), the effect is the same, as many more students thought that cyberbullying should be reported to an adult than those who would actually tell an adult. These results imply that teens believe that adults should be involved when addressing the concerns of cyberbullying. When asked what should be done to stop cyberbullying, one senior girl, age 17, suggested, “In today's tech-savvy world, all kids will use the [I]nternet. I think that all schools should require an Internet safety class/course that really digs deep into consequences of cyberbullying.”

Sexting

A substantial percentage of teens had participated in sexting activities. Nearly half (48%) had received a sext message, and approximately 4 in 10 (41%) had received a sext photo or video (Table 22). Boys and girls participated equally in the sending and receiving of sext messages and images. Yet, boys were more likely to forward those messages and images to someone else. These results were in keeping with results from the original sexting study (The National Campaign, 2008) and the results regarding the sharing of sext photos and videos from the Cox (2009) study.

There were significant differences in the overall proportions for girls and boys regarding their perceptions about sexting (Table 23). Teen boys and girls believed equally that they should decide for themselves whether to engage in sexting. However, girls were more likely than boys to believe that sexting is dangerous. Girls were also more likely than boys to believe that sexting is wrong for those under age 18 and that those under age 18 are too young to engage in sexting. Nonetheless, boys were more likely than girls to believe that adults overreact about sexting. These findings are in keeping with previous research (Cox Communications, 2009).

Anecdotal evidence further displayed the differences in experiences between genders. When asked to identify what had ever happened after a sext message or photo had been sent, this senior boy, age 18, conveyed, “[N]othing really happened. [T]wo people can just share sexts without abusing trust or showing it to anyone else[.]” However, this sophomore girl, age 16, related, “People all over the bay area, in different cities and schools saw the nude picture a girl sent to her boyfriend.”

This study revealed a strong implication that educators are not doing enough to educate both sexes about the dangers and long-term effects of sexting practices. This is especially disconcerting, as the nature of sexting stands in contrast to Catholic teaching about dignity and respect for the human person.

Recommendations

The following recommendations for future practice and future research have emerged from the results of this study.

Future Practice

That policy-makers investigate and re-structure the present information-based curriculum into a skills-based and information management curriculum that allows for the following:

1. Appropriate time for students to fully develop the interpersonal and social action skills needed to succeed in and transform the world.
2. Adequate time for educators to integrate the constantly emerging technology into their pedagogy

That teachers structure learning activities that incorporate the social networking and organizational skills that teens demonstrate daily online. At present, some learning

management systems, web-based course content delivery and management services, already imitate the structure of popular social networking sites, thus enabling students to transfer skills seamlessly from their favorite social networking site to their school course management site.

That schools build on this study's results that some students do recognize the connection between information and images that they post online and the possible negative effects on their futures. Therefore, schools should create and implement curriculum that informs students about possible long-term consequences regarding the posting of personal identifying information or inappropriate information, messages, and images.

That schools protect the safety and dignity of all students by creating an environment that provides the following:

1. Educational opportunities for students to learn how to engage with each other online while taking every action and precaution to ensure their safety by supplying useable and appropriate strategies for students to protect themselves online.
2. User-friendly reporting mechanisms for students to easily inform appropriate adults of cyberbully incidents. Any procedure should provide protections for the informant.

That administrators create and consistently promulgate school-wide behavioral policies that include cyberbullying and sexting.

That educators create and implement suitable curriculum that includes the moral and legal aspects of cyberbullying and sexting.

Future Research

That research be conducted that applies the *Student Internet Use Survey* in total or in part to other Catholic high school populations to discover similarities and differences within the Catholic school arena.

That a study be completed that investigates those interventions that positively changed teens' online behavior, as this study revealed that some students understood that what they posted online may have negatively affected their futures. It would be valuable to learn what caused this behavioral change.

That research be conducted that examines the disconnect between Catholic school behavioral expectations and teen behavior online.

That qualitative research be performed that explores the reasons that teens in Catholic high schools cyberbully others.

That qualitative research be performed that investigates why teens in Catholic high schools do not inform adults of cyberbullying.

That research be completed that examines the reasons that teens in Catholic high schools participate in sexting activities.

That research be initiated that investigates whether 1-to-1 technology access in Catholic schools leads to increased participation in cyberbullying and sexting.

Final Remarks

There is a cause for concern for educators in Catholic high schools in which technology use is prevalent. Although digital devices may be powerful educational tools, they allow students unprecedented access to each other. This is especially true in schools with 1-to-1 technology that require students to consistently operate online. By inviting

this technology into our environments without intentional curriculum dedicated to cyber-etiquette and social networking safety, we neglect a crucial opportunity to prepare our students for a world where they could preach the gospel message in the real world and in cyberspace.

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APPENDICES

APPENDIX A

IRBPHS Communication

IRB Application #12-135 - Exempt **USF IRBPHS** <irbphs@usfca.edu>

10/9/12 ☆

to me, dlmurray, shimabukurog 

October 9, 2012

Dear Diana Lynn Murray:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study. Your study has been deemed to be exempt from IRB review based on the following conditions:

Unless otherwise required by department or agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

1) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects, and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

This application does not require IRB review.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects

IRBPHS – University of San Francisco
Counseling Psychology Department
Education Building – Room 017
2130 Fulton Street
San Francisco, CA 94117-1080
(415) 422-6091 (Message)
(415) 422-5528 (Fax)
irbphs@usfca.edu

<http://www.usfca.edu/soe/students/irbphs/>

APPENDIX B

Institutional Permissions



DIOCESE OF OAKLAND

2121 HARRISON STREET, SUITE 100 • OAKLAND, CA 94612-3788
510.628.2154 • FAX: 510.451.5331 • www.csdo.org

DEPARTMENT OF CATHOLIC SCHOOLS

January 15, 2013

Institutional Review Board for the Protection of Human Subjects
University of San Francisco 2130 Fulton Street
San Francisco, CA 94117

To Whom It May Concern:

On behalf of the Diocese of Oakland, I am writing to formally indicate my awareness of the research proposed by Ms. Diana Murray, a student at USF for her dissertation: *A Survey of the Practices and Perceptions of Students in two Catholic High Schools on the use of the Internet*. We are aware that Ms. Murray intends to conduct her research by administering an online survey to a sample of students at [REDACTED] High School. As the Superintendent of Schools for the Oakland Diocese, I give Ms. Murray permission to conduct her research. If you have any questions or concerns, please contact my office at [REDACTED].

Sincerely,

A handwritten signature in cursive script that reads "sister Barbara Bray".

