Florida Teacher Perceptions Concerning Internet Dangers For Students

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FLORIDA TEACHER PERCEPTIONS CONCERNING INTERNET DANGERS
FOR STUDENTS

by

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ABSTRACT

This research study was conducted to determine if there were significant differences or relationships between teachers’ perceptions of knowledge of Internet dangers to students and factors such as demographics, self-reported comfort levels with Internet use, and with knowledge of policies and laws regarding Internet safety. Three hundred seventy-two teachers from three central Florida school districts were surveyed using an adapted survey developed by authors Patchin and Hinduja (2006) and Willard (2006, 2009). The world of the Internet is constantly changing, and students will encounter harassment and dangers while pursuing their interests on line. Recent research on the types of Internet dangers involving youth (Hinduja & Patchin, 2009; Juvonen & Gross, 2008, Leichtling, 2008; Lenhart, Madden & Hitlin, 2005; Li, 2007; Willard, 2009), and evidence supporting limited adult knowledge of Internet dangers to youth (Finkelhor, Mitchell & Wolak, 2000; Hinduja & Patchin, 2009; Patchin & Hinduja, 2006; Willard, 2006,2009) provided the conceptual framework for this study. Descriptive and inferential statistics were performed to investigate each research question. These statistics included one-way ANOVA, Scheffe post-hoc analysis, chi-square tests of independence, independent T-tests, and Kruskal-Wallis tests. These findings demonstrated that the null hypotheses were rejected for each research question. Significant differences were found between teachers’ knowledge of Internet dangers and age, years of experience, level of school taught, and personal comfort with the Internet. Other significant relationships were found between personal Internet comfort and knowledge of laws and policies, specifically the Jeffrey Johnston Stand Up for All Students Act, and between male teachers and knowledge of victim behaviors. Gender was the only demographic variable found to be
not significantly related to a teachers’ knowledge of Internet dangers to students. The implications of these results validate the importance of more teacher training to increase knowledge of Internet dangers, policies and programs, as well as increase teachers’ ability to identify victims and provide them with assistance. As technology expands, Internet dangers for children online expand and are a growing concern for parents, teachers, and administrators. Since technology will continue to grow, adults play a major role in educating children concerning the dangers of being online. However, adults struggle to play catch-up to the young digital natives, and are not really present to intervene when needed. We cannot cross the digital divide and help our students if we are not seeking out the information ourselves (Willard, 2009).
This research is dedicated to my family. I am what I am today because of them.

To my wonderful children, Kaitlyn, Vicki, Mackenzie, and Chris, you had great patience during this process. Your love, support and encouragement kept me going and on track. I’m proud of you for stepping up to help out and for giving up some of your conveniences when I couldn’t take the time. I couldn’t have been successful without you!

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CHAPTER ONE: INTRODUCTION

Background

During the last half of the twentieth century, there have been unparalleled technological advances in computers and communications. The World Wide Web, also known as the “Internet,” became a tool that puts volumes of information at our fingertips; however, it also became a tool for exploitation and crime. As a result, there are ongoing social and political debates over who should regulate this technology and how. School districts grapple with the question of how much to regulate Internet use and how much to instruct students. There was also the question of parent follow-up and regulation of Internet use in the home. Serious psychological and physical dangers can come from the ignorance or innocence of adolescents and young adults (Willard, 2005).

Several of the issues arising from the increased use of the Internet, instant messaging, cellular phones, and blogging/chat rooms by children and adolescents were child pornography (including sexting, or sending text messages or photos of a sexual nature via cellular phone), sexual predators, and cyberbullying.

Cyberbullying

One of the most common issues faced by students is cyberbullying. Mason (2008) defined cyberbullying as “an individual or a group willfully using information and communication involving electronic technologies to facilitate deliberate and repeated harassment or threat to another individual or group by sending or posting cruel text and/or graphics using technological means” (p. 323). According to the Center for Safe
and Responsible Internet Use (2009), the definition of cyberbullying is “sending or posting harmful or cruel text or images using the Internet or other digital communication devices.”

Bullying is a widespread issue in our schools and neighborhoods. The unacceptable behaviors exhibited by bullies can affect students’ academic success and will deteriorate the quality of the school environment. Emotional and psychological trauma, extreme violence or suicide can all be outcomes of bullying (Espelage & Swearer, 2003). Bullying can be in the forms of stalking, threats, harassment, impersonation, humiliation, trickery, and exclusion (Feinberg & Robey, 2008). There are two devices that cyberbullies used to lead their attacks on victims: computers and cellular phones (Patchin & Hinduja, 2006). According to Mason (2008), “cyberbullying, like other forms of bullying, is centered on the systematic abuse of power and control over another individual, and this imbalance of strength and power makes it difficult for the person being bullied to defend him/herself” (p. 323). There are three clear characteristics of bullying; harm is done, the act is repeated, and there is an unfair match of participants (Hazler, Miller, Carney, & Green, 2001).

Mason (2008) reported that few teachers, administrators, and guidance counselors were cognizant of the extent to which bullying is occurring through electronic communications of school grounds, even though they are able to recognize the signs of traditional bullying. Therefore, “schools are not equipped with appropriate ways to deal with this new form of aggression, and their staff is not properly trained about the effects of online hazards on American children and adolescents” (p.324). Cyberbullying will interfere with the academic functions of the school, and destroy school climate (Feinberg
A study completed by Feinberg and Robey, in association with the Opinion Research Corporation, found that 45% of preteens and 30% of teens were cyberbullied at school (Feinberg & Robey).

**Cyberstalking**

Cyberstalking was another form of Internet harassment. The National Center for Missing and Exploited Children (2009) states that the more children are online using such avenues as e-mail, chat rooms, blogs, and instant messaging, the more strangers can establish contact. Cyberstalkers intend to cause their victims emotional distress by the use of harassment. Bocij (2002) reported:

> cyberstalkers use information and communications technology to harass other individuals or groups of individuals, using behaviors such as the transmission of threats and false accusations, damage to data or equipment, identity theft, data theft, computer monitoring, the solicitation of minors for sexual purposes and any form of aggression (pg. 1, par. 2).

The cyberstalker could be known to the person or could be a stranger, such as an online predator (Bocij).

**Online Predators**

Online predators study their intended victims by observing online chats, studying profiles, keeping track of times a victim logs on and off, and are aware of victims’ latest games, music, hobbies, and fashions. When an online predator knows enough about the victim, they make contact with the victim using something that will interest them. Online predators “stalk” their victims (Baker, 2002).

Another form of online predator is the sexual predator. Sexual predators are people who surf chat rooms to “look for those children whose writings reflect loneliness...
and alienation from parents, teachers, and friends. The predators are adept at spotting those who have low self-esteem and are searching for attention and recognition” (Baker, 2002, p. 187). Sexual predators groom their victims by gradually introducing sexually graphic content into their conversations or viewing (photographs). They then work to make face-to-face contact with the victim, which often ends in a traumatic or life-threatening situation for the child (Gudaitis, 1999).

The term sexual predator, when used by law enforcement and the judicial system is in actuality, a very serious sub-classification of sexual offender. In order to be classified a sexual predator he or she must have committed a series of sexually violent acts. Most sexual predators suffer from a mental disorder, which increases the likelihood that they will commit repeated acts (Baker, 2002). Cyber threats to children will not decrease as those who make them gain more expertise with their Internet use (Gudaitis, 1999; Safe Florida, 2009).

Other Dangers

There were other dangers that students faced when surfing the Internet. Online dangers most often discussed were child pornography, harmful or violent content such as gang websites, online gambling, and Internet addiction (Baker, 2002; Gray, 2005; Lenhart, 2005; Willard, 2005). These dangers, although important, were not the focus of this study, which was cyberbullying, cyberstalking, and sexual predators. However, to give readers a quick view of these dangers, they will be mentioned briefly in Chapter Two: Review of Literature.
Florida Policy

In April 2008, the Florida Legislature adopted an anti-bullying act, including cyberbullying. The law is called the Jeffrey Johnston Stand Up for All Students Act (Florida Statute § 1006.147). Jeffrey Johnston was a 15-year-old boy who was bullied for two years, including cyberbullying, and finally committed suicide. The Jeffrey Johnston Act mandated that by December 1, 2008 each public school district had to adopt a policy prohibiting bullying and harassment of any student or employee. The school district policy must be implemented in a manner that is ongoing throughout the school year and integrated with a school’s curriculum, a school’s discipline policies, and other violence prevention efforts (Florida Statute § 1006.147).

Teacher Perceptions

Instructional programs and Internet safety websites sponsored by local and federal law enforcement provide the interaction that is required to enforce cyberbullying and sexual predator laws. When these resources are not utilized or the instruction fails, and the predator prevails, then the law enforcement agency is there to step in and provide assistance and punishment (Children’s Internet Protection Act, 2000; Protect our Children Act, 2008; Safe Florida, 2009). Leichtling (2009) stated that the most important factor for decreasing cyberbullying and predatory behaviors were proactive efforts to prevent them in the first place. This included law enforcement, school administrators, teachers, and parents, who can set the standards and create a safe culture. Willard (2006) stated schools should have a clear policy that “serves to remind students that the school’s Internet connection is an instructional tool, not a personal access system” (p. 55). Willard (2006) strongly suggested that school districts should have clearly defined standards for online privacy, which would be similar to those regarding student lockers. Online
activities should be supervised and monitored, and individual searches could occur when there is reasonable suspicion (Willard, 2006).

**Statement of the Problem**

“Although the Internet offers an enormous range of positive and educational experiences for children, the concern is that uncontrolled online access increases vulnerability to harm through exposure to hate, violence, sexual predators, and sexually explicit materials” (Gray, 2005, p.1). As the technology expanded, internet dangers for children online expanded and were a growing concern for parents, teachers, and administrators. Since technology will continue to grow, adults play a major role in educating children concerning the dangers of being online.

**Purpose of the Study**

Since schools are having to deal with more and more cybercrime, including but not limited to cyberbullying, cyberstalking, and sexual predators, more research is needed in the area of Internet dangers for students, the knowledge of adults concerning those dangers, and how the laws protect students and school districts concerning online activities. Therefore, the purpose of this study was three-fold: first, research was gathered on the dangers that students were exposed to with the online activities available to them; second, teachers’ knowledge of and perceptions concerning these Internet dangers and Florida laws of protection was explored, as well as whether the teachers have had professional development and/or training concerning Internet safety; lastly, teachers’ perceptions were examined at each level, elementary, middle school, and high school to determine if there were any significant relationships or differences between and among
each level of school in which the teachers taught. Teacher knowledge of the internet and the dangers concerning students is important.

**Conceptual Framework**

The world of the Internet was constantly changing. The research for this study consisted of the most recent literature on the dangers that students encountered while pursuing their interests. Students went online to surf, game, chat, blog, twitter, listen to and purchase music, do research for school, and many times create and maintaining personal web pages (Lubens, 1999). In doing so, they encounter cyberbullying, harassment, exposure to unwanted sexual or violent material, sexting (by cellular phone), approaches and solicitation by sexual predators, money scams and fraud (Webwisekids.org, 2009). In fact, Wolak, Mitchell, and Finkelhor (2006) conducted a survey for the National Center for Missing and Exploited Children in which they found that 79% of sexual solicitations occurred on a home computer, and only 5% of these students told a parent or teacher. The current study benefits teachers, who act in loco parentis. Teachers should be knowledgeable about what their students are doing online, if they may be in danger, and how to educate students to be safe online and not become victims.

**Research Questions**

This study was guided by the following research questions:

1. To what extent, if any, do teachers perceive the Internet as dangerous to students?

   $H_0$: There is no teacher perception of the dangers to their students online.
2. To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?

H02: There is no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels.

3. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?

H03: There is no difference between teachers’ perception of student Internet dangers and their amount of personal Internet knowledge and use.

4. What relationship, if any, exists between teacher knowledge of Internet-related laws and policy for protection for students and their personal levels of Internet knowledge and use?

H04: There is no relationship between the amount of personal Internet knowledge and use teachers have and their knowledge of Internet-related laws and policies for protection of students.

5. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when examining different demographic factors?

H05: There is no difference in demographic factors (age, gender, or years of experience) contributing to teacher perceptions of Internet dangers to students.
Definition of Terms

Acceptable Use Policy (AUP) – This is a document created by school districts or schools to outline what is acceptable behavior when utilizing computer facilities (Acceptable Use Policy, 2009).

Blog – “The word blog is derived from the combination of the two words web and log. Blogs are virtual diaries created by individuals and stored on the internet. Blogs generally consist of text and images and can appear in a calendar-type format” (Blog, 2009).

Chat Room - A chat room is a virtual place on the Internet. People with similar interests enter the room and communicate together by typing messages on their computer. Chatrooms do not require people to verify who they are. Problems for students can arise when a chat room participant pretends to be someone they are not (Mason, 2008).

Child Pornography – Child pornography, as defined under federal law, is a visual depiction of a child engaged in a sexually explicit act (National Center for Missing & Exploited Children, 2009).

Cyberbully – “A cyberbully is an individual or a group willfully using information and communication involving electronic technologies to facilitate, deliberate, and repeated harassment or threat to another individual or group by sending or posting cruel text and/or graphics using technological means” (Mason, 2008, p. 323).

Cyberstalk – Cyberstalk is the means a person uses “to engage in a course of conduct to communicate, or to cause to be communicated, words, images, or language by or with electronic mail or electronic communication, directed at a specific person,
causing substantial emotional distress to that person and serving no legitimate purpose” (Florida Statutes (184.048), 2009).

**Denigration** – Denigration occurs when a cyberbully sends or posts cruel gossip about a person to cause emotional trauma or damage his or her reputation (“dissing” someone) it is called denigration (Willard, 2005).

**E-Mail** – Electronic Message (Mail) transmitted via the Internet is e-mail. E-mail can contain text, but also can carry with it files of any type (i.e., photographs) as attachments (Internet, 2009).

**Erotomanic** - Erotomanics are stalkers who believe that their target of interest, usually of higher status, is in love with them (Ogilvie, 2001).

**Exclusion** – Exclusion is when a person is not included in an online group, such as a chat room or “buddy” list (Willard, 2005).

**Filtering** – Filtering is the process of blocking Internet information by key word or by web site. Filtered Internet Service Providers (ISPs) block subscriber access to website content based on set criteria for what is deemed appropriate for children. (Adams, 2008).

**Flaming** – Flaming is the sending of messages that include undesirable or obscene text (Willard, 2005).

**Friending** – “Friending is the act of requesting a person to be your friend on a social networking web site (e.g., MySpace or Facebook)” (Hinduja & Patchin, 2009, p. 186).

**Groom** – Grooming is when an online predator gradually introduces sexually graphic content into their conversations or viewing (photographs). They then work to
make face-to-face contact with the victim, which often ends in a traumatic or life-threatening situation for the child (Gudaitis, 1999).

*Harassment* – Harassment is annoying or unwelcome acts undertaken by a person or groups of persons against another person or group of persons (Mason, 2008).

*Impersonation* – Impersonation is posing as another person. On the Internet it refers to breaking into someone’s e-mail account, posing as that person, and sending messages to make them look bad (Adams, 2008).

*In loco parentis* – In loco parentis means in place of the parent (Mason, 2008).

*Instant Messaging (IM)* – The exchange of text messages between two or more people logged onto a particular instant messaging (IM) service. “Instant messaging is more interactive than e-mail because messages are sent immediately, not queued up on a server” (Instant Message, 2010).

*Internet* – “The Internet is a decentralized, self-maintaining series of redundant links among computers; capable of rapidly transmitting communications and rerouting them automatically, if one or more individual links are unavailable” (Internet, 2009).

*Online* – The term online is when one is connected to a computer network, or accessible by a computer (Willard, 2005).

*Outing* – Outing is sharing someone’s secrets or embarrassing information or images online (Gudaitis, 1999).

*Netiquette* – Netiquette means network etiquette; the unofficial rules of accepted, proper online social conduct (Hinduja & Patchin, 2009).
Perception – Perception means to gain awareness or becomes conscious of; to translate and organize sensation to provide a meaningful experience of the world (Willard, 2006)

Predator – A predator “destroys, devours, plunders, or lays to waste.” For use on the Internet, in cyberspace, this term refers to the way a predator detects, stalks, and then injures its prey (Baker, 2002).

Profile – “When considered in the context of online social networking, this is a user-created web page, the design of which can be customized, where a person’s background, interests, and friends are listed to reflect who that person is or how that person would like to be seen” (Hinduja & Patchin, 2009, p. 188).

Sexting – Sexting is the act of sending sexually explicit messages or photos electronically; primarily between cell phones (Gudaitis, 1999).

Sexual Offender – A sexual offender is a person who has committed or attempted to commit a sexual criminal offense where the victim is a minor and the defendant is not the victim’s parent. A sexual offender once convicted in the state of Florida, must register as a sexual offender, and cannot previously have been labeled as a sexual predator (a more serious label reserved for serial offenders) in Florida or any other state (Sexual Offender, 2010).

Sexual Predator - The term sexual predator, when used by law enforcement and the judicial system, is, in actuality, a very serious sub-classification of sexual offender. In order to be classified a sexual predator, he or she must have committed a series of sexually violent acts (Baker, 2002).
Texting – Texting is a way to send short messages via cell phone (Hinduja & Patchin, 2009).

Trolling – “Trolling is deliberately and disingenuously posting information to entice genuinely helpful people to respond” (Hinduja & Patchin, 2009, p. 188).

Twitter – Twitter is a web site and service that lets users send short text messages up to 140 characters in length from their cell phones to a group of people (Twitter, 2009).

Victim – A victim is the person who is on the receiving end of online social cruelty (Hinduja & Patchin, 2009).

World Wide Web or Web – A system of Internet servers that support links to other documents, as well as graphics, audio, and video files through a special language called Hypertext Markup Language (HTML) (Mason, 2008).

Methodology

This study was conducted using a mixed-method approach. Initial research was conducted to determine the dangers to students when using the Internet. Next, a survey was used to explore factors that contributed to teacher perceptions of online dangers, as well as indicated whether teachers were following district policies or using other available resources to educate their students about these dangers. Teachers from a purposeful sampling of schools, in the Central Florida region, were surveyed. This stratified sample took into account socioeconomic status, as well as rural, urban and suburban locations, and is discussed further in the population and sample sections. The survey was adapted from Willard (2005) and Patchin and Hinduja’s (2006) studies. Permission from the authors is included in Appendix A.
**Population**

The population for this study was selected from the central region of the state of Florida. Florida consists of five regions, which include 67 school districts. This study includes three central region school districts that have similar student demographics and were comparable in size. More specifically, Brevard, Seminole, and Volusia County School Districts were utilized for this study. Florida Department of Education statistics indicated that each of these districts had schools at every level that represented high and low socioeconomic status, and included rural, urban and suburban demographics. Table 1 displays the number of schools at each level (elementary, middle, and high) for each of the selected school districts.

<table>
<thead>
<tr>
<th>Schools</th>
<th># of Elementary</th>
<th># of Middle</th>
<th># of High</th>
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<tbody>
<tr>
<td>Brevard County</td>
<td>57</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Seminole County</td>
<td>38</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Volusia County</td>
<td>46</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>141</td>
<td>36</td>
<td>26</td>
</tr>
</tbody>
</table>

*Note. Public and magnet schools are represented in these numbers. This is not representative of charter schools, specialized academies, or disciplinary centers.*

**Sample**

The sample size for this study was purposefully selected from five elementary, five middle, and five high schools (N=45 schools; n= 15 elementary, 15 middle, 15 high schools) in each of the three school districts displayed in Table 1. Each of the schools
represented either a high free/reduced lunch population (>45%), high non-free lunch population (affluent), urban, rural, or suburban population. More specifically, this researcher was looking for a sample size of 450 central Florida public school teachers (N=450); 150 from each level: elementary, middle, and high schools.

Figure 1 depicts the sample size for each school and number of teachers that were invited to participate in the survey within each school district. To further clarify, the researcher estimated 10 teachers per school (five schools) at each level (elementary, middle, and high school), or a total of 50 teachers per district at each level or 150 teachers per district. The surveys were delivered to all core academic teachers (reading/language arts, math, and science), the technology facilitator, and the media specialist at every school. In the high schools, five additional teachers from career or elective areas were also surveyed.
Instrumentation

A survey was used to collect data regarding teacher knowledge of student Internet activities and their perceptions of the dangers students may encounter online. This survey was adapted from surveys written by Willard (2005) and Patchin & Hinduja (2006). The adapted survey had a total of 27 questions and an additional four collecting demographic information. The adapted survey can be found in Appendix B.