Sr. Barbara Bray
Superintendent of Schools,
Diocese of Oakland

October 5, 2012

Institutional Review Board for the Protection of Human Subjects
University of San Francisco
2130 Fulton Street
San Francisco, CA 94117

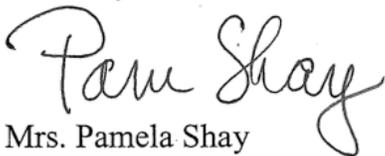
Dear Members of the Committee:

On behalf of [redacted] High School, I am writing to formally indicate our awareness of the research proposed by Miss Diana L. Murray, a doctoral student at USF. We are aware that Miss Murray intends to conduct her research by administering an online survey to 12 classes of students, providing their parents give consent.

I am the principal of the school and am responsible for the staff and students. I give Miss Murray permission to conduct her research in our school.

If you have any questions or concerns, please feel free to contact me through the school office at [redacted].

Sincerely,

A handwritten signature in cursive script that reads "Pam Shay".

Mrs. Pamela Shay
Principal, [redacted] High School

APPENDIX C

Parental Consent for Research Participation Student Internet Use Study

***Parental Consent for Research Participation for Students
Student Internet Use Study***

Purpose and Background

Miss Diana Murray, a member of the Religious Studies department, is also a graduate student at the University of San Francisco, and for her doctoral dissertation, she is doing a study on the perceptions and practices of Catholic high school students on the Internet. She believes that because Internet technology is a rapidly developing medium and students are taught early in their education how to gain access to it, it is important that adults understand teen's practices and beliefs regarding the Internet in order to make needed educational changes to better prepare them for the future and to keep them safe.

My teen is being asked to participate because he/she is a student at _____ High School, a Catholic high school that employs a 1-to-1 technology program.

Procedures

If I agree to allow my teen to be in this study, the following will happen:

1. **My son/daughter will be given time** in his/her religion class **to complete a confidential online survey.**
2. The researcher will interpret the data focusing **on the areas of general use and safety, cyberbullying, and sexting.**

Risks and/or Discomforts

My teen may be concerned about the anonymity of the surveys and may worry that information gleaned from the surveys may be used for disciplinary purposes. I understand that all participants will be given the opportunity to ask questions before the survey to learn how the data is presented, how anonymity is protected, and how off-site encrypted software makes it highly unlikely to pinpoint a particular comment to any particular student.

My teen may possibly feel some discomfort with the sensitive nature of the subject matter of several questions. I understand that **my teen may end his/her participation at any time throughout the process** with no negative consequences whatsoever.

Benefits

There will be no direct benefit to me or to my child from participating in this study. The anticipated benefit is that this study will unveil information valuable to _____ High School and the greater educational community and may lead to changes which will better service my child and my family.

Costs/Financial Considerations

There will be no costs to me or to my child as a result of taking part in this study.

Payment/Reimbursement

Neither my child nor I will be reimbursed for participation in this study.

Questions

If I have any questions about the study, I may contact Miss Murray at dmurray@_____ .org.

If I have any questions or comments about participation in this study, I should first talk with the researcher, Miss Murray. If for some reason I do not wish to do this, I may contact the IRBPHS (Institutional Review Board for the Protection of Human Subjects), which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling (415) 422-6091 and leaving a voicemail message, by FAX at (415) 422-5528, by e-mailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Counseling Psychology, Education Building, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given online access to the “Research Subject’s Bill of Rights,” and this consent form if I would like to retain a copy.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to have my child be in this study, or to withdraw my child from it at any point. My decision as to whether or not to have my child participate in this study will have no influence on my child’s present or future status as a student in _____ High School.

My signature below indicates that **I DO AGREE TO ALLOW** my child to participate in this study.

Signature of Student’s Parent/Guardian

Date of Signature

Signature of Student

Date of Signature

I have chosen **NOT TO ALLOW** my child to participate in this study.

Signature of Student’s Parent/Guardian

Date of Signature

Signature of Student

Date of Signature

APPENDIX D

Student Internet Use Survey

Student Internet Use Survey

*Note: ** denotes items requiring an answer to continue*

Welcome

Hello!

Thanks for your participation in this important research project.

You are being asked to participate in this study because you are a student at a high school with a 1-to-1 laptop program.

If you agree to be in this study, you will complete an online survey that asks about what you and others do online, and what you think about it.

Some of the questions on the survey may make you feel uncomfortable. You are free to skip any questions you do not wish to answer, or you may stop participation at any time.

Thank you so much for your participation. Your efforts will provide valuable information to those wishing to provide a safe environment for all students.

Confidentiality and Information Protection

Your participation in this survey is voluntary, and the responses to this survey are for research purposes only.

- **You will identify your grade, gender, and school only, not your name.**
- **Your answers will be kept confidential at all times by the researcher.**
- **All comments you share will be reported anonymously as in “a sophomore boy said...” or “a senior girl reported...”**
- **All responses will be transmitted via Survey Monkey's® encryption software and stored on Survey Monkey's® secured server. If you wish to view Survey Monkey's® information on encryption and other security protocols please go to www.surveymonkey.com®**

1. **** Having read this statement on confidentiality and security, do you agree to participate in this study? (If you do not, you may stop now and follow your teacher's directions for an alternate activity.)**

Yes, I do agree to participate in the survey. (Will be directed to survey)

No, I prefer not to participate in the survey. (Will be directed to the “exit” page)

General Internet Practices

It is important to discover in general, how you use your laptop, iPad, or tablet. The following questions concern your present and past activities.

2. Which of the following do you now, or have you ever done on the Internet: (check all that apply)

- Research for School
- Surf the web (non-school related)
- Send an Instant Message (IM)
- Send Emails
- Play games over the Internet
- Use a webcam
- Shop online
- Update your online profile
- Check out someone else's online profile or status
- Post messages
- Post images (photos or videos)
- Talk to someone on a chat site
- Visit an anonymous chat site
- Download music
- Share music
- Visit an online dating or romance site

3. Which of the following do you spend **the most time** doing on the Internet? (check all that apply)

- Research for School
- Surfing the web (non-school related)
- Sending Instant Messages (IM)
- Emailing your friends
- Playing games over the Internet
- Using a webcam
- Shopping online
- Updating your online profile
- Checking out someone else's online profile or status
- Posting messages
- Posting images (photos or videos)
- Talking to someone on a chat site
- Visiting an anonymous chat site
- Downloading music
- Sharing music
- Visiting an online dating or romance site

4. How often do you go online in a Typical Week to do **NON-schoolwork**?

- Every day
- Every 2 to 4 days
- Every 5 to 7 days
- Never

Online Safety Practices

The following questions concern information you share online, how you interact with others online, and how others interact with you. You also will be asked to share what you think about online safety.

5. Which of the following have you ever posted on the Internet? Do not include shopping. (check all that apply)
 - Your real name
 - Your cell phone number
 - Your home address
 - The city where you live
 - Your real age or date of birth
 - Personal images (photos or videos)
 - Images (photos or videos) of friends
 - The name of your school
 - The name of a teacher
 - The names of any local cities
 - The names of local sports teams (including school teams)
 - None of the above

6. Which of the following have you ever posted or sent to someone you **never** met face-to-face? Again, do not include shopping. (check all that apply)
 - Your real name
 - Your cell phone number
 - Your home address
 - The city where you live
 - Your real age or date of birth
 - Personal images (photos or videos)
 - Images (photos or videos) of friends
 - The name of your school
 - The name of a teacher
 - The names of any local cities
 - The names of local sports teams (including your school teams)
 - None of the above

7. Who has access to your social networking website? (Facebook, Twitter, LinkedIn, Tumblr, etc.) (check all that apply)

Friends	Family	Friends of Friends
Everyone on the Internet		Have no social networking website

8. How many social networking websites do you have? (Facebook, Twitter, LinkedIn, Tumblr, etc.)

One	Two	Three	Four or more	None
-----	-----	-------	--------------	------

9. How often do you use anonymous video chat sites? (Zoosk, Omegle, etc.)

Frequently	Often	Sometimes	Never
------------	-------	-----------	-------

10. How often do you talk to people online who you've never met face-to-face?

Frequently	Often	Sometimes	Never
------------	-------	-----------	-------

11. Which of the following information **do you think** could be unsafe to use anywhere on the Internet?
- Your real name
 - Your cell phone number
 - Your home address
 - The city where you live
 - Your real age or date of birth
 - Personal images (photos or videos)
 - Images (photos or videos) of friends
 - The name of your school
 - The name of a teacher
 - The names of any local cities
 - The names of local sports teams (including school teams)
 - None of the above
 - Other (please Explain)... **Comment box provided**
12. Do you ever worry about your personal safety while using the Internet?
- Always Often Sometimes Never
13. Which do you **think** is MORE IMPORTANT?
- Parents'/teachers' concerns for safety
 - Children's/students' rights to privacy
- Comment box provided**
14. How concerned, if at all, are you that posting your personal information (including photos and videos) on a public blog or social networking site could have a negative effect on your future?
- Very Concerned
 - Concerned
 - Somewhat concerned
 - Not at all concerned
15. Have you ever chosen **not** to post something online that you thought might have a negative effect on your future?
- Yes
 - No
16. Do you know anyone who has had something negative happen to them because of information or photos online? (check all that apply)
- Me
 - A friend
 - Someone in my family
 - Someone else
 - No one

17. Which behaviors make you feel unsafe? (check all that apply)
- When someone comes online who you do not know
 - When you get a “friend request” from someone you do not know
 - When someone says mean or cruel things about you
 - When someone uses sexually explicit language
 - When someone asks your name
 - None of the above, I always feel safe on the Internet
 - Other (please explain) **Comment box provided**
18. Have you ever logged onto any site anonymously? (check all that apply)
- Yes, because I wanted to say something mean about someone
 - Yes, because I wanted to play a joke on someone
 - Yes, because I wanted to hide my identity while gaming
 - No, I have never logged onto any site anonymously
 - Other (please explain) **Comment box provided**
19. Have you ever created a fake identity on the Internet? (check all that apply)
- Yes, because I wanted to say something mean about someone
 - Yes, because I wanted to play a joke on someone
 - Yes, because I wanted to hide my identity while gaming
 - No, I have never created a fake identity
 - Other (please explain) **Comment box provided**
20. Have you ever pretended to be any of the following on the Internet? (check all that apply)
- Someone older
 - Someone younger
 - A different gender
 - None of the above
 - Comment box provided**
21. What do you **think** about the following? (check all that apply)
- It is okay for people to log on anonymously
 - It is okay for people to create a fake identity
 - It is okay for people to log on as someone older
 - It is okay for people to log on as someone younger
 - It is okay for people to log on as a different gender
 - It is NOT okay for people to do any of the above

Cyberbullying

The following few questions are about **cyberbullying** which is defined by California state law as the use of electronic devices ... to send or post harmful messages or images about an individual or a group.

Remember that your survey responses are completely confidential, but if you feel uncomfortable, you may chose to end the survey at any time.

22. Please check any of the following that has happened to you.

- Someone I knew sent me a mean or cruel email
- Someone I knew sent me a mean or cruel IM
- Someone I knew posted mean or cruel things about me online
- Someone I knew threatened me online
- Someone I **did not** know joined me online without my permission
- Someone I **did not** know sent me a mean or cruel email
- Someone I **did not** know sent me a mean or cruel IM
- Someone I **did not** know posted mean or cruel things about me online (including anonymous posts)
- Someone I **did not** know threatened me online
- None of the above has ever happened to me

23. Please check any of the following that you have done.

- I have posted something mean or cruel about someone I knew
- I have anonymously posted something mean or cruel about someone I knew
- Using a fake identity, I have posted something mean or cruel about someone I knew
- I have posted something mean or cruel about someone I DID NOT know
- I have anonymously posted something mean or cruel about someone I DID NOT know
- Using a fake identity, I have posted something mean or cruel about someone I DID NOT know
- I have never done any of the above

24. Why do you **think** kids cyberbully? (check all that apply)

- They think it is funny
- They want to show off to their friends
- They view the victim as a loser
- They want to get back at someone
- They are jealous
- They don't see their action as a big deal
- They don't think they'll get caught
- They don't believe consequences exist
- Other (please explain)

Comment box provided

25. Which of the following should be done to stop cyberbullying? (check all that apply)
- Block the person doing it
 - If a friend cyberbullies someone, tell him/her to stop
 - Stand up for a victim of cyberbullying
 - If people see cyberbullying online, they should send a message telling the person it is wrong
 - Report cyberbullying to an adult
 - Report cyberbullying to the Internet service provider
 - Parents should talk to their kids about cyberbullying
 - Internet service providers should stop cyberbullying
 - Other suggestions?

Comment box provided

26. Which of the following are you likely to do? (check all that apply)
- Block a cyberbully
 - If a friend of yours cyberbullies someone, tell him/her to stop
 - If you know a cyberbully victim, tell him/her you are sorry it happened
 - If you see cyberbullying online, send a message telling the person it is wrong to do that
 - Report cyberbullying to an adult
 - Report cyberbullying to an Internet service provider
 - Not likely to do any of the above
 - Other (please explain) **Comment box provided**

Sexting

The final few questions are about sexting, the practice of sending or receiving nude or semi-nude images or sexually suggestive messages over the Internet, either by cell phone, tablet, or computer.

Remember that your survey responses are completely confidential, but if you feel uncomfortable, you may chose to end the survey at any time.