The survey was divided into four sections. Section One was entitled Teacher Perception of Internet Safety, and included 10 questions (1-10) regarding teacher knowledge and use of technology, including the Internet and cell phones. Questions also determined depth of knowledge regarding student technology use and dangers, including...
bullying or harassment. A sample question asked teachers if they had knowledge of student personal profiles on social networking sites, and if the profiles had information that could be dangerous to the student.

Section Two focused on cyberbully victimization. This section had a possible eight questions (11-18). All participants answered questions 11-14. Those who answered “yes” to question 14 then answered questions 15-18. Those who answered “no” were directed to Section Three (question 19). Answers to these questions determined the extent of teacher knowledge regarding cyberbullying, including their ability to detect signs of victimization, bullying, or child abuse.

Section Three had questions concerning the effects of victimization. This section had a total of nine questions (19-28), that all participants answered, most of which were in a simple yes/no/don’t know format. A sample question from this section asked the teachers if they were aware of school or district policies regarding Internet safety and/or cyberbullying.

Section Four collected demographic information such as gender, level taught, years of teaching experience, and ability (self-judged) to instruct students on Internet dangers. For example, the final question in the survey asked the teachers to evaluate their ability to instruct their students on the dangers they will encounter while using the Internet: excellent, good, moderate, or poor, with relation to their personal experience on the Internet. This provided some implications for analysis and use of statistical tests.

As was the case with Hinduja and Patchin’s survey (2009), some questions in this instrument require yes/no answers while others have multiple answers, therefore creating the possibility of unequal numbers. Although Hinduja and Patchin’s survey was
completed by students, it measured student perceptions. This current study surveyed adults using similar question content and formats.

Data Collection Procedures

After obtaining IRB approval (Appendix C), the Superintendent or school board designee of the three selected school districts: Brevard, Seminole, and Volusia, was contacted to obtain permission to survey teachers in that district. Following receipt of district permission (Appendix D), contact e-mail and mailing addresses for principals of schools that were pre-selected were obtained through the State of Florida Department of Education database, school district web sites, and through phone inquiries to the appropriate schools. The pre-selected school principals received an introductory packet containing an invitation to participate in the survey (Appendix E), along with a copy of the survey and specific information as to how participation would benefit their school and district; this was followed up by an e-mail confirmation. It was stressed that their school would not be identified in the survey or in the results of the study. When principals responded in an affirmative e-mail, they identified a school contact person that would distribute and collect the surveys on the researcher’s behalf. Due to the confidentiality of not identifying particular schools, these principal e-mails are not included in the appendix section, but are being retained by the researcher.

The Principal’s designee was sent the research package, which included a letter of introduction and details of the study (Appendix F). This included the invitation to teachers, along with applied consent forms (Appendix G), instructions, timelines, and return envelopes. To allow for anonymity, teachers were requested to return the survey instrument to the designee in a sealed envelope, who would then return all sealed
envelopes to the researcher. As there were no identifiers, the elementary school surveys were coded blue, the middle school surveys were coded green, and the high school surveys were coded yellow. Results of the study will be shared with participating schools if requested.

Data Analysis

At the conclusion of the survey window, the data were entered into an EXCEL spreadsheet designed to tally results for each instructional level. These data were transferred into Statistical Package for Social Sciences, Version 17 (SPSS) for statistical analysis. Table 2 delineates what data sources were used to answer the research questions, and the statistical calculations that were utilized to discover relationships or differences between the variables. Each section of the adapted survey measured specific teachers’ perceptions and related to one of the five research questions.

The null hypothesis for Research Question One was that there was no teacher perception of the dangers for their students online. Descriptive statistics were used to report teacher perceptions and knowledge of Internet dangers for students.

The hypothesis for Research Question Two was that there was no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels. Questions from the survey were formed into a scale, using factor analysis and reliability testing, and served as the dependent variable in a one-way ANOVA separated by school level (Elementary, Middle, and High). Chi-Square tests of independence were run to test further relationships between factors.

The hypothesis for Research Question Three was that there was no relationship between the amount of personal Internet knowledge and use teachers have and their
perception of Internet danger to their students. The same factor created as a part of Research Question Two was analyzed by descriptive statistics, split by the responses to survey question #33, which addresses ability to instruct students on Internet-related dangers. Chi-Square tests of independence were then run to test for further relationships between the factors.

The hypothesis for Research Question Four was that there was no relationship between the amount of personal Internet knowledge and use teachers have and their knowledge of Internet-related laws and policies for protection of students. Survey Questions 25 through 27, which were dichotomous in nature and addressed knowledge of laws of protection, were compared to responses for Question 33, which addressed personal levels of Internet knowledge and use. Chi-Square tests of independence were run to find the significance of the relationships.

The hypothesis for Research Question Five was that there was no difference in demographic factors (age, gender, or years of experience) contributing to teacher perceptions of Internet dangers to students. The same factor created as a part of Research Question Two was analyzed by an Independent T-Test for the gender variable, and a Kruskal Wallis test for age and years of experience. Chi-Square tests of independence were run to test for further relationships between the factors.
Table 2: Research Questions, Data Source, Statistics

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Source</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent, if any, do teachers perceive the Internet as dangerous to students?</td>
<td>Adapted Survey</td>
<td>Descriptive</td>
</tr>
<tr>
<td></td>
<td>- Section 1: Teacher Perception of Student Internet Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 2: Cyberbullying Victimization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 3: Effects of Victimization</td>
<td></td>
</tr>
<tr>
<td>To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?</td>
<td>Adapted Survey</td>
<td>One-Way ANOVA</td>
</tr>
<tr>
<td></td>
<td>- Section 1: Teacher Perception of Student Internet Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 4: Demographic Information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scheffe Post-Hoc Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chi-Square Test of Independence</td>
</tr>
<tr>
<td>To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?</td>
<td>Adapted Survey</td>
<td>Descriptive Chi-Square Test of Independence</td>
</tr>
<tr>
<td></td>
<td>- Section 1: Teacher Perception of Student Internet Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 3: Effects of Victimization</td>
<td></td>
</tr>
<tr>
<td>What relationships exist between teacher knowledge of Internet-related laws and policies for protection for students and their personal levels of Internet perceptiveness and use?</td>
<td>Research on Federal and Florida Statutes</td>
<td>Chi-Square Test of Independence</td>
</tr>
<tr>
<td></td>
<td>Adapted Survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 1: Teacher Perception of Student Internet Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Section 3: Effects of Victimization</td>
<td></td>
</tr>
<tr>
<td>To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when examining different demographic factors?</td>
<td>Research on Student Internet Safety</td>
<td>Independent T Chi-Square Kruskal-Wallis</td>
</tr>
<tr>
<td></td>
<td>Adapted Survey – Section 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Demographic Information</td>
<td></td>
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</tbody>
</table>
Significance of the Study

This research was timely because of the passing of the Jeffrey Johnston Stand Up for All Students Act in Florida (Florida Statute, 2009). This Act specifically stated, “Bullying or harassment of any student or school employee of a public K-12 educational institution is prohibited: through the use of data or computer software that is accessed through a computer, computer system, or computer network of a public K-12 educational institution” (§ 1006.147-1-c). More and more students were becoming victims of cyberbullying, leading to increased attempts at suicide, such as Jeffrey Johnston (Hinduja & Patchin, 2009).

There have been several studies completed on the effects of cyberbullying; the most recent being, Online Victimization of Youth: Five Years Later (Wolak, et al., 2006). The results of these studies were published in journal articles and on websites, giving guidance to children, parents, school personnel, and law enforcement on what cyberbullying looked like, who it affected, and why it was important to prevent it. Laws and policies were created to make it easier for states, educational institutions, law enforcement agencies, and social networking sites to effect change regarding cyberbullying, yet incidences of cyberbullying did not decrease. Very little was done that encompassed cyberbullying, sexual predators, and dangers such as pornography, hate/violent sites, and gambling, with teacher perception (Wolak, et al.).

This study displayed significance when collected research identified gaps within teachers’ knowledge concerning Internet dangers and laws of protection for students. This study attempted to heighten teacher awareness, add to the body of knowledge
concerning the dangers online, and help school districts develop professional training opportunities for teachers who will, in turn, educate students on Internet safety. The results of this study can be useful to the Florida Department of Education to encourage the creation of a common training program that could support the Jeffrey Johnston Stand Up for All Students Act (2008).

**Delimitations**

The study was delimited to the limited sample size of the population, from which the sample was drawn, three schools in central Florida. This study further relied upon the responses of the teachers working within these three school districts.

**Limitations**

The results of this study were limited by response rate, i.e. not enough surveys returned altogether or in a particular instructional level. The researcher attempted to control for this by reminders to the participating principals or designees, who then reminded the teachers.

A second limitation was that the participants were self-reporting, and might not answer truthfully. Although the researcher was certain to stress in the instructions that participants would not be individually identified, they may still have had the belief that the survey would not remain anonymous.

The nature of the sample, teachers drawn from three contiguous school districts in central Florida, raised questions as to the applicability of the findings for teachers in other districts that vary significantly from the districts surveyed, other regions, or states.
Another limitation was the awareness of participants regarding certain survey items. The researcher sought results from those that may not have had the technological skills that others did, so could have affected the study results. An attempt to prevent this limitation was made when the researcher decided to deliver a paper/pencil survey instead of an online survey.

A final limitation was the possibility that the principal would only deliver the surveys to teachers he/she felt would generate a more positive response for the school. The researcher used the survey for informational purposes only, thus it was not designed to provide a right or wrong scenario. The teacher package was pre-prepared with the teacher’s name, which should have prevented the principal from handing out the instrument to only specific teachers.

Summary

This research examined the dangers of the Internet for students. It identified risks for students online, as well as shed light on teachers’ personal knowledge of the dangers online and their personal use of technology. Chapter One of this study sought to introduce the topic, outline the problem, purpose, and research questions, as well as provide information about the research methodology. Chapter Two provides the reader with an in-depth review of literature and additional relevant research on the study topic. The data collected will be examined to measure to what extent, if any, teacher personal knowledge and use influences their perception of the dangers online, and to what extent they were using their knowledge to educate students about the online dangers. These methods and procedures will be outlined in Chapter Three. In Chapter Four the results of
the data analysis will be thoroughly presented, and Chapter Five provides a summary discussion of the findings, implications for practice, and suggestions for future research.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

During the last half of the twentieth century there were unparalleled technological advances in computers and communications. The World Wide Web, also known as the “Internet,” became a tool that put volumes of information at our fingertips; however, it also became a tool for exploitation and crime. As a result, there were ongoing social and political debates over issues regarding who should regulate this technology and how it should be regulated.

The majority of schools in the United States implemented the use of computer technology for educational purposes because of the tremendous learning benefits it afforded. It was estimated that 94% of public schools in America had access to the Internet (National Center of Education Statistics, 2005). School districts grappled with the question of how much to regulate Internet use and how much to instruct students. There was also the question of parent follow-up and regulation of Internet use in the home. Serious psychological and physical dangers can come from the ignorance or innocence of adolescents and young adults (Willard, 2005).

The review of literature and related research included dangers found on the internet, including cyberbullying and sexual predators. A review of laws and policies pertaining to the internet safety of students was also pertinent, relating to the understanding teachers had of the dangers children face.
Dangers Found on the Internet

Cyberbullying

One of the most common issues faced by students was bullying. Bullying was a widespread issue in our schools and neighborhoods. The unacceptable behaviors exhibited by bullies can affect students’ academic success and will deteriorate the quality of the school environment. Emotional and psychological trauma, extreme violence or suicide can all be outcomes of bullying (Espelage & Swearer, 2003). With the advancement of technology, bullying spread to the Internet. It was in the forms of stalking, threats, harassment, impersonation, humiliation, trickery, and exclusion (Feinberg & Robey, 2008). “Online abuse can be especially vicious and for victims, there is no escape. The abuse is ongoing 24/7” (Willard, 2006, par. 4). Educational leaders, policy makers, and teachers need to understand the social, legal, and ethical issues related to cyberbullying. As school districts struggled with how to provide safe and secure school physical environments, they were also challenged with how to provide safety and security in the virtual world (Roskamp, 2009).

Mason (2008) defined cyberbullying as “an individual or a group willfully using information and communication involving electronic technologies to facilitate deliberate and repeated harassment or threat to another individual or group by sending or posting cruel text and/or graphics using technological means” (p. 323). A cyberbully victim found it difficult to defend him/her self because, like other forms of bullying, cyberbullying was centered on the systematic abuse of power and control (Mason). There were three clear characteristics of bullying; harm is done, the act is repeated, and there is an unfair match of participants (Hazler, Miller, Carney, & Green, 2001). The electronic
media provided anonymity this aided the perpetrator in achieving his or her desired goal, which was to humiliate, cause fear, and create a sense of helplessness in victims (Patchin & Hinduja, 2006).

“Cyberbullying may appear especially frightening to parents because it involves communication technologies with which they are unfamiliar” (Lenhart, Madden & Hitlin, 2005, p. 5). With the anonymity that cyber space and the Internet provides it was easier for certain forms of relational aggression to take place such as gossip mongering, character assassination and other harmful behavior to be perpetrated (Beckerman & Nocero, 2003). Many adolescents conducted these types of communication in a world that teachers and parents were not aware of or do not understand (Bamford, 2004).

According to researchers Bamford (2004), Bernan and Li (2005), and Patchin and Hinduja (2006), there were seven different types of cyberbullying. These types of cyberbullying include: *Flaming*, which referred to sending angry, rude, and/or vulgar messages about a person to an online group or the person's electronic mail (Willard, 2005). *Online Harassment* referred to repeatedly sending offensive messages via electronic mail or other text messaging to a person (Mason, 2008). Online harassment that included threats of harm was called *cyberstalking*, which was excessively intimidating. *Denigration* referred to sending harmful, untrue, or cruel gossip about a person to other people or posting it online (Willard, 2005). *Masquerade* referred to pretending to be someone else and then sending or posting material that made that damages that person’s reputation (Patchin & Hinduja, 2006). *Outing* referred to sending or posting material about a person that contains sensitive, private or embarrassing information (Gudaitis, 1999), and *Exclusion*, which referred to maliciously excluding someone from an online group.
(Willard, 2005). The most recent term *happy-slapping* involves a person recording a physical abuse incident then uploading the video to a video sharing site or via cell phone (Hinduja & Patchin, 2009).

*Cyberbullying Through Computers*

There were two devices that cyberbullies used to lead their attacks on victims: computers and cellular phones (Patchin & Hinduja, 2006). Using these devices the cyberbullies sent harassing messages through e-mail or instant messaging; posting slanderous messages or images in chat rooms or on social networking sites such as MySpace or Facebook; or developing personal websites to circulate defamatory content (Patchin & Hinduja). Ybarra, Mitchell and Wolak (2006) reported that the most recent evidence suggested that any use of IM, blogging, and chat rooms elevated the odds of being cyberbullied. *Photoshopping* was the process of taking pictures and videos and editing them to create humiliating pictures (Hinduja & Patchin, 2009). However, researchers do not know whether students experience cyberbullying mainly through these communication tools or whether their usage merely reflected risky online behavior. In fact, 87 % of American adolescents, ages 12 to 17, went online which virtually made them a target at all times and in all places (Lenhart, Madden & Hitlin, 2005).

Juvonen and Gross (2008) found in their study that the Webcam, which allowed sharing of pictures and video, was the riskiest tool among eight that were studied. Juvonen and Gross also noted that heavy use of message boards was also found to significantly increase the risk of repeated cyberbullying.
Cyberbullying Through Cell-Phones

The second avenue was by sending harassing text messages and pictures via cellular phone. Close to half (45%) of the adolescents surveyed by Lenhart et al. (2005) reported having a cell phone and of those, 51% said they most often conversed by text through instant messaging. “Adolescent needs of belonging and peer acceptance fuel their strong attachments to their digital interactive devices” (Roskamp, 2009, pg. 5). The inseparability of the cell phone from the student makes them an easy target for individuals who desire to send threatening and insulting messages. Campbell (2005) noted that text messaging was a more effective way of communicating because it avoided awkward silences and having to make small talk. It was a more effective way of staying in touch because it did not require much time or energy.

Roles of Cyberbullying

“Cyberspace creates an illusion of invisibility because it is faceless” (Suler, 2004, p. 321). With this feeling of invisibility, the cyberbullies had no concerns about detection, social disapproval, or punishment, and therefore could reveal a side of their character they would normally keep well-hidden offline. Consequently, cyberbullies could avoid responsibility for their cyber behaviors (Cooper, 2005). Furthermore, “this reduction in social and affective cues can impede their ability to empathize or be remorseful for the types of behaviors that they exhibited” (Willard, 2005).

Mason (2008) stated that there were six different roles in cyberbullying. Three roles include different types of bullies, and three roles include their target (victim) types. The first role described entitlement bullies, which were individuals who believed that
they were superior and had the right to demean those who were different (inferior). The second cyberbully role was that of a retaliator. These were individuals who had been bullied by others and were using the Internet to gain revenge. Juvonen and Gross (2008) found that the opposite occurred in their study. School-based bullies did not use cyberspace to retaliate. Rather, cyberbullied youth were more likely to retaliate at school. The targets (victims) of retaliator bullies were individuals who had been bullying others. The last role of cyberbullying was the bystander, who watched the bullying from the sidelines, but did nothing to help the victim. They actually encouraged and supported the bully. Finally, there were the bystanders who sought to stop the bullying by providing support to the victim (Mason, 2008; Willard, 2006).

Studies on Cyberbullying

“The Crimes Against Children Research Center has warned that many children and adolescents are exposed to dangerous and inappropriate occurrences over the Internet” (Wolak, Mitchell, & Finkelhor, 2006, p. 5). After conducting several phone surveys, Wolak et al. (2006) noted that most online harassment incidents (85%) occurred when adolescents were logged on at home. Moreover, girls (58%) were more likely targets of online harassment than boys (42%) were, and girls were more likely than boys to experience distressing harassment (68% to 32%). Half of the harassers were male, and 35% were female. A study done by Kowalski (2005) contrasted those findings, stating that girls were twice as likely to be victims and perpetrators of cyberbullying.

Patchin & Hinduja (2006) found in their study that more than 29% of adolescents were victimized online, and more than 47% had witnessed online bullying.
Cyberbullying behaviors included disrespect, name calling, and more than 20% were threatened. They also found that almost 60% of the victims were negatively affected by the online behaviors at school, home, and with friends. In another study conducted by Li (2006) one fact noted that more than 40% of cyber-victims did not know the cyber-bully. Power and dominance were exerted online through the ability to remain anonymous.

Slonje and Smith (2008) noted that cyberbullying had the potential to be more dangerous than any other form of bullying because it combines the effects of several other forms of bullying. Cyberbullying combines the effect of indirect bullying, relational aggression, social bullying, and social exclusion (Slonje & Smith). As with indirect bullying, cyberbullying can involve a third party, such as using a third party's email or screen name to send derogatory messages. It is similar to relational aggression because cyberbullying damages peer relationships. It is similar to social aggression in that the intent is used to damage the individual's self-esteem or social status.

Effects of Cyberbullying

Traditional bullying and cyberbullying have similar outcomes for the victims. “If cyberbullying is an extension of school-based bullying, then the question is whether online incidents are independently associated with distress” (Juvonen & Gross, 2008, p. 497). Thoughts of suicide, eating disorders, and chronic illness are a few of the symptoms; still others battle with depression, run away from home, have poor self esteem, poor academics, and carry their scars long into adulthood (Mason, 2008). Adult psychological effects include problem behaviors, smoking, drinking alcohol, and depression. However, the bullies also experience long-term outcomes related to their
behavior. They will engage in antisocial activities later in life. Approximately 60% of boys who were characterized as bullies in grades 6-9 had been convicted of at least one crime by the age of 24, and 40% of bullies had three or more convictions by the age of 24 (Olweus, 1999). Cunningham, Henggeler, Limber, Melton, and Nation (2004) found “that children who bully were more likely to report owning a gun to gain respect or frighten others” (par. 13). Moss (2005) reported that “some 75% of the teenage perpetrators of school shootings reported having felt ostracized by other students…a chronic bullying situation” (par. 16-17).

The Centers for Disease Control and Prevention’s Division of Violence Prevention (CDC) concurred with the findings of Olweus (1999), Cunningham et al., (2000), Ybarra et al., (2006), and Mason (2008). The CDC’s 2007 research found that although much of electronic aggression is likely perpetrated outside of school hours with personal communication devices rather than with school technology resources, there is a growing understanding that these external events negatively affect the functioning of students at school and the school environment. For instance, youth who are electronic aggression victims also experience higher rates of behavior problems at school than non-victimized youth” (David-Ferdon, 2007, S3, par. 6).

The CDC stated that the studies of Olweus (1999), Cunningham et al., (2000), Ybarra et al., (2006), and Mason (2008), demonstrated an association between electronic aggression victimization and a range of psychosocial difficulties and risk factors. The psychosocial difficulties can include emotional distress, school conduct problems, weapon carrying at school, low caregiver–adolescent connectedness, and sexual solicitation. The CDC’s findings suggested that there is an emerging public health issue and a group of adolescents in need of attention (David-Ferdon, 2007).
Similar research conducted by Hazler, Miller, Carney, and Green (2001), found “that people are less likely to show concern, attempt to prevent or act to intervene in situations involving potential social/emotional or verbal harm, while they are more likely to overreact in situations involving potential physical harm” (p. 142). Hazler et al. stated that this was the reason that school personnel do not react until there was a physical threat or abuse, and then they identify it as bullying.

Research on cyberbullying was in the early stages of investigation and little was known about the prevalence of Internet bullying and how it was different from other forms of bullying (Li, 2006; Slonje & Smith, 2008; Williams & Guerra, 2007). Mason reported that few teachers, administrators, and guidance counselors were cognizant of the extent to which bullying was occurring through electronic communications of school grounds, even though they were able to recognize the signs of traditional bullying. Therefore, “schools are not equipped with appropriate ways to deal with this new form of aggression, and their staff is not properly trained about the effects of online hazards on American children and adolescents” (p.324). Cyberbullying will interfere with the academic functions of the school, and destroy school climate (Feinberg & Robey, 2008). A study completed by Feinberg in 2006 found that 45 % of preteens and 30 % of teens were cyberbullied at school (referenced in Feinberg & Robey, 2008).

Cyberstalking

Cyberstalking was another form of Internet harassment. In 1999, with the advancement of technology and it’s low cost, easy to use, anonymous nature, the medium for fraudulent scams, child sexual exploitation, and cyberstalking grew. Then Vice President, Al Gore, was commissioned the Attorney General, Janet Reno, to conduct a
study to analyze the problem and address how law enforcement, industry, victims groups, and federal and state laws combated the growing problem, stating, “Make no mistake: this kind of harassment can be frightening and as real as being followed and watched in your neighborhood or in your home” (Reno, 1999).

Cyberstalking Defined

Cyberstalking was similar to traditional forms of stalking in that it incorporated persistent behavior that instilled apprehension and fear (Ogilvie, 2001). In an attempt to define cyberstalking, Paul Bocij (2002) differentiated between offline stalking and cyberstalking. Bocij defined cyberstalking as:

a group of behaviors in which an individual, group of individuals or organization, uses information and communications technology to harass another individual, group of individuals or organization. Such behaviors may include, but are not limited to, the transmission of threats and false accusations, damage to data or equipment, identity theft, data theft, computer monitoring, the solicitation of minors for sexual purposes and any form of aggression. Harassment is defined as a course of action that a reasonable person, in possession of the same information, would think causes another reasonable person to suffer emotional distress (pg. 1, par. 2).

Some definitions of cyberstalkers describe the stalker as having mental health issues because his/her pursuit of the victim is obsessional, while others use motivations such as profit or competitive advantage as reasons to stalk an individual (Ogilvie). Erotomanics are stalkers who believe that their target of interest, usually of higher status, is in love with them. A love obsessional stalker tends to suffer from schizophrenia, bipolar disorder, or some other psychiatric illness that causes a fanatical love for the victim. The simple obsessional stalker is usually an ex-partner of the victim and wants to rekindle the relationship or harass the victim for revenge (Zona, Sharma & Lane, 1993). Mullen,
Pathe, and Purcell (2000) categorized the stalker as well into five categories: rejected stalker, intimacy seekers, incompetent suitors, resentful stalkers intent on causing fear and apprehension, and predatory stalkers who, in preparation for a sexual attack, stalk for information gathering purposes or fantasy rehearsal.

*The Cyberstalker’s Motivation*

There were four major themes that have resulted as a result of studies of cyberstalkers: vindictive, composed, collective, and intimate (McFarlane & Bocij, 2003). The *vindictive cyberstalker* was so named because of the ferocity with which he/she victimize those he/she pursued. The harassment usually began with an argument that gets blown out of proportion. This cyberstalker was fairly computer literate and used the widest range of methods to harass their target (i.e., spamming, mailbombing, viruses, identify theft). The victims also claimed to receive disturbing messages or images, for example pictures of corpses, rambling, incoherent messages, or screams. These possibly indicate that the stalker has severe mental health issues.

The *composed cyberstalker*’s actions were aimed at causing constant annoyance and irritation to their victims. Their main goal was to cause distress, they were not out to seek a relationship. However, the *intimate cyberstalker* wants to win the feelings or gain the attention of their target. They utilize e-mail, web discussion groups, and electronic dating sites, and demonstrate a detailed knowledge of their victims. This group can further be broken down into ex-intimates and infatuates; the former seeking to re-establish a relationship, sometimes even reverting to identity theft in order to do so. The
infatuates send more intimate messages to their victims, but become more threatening when rebuffed.

The final group, the collective cyberstalker, is characterized by two or more individuals pursuing victims. The computer literacy in this group is high, and they make numerous threats using spamming, mailbombing, identity theft, and intimidating multimedia. They also try to gain as much information about their victims as possible. In the case of corporate cyberstalking, they would use their threats to try to discredit or silence a target, or even to punish them. It is not uncommon for this group to recruit others to join in the harassment (McFarlane & Bocij, 2003).

Methods Used by Cyberstalkers

There were three primary ways in which cyberstalking was conducted: e-mail stalking, Internet stalking, and computer stalking, which involved unauthorized control. One advantage that cyberstalkers had that the offline stalkers did not have, they could harass a number of victims at one time. “More sophisticated cyberstalkers used programs to send messages at regular or random intervals without being physically present at the computer terminal” (Reno, 1999). These same stalkers also used anonymous remailers, making it almost impossible to trace the true identity of the source of an e-mail or other communication.

In a study conducted by McFarlane & Bocij (2003) the most common method of initial contact by cyberstalkers was e-mail, followed by network access at work and web discussion groups. Other methods of contact included online dating sites and chat rooms. In many cases of online harassment there were also incidences of offline stalking. This
included stalking at their homes, at their place of employment, at other public sites, and even by use of surveillance such as cameras or audio transmitters. Many of the victims also received threats, either directly or through a third party. In all cases, however, there were no physical attacks to the victims; some of the victims ended up with criminal property damage to their cars (McFarlane & Bocij).

Effects of Cyberstalking

“The effects of stalking upon its victims have been well documented. Months or years of continuous exposure to harassment and/or threats often lead victims to change their daily habits, and even cause psychological trauma” (McFarlane & Bocij, 2003, par. 1). Victims disrupted their normal routines in order to avoid the stalker, they carried pepper spray, a knife, or a gun, and many reported that their feelings of powerlessness had even made them seriously consider attempting suicide (McFarlane & Bocij).

According to the National Center for Victims of Crime (2010), other potential effects, especially for children were changes in sleeping and eating patterns, nightmares, hyper vigilance, anxiety, helplessness, fear for safety, shock and disbelief.

According to Doyle (2003), victims tended not to come forward for assistance because of their intense feelings of fear, shame, embarrassment, or anger. Doyle’s study found that females were the most likely recipients and were victimized in about 52 % of the cases, whereas male victims only accounted for 35 % of aggravated harassment. The next most likely target was educational institutions at 8 % (Doyle).

The Internet became the ideal instrument for individuals who wished to intimidate, threaten, or harass another person because it allowed human interaction
without physical barriers and with the perception of anonymity (Doyle, 2003). The National Center for Missing and Exploited Children (2009) stated that the more children were online using such avenues as e-mail, chat rooms, blogs, and instant messaging, the more strangers could establish contact. Cyber threats to children will not decrease as those who make them gain more expertise with their Internet use (Gudaitis, 2009; Safe Florida, 2009).

**Online Predators**

A cyber threat of a much more serious nature was the online sexual predator. Although students were aware of the risks, many exposed personal information about themselves online anyway. Cox Communications (2009), in conjunction with the National Center for Missing & Exploited Children and the John Walsh foundation, conducted a survey of teen online safety and found that nearly three-quarters of teens had an online profile on a social networking site, where many had posted photos of themselves and their friends, among other personal information. Three in five teens said having personal information or photos on a public site was unsafe, and one in four said they knew someone who had something bad happen to them as a result of posting information electronically (Cox Communications).

**Methods Used by Online Predators**

Online predators study their intended victims. Online predators were always searching for profiles, blogs (online diaries), and did searches on the names of targeted victims to see what else was out there about them online. The online predator targeted students who were having problems at home, had broken up with a boy or girlfriend, or
who were having a hard time in school (Willard, 2005). Online predators were aware of
the student’s latest games, music, hobbies, and fashions, and usually made contact using
something that would interest them.

Once the online predator had identified the student victim, he/she began the
grooming process. The predator created a profile pretending to be the same age or close
to the age of the student. Then the predator instant messaged, chatted with, or e-mailed
the student. Once the student was comfortable with their new friend, the predator usually
admitted that they were older than they claimed, convinced the student to meet them in
person, and moved in (Hitchcock, 2007). Cox Communications (2009) reported that 69 %
of teens regularly received personal messages online from people they did not know and
most of them did not tell a trusted adult about it. When teens received these messages,
60 % of teens said they asked who the person was, and 31 % actually replied and chatted
with these people. Sixteen percent of surveyed teens said they had considered meeting
face-to-face with someone they had talked to only online, and 7 % reported having met
someone in the real world from an online encounter (Cox Communications). Wolak,
Mitchell, & Finkelhor (2006) stated that 90 % of sexual solicitations were directed to
youth ages 13 and older. Of these youth, 34 % received unwanted sexual material online,
34 % had received a phone call from the predator, 18 % had the predator visit their home,
and 12 % were offered money or other items in return for photos or sexual favors.

Willard (2005) reported that predators, as well as commercial sites and
advertisers, used powerful social techniques to encourage specific attitudes and behaviors
from their victims. These included providing a gift to the student that led to feelings of
indebtedness, seeking a commitment, encouraging group allegiance, and creating an
attractive image to enhance respect and credibility. Students who were at risk from these
techniques were those who lacked sufficient knowledge, skills, and values to make good
decisions online (Willard, 2005).

Effects of Predatorial Behavior

Adults who solicit or commit sexual offenses against youth were a widely
disparate group with few commonalities or motivations for offending. Some child
molesters were not sexually attracted to children, but had other psychological disorders or
factors such as opportunity, poor impulse control, or a generally antisocial character
(Mason, 2008). Different terms were used to categorize predators. Pedophilia referred to
persistent sexual attraction to children; sexual attraction to adolescents was labeled
hebephilia.

“Healthy romantic relationships and sexual development are issues of concern
when considering student vulnerability to online predators” (Wolak, et al., 2008, p.113).
From the student’s perspective, their Internet-initiated sex crimes were romances. These
“romances” typically took place in isolation and secrecy. These relationships also formed
more quickly, involved greater self-disclosure, and developed with greater intensity than
face-to-face relationships among their peers (McKenna, Green & Gleason, 2002). Few of
the students had the maturity or emotional self-regulation required to engage in healthy
relationships that include sexual intimacy (Cauffman & Steingbeg, 2000; Wolak, et al.,
2008). When these online relationships included disclosures about sexual matters, the
powerful feelings that were generated were difficult to handle for youth just beginning to
experience sexual desires. Early sexual activity and intense romantic involvement during
early and mid-adolescence were associated with a range of negative outcomes, including risk behaviors, poor mental health, and low academic achievement (Wolak, et al., 2008).

Studies of Online Predators

Wolak et al. (2008) reported that media reports and Internet safety messages about Internet predators often suggest that online meetings between adults and youth which develop into sex crimes constitute a new dimension of child sexual abuse. Does this mean that all online predatorial acts are sexual in nature? Finkelhor, Mitchell & Wolak (2000), and Wolak et al. (2006) reported that one in five females and one in seven male minors were sexually solicited online. Offenders rarely deceived their victims about their sexual interests, and the opportunity to meet for sex was usually discussed online. Most victims who met offenders face-to-face went to such meetings expecting to engage in sexual activity. If deception did occur, it often involved promises of love and romance. The majority of sex crimes against minors were never reported to law enforcement (Finkelhor, Ormrod, Turner & Hamby, 2005). Students may not report statutory rape because they may not view these incidents as crimes or themselves as victims (Berliner, 2002). Young students with older partners had high rates of coerced intercourse (Wolak, et al., 2008).

In a study conducted by Mitchell et al. (2005) of Internet-initiated sex crimes reported to law enforcement, 44 % of crimes were committed by family members and 56 % were committed by people known to the victim offline, including neighbors, friends’ parents, leaders of youth organizations, and teachers. Known cases involving strangers were extremely rare. Social network sites did not appear to have increased the overall risk
of solicitation, and although solicitations themselves were reason for concern, few solicitations result in offline contact (Wolak et al., 2008); chatrooms and instant messaging were still the dominant place where solicitations occur (77%) (Wolak et al., 2006).

There was also the belief that deception was often involved where adults pose as teens to engage with young people, but research showed that’s rarely the case. In the National Juvenile Online Victimization (N-JOV) Study, the only research to date examining the characteristics of Internet-initiated sex crimes by interviewing law enforcement investigators, only 5 % of offenders pretended to be teens when they met potential victims online (Wolak et al., 2008).

In contrast to the above studies, the Internet Safety Technical Task Force concluded that children and teens were less vulnerable to sexual predation than many had feared (Magid, 2009). The Task Force stated that the media paints an inaccurate picture of the adult male deceiving and preying on a young child. The Task Force determined that the overwhelming majority of youth were not in danger of being harmed by an adult predator, according to data from a 2006 survey conducted by the Crimes Against Children Research Center. “Youth identify most sexual solicitors as being other adolescents (30 %) with few (9 %) coming from older adults, and the remaining being of unknown age” (pg. 2). Magid reported that interviews with police showed most victims were underage adolescents who know they were going to meet adults for sexual encounters.

Many acts of solicitation online were harassing or teasing communications that were not designed to seduce youth into offline sexual encounters. Wolak et al. (2006)
stated that 69% of solicitations actually involved no attempt at offline contact, and that the concept of "solicitation" more generally referred to communications of a sexual nature, including sexual harassment and flirting. The Internet Safety Technical Task Force (2008) reported:

A group of 50 United States Attorneys General convened a multi-state working group of leaders from Internet service providers, social network sites, education, child safety and public policy advocacy organizations, and technology development to determine the extent to which today’s technologies could help to address online safety risks, with a primary focus on social network sites in the United States; more research needs to be done specifically concerning the activities of sex offenders in social network sites and other online environments, and law enforcement should be encouraged to work with researchers to make more data available for this purpose (p. 4).

The Internet Safety Technical Task Force published its final report on December 31, 2008, which noted that much of the research based on law-enforcement cases involving Internet-related child exploitation predated the rise of social networks.

Although the majority of students were savvy enough to avoid encounters with the few adults who would engage in sex with youth they met online, there remained a minority who – for psychological or social reasons were vulnerable online and offline. Magid (2009) stated that we must continue to do research and provide them with resources and protective services. “If even one child is in danger, then there is work to be done, and that is one thing everyone who cares about this issue can agree on” (pg. 4).

Other Dangers

The affordability and the development of search engines (such as Google, Excite and Yahoo) and portal companies (such as American on Line- AOL) have made it simple for a vast amount of adolescents and children to gain mastery of technology (Lightburn, 2009). Many school age children possessed a proficiency in technology that
exceeded their parents' proficiency because technology was part of their everyday life. They had access to technology such as computers, cellular telephones, personal electronic gaming systems and digital cameras (Campbell, 2005). Advancements in technology had opened many doors to learning experiences for students. However, if not used appropriately, these doors could be dangerous. The inappropriate use of digital cameras and cameras on cell phones, along with I-pods, could lead to one of those dangers; sexting (Chalfen, 2009).

**Sexting**

The term sexting is a combination of the words sex and texting, which refers to the practice of using a camera cell phone to take and send nude and/or semi-nude photographs to other cell phones or Internet sites. First reported in 2005, these photographs were occasionally referred to as ‘home-made pornographic images’ (Chalfen, 2009).

The National Campaign to Prevent Teen and Unplanned Pregnancy (The National Campaign), working with Cosmogirl.com, developed a survey for teens and young adults to explore their electronic activity (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2009). This was the first survey of its kind to quantify the proportion of teens and young adults (13-26) that were sending or posting sexually suggestive text and images, and was designed to better understand their attitudes and behaviors with regard to sex and cyberspace. For this survey, teens were considered to be ages 13-19, and young adults were ages 20-26. The survey was fielded online to a total of
1,280 respondents; 653 teens (ages 13-19) and 627 young adults (ages 20-26) between September 25, 2008 and October 3, 2008.

The National Campaign organization found that a significant number of teens had electronically sent, or posted online, nude or semi-nude pictures or videos of themselves: 22% of teen girls (11% of young teens, those ages 13-16), and 18% of teen boys (ages 13-19). The young adults ranked higher with 36% of young adult women, and 31% of young adult men had posted images of themselves. Sexually suggestive messages (text, e-mail or instant message) were even more prevalent, with 37% of teen girls (ages 13-19) and 40% of teen boys (ages 13-19) having sent suggestive messages, while 48% of teens said they received suggestive messages. The young adults (ages 20-26) again ranked higher with 56% of young adult women and 62% of young adult men having sent suggestive messages while 64% of young adults had received suggestive messages (The National Campaign, 2009).

When The National Campaign (2009) survey asked participants who these sexual images or suggestive messages were being sent to, most teens/adults said to a girlfriend or boyfriend. Approximately 30% of teens and young adults reported that they had sent suggestive content to someone they wanted to date or hook up with. Furthermore, 15% of the girls (teens and young adult women) reported that they posted nude and/or semi-nude images of themselves to someone they only knew online, while 23% of the boys (teens and young adult men) reported posting similar images. A frightening finding was that although these young people realized that sending sexually suggestive content can have serious negative consequences (75% of teens and 71% of young adults), they did it any way. When the survey questioned whether they knew if sharing sexually explicit
messages or images was common, less than 45% thought that it was common to share such material. Nevertheless, 38% of teen girls (13-19 years of age), 39% of teen boys, and 37% of young adult women (20-26 years of age) had sexually explicit text messages shared with them. Whereas almost half (47%) of young adult men reported they had explicit text messages shared with them. When reporting on sexually explicit images, 25% of females (teen and young adult) had images shared with them, while 33% of teen boys and 47% of young adult men had sexually explicit images shared with them.

Approximately 40% of teens/adults said that exchanging sexually suggestive content makes dating or hooking up with others more likely. Finally, when participants were asked about their feelings when receiving such content, the top three feelings for teens were surprised (55%), amused (54%), and turned on (53%). For young adults the top three feelings were turned on (57%), excited (55%), and amused (52%) (The National Campaign, 2009).

Cordelia Anderson, chair of the National Coalition to Prevent Child Sexual Exploitation, stated that children were growing up in a *sexually toxic culture*, where all around them was the promotion of sex; through media, fashion, music, TV, and movies. Therefore, to kids, teens, and young adults sexting would be a behavior consistent with that they see all around them (Magid, 2009). Similar to sexting, another dangerous door to open was that of the social networking world.

**Social Networking**

Social Networking sites allowed the user to create a profile and befriend others online to make new connections. This created a snowball effect, whereby a viewer
accesses other member’s lists of friends, adds them to their lists, and expands their original list of social contacts. Hinduja & Patchin (2009) defined a social network as a socialization framework that linked people through a common purpose, interest, or characteristic. They may be related, go to school or work together, live in a particular city or region, or share an interest in music, technology, or a certain hobby. Hinduja & Patchin further stated that the growth in Internet access, combined with a population of students that were being raised in front of a computer, led to social networking being replicated online. “Without question, youth have embraced the concept of creating virtual presences and are the driving force behind the success of many online communities” (Boyd, 2006).

Webwisekids.org (2009) reported that 96 % of students ages 9 to 17 who had access to the Internet used social networking sites. ComScore, Inc. reported a 25 % growth in worldwide social networking sites for an audience of 15 years of age or older from 2007 to 2008 (Lipsman, 2008). In that time, Facebook.com took over the global lead among social networking sites (it’s audience having quadrupled), and has made an effort to pursue relevant markets outside the United States (Lipsman).