27. Which of the following apply to you? (Check all that apply)
- I have sent a sexually suggestive message to someone (email, IM, etc.)
 - I have never sent/posted sexually suggestive messages.
 - I have received a sexually suggestive message from someone (email, IM, etc.)
 - I have shared a sexually suggestive message with someone other than the one(s) it was originally meant for
 - I have had a sexually suggestive message (originally meant to be private) shared with me
 - I have never received/shared a sexually suggestive message from someone

28. Which of the following apply to you? (Check all that apply)
- I have sent at least one nude or semi-nude picture/video of myself to someone (email, IM, etc.)
 - I have never sent/posted a nude or semi-nude picture/video of myself
 - I have received at least one nude or semi-nude picture/video from someone (of himself/herself)
 - I have shared at least one nude or semi-nude picture/video with someone other than the one(s) it was originally meant for
 - I have had at least one nude or semi-nude photo (meant to be private) shared with me
 - I have never received/shared a nude or semi-nude photo of someone
29. Which of the following apply to you? (Check all that apply)
- I think sending sexually suggestive messages about someone under 18 years of age is wrong
 - I think sending nude or semi-nude images of someone under 18 years of age is wrong
 - I think people under the age of 18 are too young to engage in “sexting”
 - I think people under the age of 18 are old enough to decide for themselves if “sexting” is okay
 - I think it is dangerous to engage in “sexting”
 - I think adults overreact about “sexting”
30. Which of the following ever happened after you or someone you personally knew sent a text message or email with a nude, semi-nude, or sexually suggestive photo?
- The photo was forwarded to an authority figure and the sender got into trouble
 - The photo was posted online where many people could see it
 - The photo was forwarded to someone the sender did not want to see it
 - The person to whom the photo was sent, threatened to send it to someone else
 - The person to whom the photo was sent made fun of the sender
 - I don't know anyone who has ever sent a “sext” message or photo

Demographic Information

Remember, your answers will be kept confidential. The following information is needed to analyze and organize all survey responses.

- | | | | | | | |
|--------|---------------------------|-----------------|------------------|------------------|------------------|-------|
| 31. ** | What is your grade level? | 9 th | 10 th | 11 th | 12 th | |
| 32. ** | What is your age? | 14 | 15 | 16 | 17 | 18 19 |
| 33. ** | What is your gender? | | | Female | | Male |

Thank You!

Your participation has been invaluable to this project! Thanks so much for your effort. You can end the survey and look to your teacher for further instructions.

APPENDIX E

Permission to Use Survey Questions

Permission Request **Murray, Diana** <dmurray@_____.org>7/11/12 to tsmith 

Dear Mr. Smith,

As I explained in our phone conversation, I am a doctoral student at the University of San Francisco doing my dissertation research on teen use of the Internet. I am also a teacher at a high school in _____, California, which employs a 1-to-1 laptop program. As more schools move toward 1-to-1 technology programs requiring students to acquire laptops or tablets to gain membership into their communities, it is my belief that we should actually know how they use this technology. Although similar studies have been done, I would like to target students in Catholic high schools with 1-to-1 technology programs.

I am planning to use online survey methodology and would like **with your permission**, to include five questions (three are adaptations) from your 2009 Teen Online and Wireless Safety Survey. Please see specific questions listed below.

Full credit will be given to the original study and any additional acknowledgement will be in the given in the form that you require. I would be happy to provide any additional information you might need.

Thank you so very much for your assistance.

Respectfully,
Diana Murray

Questions used or adapted from the 2009 Teen Online and Wireless Safety Survey:

Cox p. 20

How concerned, if at all, are you that posting your personal information (including photos and videos) on a public blog or social networking site could have a negative effect on your future?

Very Concerned Concerned Somewhat
concerned Not at all concerned

Cox p. 21

Do you know anyone who has had something negative happen to them because of information or photos online?

Me A friend Someone in my family
Someone else No one

Cox p. 28 (adaptation)

Why do you **think** kids cyberbully? (check all that apply)

- They think it is funny
- They want to show off to their friends
- They view the victim as a loser
- They think the victim deserves it
- They don't like the person
- They want to get back at someone
- They are jealous
- They don't see their action as a big deal
- They don't think they'll get caught
- They don't believe consequences exist
- Other _____

Cox pp. 42 & 43 (adaptation)

Which of the following apply to you? (Check all that apply)

- I think sending sexually suggestive messages about someone under 18 years of age is wrong
- I think sending nude or semi-nude images of someone under 18 years of age is wrong
- I think people under the age of 18 are too young to engage in "sexting"
- I think people under the age of 18 are old enough to decide for themselves if "sexting" is okay
- I think it is dangerous to engage in "sexting"
- I think adults overreact about "sexting"

Cox p.38 (adaptation)

Which of the following ever happened after you or someone you personally knew who sent a text

message or email with a nude, semi-nude, or sexually suggestive photo?

- The photo was forwarded to an authority figure and the sender got into trouble
- The photo was posted online where many people could see it
- The photo was accidentally sent to the wrong person
- The photo was forwarded to someone the sender did not want to see it
- The person to whom the photo was sent, threatened to send it to someone else
- The person to whom the photo was sent, made fun of the sender



Smith, Todd C. (CCI-Atlanta) <TSmith@cox.com>

7/12/12 ★



to me ▾

Diana: this is fine. Thanks for asking and good luck with your research. We'd be curious to see it. We might even be able to cite it at some point.

Todd

Todd C. Smith
Director, Media Relations
Cox Communications
office: 404-269-3124
mobile: 678-362-8346
email: tsmith@cox.com
[Twitter](#) [Facebook](#) [LinkedIn](#)

From: Murray, Diana [mailto:dmurray@_____.org]

Sent: Wednesday, July 11, 2012 3:47 PM

To: Smith, Todd C. (CCI-Atlanta)

Subject: Permission Request

...

APPENDIX F

Student Internet Use Survey Validity Panel Members

Student Internet Use Survey Validity Panel Members

Positions, Level, and Expertise of Student Internet Survey Validity Panel Members

Positions	Elementary	High School	College
Sr. Jeanne Hagelskamp, Ed.D. Principal, Providence Cristo Rey Indianapolis, IN		X	
Mr. Bob Ryan Principal, Brophy Prep Phoenix, AZ		X	
Ms. Lisa Tortorich Principal, Mercy Burlingame, CA		X	
Mr. Blair Cook Director of Technology Brophy Prep, Phoenix, AZ		X	
Dr. Joy Lopez Director of Technology Sacred Heart, Atherton, CA		X	
Mr. Larry Steinke Director of Technology St. Francis, Mt. View, CA		X	
Mr. Mike Taverna Dean of Technology Sacred Heart, Atherton, CA	X		
Ms. Jennifer Buonafede Technology Coordinator Sacred Heart, Atherton, CA	X		
Ms. Summer Ditmer, Student Activities Coordinator, Mercy, Burlingame, CA		X	
Ms. Shanterra McBride, AP Student Life Sacred Heart, Atherton, CA		X	
Mrs. Cheryl Ruyle, Learning Resource Specialist Notre Dame, San Jose, CA		X	
Dr. Sarah Wannemuehler Director of Graduate Studies in Education Aquinas College, Nashville, TN			X

APPENDIX G

Validation Questionnaire

Dear Colleagues,

For your convenience, here are the Validity Panel Questions (items 35-46). Please remember however, all survey answers and comments must be completed using Survey Monkey®.