Social networking sites were a danger to students because, although they stated they had minimum age requirements, they did not have a way to verify ages. Facebook and Bebo website policies stated that they had a 13 year old age requirement (Carvel, 2008). This was only enforced by assuming that the student was typing in the correct birthdate. In a 2008 survey of 1,000 children, nearly a quarter of children between the ages of eight and 12 were evading the age restrictions imposed by sites such as Facebook (Carvel). MySpace policy allowed individuals who were 14 years of age and older to
register for the site. MySpace continuously searched its network for underage users with a search algorithm designed to identify potential underage user profiles (MySpace.com, 2010). Once flagged and reviewed, thousands of profiles were deleted every month. In addition, MySpace took action against any user misrepresenting their age, regardless of whether they were underage users or not.

Classmates.com was the first commercial online social networking site, connecting past classmates from grade school through college (Boyd & Ellison, 2007). In 1997, SixDegrees.com began and was offered as a site to meet friends of friends. In 2002, Friendster arrived on the scene, offering an easy, friendly, and interactive environment where users could globally connect from any Internet-ready mobile device (Boyd & Ellison). MySpace became one of the most popular networking sites in 2003 because it began as a promoter of independent music groups. It allowed users to create profiles, share personal information, pictures, videos, and friend lists. It also allowed friends to post on the user’s MySpace page. In 2004, Facebook joined the social networking picture, starting for the same reason as Classmates.com, only targeting college students as their clientele (Roskamp, 2009). Teens enjoyed socializing, creating, and sharing online (Lenhart, Madden, Macgill, & Smith, 2007). With the many uses of the Internet for communication, teens spent more time on a regular basis communicating with each other online as compared to previous generations who socialized and communicated in a traditional face to face format (Roskamp).

In a study completed by Lenhart (2009), he reported that 65 % of teens used online social networks. He found that 37 % of 12-13 year olds and 14-17 year olds had online profiles. Additionally, 48 % of these teens reported logging on to their web page at
least once a day or more. These social sites, or cyberplaces, provided an easy to use location for the teens to connect and communicate with others while creating content, and allowing for self-expression (Solomon & Schrum, 2007).

The Cox Communications survey (2009) reported some disturbing statistics with regard to social networking. They found that 58 % of teens did not think posting photos or other personal information on social networking sites was unsafe. Even more disturbing was that 64 % of teens posted photos of themselves, more than half (58%) of them posted information about where they live, and nearly one in ten (8%) had posted their cell phone number online. Lenhart et al. (2007) found that 61 % of the teens on social networking sites posted the name of their city or town, 49 % posted their school’s name, 29 % posted their e-mail address, and 29 % posted their last name. In fact, Patchin & Hinduja (2006) completed a content analysis of publicly viewable web pages posted by adolescents on MySpace and found that 5 % included pictures of youth wearing swim suits or underwear.

With all of these vulnerabilities, there were several concerns when it came to student safety. First, was the ability to link social profiles to social maladies such as alcohol or drug abuse, hate crimes, planned school attacks (bombings or shootings), murder, and suicide. Second, were the incidences of cyberbullying and harassment. Social networking sites were ideal for bullying because they were popular and widely accessible, yet the bully can still remain virtually anonymous (Hinduja & Patchin, 2009). Cyberbullying occurs on a social networking site in the form of anonymous commenting, information spreading (disclosing specific details about someone), rumor spreading, and identity theft. The third, and biggest, concern was that youth who had posted personal
information on their profiles would be contacted by predators and pedophiles. Lenhart et al. (2007), reported that 43% of the teens that had social networking profiles had been contacted online by a complete stranger. Youth who posted sexually suggestive photographs may be more likely to receive online sexual solicitations, and could become a victim of child pornography.

*Online Child Pornography*

In 2006, a congressionally mandated system for reporting child crimes, CyberTipline, received 62,365 reports of child pornography, 1087 of child prostitution, 564 of child sex tourism, 2145 of child sexual abuse, and 6334 reports of online enticement of children for sexual acts (National Center for Missing and Exploited Children, 2009). “Yet the increased popularity of the Internet in the United States has not been correlated with an overall increase in reported sexual offenses; overall sexual offenses against children have gone steadily down in the last 18 years” (p.24). The majority of sexual molestations were committed by people the victim knows offline, mainly by family members or acquaintances (Snyder & Sickmund, 2006).

The United States Supreme Court, in a 1982 decision on the case of New York v. Ferber, defined child pornography as material that visually depict[s] sexual conduct by children below a specified age (Ray, Kimonis & Donohue, 2010). The court found that child pornography was not protected by the First Amendment because it “is intrinsically related to the sexual abuse of children” (New York v. Ferber, 1982, p. 764).

On April 13, 2006, in order to legally include virtual images, using any technology, whether they were images of minor children or who appear to be minors; and
to include possession, distribution, or reproduction of such images, Congress enacted U.S.C Title 18: Crimes and Criminal Procedure. Section 2252A specifically referenced virtual child pornography, and included the commerce of Internet child pornography across foreign borders. The Act stated that the penalty for such possession was no less than 5 years in prison and no more than 20 years for a first offense (U.S.C. 18, §2252A, 2006).

In Florida it was mandated that all persons who suspect abuse of either children or vulnerable adults must report any incident to the proper authorities regardless of that individual’s profession (Fla. Stat. xx 39.201, 415.1034). This mandatory reporting of child abuse included child pornography. In addition, federal legislation entitled Reporting of Child Pornography by Electronic Communication Service Providers required Internet service providers who became aware of facts or circumstances from which a violation of child pornography laws was apparent to report these circumstances to the Cyber Tip Hotline of the National Center for Missing and Exploited Children, which will forward this report to a law enforcement agency or agencies designated by the Attorney General (Ray, et al., 2010). If they did not, they faced fines.

The National Center for Missing and Exploited Children (2009) stated that persons who possessed child pornography were motivated by using their sexual interest in prepubescent children or young adolescents for sexual fantasies and gratification. Persons who possessed child pornography were constantly looking for new and different sexual stimuli, so the Internet became their access point. Still others were seeking financial gain from these indiscriminate few, so they set up web sites where images were posted for sale.
Once pornographic images were placed on the Internet they cannot be deleted and will continue to circulate, causing the child victim to be re-victimized over and over again, and their life was altered forever. Once vulnerable, students were drawn into another danger such as hate or terrorist web sites or chat rooms.

**Hate Websites**

The Internet’s global reach, combined with the difficulty in monitoring and tracing communications, made it the prime tool for extremists and terrorists. The Simon Wiesenthal Center monitored these developments for over a decade through its Digital Terrorism and Hate Project. On June 18, 2009 it released a report entitled, _Facebook, YouTube +: How Social Media Outlets Impact Digital Terrorism and Hate_. This interactive CD-ROM report confirmed that as the Internet grew, the growth of extremist or terrorist sites kept pace in number (over 10,000) and in technological advances, especially with social networking services. The report was used by the FBI, Homeland Security, military officials, hate crime units and joint terrorism taskforces in the U.S. as well as Canada and Europe (Wiesenthal, 2009).

In April, 1995, the first Internet extremist website, Stormfront.org, went online. Wiesenthal identified over 10,000 hate and terrorist websites, hate games, and other Internet postings (Wiesenthal, 2009). This user-generated material increased the viral spread of extremism online and increased the social acceptability of hate. Facebook and YouTube sites had seen the greatest increase of digital hate, with 30% of new postings on Facebook alone; the greatest increase coming from overseas, particularly Europe and the Middle East (Wiesenthal). Another way that the spread of hate and violence was
virally spread was to children and teens, through colorful sites that appear to be online gaming.

Gaming sites were regularly reviewing and hosting games that perpetuate stereotypes and celebrate violence (aimed at young people). Hates sites aimed at children had bright colors, balloon lettering, free coloring pages or plug-ins to popular video adventure games. Hate sites aimed at adolescents had ‘hate core’ or ‘white power’ music and streaming music videos, and/or messages that appealed to their growing independence such as, “Your parents or teachers may not know about this…don’t you think you should make up your mind for yourself” (Lamberg, 2001). Students were empowered to belong to hate groups because they felt isolated from, or persecuted by, classmates and neighborhood peers, and/or rejected by members of their own families. By going online, they avoided the complexities of face-to-face interactions (Lamberg).

Lastly, another danger for a student who was not monitored while on the Internet could be involvement with online gambling. This type of danger could become addictive and dangerous for young teens, and costly for parents.

Online Gambling

In the last decade, the growing popularity of Internet gambling and the convergence of gambling with digital media technologies like mobile phones, interactive television, and video games drew increased academic attention (King, Delfabbro & Griffiths, 2008). Typically youth gambling begins with games such as bingo and poker, betting on games of skill (basketball, golf, and pool), state-run lottery games, or drinking games (such as quarters). Many contemporary video games incorporated gambling
situations and games of chance into the playing experience. These gambling situations were usually optional for the player, but they were designed to entice the player to earn rewards quickly and further accelerate their progress in the game. For example, the game Grand Theft Auto: San Andreas had a casino where the player could win lots of virtual money to spend on improving the cars.

There were approximately 3,000 online gambling sites worldwide that enable players to gamble in traditional games of chance like poker and blackjack, as well as place bets on the outcomes of sports, racing and other events (King et al., 2008). It was no longer necessary for someone to visit a licensed gambling venue in order to gamble; individuals are able to connect to Internet casinos anywhere in the world using a personal computer and modem, or gamble via a mobile phone, interactive television, and/or gamble within online video games (King, et al.). “Increased access to gaming through the Internet has helped embed gambling into modern youth culture” (Verbeke & Dittrick-Nathan, 2008, p. 61). School environments can unintentionally contribute to gambling behavior because of either lack of awareness or lack of supervision (Verbeke & Kittrick-Nathan).

Verbeke and Dittrick-Nathan (2008) reported that problem or compulsive gambling was a progressive addiction characterized by an increasing preoccupation with gambling and a need to bet increasing amounts of money more frequently. The student would begin to “chase” losses or increase bets to make up for previous losses. According to Verbeke and Dittrick-Nathan the compulsive gambler would also manifest other symptoms such as; problem gambling can result in poor concentration, low grades, absenteeism, and social and behavior problems in school. Students that gamble would
also use gambling lingo in most of their conversations, would have felt a loss of control, and exhibited irritability and restlessness when attempting to stop.

With the prevalence of danger on the Internet, there was a need to create policy in order to protect digital youth.

Policies Regarding Internet Dangers

Federal Government Policy

Children’s Online Privacy Protection Act

The Children’s Online Privacy Protection Act of 1998 (Title XIII) was the Federal Government’s first attempt at regulating the unfair, deceptive acts and practices in connection with the collection and use of personal information from and about children on the Internet. The Act states:

It is unlawful for an operator of a website or online service directed to children, or any operator that has actual knowledge that it is collecting personal information from a child, to collect personal information from a child in a manner that violates the regulations prescribed…” (§ 1303-a-1).

The regulations included, among other items, obtaining parental consent and providing notice of the specific type of information being collected. The Act also prohibited conditioning a child's participation in a game, the offering of a prize, or another activity on the child disclosing more personal information than was reasonably necessary to participate in the activity. If the parent of the child refused to allow services or participation on the website, the Act stated that the site must terminate service to the child and was allowed no further contact or future online collection of personal information from that child.
Children’s Internet Protection Act

President Clinton signed the next Federal Act into law on December 21, 2000: the Children’s Internet Protection Act (CIPA) 2000, which was designed to protect children online. The Supreme Court upheld this law in 2003, in an appeals case brought by the American Library Association and the American Civil Liberties Union. CIPA requires schools and libraries using E-Rate discounts (funded by the Federal Communications Commission) to operate "a technology protection measure with respect to any of its computers with Internet access that protects against access through such computers to visual depictions that are obscene, child pornography, or harmful to minors..." (§ 3601-a-1-A-i). Such a technology protection measure must be employed "during any use of such computers by minors" (§ 3601-a-1-A-ii). The law requires the same standards for adult Internet users, with the exception of the harmful to minors’ provision. The law also provides that the library "may disable the technology protection measure concerned, during use by an adult, to enable access for research or other lawful purpose" (§ 1721-D).

Protect our Children Act

The most recent act to pass both House and Senate was the Protect Our Children Act of 2008 (S. 1738 [110th]). This Act was designed to increase the ability of law enforcement agencies to investigate and prosecute child predators. The Act states:

There is established within the Department of Justice, under the general authority of the Attorney General, a National Internet Crimes Against Children Task Force program (ICAC Task Force), which shall consist of a national program of State and local law enforcement task forces dedicated to developing effective responses to online enticement of children by sexual predators, child exploitation, and child obscenity and pornography cases. (S. 1738-102-a)
In response to the Federal Protect our Children Act of 2008, Florida Attorney General, Bill McCollum, along with the Florida Department of Law Enforcement, created a web site called Safe Florida (2009). This was an educational site for children, teens, parents, and educators. This site contained many resources; among those were full references to Florida Statute 827.071 – sexual performance by a child. This statute defined all sexual crimes that can be committed against children including taking pictures by cell phone or webcam with the intent to distribute them to others, and promoting the sexual performance of a minor, including online victims (Safe Florida).

*Florida Policy*

In April 2008, the Florida Legislature adopted an anti-bullying act, including cyberbullying. The law was called the Jeffrey Johnston Stand Up for All Students Act (Florida Statute § 1006.147). Jeffrey Johnston was a 15-year-old boy who was bullied for two years, including cyberbullying, and he finally committed suicide.

*Jeffrey Johnston Stand Up For All Students Act*

This Florida law prohibited bullying and harassment of any public K-12 student or employee, with a requirement that public schools adopt measures to protect students and employees from the physical and psychological effects of bullying and harassment.

The Jeffrey Johnston Act mandated that by December 1, 2008, each public school district had to adopt a policy prohibiting bullying and harassment of any student or employee:

The school district bullying and harassment policy shall afford all students the same protection regardless of their status under law…and shall involve students,
parents, teachers, administrators, school staff, school volunteers, community representatives, and local law enforcement agencies in the process of adopting the policy. The school district’s policy must be implemented in a manner that is ongoing throughout the school year and integrated with a school's curriculum, a school's discipline policies, and other violence prevention efforts. (§ 1006.147-1-4).

The Act also stated that the policy must have a minimum of 14 requirements, among those definitions and descriptions of behaviors expected from students, as well as consequences for those committing acts of bullying or harassment. Florida Statute 784.048 also addressed the instance of cyber crime in the form of cyberstalking:

‘Cyberstalk’ means to engage in a course of conduct to communicate, or to cause to be communicated, words, images, or language by or through the use of electronic mail or electronic communication, directed at a specific person, causing substantial emotional distress to that person and serving no legitimate purpose (Florida Statute, 2009).

Policy Implications to School Districts

Policy implications of (cyber) bullying and sexual predator laws for school districts were that revisions to school board code of conduct policies across the state and/or nation need to be made (Children’s Internet Protection Act, 2000; Protect our Children Act, 2008; Safe Florida, 2009). Libraries, youth chat rooms, networking sites, and Internet cafés had to have filtering mechanisms and/or a “watchdog” for activity (Children’s Internet Protection Act). Most communities were banding together with their school districts to encourage instructional programs and support (National Center for Missing & Exploited Children, 2009; Webwisekids, 2009).

This researcher explored if teachers had knowledge of these policies and have had teacher education and/or training concerning Internet safety. Were teachers able to instruct students on Internet dangers? Landmark cases and case law created frameworks
used by schools, communities, law enforcement, and judicial branches in dealing with online behaviors.

**Case Law**

Unfortunately, since technology advances at such a rapid pace, there are not many case studies that courts can rely on when a cyber crime takes place. Therefore, courts fall back to case studies related to students’ freedom of speech and freedom of expression. For instance, students under the age of 18 caught in the “sexting” epidemic that developed with the invention of the camera phone were being tried on the basis of child pornography. Until the laws advanced to include cyber crimes, the courts used laws that were “somewhat” related. Once such law the courts usually considered was landmark U.S. Supreme Court case addressing the issues of student speech: *Tinker v. Des Moines Independent School District (1969)*. This case can help inform administrative behavior (Brooks, Corder, & Marshall, 2006).


In *Tinker* (1969), the Court set the standard for requiring students to curtail a protected activity or discipline them for not doing so; if there was a reasonable belief that the speech would cause material and substantial disruption to school activities, or if the speech presented a clear and present danger.

A student’s right to freedom of expression and a school’s right and responsibility to provide a safe, bullying-free environment for students and staff members were both supported by this case law (Brooks, et al., 2006). “Since control over content that is created on school grounds can generally be viewed as school-sponsored speech (referring
to *Tinker*), enforcing clearly stated acceptable-use policies and agreements that limit the use of school hardware and software will likely be upheld in court” (p. 54). Brooks, et al. suggested that user agreements should use direct language, and inform students of the consequences of violating the agreement. These agreements should also be signed by both the students and their parents. Cyber crimes fell under the bullying-free environment for students and staff and the school’s responsibility to provide a safe haven for all. Cyberbullying and stalking when carried over into the schools with clear, defined policies will likely be upheld in courts.

*Case Law Held to the Standard of Tinker*

Thirty years post-Tinker, case law continues to be held to the standard of *Tinker*. The case of *Emmett v. Kent School District* (2000) was where a student created a website with mock obituaries of school personnel. There was no evidence that the student was using the website as a threat, so his speech did not rise to the level of *Tinker*. In *Beussink v. Woodland R-IV School District* (1998), a school failed to show that a student website that criticized the school’s administrators was a threat to the level that was substantially interfered with the school’s discipline procedures. This case was again held to the standard of *Tinker*. In *Killion v. Franklin Regional School District* (2001), a student compiled and e-mailed a top-10 list about the athletic director. Several weeks later, the list appeared at school and the student was suspended. Again, the standard of *Tinker* was upheld with the court stating that the student’s actions were offensive but did not substantially disrupt the school setting.
The case of *J.S. v. Bethlehem Area School District* (2000), however, is different. The Supreme Court of Pennsylvania held that “school officials could discipline the student for creating and posting offensive material on a web site created at home. This web site contained derogatory, profane, offensive, and threatening statements directed toward one of the student’s teachers and the principal” (Sec. 1a). The Court, in this case, expressed its regret that so many years had passed since it has ruled on a student speech issue and that it had never ruled on a case that involved a student’s use of the Internet. It upheld the school district’s disciplinary action, finding that the teacher had suffered extreme mental and physical harm from viewing the site.

*Other Case Law in Support of School Districts*

Similarly, in *Layshock v. Hermitage School District* (2006), a student created a profile that was posted on MySpace with a photograph of the principal. As word of the profile spread, students began accessing it from the school’s computers. The student sued over his disciplinary action, alternative placement, but the court held that his off-campus conduct resulted in actual disruption of the school’s day to day operations, and ruled in the school’s favor.

*Doe v. MySpace, Inc.* (2007) was a case where the mother of a 13-year-old daughter claimed the web-based social network failed to take sufficient steps to prevent the girl from lying about her age in order to create a personal profile. Through the social networking site, her daughter was contacted by an alleged predator of which she agreed to meet and was sexually assaulted.
*Davis v. Munroe County Board of Ed.* (1999) involved a parent who alleged that her fifth-grade daughter had been the victim of sexual harassment by another student in her class. The parent claimed they reported to the school that there was repeated harassment, and the school failed to address a situation which created an unsafe environment. The student’s grades dropped and she had health issues. This was an argument of peer-to-peer cyberbullying creating a similar dangerous environment for victims in a physical school setting.

*Miller v. Skumanick*, FSupp.2d, 2009 WL 838233, M.D. Pa., 2009 (March 30, 2009) was a lawsuit involving the practice of sexting, where three high school girls, appeared topless or in their underwear. The girls were charged with being accomplices to the production of child pornography. This charge was brought over some digital photos discovered by Tunkhannock School District officials on students’ cell phones. The school district handed the photos over to the district attorney, who claimed that the possession of “provocative photographs” could be a felony charge. The district attorney demanded that all students who had the images on their phones be placed on a year’s probation and complete a six to nine month “re-education” program. The parents filed suit against the district attorney asserting that their children’s First and Fourteenth Amendment rights had been violated, and were granted a restraining order against the re-education program until the trial.

Direction for disciplining students who used the Internet to bully other students or disrupted school functions continued to evolve. Brooks, Corder and Marshall (2006) stated that “when imposing discipline, it is clear that principals can rely heavily on
...it might be wise to rely on prevention as a more effective tool for eliminating bullying than discipline” (p. 56).