Thank you

Validity Panel Responses

Please read and answer each question carefully, using comment boxes to give more complete responses if necessary as to the validity of this survey instrument.

35. Please, tell me your name.

36. Approximately how long did it take you to complete the survey?

- under 10 minutes
 10-15 minutes
 16-20 minutes
 21-25 minutes
 26 minutes or more

37. Are the answer choices clearly stated and easily readable?

- Yes
 No

Please comment on needed changes.

38. Does the "Welcome Page" give an adequate explanation of the purpose of the study and survey?

- Yes
 No

Please comment on needed changes.

39. Are the expectations and instructions for taking the survey clearly stated on the "Welcome" page?

- Yes
 No

Please comment on needed changes.

40. Does the "Confidentiality and Security Information" page give a clear explanation in order for an individual to give informed consent to participate in this study?

- Yes
 No

Please comment on needed changes.

Construct Validity

41. In light of the research questions, do the items included on the survey measure what the study is investigating: The practices and perceptions of students in Catholic high schools concerning general Internet usage, Internet safety, cyberbullying, and sexting?

Yes

No

Please comment on needed changes below.

42. Are there items on the survey that need further development?

Yes

No

Please comment on needed changes.

43. Does the layout of the survey facilitate a clear understanding of the survey items?

Yes

No

Face Validity

44. Does the survey clearly address the topic of the research study: the practices and perceptions of teen Internet use?

Yes

No

Please comment on needed changes.

Content Validity

45. Do the questions contained in the survey adequately relate to the areas of Internet usage, safety practices, cyberbullying, and sexting?

Yes

No

Please comment on needed changes.

46. Do you have any additional comments to assist me in improving the survey?

Thank you for your time and your educational expertise.
I truly appreciate your effort.

With much gratitude,
Diana Murray

APPENDIX H

Transcript for Verbal Instructions

Verbal Consent Script Transcript for Participation in Research University of San Francisco

To be read by the classroom teacher on the day of the survey:

1. Good morning ladies and gentlemen. Today you are being invited to participate in a research project designed by Miss Murray, a doctoral student at the University of San Francisco and a teacher here. She is doing a study on Internet use by high school students, and she is extremely interested in learning about your online activities, what you think about your activities, and what you think about what other people do online.
2. You are being asked to participate in this research study because you are a student at a Catholic high school with a 1-to-1 laptop program. If you agree to participate, you will complete an online survey that asks about your online activities, what you think about your activities, and what you think about what other people do online. After you complete the survey, follow the instructions [*on the board*] when you are finished.
3. Some of the questions on the survey may make you feel uncomfortable, but you are free to skip any questions you do not wish to answer, or you may stop participation at any time. Although you will not be asked to identify your name on the survey, you will be required to identify you're age, grade and gender. No individual identities will be used in any reports or publications resulting from the study. Results of the study will be kept secure at all times.
4. PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to choose not to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate will have no influence on your present or future status as a student at this school. You may not participate without a signed permission form from your parents. For those of you who do not to participate, please do the following activity: [*Please provide an appropriate activity so all students may complete the survey.*]
5. Thank you for your attention. If you agree to continue, go to Blackboard to access the survey. Please read all the survey instructions when you begin. When you have completed the survey, please do the following: [*Please provide an appropriate activity so all students may complete the survey.*]

APPENDIX I

Complete Listing of Comments

Complete Listing of Comments

The following lists include all comments generated by the respondents. All comments have been left in their original format with no changes to spelling or grammar. Only those questions that permitted comments are included below. See Appendix D for the full *Student Internet Use Survey*.

Online Safety Practices

Item #11: Which of the following information **do you think** could be unsafe to use anywhere on the Internet? (check all that apply) [Eleven possible choices were given.] (n=480)

There were 19 responses:

1. your email
2. Depends on what site/who can see it
3. Social Security Number
4. Specific situations that could be used to identify me
5. social security, credit card number
6. Social Security Number
7. Social security number
8. family status
9. where you will be at a specific time
10. social security number,
11. any personal information that is able to track who you are and where you are
12. Social Security Number, Names of Family, and Personal Family Things
13. financial information
14. It isn't safe to share any info with someone you've never met.
15. Social Security Number
16. nothing
17. All of them because I've googled myself before and I can find my address with just my first and last name.
18. Relationship Status
19. it could be if done improperly

Item #13: Which do you **think** is MORE IMPORTANT? [Parents'/teachers' concerns for safety or Children's/students' rights to privacy] (n=480)

There were 96 responses:

1. Both
2. Both
3. both
4. both equally
5. i think parents should know what happens in their childrens lives, but i also think children should have a level of privacy.
6. Depending on the circumstances
7. I think there is a very delicate balance in which parents and children should both follow.
8. Depending on the situation, and as long as the student is using the web safely and smartly.
9. They want the best for you
10. Depends on the situation
11. But it depends on the child's safety
12. Parents should be concerned about the safety of their children, so that the children do not post personal stuff on the internet.

13. As a 16 year old girl, i believe that ive been taught well enough to know how to act online. So i believe we deserve a right to privacy due to our age and maturity. But it is all based on who the person it.
14. Parents or teachers can be concerned, but kids or students need the right to keep their information private from anonymous users.
15. i think both are valid
16. People just can't be dumb asses about it
17. Privacy is our right.
18. they are both important but sometimes parents/teachers' concerns end up invading privacy
19. ultimately your lack of privacy has less of a risk to do harm than a lack of safety
20. The Fourth Amendment of the U.S. Constitution pretty much secures the right to privacy.
21. If children/students desire the right to privacy, they may excercise it by not sharing excessive information online. If they do not care for privacy, they have a certain right to expression that they may exercise through the Internet.
22. however, I believe that teachers/parents must have probable cause that a student is in danger before infringing upon their privacy rights
23. At a certain age, students should understand the risks of the Internet.
24. Safety should always be first. However, it should be based on the child
25. However, safety is important
26. most kids are resposible
27. constitutionally we must protect the right to privacy. if it is harming and individual then right for intervention is okay by parent. minor rights to privacy are overruled by parents anyways.
28. I believe that safety cannot be enforced through a barrier between the student and internet. Instead the child should be taught the importance and safety and subsequently the children can respond with a right to privacy.
29. Though the rights to privacy are very important, Younger children tend to find the internet "safe" and are not aware of the potentials of threats to them unlike older young adults.
30. I think adults would be more responsible
31. But some concerns for safety as well
32. Aint nobody reading my stuff
33. Because a child needs to learn how to be responsible on their own as their parents won't always be around in their lives
34. both are equally important, it depends on the situation
35. I think that parents and teachers concern for us because they care, not to see us punished. However, from a student perspective it is awkward to approach adults on these matters and if often does seem like it would be easy to just keep everything private.
36. I don't know. Maybe a middle ground.
37. I think child/student's rights are important because sometimes a parent or teacher's concerns are unnecessary and it is them just worrying about things that are most likely not going to happen.
38. idk
39. I think the kids should have the responsibility to be safe themselves.
40. It really depends.
41. depends on the situation
42. but parent's concern for safety is still important
43. I think it is most important for both parties to understand each other's definitions of safety and privacy
44. The right to privacy should be earned
45. school isn't our whole lives, we have a right to keep home and school life separate
46. Everyone has rights to privacy
47. Most parents and teachers don't understand the way talking online goes. Personally I only talk to people online when either they only know my first name and or gamertag (username). Also parents don't understand that online safety is natural to most of us