Teacher Perceptions Concerning the Internet

Teaching about safe and responsible Internet use was increasingly important for digital youth. Principals and teachers juggle curriculum, manage new technologies, develop and enforce relevant discipline policies, as well as implement federal and state technology related mandates (Roskamp, 2009).

In a survey released by the National Cyber Security Alliance (NCSA) (2010), teachers believed students needed to learn safe and responsible Internet use. Unfortunately, many reported these subjects were not required in their districts. Microsoft Corp. supported that finding, by reporting that less than one-fourth of U.S. teachers have spent more than six hours on any kind of professional development related to cyber ethics, safety, or security within the last 12 months (eSchool News, 2010). In this survey, only 35 % of teachers said they had taught proper online conduct to their students, 27 % had taught about the safe use of social networks, and 18 % had taught about online scams, fraud, and social engineering (eSchool News).

The NCSA survey further found that opinions of teachers and administrators differed when it came to who was the responsible person for educating students about these topics. Michael Kaiser, NCSA’s executive director, stated that the study “illuminates that there is no cohesive effort to give young people the education they need to safely and securely navigate the digital age and prepare them as digital citizens and employees” (p. 2).
Sharples, Graber, Harrison, & Logan (2009) conducted a survey of 2,611 students, 206 teachers, and 121 parents from schools across England in order to gain an understanding of their perceptions of Internet safety. Only 55% of the teachers surveyed indicated that their school had a safety policy, while 42% indicated that they did not know, and 3% said their school did not have an Internet safety policy. Only 11% of the teachers said that they taught their students about Internet safety, while 42% said that they never did so. The main concern of the teachers (42%) was about how much information students actually or might give away about themselves; a mixture of online bullying and stranger danger concerns (Sharples et al.).

With regard to Web 2.0 activities, teachers were concerned about the worst case scenario, where information posted might be damaging to the reputation of themselves or the school. “Some interviewees indicated that schools were prevented by media scare stories from providing the kind of Web 2.0 activities that are now part of society…regarding child grooming, statistics show that a child is more likely to come to harm inside the four walls of their house” (Sharples et al., p.78). The teachers also agreed that by using filters and third party blocking, they were failing to teach children the essential skills of managing their online identity and, instead, encouraging them to seek ways to bypass the filters by using proxy sites.

Summary

This chapter researched the dangers that students will encounter on the Internet; specifically cyberbullying, cyberstalking, and online predators. The researcher also reviewed more recent dangers to students such as sexting, social networking profiles,
child pornography, hate sites, and online gambling. The review of federal, state, and
district policies was also relevant in this chapter, as was case law. Finally, the researcher
reviewed teacher perceptions of student Internet safety. Chapter Three contains the
methodology for the study. It examines the research design, population, sample,
instrument, data collection, reliability and validity issues, and data analysis for this study.
CHAPTER THREE: METHODOLOGY

This study was conducted using a mixed-method approach. Initial research was conducted to determine the dangers to students when using the Internet. Next, a survey was used to explore factors that contributed to teacher perceptions of online dangers, as well as indicated whether teachers were following district policies or using other available resources to educate their students about these dangers. Teachers from a purposeful sampling of schools, in the central Florida region, were surveyed. This stratified sample took into account socioeconomic status, as well as rural, urban and suburban locations, and is discussed further in the population and sample sections. The survey was adapted from Willard (2005) and Patchin and Hinduja’s (2006) studies.

Statement of the Problem

“Although the Internet offers an enormous range of positive and educational experiences for children, the concern is that uncontrolled online access increases vulnerability to harm through exposure to hate, violence, sexual predators, and sexually explicit materials” (Gray, 2005, p.1). Teachers could be the answer to educating our students about the dangers on the Internet. As the technology expands, internet dangers for children online expand and were a growing concern for parents, teachers, and administrators. Since technology will continue to grow, adults play a major role in educating children concerning the dangers of being online.
Research Questions

The following research questions guided the study:

1. To what extent, if any, do teachers perceive the Internet as dangerous to students?
   
   H01: There is no teacher perception of the dangers to their students online.

2. To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?
   
   H02: There is no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels.

3. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?
   
   H03: There is no difference between the amount of teachers’ personal levels of Internet knowledge and their perception of Internet dangers to students.

4. What relationship, if any, exists between teacher knowledge of Internet-related laws and policies for protection for students and their personal levels of Internet knowledge and use?
   
   H04: There is no relationship between teacher knowledge of Internet-related laws and policies for protection of students and their personal levels of Internet knowledge and use.

5. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when examining different demographic factors?
   
   H05: There is no difference in demographic factors (age, gender, or years of experience) contributing to teacher perceptions of Internet dangers to students.
Research Design

This study investigated teacher perceptions from three central Florida school districts at the elementary, middle, and high school levels with regard to dangers that students faced on the Internet. The districts: Brevard, Seminole, and Volusia, were identified for this study because of their similarity in size (similar number of schools at each level) and location (central Florida).

The study was conducted using a mixed-method approach. Initial research was conducted to determine the dangers to students when using the Internet. Next, a survey was used to explore factors that contributed to teacher perceptions of online dangers, as well as indicated whether teachers were following district policies or using other available resources to educate their students about these dangers. Teachers from a sampling of schools in each district were surveyed. This sample took into account socioeconomic status, as well as rural, urban and suburban locations, and is discussed further in the population and sample section. The survey was adapted from Willard (2005) and Patchin and Hinduja’s (2006) studies. Appendix A exhibits e-mail communication from each author asking for permission to adapt their survey as well as their response.

Results of the survey are referenced only by district; individual schools or teachers are not identified. As such, the survey instruments were coded by colored paper relating to the instructional level (elementary, middle, high school). The researcher chose a paper survey for two reasons: first, answers from teachers who are both experienced online and inexperienced were being sought. Therefore, a paper survey, administered and collected by the Principal’s designee, was easily completed by both sets. Second,
research indicates that online surveys do not have any better return rate than paper
surveys (Brecko & Carstons, 2006; Denscombe, 2009). The adapted survey can be found
in Appendix B.

**Population**

The population for this study was selected from the central region of the state of
Florida. Florida consists of five regions, which include 67 school districts. This study
included three central region school districts that had similar student demographics and
were comparable in size. More specifically, Brevard, Seminole, and Volusia County
School Districts were utilized for this study. Florida Department of Education statistics
indicated that each of these districts had schools at every level that represented high and
low socioeconomic status, and included rural, urban and suburban demographics. Table 1
displayed the number of schools at each level (elementary, middle, and high) for each of
the selected school districts.

**Sample**

The sample size for this study were purposefully selected from five elementary,
five middle, and five high schools (N=45 schools; n= 15 elementary, 15 middle, 15 high
schools) in each of the three school districts displayed in Table 1. Each of the five
schools represented either a high free/reduced lunch population (>45%), high non-free
lunch population (affluent), urban, rural, or suburban population. More specifically, this
researcher sought a sample size of 450 central Florida public school teachers (N=450);
150 from each level: elementary, middle, and high schools.
Figure 1 in Chapter One depicted the sample as divided by school district. To further clarify, the researcher estimated 10 teachers per school (five schools) at each level (elementary, middle, and high school), or a total of 50 teachers per district at each level. The surveys were delivered to all core academic teachers (reading/language arts, math, and science), the technology facilitator, and the media specialist at every school. In the high schools, five additional teachers from career or elective areas were also surveyed.

Instrumentation

The instrument, entitled Cyberbullying and Internet Danger Survey, was used to collect data regarding teacher knowledge of student Internet activities and their perception of the dangers students encounter online. This survey was adapted from surveys written by Willard (2005) and Patchin & Hinduja (2006). The adapted survey has a total of 27 questions and an additional four collecting demographic information.

The survey was divided into four sections. Section One, entitled Teacher Perception of Internet Safety, included 10 questions (1-10) regarding teacher knowledge and use of technology, including the Internet and cell phones. Questions also determined depth of knowledge regarding student technology use and dangers, including bullying or harassment. A sample question asked teachers if they had knowledge of student personal profiles on social networking sites, and if the profiles had information that could be dangerous to the student.

Section Two was concerned with cyberbully victimization. This section had a possible eight questions (11-18). All participants answered questions 11-14. Those who answered yes to question 14 then answered questions 15-18. Those who answered no
were directed to Section Three (question 19). Answers to those questions determined the extent of teacher knowledge regarding cyberbullying, including their ability to detect signs of victimization, bullying, or child abuse.

Section Three had questions concerning the effects of victimization. This section had a total of nine questions (19-27), that all participants answered, most of which were in a simple yes/no/don’t know format. A sample question from this section asked the teacher if they were aware of school or district policies regarding Internet safety and/or cyberbullying.

Section Four collected demographic information such as gender, level taught, years of teaching experience, and ability (self judged) to instruct students on Internet dangers. For example, the final question in the survey asked the teachers to evaluate their ability to instruct their students on the dangers they would encounter while using the Internet: excellent, good, moderate, or poor, with relation to their personal experience on the Internet.

As was the case with Hinduja and Patchin’s survey (2009), some questions in this instrument required yes/no answers while others had multiple answers, therefore creating the possibility of unequal numbers. Although Hinduja and Patchin’s survey (2009) was completed by students, it was measuring student perceptions. A major difference in this current study was that adults, teachers, were measured using similar questions.

Reliability of Instrument

The survey instrument is valid and reliable because it was adapted from an instrument created by Patchin and Hinduja (2006), revised by Hinduja and Patchin
(2009), and used in at least four major online surveys of teens. With the results of the first survey, Patchin and Hinduja (2006) refined the instrument and chose a new online venue of middle school students, increasing their sample size (n=384 to n=1,963). In their 2006 survey, many teen websites and social networking sites agreed to post the survey, so that the participant base was expanded to a greater sampling of the online network.

Because of criticism received regarding online survey methodology and its limitations, Hinduja and Patchin (2009), in their most recent survey, conducted a large scale project involving approximately 2,000 middle school students in a traditional setting. The reliability for this particular Cyberbullying Victimization Scale was Cronbach’s alpha = 0.736; for the Cyberbullying Offending Scale Cronbach’s alpha = 0.761 (p.209). “Since students were randomly selected to participate, results of the study should be representative of other students in other large districts of the United States as well” (p. 46).

Questions on the survey pertaining to teachers’ personal Internet usage were adapted from Willard’s (2006-2009) research. Willard, known for her resources for educators and parents that teach responsible Internet use for youth, also addressed the Children’s Online Protection Act Commission in 2000.

Data Collection

After obtaining IRB approval (Appendix C), the Superintendent or school board designee of the three selected school districts: Brevard, Seminole, and Volusia, was contacted to obtain permission to survey teachers in that district. Following receipt of district permission (Appendix D), contact e-mail and mailing addresses for principals of
schools that were pre-selected were obtained through the State of Florida Department of Education database, school district web sites, and through phone inquiries to the appropriate schools. The pre-selected school principals received an introductory packet containing an invitation to participate in the survey (Appendix E), along with a copy of the survey and specific information as to how participation would benefit their school and district; this was followed up by an e-mail confirmation. It was stressed that their school would not be identified in the survey or in the results of the study. When principals responded in an affirmative e-mail, they identified a school contact person that would distribute and collect the surveys on the researcher’s behalf. Due to the confidentiality of not identifying particular schools, these principal e-mails are not included in the appendix section, but are being retained by the researcher if needed.

The Principal’s designee was sent the research package, which included a letter of introduction and details of the study (Appendix F). This included the teacher invitation to participate along with applied consent forms (Appendix G), instructions, timelines, and return envelopes. To allow for anonymity, teachers were requested to return the survey instrument to the designee in a sealed envelope, who would then return all sealed envelopes to the researcher. As there were no identifiers, the elementary school surveys were coded blue, the middle school surveys green, and the high school surveys yellow. Results of the study will be shared with participating schools if requested.

**Data Analysis**

At the conclusion of the survey window, the data were entered into an EXCEL spreadsheet designed to tally results for each instructional level. These data were
transferred into Statistical Package for Social Sciences, Version 17 (SPSS) for statistical analysis. Table 2 delineates what data sources were used to answer the research questions, and the statistical calculations that were utilized to discover relationships or differences between the variables. Each section of the adapted survey measured specific teachers’ perceptions and related to one of the five research questions.

The null hypothesis for Research Question One was that there was no teacher perception of the dangers for their students online. Descriptive statistics were used to report teacher perceptions and knowledge of Internet dangers for students.

The hypothesis for Research Question Two was that there was no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels. Questions from the survey were formed into a scale, using factor analysis and reliability testing, and served as the dependent variable in a one-way ANOVA separated by school level (Elementary, Middle, and High). Chi-Square tests of independence were run to test further relationships between factors.

The hypothesis for Research Question Three was that there was no difference between the amount of personal Internet knowledge and use teachers had and their perception of Internet danger to their students. The same factor created as a part of Research Question Two was analyzed by descriptive statistics, split by the responses to Survey Question 33, which addressed ability to instruct students on Internet-related dangers. Chi-Square tests of independence were then run to test for further relationships between the factors.

The hypothesis for Research Question Four was that there was no relationship between the amount of personal Internet knowledge and use teachers had and their
knowledge of Internet-related laws and policies for protection of students. Survey Questions 25 through 27, which were all dichotomous in nature and addressed knowledge of laws of protection, were compared to responses for Question 33, which addressed personal levels of Internet knowledge and use. Chi-Square tests of independence were run to find the significance of the relationships.

The hypothesis for Research Question Five was that there was no difference in demographic factors (age, gender, or years of experience) contributing to teacher perceptions of Internet dangers to students. The same factor created as a part of Research Question Two was analyzed by an Independent T-Test for the gender variable, and a Kruskal Wallis test for age and years of experience. Chi-Square tests of independence were run to test for further relationships between the factors.

**Summary**

The research design and procedures described in this chapter were designed to report teacher perceptions of student Internet dangers, such as cyberbullying and cyberstalking (sexual predators). They were also designed to measure differences in these perceptions based on level taught, years of teaching, or knowledge of federal/state laws, or district policies. The subject participants for the study were Florida elementary, middle, and high school teachers (N = 450) selected from three central Florida districts. The instrument used in the study was an adapted paper survey originally developed by Willard (2005) and Patchin and Hinduja (2006). Sections of the instrument collected data on teacher knowledge of the Internet, cyber victimization and its effects, and
demographic data. Chapter Four presents the results of the data analyses, which will be clearly linked to the respective research questions.
CHAPTER FOUR: DATA ANALYSIS

Introduction

The purpose of this study was to discover what knowledge teachers had with regard to student online activities and could they perceive the dangers that their students would encounter while on the Internet. The researcher also sought to discover whether there were relationships between level taught in school (elementary, middle, or high school), age, gender, years of experience, and teacher knowledge and perception of Internet dangers.

This chapter contains the major findings of the study, including a description of the respondents. In order to examine the hypotheses established for this study, statistical analyses of the teachers’ responses to the survey instrument were performed to assist in answering the five research questions that guided the study. Details of the statistical analyses will be included when reporting on the findings for each research question.

Research Questions

1. To what extent, if any, do teachers perceive the Internet as dangerous to students?
   
   H01: There is no difference in teacher perceptions of student Internet dangers when compared to teachers’ personal levels of Internet knowledge and use.

2. To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?
   
   H02: There is no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels.
3. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?

H03: There is no difference in teacher perceptions of student Internet dangers when compared to teachers’ personal levels of Internet knowledge and use.

4. What relationship, if any, exists between teacher knowledge of Internet-related laws and policies for protection for students and their personal levels of Internet knowledge and use?

H04: There is no relationship between the amount of personal Internet knowledge and use teachers have and their knowledge of Internet-related laws and policies for protection of students.

5. To what extent, if any, is there a difference in teacher perceptions of Internet dangers to students when examining different demographic factors?

H05: There is no difference in teacher perceptions of Internet dangers to students when examining the demographic factors (age, gender, or years of experience).

Survey Distribution and Response Rates

After obtaining university Institutional Review Board approval (Appendix C), the Superintendent, or school board designee of the three selected school districts: Brevard, Seminole, and Volusia, was contacted to obtain permission to survey teachers in that district. Following district permission, the selected school principals of five elementary, five middle and five high schools in each district, received an introductory packet containing an invitation to participate in the survey. Principals agreeing to have their
school participate were sent the research package, which included details of the study, teacher invitations, applied consent forms, instructions, timelines, and return envelopes. As there were no identifiers, the elementary school surveys were coded blue, the middle school surveys green, and the high school surveys yellow. Results of the study are being shared with participating schools at their request.

Forty-five schools were originally contacted and invited to participate, twenty-two principals agreed to have their schools participate, which was less than half (49%) of the schools originally contacted. Within each school, a purposeful selection of core and technology/media teachers received the surveys. Four hundred-fifty surveys were distributed with three hundred seventy-two returned, yielding an 82.6% survey rate.

**Demographic Data**

The population in this study consisted of a purposeful sample of four hundred fifty central Florida public school teachers ($N=450$); one hundred fifty from each level: elementary, middle, and high schools. The sample size became the three hundred and seventy-two (82.6%) teachers that completed the survey and participated in the study ($N=372$). The largest group of respondents were high school teachers (146, 39.2%), followed by middle school teachers (125, 33.6%) with the smallest group of respondents (101, 27.2%) at the elementary level. Of those that responded to the gender question ($n=354$), 288 (81.4%) were female, and 66 (18.6%) were male; 18 teachers did not indicate their gender. When responding to age ($n=365$) the largest group of respondents were between 50-59 years of age (104, 28.5%), followed closely by those 40-49 (89, 24.4%) and 30-39 (81, 22.2%) years of age. Teachers in the 20-29 years of age were
represented at 14.5% (n=53) with the smallest group of teachers in the oldest age range 60+ years (38, 10.4%); seven teachers did not indicate their age. When responding to the question on years of teaching experience (n = 353), the largest group of respondents fell in the 16-20 years of experience range (99, 28%). This was closely followed by 11-15 and 6-10 years of experience (88, 25%, and 80, 22.7% respectively). Fifty-two teachers (14.7%) had 0-5 years of experience, with the smallest group of teachers falling into the 21+ years of experience (34, 9.6%). Nineteen teachers did not indicate their years of teaching experience.

Analysis of Research Questions

Research Question One

To what extent, if any, do teachers perceive the Internet as dangerous to students?

H01: There is no teacher perception of the dangers to their students online.

To answer Research Question One (and subsequent research questions), survey items 1, 2, 4, 6, 9, 10, 21, 22, and 24 were combined into a single factor ranging from -9 to 9 that measured a teacher’s knowledge of the Internet. Each individual item had a value of -1, 0, or 1 with the exception of Aware of Internet Dangers which had values of -1, -0.33, 0.33, or 1 due to the addition of a somewhat response and the necessity to keep even spacing between values. Results are located in Table 3.
Table 3: Descriptives for Items Comparing the Knowledge of Internet Dangers Factor

\( (N = 372) \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequencies</th>
<th>Don't Know</th>
<th>Somewhat</th>
<th>Yes</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient WWW Navigation ( (N = 372) )</td>
<td>58</td>
<td>40</td>
<td>N/A</td>
<td>274</td>
<td>0.58</td>
<td>0.75</td>
</tr>
<tr>
<td>Aware of WWW Dangers ( (N = 372) )</td>
<td>19</td>
<td>16</td>
<td>235</td>
<td>102</td>
<td>0.42</td>
<td>0.47</td>
</tr>
<tr>
<td>Understand Sexting ( (n = 370) )</td>
<td>28</td>
<td>0</td>
<td>N/A</td>
<td>342</td>
<td>0.85</td>
<td>0.53</td>
</tr>
<tr>
<td>Profiles Contain Dangerous Info ( (n = 369))</td>
<td>17</td>
<td>193</td>
<td>N/A</td>
<td>159</td>
<td>0.38</td>
<td>0.57</td>
</tr>
<tr>
<td>Cyberbullying is Problematic ( (n = 365) )</td>
<td>26</td>
<td>18</td>
<td>N/A</td>
<td>321</td>
<td>0.81</td>
<td>0.55</td>
</tr>
<tr>
<td>Victims Know their Cyber stalker/bully ( (n = 371) )</td>
<td>48</td>
<td>131</td>
<td>N/A</td>
<td>192</td>
<td>0.39</td>
<td>0.71</td>
</tr>
<tr>
<td>Predators Finalize by Meeting Victim ( (n = 371) )</td>
<td>21</td>
<td>135</td>
<td>N/A</td>
<td>215</td>
<td>0.52</td>
<td>0.60</td>
</tr>
<tr>
<td>Game Violence Carries to Real Life ( (N = 372) )</td>
<td>32</td>
<td>134</td>
<td>N/A</td>
<td>206</td>
<td>0.47</td>
<td>0.65</td>
</tr>
<tr>
<td>Child Pornography a Threat ( (n = 371) )</td>
<td>37</td>
<td>29</td>
<td>N/A</td>
<td>305</td>
<td>0.72</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Note. Unequal n's due to number of respondents per survey item \( (N = 372) \).

Also explored were survey items 13, 19, and 20, which measured the number of ways cyberbullying can affect a student. These items included how cyberbullying was performed (Q 13), psychological effects (Q19), and potential adult behaviors a victim may turn to (Q20). Since respondents were provided with an opportunity to check all
responses that they felt applied, or all of the above, it was necessary to categorize the overall responses into categorical variables suitable for inferential analysis.

- Q13, Knowledge of Cyberbullying Methods: 1-4 checked items represented low knowledge; 5-8 checked items represented moderate knowledge, 9-11 checked items represented high knowledge. Factor ranges from 1 (Low) to 3 (High).
- Q19, Knowledge of Victim Behaviors: 1-5 checked items represented low knowledge; 6-10 checked items represented high knowledge. Factor ranges from 1 (Low) to 2 (High).
- Q20, Knowledge of Victim Behaviors as Adults: 1-3 items represented low knowledge; 4-6 checked items represented high knowledge. Factor ranges from 1 (Low) to 2 (High).

Counts and frequencies for these items in combined form are located in Table 4. Additional tables for questions 13, 19, and 20 for the cyberbullying methods, physical, and psychological effects for victims can be found in Appendix H, on Tables 29, 30, and 31.

Table 4: Descriptives for Cyberbullying Knowledge Items, Combined Factors
(N = 372)

<table>
<thead>
<tr>
<th>Item</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of Cyberbullying Methods (n = 359)</td>
<td>33</td>
<td>41</td>
<td>285</td>
<td>2.70</td>
<td>0.63</td>
</tr>
<tr>
<td>Knowledge of Victim Behaviors (n = 269)</td>
<td>31</td>
<td>N/A</td>
<td>238</td>
<td>1.88</td>
<td>0.32</td>
</tr>
<tr>
<td>Knowledge of Victim Behaviors as Adults (n = 299)</td>
<td>44</td>
<td>N/A</td>
<td>255</td>
<td>1.85</td>
<td>0.35</td>
</tr>
</tbody>
</table>

*Note. Unequal n’s due to number of respondents per survey item (N = 372).*
The null hypothesis for Research Question One is rejected because teachers do have knowledge of the dangers their students may face online. Further analysis as to how age, grade level taught, and years of experience affected this knowledge will follow in the remaining research questions.

**Research Question Two**

*To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?*

H0₂: There is no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels.

For Research Question Two, the factor representing knowledge of Internet dangers was compared against school level in a one-way ANOVA. Descriptive statistics, including means and standard deviations are located in Table 5.

<table>
<thead>
<tr>
<th>Level</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary (n = 96)</td>
<td>4.53</td>
<td>2.23</td>
</tr>
<tr>
<td>Middle (n = 123)</td>
<td>5.92</td>
<td>1.97</td>
</tr>
<tr>
<td>High (n = 138)</td>
<td>4.96</td>
<td>2.51</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\[ F(2, 354) = 11.22, p < .01 \]

The F-statistic, \( F(2, 354) = 11.22, p < .01 \), was significant, which means that a teacher’s comprehension does depend on the level of school. A Scheffe post-hoc analysis was utilized to determine which particular groups differed significantly from one another.
Teachers at the middle school level had significantly higher levels of knowledge of internet dangers at the $p < .01$ level ($M = 5.92, SD = 1.97$) than teachers at both the elementary ($M = 4.53, SD = 2.23$) and high school ($M = 4.96, SD = 2.51$) levels. Elementary and high school teachers, however, did not differ significantly from one another on this measure.

Individual chi-square tests of independence were run to test the relationship among each of the three variables representing knowledge of cyberbullying-related dangers with school level (elementary, middle, and high).

- Table 6, Knowledge of Cyberbullying Methods: not significant, $\chi^2(4) = 2.46$, $p = .65$
- Table 7, Knowledge of Victim Behaviors: not significant, $\chi^2(2) = 1.64$, $p = .44$
- Table 8, Knowledge of Victim Behaviors as Adults: not significant, $\chi^2(2) = 2.29$, $p = .32$

These non-significant results indicated that none of the cyberbullying knowledge-related variables were significantly related to school level.
Table 6: *Chi-Square Analysis for School Level and Knowledge of Cyberbullying Methods*  

\( (n = 358) \)

<table>
<thead>
<tr>
<th>School Level</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary ((n = 92))</td>
<td>9</td>
<td>9</td>
<td>74</td>
</tr>
<tr>
<td>Count</td>
<td>9.8</td>
<td>9.8</td>
<td>80.4</td>
</tr>
<tr>
<td>% of Row</td>
<td>0.2</td>
<td>-0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Middle ((n = 123))</td>
<td>9</td>
<td>18</td>
<td>96</td>
</tr>
<tr>
<td>Count</td>
<td>7.3</td>
<td>14.6</td>
<td>78.0</td>
</tr>
<tr>
<td>% of Row</td>
<td>-0.7</td>
<td>1.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>High ((n = 143))</td>
<td>15</td>
<td>14</td>
<td>114</td>
</tr>
<tr>
<td>Count</td>
<td>10.5</td>
<td>9.8</td>
<td>79.7</td>
</tr>
<tr>
<td>% of Row</td>
<td>0.5</td>
<td>-0.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Note. Difference in (n's) due to number of respondents per survey item ((N = 372)).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 = 2.46, df = 4, p = .65, \nu = .06. \)
Table 7: *Chi-Square Analysis for School Level and Knowledge of Victim Behavior* 

*(n=298)*

<table>
<thead>
<tr>
<th>School Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elementary (n = 82)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>9</td>
<td>73</td>
</tr>
<tr>
<td>% of Row</td>
<td>11.0</td>
<td>89.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.9</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Middle (n = 103)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>15</td>
<td>87</td>
</tr>
<tr>
<td>% of Row</td>
<td>14.7</td>
<td>85.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>High (n = 114)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>20</td>
<td>94</td>
</tr>
<tr>
<td>% of Row</td>
<td>17.5</td>
<td>82.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.8</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item (*N* = 372).

\( \chi^2 = 1.64, df = 2, p = .44, \nu = .07. \)
Table 8: Chi-Square Analysis for School Level and Knowledge of Adult Behaviors

\( (n = 268) \)

<table>
<thead>
<tr>
<th>School Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary ((n = 72))</td>
<td>(5)</td>
<td>(67)</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Row</td>
<td>6.9</td>
<td>93.1</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Middle ((n = 91))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>11</td>
<td>80</td>
</tr>
<tr>
<td>% of Row</td>
<td>12.1</td>
<td>87.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>High ((n = 105))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>15</td>
<td>90</td>
</tr>
<tr>
<td>% of Row</td>
<td>14.3</td>
<td>85.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.8</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

Note. Difference in \(n\)’s due to number of respondents per survey item \((N = 372)\).

\(\chi^2 = 2.29, df = 2, p = .32, \nu = .09.\)

The null hypothesis for Research Question Two was rejected because there was a significant difference \((p < .01)\) when comparing the knowledge factors of Internet danger by school levels.

**Research Question Three**

To what extent, if any, is there a difference in teacher perception of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?

H03: There is no difference in teacher perceptions of Internet dangers to students when compared to teachers’ personal levels of Internet knowledge and use.

Analysis for Research Question Three followed the same procedure as Research Question Two, comparing the results of the various factors (general knowledge and knowledge of cyberbullying-related topics) by levels of teacher self-reported Internet
comfort level (survey item 33). Due to small cell sizes, the moderate and poor comfort levels were combined into one group. Descriptive statistics for the comprehension factor by internet comfort level are provided in Table 9.

Table 9: Comparison of Knowledge Factors by Comfort (n=358)

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (n = 132)</td>
<td>5.57</td>
<td>2.55</td>
</tr>
<tr>
<td>Good (n = 168)</td>
<td>5.20</td>
<td>2.02</td>
</tr>
<tr>
<td>Moderate / Poor (n = 58)</td>
<td>4.21</td>
<td>2.36</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\[ F(2, 355) = 7.12, p = .01 \]

The \(F\)-statistic \(F(2, 355) = 7.12, p = .01\), was significant, which means that a teacher’s knowledge of Internet dangers does depend on the level of personal comfort. Teachers with Moderate/Poor personal comfort to instruct students on dangers had significantly lower levels of knowledge of internet dangers (\(M = 4.21, SD = 2.36\)) than teachers at both Good comfort (\(M = 5.20, SD = 2.02, p < .05\)) and Excellent comfort (\(M = 5.57, SD = 2.55, p < .01\)) levels. Good comfort and Excellent comfort level teachers, however, did not differ significantly from one another on this measure.

Individual chi-square tests of independence were run to test the relationship between each of the three variables representing knowledge of cyberbullying-related dangers with self-reported comfort (excellent, good, and moderate/poor).

- Table 10, Knowledge of Cyberbullying Methods: not significant, \(\chi^2(4) = 6.50, p = .17\)
• Table 11, Knowledge of Victim Behaviors: not significant, $\chi^2(2) = 4.41, p = .11$

• Table 12, Knowledge of Victim Behaviors as Adults: not significant, $\chi^2(2) = 0.17, p = .92$

These non-significant results indicated that none of the cyberbullying knowledge-related variables were significantly related to self-reported comfort. Levels of Cramer’s $v$, which measures practical significance, were all relatively low as well, mostly around .10.

Table 10: *Chi-Square Analysis for Comfort and Knowledge of Cyberbullying Methods*  

*($n=359$)*

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excellent</strong> ($n = 137$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>12</td>
<td>9</td>
<td>116</td>
</tr>
<tr>
<td>% of Row</td>
<td>8.8</td>
<td>6.6</td>
<td>84.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.2</td>
<td>1.7</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Good</strong> ($n = 164$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>17</td>
<td>22</td>
<td>125</td>
</tr>
<tr>
<td>% of Row</td>
<td>10.4</td>
<td>13.4</td>
<td>76.2</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.7</td>
<td>1.0</td>
<td>-0.2</td>
</tr>
<tr>
<td><strong>Moderate/Poor</strong> ($n = 158$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>4</td>
<td>10</td>
<td>44</td>
</tr>
<tr>
<td>% of Row</td>
<td>6.9</td>
<td>17.2</td>
<td>75.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.6</td>
<td>1.3</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

*Note.* Difference in $n$’s due to number of respondents per survey item ($N = 372$).

$\chi^2 = 6.50, df = 4, p = .17, v = .10.$
Table 11: Chi-Square Analysis for Comfort and Knowledge of Victim Behaviors (n=299)

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (n = 117)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>23</td>
<td>94</td>
</tr>
<tr>
<td>% of Row</td>
<td>19.7</td>
<td>80.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.4</td>
<td>-0.6</td>
</tr>
<tr>
<td>Good (n = 142)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>18</td>
<td>124</td>
</tr>
<tr>
<td>% of Row</td>
<td>12.7</td>
<td>87.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Moderate/Poor (n = 40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>% of Row</td>
<td>7.5</td>
<td>92.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\( \chi^2 = 4.41, df = 2, p = .11, v = .12. \)

Table 12: Chi-Square Analysis for Comfort and Knowledge of Adult Behaviors (n=269)

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (n = 104)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>13</td>
<td>91</td>
</tr>
<tr>
<td>% of Row</td>
<td>12.5</td>
<td>87.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Good (n = 127)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>14</td>
<td>113</td>
</tr>
<tr>
<td>% of Row</td>
<td>11.0</td>
<td>89.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Moderate/Poor (n = 38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>% of Row</td>
<td>10.5</td>
<td>89.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\( \chi^2 = .17, df = 2, p = .92, v = .03. \)
The null hypothesis for Research Question Three is rejected because there was a difference \( p < .01 \) when comparing teacher perceptions of Internet dangers to students to teachers’ personal knowledge and comfort level.

**Research Question Four**

*Is there a relationship between teacher knowledge of Internet-related laws and policies for protection of students and their personal levels of Internet knowledge and use?*

\( H_04: \) There is no relationship between teacher knowledge of Internet-related laws and policies for protection of students and teachers’ personal Internet knowledge and use.

For this question, the self-reported Internet comfort variable, survey item 33, was compared to the survey items that pertained to the following items:

- Knowledge of the Jeffrey Johnston Stand Up for All Students Act (Q25)
- Whether the teacher’s school has an Internet Safety Program (Q26)
- Whether the district has a cyberbullying policy (Q27)

Chi-square tests for independence were utilized to compare each of these questions to the teacher’s self-reported internet comfort level and detect any relationships. The relationship between internet comfort and knowledge of the Jeffrey Johnston Stand Up for All Students Act did prove to be marginally significant, \( \chi^2(2) = 6.05, p = .05 \). These results are located in Table 13. An examination of standardized residuals provided further indication into which groups of respondents responded differently than expected. More teachers claiming an excellent level of comfort knew about the Jeffrey Johnston Act than expected \( (SR = 1.5) \). On the other hand, there was a fewer-than-expected number of those claiming a good level of comfort who knew about the Act \( (SR = -1.6) \). This indicated that even those who claimed to have an average Internet knowledge did not know of this Act. In terms of practical significance, the
Cramer’s $\nu$ value of .13 indicated a low level of a practical relationship between the two variables of personal comfort and knowledge of the Act.

Table 13: Chi-Square Analysis for Comfort and Knowledge of Jeffrey Johnston Act

($n = 370$)

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excellent ($n = 137$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>110</td>
<td>27</td>
</tr>
<tr>
<td>% of Row</td>
<td>80.3</td>
<td>19.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.6</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Good ($n = 170$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>153</td>
<td>17</td>
</tr>
<tr>
<td>% of Row</td>
<td>90.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.7</td>
<td>-1.6</td>
</tr>
<tr>
<td><strong>Moderate/Poor ($n = 63$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>% of Row</td>
<td>82.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Note.* Difference in $n$’s due to number of respondents per survey item ($N = 372$).

$\chi^2 = 6.05, df = 2, p = .05, \nu = .13.$

While knowledge of the Jeffrey Johnston Act was not strong among teachers, Table 14 further displays descriptive statistics on levels and age range of those who responded to survey question 25 ($n=370$) concerning the Jeffrey Johnston Act. Teachers at the high school level (26%) knew more about the Act than middle school (8.9%) and elementary (5.9%) teachers. Of the teachers responding, the largest group, at all three levels, knowledgeable concerning the Jeffrey Johnston Stand Up for All Students Act was in the 50-59 age group (22.5%).
### Table 14: Descriptives for Item 25, Respondents that were Aware of Jeffrey Johnston Act by Age and Level (n = 55)

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Elementary n = 101</th>
<th>Middle School n = 123</th>
<th>High School n = 146</th>
<th>% by Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>7.5</td>
</tr>
<tr>
<td>30-39</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8.6</td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>18.0</td>
</tr>
<tr>
<td>50-59</td>
<td>3</td>
<td>4</td>
<td>16</td>
<td>22.5</td>
</tr>
<tr>
<td>60+</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>13.2</td>
</tr>
<tr>
<td>% by Level</td>
<td>5.9</td>
<td>8.9</td>
<td>26.0</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item (N = 372).

The relationship between Internet comfort and knowledge of whether their school had an Internet Safety policy or instructional program did prove to be statistically significant, \( \chi^2(2) = 10.04, p = .01 \). These results are presented in Table 15. An examination of standardized residuals provided further indication into which groups of teachers responded differently than expected. More teachers claiming a moderate or poor level of comfort did not know about having an internet safety program than expected (\( SR = 2.6 \)). This indicated that those who claimed to have a lack of internet comfort do not know about the existence of internet safety policies in their schools. In terms of practical significance, the Cramer’s \( \nu \) value of .17 indicates a reasonable level of a practical relationship between the two variables of personal comfort level and knowledge of a school safety program.
Table 15: Chi-Square Analysis for Comfort and Knowledge of School Safety Program

*(n = 359)*

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excellent (n = 134)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>23</td>
<td>111</td>
</tr>
<tr>
<td>% of Row</td>
<td>17.2</td>
<td>82.8</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.7</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Good (n = 165)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>28</td>
<td>137</td>
</tr>
<tr>
<td>% of Row</td>
<td>17.0</td>
<td>83.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.9</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Moderate/Poor (n = 60)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>% of Row</td>
<td>35.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>2.6</td>
<td>-1.3</td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item (N = 372).

$$\chi^2 = 10.04, \text{ df} = 2, \ p = .01, \ \upsilon = .17.$$ 

The relationship between internet comfort and knowledge of a cyberbullying policy did prove to be statistically significant, $$\chi^2(2) = 11.33, \ p < .01.$$ These results are located in Table 16. An examination of standardized residuals provides further indication into which groups of teachers responded differently than expected. Once again, more teachers claimed a moderate or poor level of comfort did not know about having a cyberbullying policy than expected ($SR = 2.8$). This indicated that those who claim to have a lack of internet comfort do not know about the existence of cyberbullying policies in their schools. In terms of practical significance, the Cramer’s $\upsilon$ value of .17 indicated a reasonable level of a practical relationship between the two variables of personal comfort level and knowledge of district cyberbullying policy.
Table 16: Chi-Square Analysis for Comfort and Knowledge of Cyberbully Policy

*(n = 357)*

<table>
<thead>
<tr>
<th>Comfort Level</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent <em>(n = 133)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>22</td>
<td>111</td>
</tr>
<tr>
<td>% of Row</td>
<td>16.5</td>
<td>83.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Good <em>(n = 166)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>25</td>
<td>141</td>
</tr>
<tr>
<td>% of Row</td>
<td>15.1</td>
<td>84.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Moderate/Poor <em>(n = 58)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>20</td>
<td>38</td>
</tr>
<tr>
<td>% of Row</td>
<td>34.5</td>
<td>65.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>2.8</td>
<td>-1.3</td>
</tr>
</tbody>
</table>

*Note.* Difference in *n*’s due to number of respondents per survey item *(N = 372).*

\[ \chi^2 = 11.33, df = 2, p < .01, \nu = .18. \]

The null hypothesis is rejected because there was significance in the relationship of reported personal Internet knowledge and knowledge of school and district Internet safety programs and policies. However, it should be noted that there was only a marginal significance between teacher self-reported Internet knowledge and teacher knowledge of the Jeffrey Johnston Stand Up for All Students Act.
Research Question Five

To what extent, if any, is there a difference in teacher perception of Internet dangers to students when examining different demographic factors?

H05: There is no difference in teacher perceptions of Internet dangers to students when examining the demographic factors (age, gender, and years of experience).

For Research Question Five, the same dependent variables as found in Research Questions Two and Three were analyzed with the same procedures but utilizing various demographics (gender, age, and years of experience) as independent variables.

Gender

An independent *t*-test was run to determine the differences in the knowledge factor by gender. As evidenced in Table 17, there was no significant difference, *t*(352) = 0.35, *p* = .73, between males (*M* = 5.09, *SD* = 2.35) and females (*M* = 5.21, *SD* = 2.32). There was no evidence that males and females comprehend the factor differently.

Table 17: Comparison of Knowledge Factors by Gender (*n* = 354)

<table>
<thead>
<tr>
<th>Cohort</th>
<th><em>M</em></th>
<th><em>SE</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (<em>n</em> = 288)</td>
<td>5.21</td>
<td>2.32</td>
</tr>
<tr>
<td>Male (<em>n</em> = 66)</td>
<td>5.09</td>
<td>2.35</td>
</tr>
</tbody>
</table>

*Note.* Difference in *n*’s due to number of respondents per survey item (*N* = 372).