- because we grew up with the emersion of social networking sites as well as other sites that host interaction between people all across the country and the globe.
48. Parents are only trying to look out for their own kid most of the time. Kids should understand that, we aren't adults yet.
 49. I think both are very important, and students need rights to privacy, but parents and teachers need to make sure students and kids are safe.
 50. Parents and teachers are wiser than you and they know which is a good or bad situation more than a student might realize
 51. there were plenty of risky behaviors before the internet was around, but parents and teachers didn't have anyway of see that, so why should they invade a student's privacy unless there is definite proof that the student is putting themselves in danger
 52. It all depends on the person.
 53. I think both.
 54. i have a right to privacy but i also worry about my own safety as well
 55. A balance of the two
 56. obviously your parents want you to be safe, and that's important, but they should to some degree respect privacy.
 57. Parents have the right to protect their children's information.
 58. A combination of both... They are equally important
 59. Kids do deserve their own personal privacy but safety should be a big part of allowing privacy
 60. I believe as we grow older, the lessons and teachings they teach us will become more realistic. Right now as a teenager, sometimes the concerns they have do not make sense, but parents always know best. Parents want to make sure that our safety is in check.
 61. both are important, but need a balance
 62. It's more important for children and students because they are younger and don't always know what can happen if they post things to the internet.
 63. depends on the age of the "child".
 64. By this age we know what/who's out there and know to be safe and watch out for ourselves
 65. We are all individuals and we all have our own rights
 66. the age of the student or child is important
 67. I know that I can take care of myself.
 68. Children should be aware of the risks and make decisions based on that.
 69. I think they are both important.
 70. They are both very important because without children's/students' right to privacy parents'/teachers' concerns would be necessary and vice versa
 71. I think a lot of students know the risks of the internet and know what to do to stay safe without an adults guidance
 72. The parents' and teachers' concerns for safety are more important because they are the ones that will have an impact to our future.
 73. They are both important because our right to privacy may lead to danger.
 74. Perhaps I am biased, as I am a student, and I do research, as opposed to any activity that puts me in danger.
 75. It keeps you safe even if you dont think its important
 76. Both
 77. theres somethings the student wants to keep to them self
 78. If the parents and teachers stay on the students, then the student will be more careful with what they do ion the internet.
 79. We needa have freedom
 80. I think they are equally important.
 81. Just the way it is right now, I can only see my side of things. I don't want my parents creeping on my Facebook page and things like that. I make wise decisions online, and they should respect that.
 82. both

83. everyone has the rights of privacy
84. nothing
85. I think parents need to work on talking to their kids about making safe online decisions as opposed to freaking out and banning it altogether.
86. Although I value my right to privacy, I know that parents worry a lot, especially when they don't have a good idea of what their child uses the internet for.
87. Being almost 18, I do value privacy, however, I do not think that young children or preteens should have any right to privacy because they do not have knowledge of how to be safe online
88. We need privacy!
89. Children's/students' safety
90. I actually agree with both, but i mostly agree with the child's privacy, unless of course they are getting themselves into a dangerous situation.
91. It depends if one is more important than the other. I get why parents and adult figures are concerned about their child but they might go overboard on a silly post that some said about about that child. Parents dont know the full insight of a situation and thats what makes the child's right to privacy comes in. students should be able to express themselves without there parents getting overly dramatic about it.
92. High school students are old enough to know what is right or wrong. They should be able to do the right thing without a parent or a teacher pestering them about it.
93. I think they go hand in hand. One is not more important than the other.
94. If there is legitimate reason for concern, it is important for parents, but not teachers, to be able to access a student's online life.
95. I'm not really sure.
96. Depends on the intensity of the situation

Item #17: Which behaviors make you feel unsafe? (check all that apply) [Six possible choices were given.] (n=465)

There were 32 responses:

1. None, but I don't always feel safe
2. When someone you dont know messages you.
3. i dont always feel safe on the internet because of malware and viruses but in the sense of strangers asking me information, that never happens to me because I avoid it.
4. When a person you don't know asks about your friends.
5. Anything from strangers
6. My current location
7. I dont interact online with people i do not know, so i dont feel unsafe and am not put in unsafe situations where people i dont know can see who i am. The only site i use is facebook, and i know everyone who can see my profile.
8. When someone spams me
9. for the sexual language part, i'm assuming you mean in reference to me
10. forward messages from people i dont know well or at all
11. I have not encountered a few of these things, so therefore, I cannot say.
12. When people i don't know try to vchat me on skype.
13. I only get worried when I see cybe bullying otherwise people are just being friendly or funny in my cases.
14. I filter my social networking account pretty well.
15. No one does these these things on Twitter, at least not that I've seen.
16. I feel unsafe whenever someone I do not know talks or asks me anything.
17. naked pictures
18. none of these have really happened to me
19. I am never on a site without an alias and fake information that has this kind of interaction. Most of the time I witness this type of behavior though is in online games from people venting.

20. Someone I don't know tries to talk to me
21. When they ask about personal information
22. i do not have social networking accounts and i almost always feel safe on the internet because i do not post really personal information
23. I generally feel uncomfortable when some of these things happen, I would not say, though, that I feel unsafe.
24. its the internet. I don't feel unsafe because I don't have to respond.
25. None of the above.
26. nothing
27. If someone I don't know chats me online
28. when someone i dont know uses sexual or explicit language.
29. also if there person asks where you live.
30. There is a difference between someone I dont know and a stranger. Sometimes you dont know a person on a personal level but you have many mutual friends.
31. getting messages from random people
32. I do not have any social networking sites therefore, a lot of these things do no apply to me.