Individual chi-square tests of independence were run to test the relationship among each of the three variables representing knowledge of cyberbullying-related dangers with gender:
• Table 18, Knowledge of Cyberbullying Methods: not significant, $\chi^2(2) = 0.21$, $p = .90$

• Table 19, Knowledge of Victim Behaviors: significant, $\chi^2(1) = 6.46$, $p = .01$
  o Greater than expected frequency of males with low knowledge of a victim’s behavior with respect to cyberbullying, $SR = 2.1$

• Table 20, Knowledge of Victim Behaviors as Adults: not significant, $\chi^2(1) = 1.49$, $p = .22$

These results indicate that knowledge of methods of cyberbullying and knowledge of adult behaviors because of childhood victimization were not dependent upon gender, but knowledge of victim behaviors was dependent upon gender. Levels of Cramer’s $\nu$ (Table 18) or phi (Tables 19 and 20), a measure of practical significance, were all relatively low with the exception of knowledge of victim behaviors, where phi was .15.
Table 18: *Chi-Square Analysis for Gender and Knowledge of Cyberbullying Methods*

\[(n = 357)\]

<table>
<thead>
<tr>
<th>Gender</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female ((n = 290))</td>
<td>26</td>
<td>34</td>
<td>230</td>
</tr>
<tr>
<td>Count</td>
<td>9.0</td>
<td>11.7</td>
<td>79.3</td>
</tr>
<tr>
<td>% of Row</td>
<td>-0.2</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>Male ((n = 67))</td>
<td>7</td>
<td>7</td>
<td>53</td>
</tr>
<tr>
<td>Count</td>
<td>10.4</td>
<td>10.4</td>
<td>79.1</td>
</tr>
<tr>
<td>% of Row</td>
<td>0.3</td>
<td>-0.3</td>
<td>0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.3</td>
<td>-0.3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item \((N = 372)\).

\[\chi^2 = .21, df = 2, p = .90, \nu = .02.\]
Table 19: Chi-Square Analysis for Gender and Knowledge of Victim Behaviors (n=297)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (n = 243)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>30</td>
<td>213</td>
</tr>
<tr>
<td>% of Row</td>
<td>12.3</td>
<td>87.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Male (n = 54)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>% of Row</td>
<td>25.9</td>
<td>74.1</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>2.1</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\[ \chi^2 = 6.46, df = 1, p = .01, \Phi = -.15. \]

Table 20: Chi-Square Analysis for Gender and Knowledge of Adult Behaviors (n = 268)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (n = 220)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>23</td>
<td>197</td>
</tr>
<tr>
<td>% of Row</td>
<td>10.5</td>
<td>89.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Male (n = 48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>% of Row</td>
<td>16.7</td>
<td>83.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.0</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

\[ \chi^2 = 1.49, df = 1, p = .22, \Phi = -.07. \]

Age

For age, the intent was to utilize a one-way ANOVA to test the difference in the knowledge factor among groups. However, one of the major assumptions of the one-way ANOVA, homogeneity of variances, was violated at the \( p < .01 \) level. To avoid having to transform the variable, the decision was made to utilize the Kruskal-Wallis test, which
determines differences in the location of each group instead of testing for pure
differences in means. This nonparametric test is assumption-free by nature and is
appropriate for cases such as these where an assumption for a one-way ANOVA was not
met. Table 21 provides the results for the significant Kruskal-Wallis test, $H(4) = 10.49, \ p = .03$. This result implied that there was a difference in knowledge based upon a teacher’s
age. The largest difference between the mean ranks was between the 60+ and the 20-29
group (134.44 vs. 204.86, respectively) implying that younger teachers understand the
Internet better than older teachers do.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 ($n = 52$)</td>
<td>204.86</td>
</tr>
<tr>
<td>30-39 ($n = 80$)</td>
<td>184.19</td>
</tr>
<tr>
<td>40-49 ($n = 88$)</td>
<td>172.10</td>
</tr>
<tr>
<td>50-59 ($n = 99$)</td>
<td>175.53</td>
</tr>
<tr>
<td>60+ ($n = 34$)</td>
<td>134.44</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item ($N = 372$).

$H(4) = 10.49, \ p = .03$

Individual chi-square tests of independence were run to test the relationship
among each of the three variables representing knowledge of cyberbullying-related
dangers with age.

- Table 22: Knowledge of Cyberbullies: not significant: $\chi^2(8) = 6.78, \ p = .56$
- Table 23: Knowledge of Victim Behaviors: not significant: $\chi^2(4) = 6.13, p = .19$
- Table 24: Knowledge of Victim Behaviors as Adults: not significant: $\chi^2(4) = 7.56$, $p = .11$

These non-significant results indicated that none of the cyberbullying knowledge-related variables were significantly related to age. Levels of Cramer’s $v$, which measures practical significance, were all relatively low as well, with the highest value at a low-to-moderate .17 (knowledge of victim behaviors as adults).
Table 22: Chi-Square Analysis for Age and Knowledge of Cyberbullying Methods

(*n = 286*)

<table>
<thead>
<tr>
<th>Age</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>8</td>
<td>5</td>
<td>39</td>
</tr>
<tr>
<td>% of Row</td>
<td>15.4</td>
<td>9.6</td>
<td>75.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.4</td>
<td>-0.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>30-39</td>
<td>8</td>
<td>10</td>
<td>62</td>
</tr>
<tr>
<td>% of Row</td>
<td>10.0</td>
<td>12.5</td>
<td>77.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.2</td>
<td>0.3</td>
<td>-0.2</td>
</tr>
<tr>
<td>40-49</td>
<td>5</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>% of Row</td>
<td>5.7</td>
<td>8.0</td>
<td>86.2</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.1</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>50-59</td>
<td>10</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>% of Row</td>
<td>31.3</td>
<td>46.9</td>
<td>21.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.2</td>
<td>0.9</td>
<td>-0.4</td>
</tr>
<tr>
<td>60+</td>
<td>2</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>% of Row</td>
<td>5.7</td>
<td>11.4</td>
<td>82.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.7</td>
<td>0.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Note.* Difference in *n’s* due to number of respondents per survey item (*N* = 372).

\( \chi^2 = 6.78, \text{df} = 8, p = .56, \nu = .10. \)
Table 23: *Chi-Square Analysis for Age and Knowledge of Victim Behaviors*

\( (n = 296) \)

<table>
<thead>
<tr>
<th>Age</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>% of Row</td>
<td>22.0</td>
<td>78.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>30-39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>7</td>
<td>60</td>
</tr>
<tr>
<td>% of Row</td>
<td>10.4</td>
<td>89.6</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>% of Row</td>
<td>9.1</td>
<td>90.9</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.3</td>
<td>0.5</td>
</tr>
<tr>
<td>50-59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>16</td>
<td>69</td>
</tr>
<tr>
<td>% of Row</td>
<td>18.8</td>
<td>81.2</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.9</td>
<td>-0.4</td>
</tr>
<tr>
<td>60+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>% of Row</td>
<td>19.2</td>
<td>80.8</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.6</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item \( (N = 372) \).

\( \chi^2 = 6.13, df = 4, p = .19, v = .14. \)
Table 24: Chi-Square Analysis for Age and Knowledge of Victim Behaviors as Adults

\[ n = 267 \]

\[
\begin{array}{ccc}
\text{Age} & \text{Low} & \text{High} \\
\hline
20-29 & & \\
\text{Count} & 7 & 31 \\
\% of Row & 18.4 & 81.6 \\
\text{Std. Residual} & 1.2 & -0.4 \\
30-39 & & \\
\text{Count} & 6 & 56 \\
\% of Row & 9.7 & 90.3 \\
\text{Std. Residual} & -0.4 & 0.2 \\
40-49 & & \\
\text{Count} & 3 & 63 \\
\% of Row & 4.5 & 95.5 \\
\text{Std. Residual} & -1.7 & 0.6 \\
50-59 & & \\
\text{Count} & 10 & 68 \\
\% of Row & 12.8 & 87.2 \\
\text{Std. Residual} & 0.3 & -0.1 \\
60+ & & \\
\text{Count} & 5 & 18 \\
\% of Row & 21.7 & 78.3 \\
\text{Std. Residual} & 1.4 & -0.5 \\
\hline
\end{array}
\]

\textit{Note.} Difference in \( n \)'s due to number of respondents per survey item (\( N = 372 \)).

\[ \chi^2 = 7.56, df = 4, p = .11, \nu = .17. \]

\textit{Years of Experience}

For experience, the intent was to utilize a one-way ANOVA to test the difference in the knowledge factor among groups. However, one of the major assumptions of the one-way ANOVA, homogeneity of variances, was violated at the \( p < .01 \) level.
To avoid having to transform the variable, the decision was made to utilize the Kruskal-Wallis test, which determines differences in the location of each group instead of testing for pure differences in means. This nonparametric test is assumption-free by nature and is appropriate for cases such as these where an assumption for a one-way ANOVA was not met.

Table 25 provides the results for the significant Kruskal-Wallis test, $H(4) = 9.9, p = .03$. This result implied that there was a difference in knowledge based upon a teacher’s years of experience. The largest difference among the mean ranks was between the 21+ years of experience and the 11-15 years of experience grouping (154.84 vs. 199.67, respectively) implying that teachers with a mid-range of experience understand the Internet better than teachers with more years of experience.

Table 25: *Comparison of Knowledge Factors by Experience*  

<table>
<thead>
<tr>
<th>Experience</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Years ($n = 52$)</td>
<td>189.65</td>
</tr>
<tr>
<td>6-10 Years ($n = 80$)</td>
<td>178.45</td>
</tr>
<tr>
<td>11-15 Years ($n = 88$)</td>
<td>199.67</td>
</tr>
<tr>
<td>16-20 Years ($n = 99$)</td>
<td>168.33</td>
</tr>
<tr>
<td>21+ Years ($n = 34$)</td>
<td>154.84</td>
</tr>
</tbody>
</table>

*Note.* Difference in n’s due to number of respondents per survey item ($N = 372$).  

$H(4) = 9.97, p = .04$
Individual chi-square tests of independence were run to test the relationship between each of the three variables representing knowledge of cyberbullying-related dangers with experience.

- Table 26: Knowledge of Cyberbullies: not significant, $\chi^2(8) = 11.95, \ p = .15$
- Table 27: Knowledge of Victim Behaviors: not significant: $\chi^2(4) = 9.47, \ p = .05$
- Table 28: Knowledge of Victim Behaviors as Adults: not significant, $\chi^2(4) = 4.43, \ p = .35$

These non-significant results indicated that none of the cyberbullying knowledge-related variables were significantly related to years of experience. Levels of Cramer’s $v$, which measures practical significance, were all relatively low as well, with the highest value at a low-to-moderate .18 (knowledge of victim behaviors as adults).
Table 26: Chi-Square Analysis for Experience and Knowledge of Cyberbullies (n = 357)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>11</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>% of Row</td>
<td>14.7</td>
<td>6.7</td>
<td>78.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.5</td>
<td>-1.2</td>
<td>0.</td>
</tr>
<tr>
<td>6-10 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>7</td>
<td>11</td>
<td>57</td>
</tr>
<tr>
<td>% of Row</td>
<td>9.3</td>
<td>14.7</td>
<td>76.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.0</td>
<td>0.8</td>
<td>-0.3</td>
</tr>
<tr>
<td>11-15 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>9</td>
<td>48</td>
</tr>
<tr>
<td>% of Row</td>
<td>5.0</td>
<td>15.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.1</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>16-20 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>2</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>% of Row</td>
<td>4.9</td>
<td>2.4</td>
<td>92.7</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.9</td>
<td>-1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>21+ Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>10</td>
<td>15</td>
<td>81</td>
</tr>
<tr>
<td>% of Row</td>
<td>9.4</td>
<td>14.2</td>
<td>76.4</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.1</td>
<td>0.8</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

χ² = 11.95, df = 8, p = .15, v = .13.
Table 27: Chi-Square Analysis for Experience and Knowledge of Victim Behaviors

\( (n = 297) \)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>% of Row</td>
<td>22.2</td>
<td>77.8</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>6-10 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>% of Row</td>
<td>8.2</td>
<td>91.8</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>11-15 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>% of Row</td>
<td>14.8</td>
<td>85.2</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.</td>
<td>0.</td>
</tr>
<tr>
<td>16-20 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>% of Row</td>
<td>3.0</td>
<td>97.0</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.8</td>
<td>0.7</td>
</tr>
<tr>
<td>21+ Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>16</td>
<td>70</td>
</tr>
<tr>
<td>% of Row</td>
<td>18.6</td>
<td>81.4</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.9</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

*Note.* Difference in \( n \)’s due to number of respondents per survey item (\( N = 372 \)).

\( \chi^2 = 9.47, df = 4, p = .05, \nu = .18 \).
Table 28: Chi-Square Analysis for Experience and Knowledge of Adult Behaviors

<table>
<thead>
<tr>
<th>Experience</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>10</td>
<td>47</td>
</tr>
<tr>
<td>% of Row</td>
<td>17.5</td>
<td>82.5</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>1.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>6-10 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td>% of Row</td>
<td>9.8</td>
<td>90.2</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>11-15 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>% of Row</td>
<td>6.4</td>
<td>93.6</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>16-20 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>% of Row</td>
<td>6.7</td>
<td>93.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>21+ Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>% of Row</td>
<td>13.7</td>
<td>86.3</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>0.5</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

Note. Difference in n’s due to number of respondents per survey item (N = 372).

χ² = 4.43, df = 4, p = .35, ν = .13.

The null hypothesis for Research Question Five was rejected because there was a significant difference between teachers’ perception of knowledge of Internet dangers for students and the demographic variables of gender, age, and years of experience.
Summary

The purpose of this study was to discover what knowledge teachers had with regard to student online activities, the dangers they could encounter, school policy and/or instructional programs, and district policy. Results of the survey from 372 Central Florida teachers were analyzed with descriptive statistics, ANOVA, Scheffe Post-Hoc Analysis, Kruskal-Wallis test, independent t-test, and chi-square tests of independence. To answer the research questions, survey items were used to focus on the extent of teacher knowledge and determine the various variables affecting this knowledge. Research Questions Three and Four were analyzed by comparing teacher knowledge of Internet dangers with their self-reported skill/ability level of comfort with knowledge of Internet. Demographic variables (gender, age, and years of experience) were also compared with knowledge of the Internet. A summary of the data analyses was included in this chapter, indicating the evidence to support that although teachers have knowledge of student online dangers, there are several factors affecting this knowledge. Chapter Five will provide a discussion of the data analysis, conclusions, and recommendations for future studies.
CHAPTER FIVE: DISCUSSION OF FINDINGS

Introduction

The purpose of this study was to determine if there were significant differences or relationships between teachers’ perceptions of knowledge of Internet dangers to students and factors such as demographics, self-reported comfort levels with Internet use, and with knowledge of policies and laws regarding Internet safety. The world of the Internet is constantly changing, and students will encounter harassment and dangers while pursuing their interests on line. When referring to the Internet, Willard (2009) stated an old paradigm where “adults understand the risks and the environment young people are interacting in and are generally in a position to detect and intervene in situations that present risk” (p. 1). The new paradigm would be that adults struggle to play catch-up to the young digital natives, and are not really present to intervene when needed. This was the conceptual framework for this study.

Three hundred and seventy-two teachers from three central Florida school districts were surveyed anonymously using a survey adapted from the works of Willard (2005) and Patchin & Hinduja (2006). These districts were selected due to similar demographics such as size, socioeconomic status, rural, urban, and suburban locations. Five schools from each level (elementary, middle, and high school) were invited to participate for a total of 450 possible teacher respondents. Three hundred seventy-two (82.6%) teachers participated in the study (N=372). The largest group of respondents was
high school teachers (39.2%), with the smallest group of respondents (27.2%) at the elementary level.

The analysis and interpretations of the results in Chapter Four rejected the null hypothesis for all of Research Questions One, Two, Three, Four, and Five. Significant differences were found between teachers’ perception of knowledge of dangers to students when compared with school levels, and self-reported Internet comfort level of knowledge, as well as the demographic variable of age and years of teaching experience. Significant relationship was found in Research Question Four between Internet personal comfort and knowledge of Internet Safety programs and cyberbullying policy. Although there was also a significant relationship found between Internet personal comfort and knowledge of the Jeffrey Johnston Stand Up for All Students Act, the significance was marginal (p=.05). Significant differences were also found between teachers’ perception of knowledge of victim behaviors and the demographic variable of gender. A discussion of the findings in relation to the literature, implications of the study, and recommendations for future research are presented in this chapter.

Statement of Problem

As technology expands, internet dangers for children online expand and are a growing concern for parents, teachers, and administrators. Since technology will continue to grow, adults play a major role in educating children concerning the dangers of being online. Since schools are dealing with more and more cybercrime, including but not limited to cyberbullying, cyberstalking, and sexual predators, it was essential to complete more research in the area of Internet dangers for students (Baker, 2002; Finkelhor, et al.,
2000; Hinduja & Patchin, 2009; Patchin & Hinduja, 2006; Willard, 2009) the knowledge of adults concerning those dangers (Berson & Berson, 2005; Willard, 2009), and how the laws protect students and school districts concerning online activities (Jeffrey Johnston Act, 2008; Protect our Children Act, 2008). Therefore, research was gathered on the dangers that students are exposed to with their online activities, compared to teachers’ knowledge and perceptions concerning these Internet dangers. Research was also conducted on teachers’ knowledge of Florida laws of protection regarding these Internet dangers such as the Jeffrey Johnston Stand Up for All Students Act, as well as whether the teachers have had professional development and/or training concerning Internet safety. In addition, this research sought to determine if teachers’ perceptions at each level, elementary, middle school, and high school were any different, or whether demographic factors such as gender, age, and years of experience affected this knowledge. Teacher knowledge of the internet and the dangers concerning students is important, therefore it was essential to find out if they were using this knowledge, or their training to teach students about dangers online, or assisting them if they were being victimized.

**Discussion of Findings and Conclusions**

The research reported on the findings of teacher perceptions of knowledge concerning Internet dangers for students in relationship to self-reported skills and ability of personal Internet knowledge and use. The findings of this research supported the conclusion that teachers do have knowledge of the Internet dangers. However, it should be noted that this knowledge differs with factors such as demographics or personal
Internet comfort. Evidence supporting limited adult knowledge of Internet dangers to youth is woven throughout the literature as well. (Finkelhor, Mitchell & Wolak, 2000; Hinduja & Patchin, 2009; Patchin & Hinduja, 2006; Willard, 2006, 2009).

Of particular importance in these findings, the researcher reported that teachers were unaware of the Jeffrey Johnston Stand Up for All Students Act, which was enacted in 2008. This law mandated that school districts develop policies prohibiting bullying and harassment, including cyberbullying and cyberstalking (Jeffrey Johnston Act, 2008), yet 85.1% of the teachers responding \((n = 315)\) did not know about this Act. It can be concluded from the results that if districts have bullying policies in effect, it appeared that teachers, at all levels, did not know about them. In 2007, the Center for Disease Control ranked suicide as the third leading cause of death for youth ages 10-24 (Hinduja & Patchin, 2009), and with the most recent suicide of Phoebe Prince in January, 2010, due to bullying, this would be of real concern to school district administrators. The following sections discuss the results for each research question.

**Research Question One**

*To what extent, if any, do teachers perceive the Internet as dangerous to students?*

**H0:** There is no teacher perception of the dangers to their students online.

For this research question, the null was rejected because the teachers did have perceptions of the dangers to their students online. The average mean for survey questions (1, 2, 4, 6, 9, 10, 21, 22, and 24) pertaining to general Internet knowledge of dangers was 5.14 of 9, which was an indication that on average, teachers were aware of Internet dangers to students. However, when answering question 2 on the survey, “My
students are aware of the dangers they may encounter while using the Internet,” 235 (63.2%) of the teachers responding (N = 372) answered somewhat. This would indicate that while the teachers had an awareness of certain terms or subjects concerning the Internet, they may not have a good working knowledge of the dangers to students.

Survey items 13, 19, and 20 questioned teachers about their knowledge of cyberbullying methods, child victim behaviors, and adult behaviors due to childhood victimization. These questions were in a list format where the respondent could choose all items they perceived related to the specific methods and behaviors. It is of the opinion of the researcher that the list should have contained some Internet terms that only teachers with proficient knowledge would recognize. An assumption was made that the teachers would check on what they were proficient. However, a teacher with an awareness of Internet terms, without an actual proficiency, may have selected them and would have scored in the high range. Another concern to the researcher was that 75 (13.2%) respondents scored in the low range when asked about victim behaviors a student may exhibit and carry over to adulthood with an additional 103 (18.1%) not responding at all. These victim behaviors (depression, anxiety, eating disorders, loss of friendships) can lead to suicide (Hinduja & Patchin, 2009; Willard, 2006; Wolak & Finkelhor, 2006), and as suicides related to bullying were on the rise, there was a need for these teachers to have more training in what behaviors victims will exhibit (Hinduja & Patchin; Willard; Wolak & Finkelhor).

For those respondents that did not respond at all to these questions, it was impossible to determine whether this was due to a willful skip of the question or a genuine lack of knowledge or awareness of the behaviors. This occurrence was noted as a
potential area for improvement for future surveying endeavors and was a limitation of the study.

Research Question Two

To what extent, if any, is there a difference of teacher perceptions of Internet dangers to students at the different levels; elementary, middle, and high school?

H02: There is no difference of teacher perceptions of Internet dangers to students online at the elementary, middle, or high school levels.