Item # 18: Have you ever logged onto any site anonymously? (check all that apply) [Four possible choices were given.] (n=475)

There were 39 responses:

1. I always want people to know who I am
2. My friends have this site ask.fm where people anonymously can ask other people questions. So i asked my friends dumb questions anonymously.
3. Yes , because I didn't want my real name out there
4. I did it with a friend who was in control
5. yes, none of the above reasons
6. Yes but not to be cruel or say mean things, simply to keep my identity secret.
7. in online video cams that celebrities have, i'd rather not have all the other fans online to watch know me and my name,
8. I rarely use my name
9. Just didn't want to use my real name I guess
10. because it is safer
11. I wanted to give a helpful message to somebody as a serendipitous act
12. I don't go onto sites where you log in a name.
13. Yes, because I wanted my opinion on a certain topic to remain without a face.
14. Yes, for privacy
15. Yes, because my personal information was not relevant
16. Sites like reddit value anonymity thus there is no actual information connected to your account just a non identifying username and password. Senior, male 17
17. omegle...for fun
18. Yes for Curiosity
19. Comment on a web site
20. yes, i didnt want people to know who i was
21. I have gone onto youtube or twitter without having an account just for fun.
22. cus i felt like it
23. I don't feel like setting up an account
24. it wasn't rude or anything though i posted a nice message anonymously on tumblr
25. so others don't know who I am.
26. no reason, it just works that way sometimes
27. 4chan
28. I did once because if I wanted to have my name displayed I would've had to sign up for the blogging website.
29. yes because it was before I was 18
30. reddit.com

31. Yes, because I wanted to anonymously compliment someone
32. Yes, but not any of the reasons above. Just to keep the privacy of my name/username.
33. Yes my identity is irrelevant
34. to lazy to create an account
35. Yes, because I wanted advice.
36. Omegle, so no one knows my identity
37. Formspring
38. nothing
39. Yes, my friends and I went on omegle for fun

Item #19: Have you ever created a fake identity on the Internet? (check all that apply)
 [Four possible choices were given.] (n=479)

There were 34 responses:

1. No because lying is bad, and creating a fake identity is illegal
2. yes because me and my friend wanted to
3. I've made a fake name for an account.
4. Yes but I stopped.
5. Yes, so I can remain anonymous to strangers (NOT to doing anything mean)
6. The joke wasn't to hurt anyone, I just had a fake profile called Jesus McChrist because I thought it was funny.
7. YES I AM A CATFISH!
8. Yes, because I do not want to offer my personal information to others.
9. it's safer
10. Yes, for gaming benefits / privacy
11. On most of my social networking sites I use fake names or nick names that only friends would know; I only do it for protection, not to be cruel.
12. Yes, a joke on society as a whole. Made a stereotypical character
13. yes, to have a unique username, with facts i wished to be true about my own life
14. I used my other name that only a few close friends know.
15. I created a different username on many games. Not a real name, but a gaming name.
16. I use it for things that I think might be unsafe.
17. yes because i wasn't allowed by my parents to have a Facebook
18. I never have, but I LOVE the show Catfish.
19. to hide who I really was.
20. To sign up for something that might have sent me spam mail if i put in my real identity
21. to hide identity on youtube or whatever
22. yes in the way that I didnt give any personal information just because and I didnt use my real name
23. I have to not allow people to know my identity
24. amazon prime free trials with every new email address
25. yes because I was under 18
26. Yes, because I didn't want people knowing who I was
27. reddit.com
28. Purely out of privacy concerns, I create fake identities for companies I do not trust.
29. Yes for many reasons
30. Yes, so its much harder for employers to search me.
31. i used a fake name for a youtube account
32. nothing
33. just for fun, not to be mean or play a joke, or try to hide my identity.
34. Webkinz.

Item #20: Have you ever pretended to be any of the following on the Internet? (check all that apply) [Four possible choices were given.] (n=480)

There were 24 responses:

1. I like to troll
2. Some sites have an age requirement.
3. I round up. Like if i turn 17 in september and its july, ill round up so i seem older
4. Only to be of age for accounts or websites.
5. Play game
6. facebook wasnt available for my age in middle school and i wanted one
7. I couldn't have a MySpace before i was "14" years old, so when I was around 12 years old I put that I was 14. NBD
8. I pretend to be older to get video games.
9. So I could get an e-mail account
10. in the birth date year categories for ordering and subscriptions to stuff
11. I always create a anonymous gaming name, or I say who I am. When I was younger I played on my Mom's account.
12. I have a few different email accounts that I use for websites that I dont want to have access to my real name and email.
13. when i was 13 i said i was 14 it isn't a big deal yaknow
14. I play call of duty and to download the dlc (Downladable content) you have to be 18. Even if your parent sets up your account and allows all content Xbox live won't let you download content rated M until you turn 18
15. Certain websites have age limits so I changed my age
16. in order to get a facebook i said i was older, but it was also so people who i didn't know didn't know my real age
17. to access it i had to be 18
18. When I was not old enough to join myspace in 6th grade.
19. To buy and play games
20. This is in order to play specific games. I do not tell other people I am a different age.
21. nothing
22. I thought you had to be a certain age to have a facebook so I made my birth year older.
23. I only do it because people ask and I dont want them knowing my age but the oldest that I have every said I was is 16 years
24. My friends made them for fun and we did not use them

Cyberbullying

Item #24: Why do you think kids cyberbully? (check all that apply) [Eight possible choices were given.] (n=474)

There were 44 responses:

1. They think that they are cool
2. it makes them self feel better
3. Its a way to feel powerful but still be able to be safe behind a computer.
4. Parents have not taught them how to respect technology, and use it affectively
5. They are mean people.
6. They wanted to say something they couldn't in person.
7. Sometimes Karma comes back to the person you are saying it to sort of like the term "bully the bully" to prove a point
8. it can because they dont feel accepted so they want to make others feel unaccepted as well
9. they are braver not facing the person face to face
10. They themselves had or have an abusive relationship

11. I would say that it probably has more to do with a disjointed or broken home life than any of the above. They don't respond well emotionally to things not going their way
12. They are insecure about themselves so they take it out on someone else.
13. They are afraid
14. there is not a system to hold students accountable. hard to see what is going on at home
15. They are bored and have the time
16. They are insecure
17. They have experienced the same phenomenon
18. They as a person are struggling and have their own problems, and take their anger out on other behind the safety of a screen.
19. The main reason kids cyberbully in my opinion is because they have something against the person. If they do it to someone random, it is out of anger out of their own life, maybe they think it is funny if they are pulling a joke with friends. Many people are ignorant to the consequences of cyberbullying and the effect it can have on someone else.
20. they feel bad about themselves
21. they dont like the person
22. some people do things that are out of line and no one steps up to call them out and they continue to do what they are doing. For example, there are people who constantly bully people online but no one says anything about it until they post something about the bully. I think sometimes it is very okay to post things about other people when its saving other people from being embarrassed or hurt. The bully might not even know what he or she is doing until someone calls them out on it.
23. Many times thye get back from school and being a jerk online helps them feel better. Most of the time to people in the lobby will join in on your venting and that helps relieve everyones stress. People who do not enjoy that behavior leave the lobby and join a new one. No harm done.
24. They want to make someone feel bad because they feel bad themselves
25. spoiled, parents let them get away with things around the family so they bring it to the outside world.
26. this allows bullies today to constantly bully their viciems and never let them escape the torture that endure everyday at school. They want to get in their victem's head and destroy them as much as possible and the internet has allowed them to do that much more than before
27. Try and seem cool
28. You could just log off
29. They wanted to hurt someone because they were hurt
30. They have self-esteem problems
31. insecure with themselves
32. they want to hide behind the internet
33. they are insecure. They are social ladder climbers
34. They want to have control over the victim and exploit all possible oppourtunities and things.
35. It's easier to do it behind a computer screen rather than to someone's face
36. They want to take out their own frustrations without the confrontation
37. They are insecure about themselves.
38. they think they cant be touched because they are behind a computer screen
39. They have internal problems
40. they have their own personal insecurities
41. nothing
42. They don't have the love at home that they feel like they should. So they take it out that anger on other kids
43. They dont understand what they are doing to the other person. They might be hurt themselves.
44. They are scumsucker low lives who have nothing else to do.

Item #25: Which of the following should be done to stop cyberbullying? (check all that apply) [Eight possible choices were given.] (n=473)

There were 33 responses:

1. Learn to pay no attention to it or change your actions on the internet.
2. You can't
3. Don't spend so much time on the Internet.
4. Say why you think cyberbullying is wrong and the consequences that may come along with it. Not just the for cyberbully but often it lowers the self esteem of the victim and may cause them to commit suicide
5. kids should be taught more about cyber bullying and what it affects that it has on others.
6. Ignore it, unless it gets out of hand
7. Just go and tell the person who is cyber bullying to stop doing so
8. Being able to remain anonymous online allows people to ridicule others with no consequences. This level of power while seemingly small is quite large and can lead to many problems that parents, service providers and friends can't do anything about. Kids should learn from other people who traverse the internet about how to ignore cyber bullying. Ignoring those who bully online is the most proficient way leave those who bully powerless.
9. I really believe that internet providers possess a very limited capability to influence cyberbullying
10. education
11. Ignore it
12. Get that cyberbully into a full talk of why he/she is doing such a thing
13. I think the blame ultimately rests on the bully, not on the Internet Service Provider
14. stop teaching kids to be so hateful. people aren't born hating. hatred is taught. stop raising kids to be so mean.
15. If on a social media site, report to the social media offices
16. If someones actions get out of hand their account should get banned
17. you need to be smart about who you interact with, the good part about not being face to face is that you can just log off and get away from what they are saying, it is much easier to get away then if they were face to face before
18. confront the person face to face
19. log out
20. Teachers should explain the harm and consequences caused by cyberbullying in a way that teenagers can relate to
21. force them to delete respective social networking site.
22. One should stop using the social media that one is being bullied on.
23. uh, make it illegal
24. Come up with an equally hurtful but not humiliating punishment
25. Ignore it
26. shut down the internet jk
27. talk to the site manager to observe conversations with certain derogatory words and catch cyberbullying.
28. The kids should be able to handle it themselves
29. In today's tech-savvy world, all kids will use the internet. I think that all schools should require an Internet safety class/course that really digs deep into consequences of cyberbullying.
30. nothing
31. Get off of that site because seeing a bunch of negative things could prompt the person to become harmful so they need to get off so that they will not dwell on it.
32. There should be consequences for those who do participate in it
33. get off the internet

Item #26: Which of the following **are you likely to do** any of the following? (check all that apply) [Seven possible choices were given.] (n=475)

There were 15 responses:

1. I'd say why I think it's wrong to cyberbully.
2. cyberbully them back
3. Be a neutral arbitrator
4. It doesn't bother me
5. I would stand up to the bully face to face or if that's not possible I would call them out on the site that they are bullying people on.
6. Bully the cyberbully. They are often just looking for conflict and giving it to them helps them vent and feel better
7. confront the person face to face
8. Tell them to get off of whatever social media platform they are on.
9. It's common on the internet on many sites and also over gaming networks like xbox live and playstation network, for people to trash talk each other and be "mean" to other people online, whether they've met them or not. I'm used to seeing it and it doesn't seem like a huge deal, solely because it's just some person on the internet that usually doesn't know the person they're insulting.
10. If I know the person, deal with it face to face.
11. Stand up to a cyberbully
12. I would most likely not care, as I feel fairly strong and I believe in myself. I would not care if someone said something rude about me online; in fact, I would likely ask them what's going on in their life. However, as I am not in that position, I am unsure. I do know there is a girl who says very rude and untrue things about me to other people via texting, and I challenged her on that, so that makes good precedent, I guess.
13. virtually beat the crap out of the cyber bully
14. nothing
15. Confront the ass hole in person in front of all of his or her friends.

Sexting

Item #30: Which of the following ever happened after you or someone you personally knew sent a text message or email with a nude, semi-nude, or sexually suggestive photo? (check all that apply) [Six possible choices were given.] (n=425)

There were 35 responses:

1. Nothing happened and no one knew
2. Nothing happened.
3. The receiver did not do anything
4. The photo was sent and nothing happened
5. The image was sent over snapchat which deletes forever after 10 seconds.
6. showed picture to friends
7. her whole group of friends found out and now don't respect her
8. I personally know a person who enhanced in sexting and no negative consequences have resulted.
9. Nothing bad happened
10. None of the above. I deleted the photo after a while.
11. The photos get sent around to many people, i.e. in a school
12. Blew up to three states
13. None of those things happened
14. nothing bad happened
15. People all over the bay area, in different cities and schools saw the nude picture a girl sent to her boyfriend.
16. The entire school found out about it and saw it
17. the photo was found by her best friend and she told her mom

18. The person who sent the photo did not get in trouble and the photo was never spread around.
19. They sent it to other people in the school and almost the entire school ended up seeing her.
20. nothing happened they were just like oh cool nudes thanks
21. I know people who've done it, but nothing happened.
22. the photo got sent around to other people and alot of people ended up getting it
23. the photo was kept private
24. We brought it to an adult and they didn't do anything about it
25. the photos stay between the two people
26. I do not know what happened
27. these things have happened to 2 people I barely know
28. they sent one back
29. snapchat
30. The picture was sent to a lot of the senders peirs.
31. It was deleted
32. The image has been kept private since it was sent.
33. nothing
34. The photo got sent around to several people.
35. nothing really happened. two people can just share sexts without abusing trust or showing it to anyone else