The null hypothesis for this question was rejected. The result of the one-way ANOVA indicated a statistically significant result (p<.01), which means that a teacher’s knowledge of Internet dangers does depend on the level of school he or she teaches. A Scheffe post-hoc analysis indicated that middle school teachers had significantly higher levels of knowledge than both the elementary and high school teachers did. This could be due to the fact that there is a high degree of socialization in the middle schools among students. Teachers instruct in teams and may have the opportunity to discuss individual students more often than at other schools. According to Finkelhor, et al. (2000), when a student is being bullied and harassed, their socializing routine changes (i.e., stops associating with friends). Middle school teachers may have been able to notice these changes in behavior more so than elementary or high school teachers would.

Minimal knowledge of the Internet dangers at the elementary level could be due to the fact that teachers at this level do not think that the students are tech savvy enough to be encountering dangers, or that their parents are guiding their online activities. However, prior research (Cox, 2009) indicated that elementary students are already on social networking sites and encountering cyberbullying, most without parent knowledge.
Minimal knowledge at the high school level could be due to the fact that these teachers just do not believe it is their responsibility to police student online activities. The demographic data also showed many older teachers (50+) at the high school level, who may not be conducting social online activities themselves, and may be truly unaware of the dangers. Research studies found that the emotional and psychosocial issues caused by bullying and harassment were leading to more and more suicides at the high school level (Finkelhor, et al., 2000; Hinduja & Patchin, 2009).

The findings of this research question indicated a need for more training regarding student Internet dangers and symptoms of victimization, especially at the elementary and high school levels.

**Research Question Three**

*To what extent, if any, is there a difference in teacher perception of Internet dangers to students when comparing teachers’ personal levels of Internet knowledge and use?*

H03: There is no difference in teacher perceptions of student Internet dangers when compared to teachers’ personal levels of Internet knowledge and use.

To examine hypothesis three, knowledge of Internet dangers was compared to a teacher’s personal comfort level when using the Internet. There was a significant relationship (p=.01) between teachers’ personal levels of Internet comfort and their knowledge of dangers, so the null hypothesis was rejected.

Not surprising, the findings indicated that teachers with a low comfort level with the Internet had low knowledge of student Internet dangers. The digital divide cannot be crossed to help students if teachers are not seeking out the information themselves (Willard, 2009). Willard also suggested that schools should create their own online social
networking site for teachers so that teachers can collaborate, share resources, and have discussion boards (2009).

It is important to note that question 33 on the survey was used to determine comfort level of knowledge teachers had of the Internet and their skill and ability level to instruct students. Question 33 stated, “As an educator, my ability to instruct my students on the dangers they will encounter while using the Internet is” the respondents were asked to complete this self-evaluation by selecting one from the following responses:

- Excellent; I am highly educated with regards to the Internet (I can easily maneuver through e-mail, blogs, gaming areas, chat rooms, social networking sites, etc.).
- Good; I am familiar with many aspects of the Internet (I am aware of the different types of social sites or chat rooms, but do not access them much).
- Moderate; I use the Internet when I need to (e-mail, research), but have never been on social networking sites, etc.
- Poor; I rarely use the Internet and am not familiar with many of its’ sites.

An interesting finding was that 301 of the teachers (83.8%) that responded to survey question 13 concerning knowledge of cyberbullying methods (N=359), self-reported themselves to be in the excellent/good comfort range. However, when it came to survey question 25, knowledge of the Jeffrey Johnston Stand Up for All Students Act (N=370), enacted when a 15 year old Florida student, Jeffrey Johnston, committed suicide because of many of these cyberbullying methods, only 44 (11.9%) self-reported themselves with skills in the excellent/good range to instruct students on the dangers. This was a great concern for this researcher. If teachers considered themselves as
proficient on the Internet and report they recognize ways in which cyberbullying takes
place but do not know what the Jeffery Johnson Stand Up for All Students Act is or who
Jeffery Johnston was how could they identify students that were being bullied? More
training was needed for all teachers at all levels on this law.

Research Question Four

What relationship, if any, exists between teacher knowledge of Internet-related laws and
policies for protection for students and their personal levels of Internet knowledge and
use?

H04: There is no relationship between knowledge of Internet-related laws and policies for
protection of students and their personal levels of Internet knowledge and use.

This question was interrelated with Research Question Three. Again, self-reported
comfort levels were compared to knowledge of policies and programs for protecting
students. The null hypothesis was rejected because there were significant relationships
between comfort level and the different policy items.

There was a marginally significant relationship (p=.05) between teacher comfort
level and knowledge of the Jeffrey Johnston Stand Up for All Students Act. Interestingly,
as the level of school increased from elementary, middle, to high school, so did the age of
respondent increase concerning knowledge of the Jeffrey Johnston Stand Up for All
Students Act, with the exception of the teachers in the 60+ group (Table 14).

Furthermore, high school teachers in the 50-59 age group seemed to know more about the
Act than all other age groups, regardless of school level. The findings indicated that in
general, teachers did not know about the Jeffrey Johnston Stand Up for All Students Act.
Therefore, having knowledge of Internet dangers did not equate to having knowledge of
the Jeffrey Johnston Stand Up for All Students Act. To protect students from these
dangers, and possible suicide (Hinduja & Patchin, 2009; Jeffrey Johnston Act, 2008),
district training must be the source of the Act and related policies.

Relationships between teacher comfort level and school and district policy
knowledge were also significant at p=.01 and p<.01 respectively. Not surprising, the
reported findings showed that teachers with a moderate to poor Internet comfort level
were unaware of school or district programs and policies concerning cyberbullying. The
significant findings reported in this research question supported the need for teacher
training at all levels in the areas of Internet laws, both at the school and district levels.
Furthermore, although cyberbullying programs seemed to be in place, there seemed to be
very little follow-up taking place in these districts. This further supported the need for
teacher training concerning laws on Internet safety but also supported the need for
administrative training as well.

Research Question Five

To what extent, if any, is there a difference in teacher perceptions of Internet dangers to
students when examining different demographic factors?

H05: There is no difference in teacher perceptions of Internet dangers to students when
examining demographic factors (age, gender, or years of experience).

To examine Research Question Five, knowledge of Internet dangers was
compared to teacher demographics (gender, age, and years of experience). This question
was interrelated to Research Questions Two, Three, and Four. There was a significant
difference between knowledge of Internet dangers and a teacher’s age (p=.03). The
results indicated that older teachers were, the less they knew about the Internet dangers,
with the exception of the 50-59 age group that was somewhat more knowledgeable than
the 40–49 age group. This is what one might expect since the younger teachers have more
technology skills than older teachers do because they use their skills more often.
Interestingly however, this was not the case when it came to knowledge of policy and
cyberbullying programs. Results of younger teachers reporting a greater knowledge of
Internet dangers did not correlate with Research Question Four where older teachers were
more aware of policy. One might ask if younger teachers do not know policy and do not
know about the Internet safety programs can they instruct students on Internet dangers.

There was also a significant difference based on a teacher’s years of experience
(p=.04) and teacher perceptions of knowledge of Internet dangers to students. The results
indicated that teachers in the mid-level range of their teaching career (11-15 years) had a
better knowledge of Internet dangers than their peers do. This could be because teachers
in the 11-15 year experience range were “tech savvy” and still young enough (early 30s)
to relate to the students. Teachers in this experience range (11-15) would have more
experience with the school environment than the less experienced teachers would, and
therefore would be able to build better relationships with their students. This would also
relate to ability to detect changes in socialization patterns, as previously discussed in
Research Question Two.

The null hypothesis for Research Question Five was rejected because there is a
significant difference between teachers’ perception of knowledge of Internet dangers to
students and the demographic variables of age and years of experience. There was a
significant relationship (p=.01) between teachers’ gender and their knowledge of victim
behaviors. Specifically, male teachers had a lower understanding of student victim
behaviors.
Implications of the Study

Data collected from this study, gathered information that suggests future in-service training for all teachers may have a positive effect on educating students about the dangers on the Internet.

1. Based on the results of this study, a major implication is that even though states have laws about Internet safety for students, school districts have policies, and schools have cyberbullying programs in place, there is a need for more training of teachers at all levels. This study supported the research of Willard (2005), Patchin & Hinduja (2006), and Wolak et al. (2006), that teachers do not have the necessary knowledge needed to instruct their students on Internet safety.

2. Although an average mean (5.14 of 9) of the teachers in these districts represent an awareness of Internet dangers to students, there seemed to be inconsistencies when compared with teacher perceptions of comfort level and knowledge of Internet dangers. Young teachers (20-29 years) who have probably gone through high school and college growing up with technology are competent, but lack knowledge on laws and policies. Many young teachers (20-29 years) may not even see the dangers unless they have experienced the dangers themselves. Teachers in this age range (20-29 years) need more training with policy and perhaps could be trainers of technology skills.

3. In contrast to implication number 2, older teachers (50+ years of age) with more years of experience seem to have a better knowledge of district and school programs and policies than younger teachers with less experience do. However, this group of teachers seems to be reluctant when it comes to utilizing the
Internet. More training is needed to encourage teachers to increase their skills and knowledge in the area of technology and the Internet.

4. Teachers within the 11-16 years of experience range seemed to be young enough to be “tech savvy” and in the school environment long enough to develop relationships with students to know the dangers students may experience online. More research is needed in the degree of knowledge this group of teachers may have that will add to the body of knowledge to support importance of relationships and dangers to students online.

5. Teachers at all levels, particularly the males within these districts had the need for training to identify victims of bullying/cyberbullying or harassment online. Research conducted by Hinduja and Patchin (2009) supported that behaviors initiated by bullying on or off line can lead to suicide, which was on the rise for students at all school levels. Teachers need to recognize subtle differences such as depression or anxiety. They need to be able to detect when a student suddenly stops associating with friends and becomes a loner, or many of the other symptoms a victim exhibits (Finkelhor, et al., 2000). This implication was interrelated with the last implication.

6. The data from this study offered the belief that school districts in Florida did not train their teachers with regard to the Jeffrey Johnston Stand Up for All Students Act. This Act does require teachers to be trained in the methods of bullying, as well in knowing the signs of a victim (Jeffrey Johnston Act, 2008). Three hundred fifteen respondents (85.1%) did not know about this Act regardless of age, level taught, or years of experience. Research supported reports of increased suicides
caused by cyberbullying, Jeffrey Johnston, Megan Meier, Rachael Neblett, and Ryan Halligan are just a few of such suicides (Hinduja & Patchin, 2009). This Act is a law in the state of Florida and part of a teacher’s responsibility within the school setting.

As districts develop their policies, they should also be ensuring that there are trainers at the school levels. Out of the 372 respondents, nearly one quarter (85) (22.8%) of them had no knowledge of safety programs at the school level, or did not respond at all. Again, this spoke to the safety of all students. If all of the teachers were not trained on district Internet safety protocol, or how to identify bullies or their victims, how can they possibly instruct their students on the same? This cannot be a professional development class that one elects to attend; it must be mandated for all teachers at all levels (Jeffrey Johnston Act, 2008).

**Recommendations for Future Study**

This study was conducted specifically to determine the extent of a teacher’s knowledge with regard to student Internet safety, and if there was a relationship between teachers’ knowledge and perception of Internet dangers and factors such as age, gender, years of experience, personal comfort, or level of school taught (elementary, middle school, or high school). Because a significant amount of the research supported teacher knowledge of Internet safety at some level (Baker, 2002; Finkelhor, et al., 2000; Hinduja & Patchin, 2009; Patchin & Hinduja, 2006; Willard, 2009), the researcher believed it would be a worthy endeavor to further explore the depth of their knowledge. Based on the results of the research, it was evident that the level of knowledge was paramount to
the ability to instruct students on Internet safety. With this in mind, it would be appropriate to conduct further research to explore whether teachers are simply aware of Internet safety terms such as cyberbullying, cyberstalking, or online predator, or have the ability to instruct a student how to avoid these personal dangers.

In addition, further research should include administrators. This study could be replicated to discover the knowledge level of administrators on Internet dangers for students with a second focus on follow-up regarding training on Internet safety programs.

This current study supported a gap in knowledge of law, policy, and programs within the teaching staff. Research examining whether the gap began at district, school, or teacher level would be beneficial when addressing the school district’s responsibility to instruct their students on Internet safety. Replication of the research in other districts, where demographics may differ from those in this study, would also be beneficial.

A final recommendation for future research derives from a limitation of this current research study. The survey instrument should include higher level technology terms to identify true personal knowledge of respondents instead of terms that may be commonly heard but not an active tool or behavior used or noted by the respondents. Questions should be stated to include wording such as “Have you ever been on (a particular) website,” “Do you have a profile on (specific social network site),” “Have you sent family pictures to friends on a social networking site,” to gather specific personal knowledge of proficiency of technology activities.
Summary

This study contributed to the body of knowledge in the area of school technology with regard to student Internet safety. More specifically, the purpose of this research was to determine the extent of teachers’ knowledge and perception of Internet dangers to students and examine specific factors that contribute to that knowledge.

The implications and recommendations surfacing from this study stem from a direct connection to the research presented previously (Baker, 2002; Finkelhor, et al., 2000; Hinduja & Patchin, 2009; Patchin & Hinduja, 2006; Willard, 2009), and are worthy of reiteration here. As technology expands, Internet dangers for children online expand and are a growing concern for parents, teachers, and administrators. Since technology will continue to grow, adults play a major role in educating children concerning the dangers of being online. All children will be exposed to things in cyberspace, what they do with the problematic things depends on the instruction they have received and the habits they have developed (Hinduja & Patchin, 2009).

As evidenced in the results, there were significant differences between teacher knowledge of student Internet dangers and age, personal comfort level, years of experience, and level of school taught. There was also a marginally significant relationship between teachers’ knowledge of Internet safety and their knowledge of the Jeffrey Johnston Stand Up for All Students Act. The need for more teacher training on student Internet dangers was woven throughout the results.

The focus of this study was on teachers’ perception of Internet dangers to students and their personal knowledge and use of the Internet. As a result, it is the researcher’s hope that there is a greater awareness of the influence that teacher training can provide to
increase knowledge of Internet dangers, policies and programs, as well as increase teacher ability in identifying victims and provide them with assistance.
APPENDIX A: LETTERS ASKING FOR AND GRANTING PERMISSION TO USE SURVEY INSTRUMENT
Dr.s Hinduja and Patchin,

My name is Michelle Baker, and I am an Ed. Leadership doctoral student at the University of Central Florida, Orlando, FL. I am currently working on my dissertation regarding teacher perception of student Internet dangers. I am writing to you today to seek permission to adapt your survey instrument for use in my research. I will adapt the survey to include the more recent social networking arenas (blogging, twittering, Facebook), as well as sections as specified below.

I am looking for a relationship between teacher Internet use and knowledge, and their perception of the dangers that their students may face while online. I am also looking for a relationship between their perceptions, and what they actually do to help their students: do they follow district/state protocol, can they even recognize symptoms of bullying or abuse, etc. With this information, I should be able to give school districts recommendations on teacher inservice training, staff development, etc.

Thank you for your consideration, and it would be an honor to use your survey instrument and any other information that you may have that could be beneficial to my research.

Michelle Baker
Assistant Principal
Geneva Elementary
Seminole County Public Schools
407-XXX-XXXX
Hello Michelle,

Thanks for the note and your interest in our work. You have our permission to use the instrument. For your information, I have attached an updated version of our instrument that includes questions about the newer online environments. We would certainly be interested in the findings of your work, please forward to us when appropriate. And be sure to let me know if you have any questions.

Best of luck with your project,

Justin Patchin

Justin W. Patchin, Ph.D.
Co-Director, Cyberbullying Research Center
Assistant Professor of Criminal Justice
Department of Political Science
University of Wisconsin-Eau Claire
105 Garfield Avenue
Eau Claire, WI 54702-4004
Phone: 715.836.4058
E-mail: patchinj@uwec.edu
www.cyberbullying.us
Ms. Willard,

My name is Michelle Baker, and I am an Ed. Leadership doctoral student at the University of Central Florida, Orlando, FL. I am currently working on my dissertation regarding teacher perception of student Internet dangers. I am writing to you today to seek permission to adapt your survey instrument for use in my research. I will adapt the survey to include the more recent social networking arenas (blogging, twittering, Facebook), as well as sections as specified below.

I am looking for a relationship between teacher Internet use and knowledge, and their perception of the dangers that their students may face while online. I am also looking for a relationship between their perceptions, and what they actually do to help their students: do they follow district/state protocol, can they even recognize symptoms of bullying or abuse, etc. With this information, I should be able to give school districts recommendations on teacher inservice training, staff development, etc.

Thank you for your consideration, and it would be an honor to use your survey instrument.

Michelle Baker
Assistant Principal
Geneva Elementary

RE: Permission to Use Survey Instrument
Sent by: nwillard On: July 15, 2009 11:26 PM

Attachments

Hi Michelle,

Please feel free to use my survey in this manner. I would love to receive your results.

I have also attached some material I am about to release on these issues.

Nancy

-----------------------------------------------------------------------------------------------
APPENDIX B: ADAPTED SURVEY INSTRUMENT
Cyberbullying and Internet Danger Survey

Teacher Perception of Student Internet Safety

The following questions will determine the level of understanding educators have with regard to student Internet safety. Please use an [X] to answer the questions on this survey.

1. My students are proficient when navigating the World Wide Web.
   - [ ] Yes
   - [ ] No
   - [ ] I Don’t Know

2. My students are aware of the dangers they may encounter while using the Internet.
   - [ ] Yes
   - [ ] No
   - [ ] Somewhat
   - [ ] I Don’t Know

3. Number of students with cell phones:
   - [ ] They all have one.
   - [ ] Most of them have one.
   - [ ] Less than half of them have one.
   - [ ] A few have one.
   - [ ] None of my students have a cell phone.
   - [ ] I Don’t Know

4. I know what the term sexting refers to.
   - [ ] Yes
   - [ ] No

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5. When my students are not at school, I think they conduct the following activities online (check all that apply):

- Studying/homework
- Using social networking sites
- Research
- Blogging
- E-mail
- Surfing the Internet
- Chatting
- Playing games
- None of These
- All of These

6. My students have personal profiles on social networking sites that contain information that could be dangerous to them.

- Yes
- No
- I Don’t Know

7. I have a social networking site profile.

- Yes
- No

If yes, can your students access your personal profile?

- Yes
- No

8. In general, are parents aware of their students’ online activities?

- Yes
- No
- I Don’t Know

9. Bullying online is a serious problem with today’s youth.

- Yes
- No

10. The majority of victims personally know their cyberstalker or cyberbully.

- Yes
- No
- I Don’t Know
Cyberbullying Victimization

Using the following definition, please answer the next set of questions.

Cyberbullying is when someone repeatedly harasses, mistreats, or makes fun of another person online or while using cell phones or other electronic devices.

11. I know people that are, or have been, cyberbullied.
   - [ ] Yes
   - [ ] No

12. These people are (check all that apply):
   - [ ] Myself
   - [ ] Family
   - [ ] Friends
   - [ ] Students
   - [ ] Other Staff Members
   - [ ] I do not know of anyone who has been cyberbullied.

13. My students can be cyberbullied or harassed in these online environments:
   - [ ] In a chat room
   - [ ] On MySpace
   - [ ] Through e-mail
   - [ ] On Facebook
   - [ ] Through cell phone text messages
   - [ ] On Twitter
   - [ ] Picture or video mail
   - [ ] On YouTube
   - [ ] On any other social networking site
   - [ ] In virtual worlds (such as Second Life, Gaia, or Habbo Hotel)
   - [ ] While gaming online
   - [ ] All of these

14. I have had a student, or students, confide in me that they were being cyberbullied.
   - [ ] Yes
   - [ ] No

If yes on #14, please answer questions 15-18; if no, please go to #19.
15. The student has been bullied in the last 30 days.
   ☐ Yes
   ☐ No

16. The student was bullied
   ☐ A few times
   ☐ Many times
   ☐ Every day
   ☐ More than once a day

17. The student was bullied in the following manner (check all that apply):
   ☐ Someone posted mean or hurtful comments online.
   ☐ Someone posted a mean or hurtful picture online.
   ☐ Someone posted a mean or hurtful video online.
   ☐ Someone created a mean or hurtful webpage about them.
   ☐ Someone spread rumors online, by text, or twitter.
   ☐ Someone threatened to hurt them through a cell phone text message.
   ☐ Someone threatened to hurt them online.
   ☐ Someone pretended to be them online and acted in a way that was hurtful or mean to others.

18. The student knows who is victimizing him/her.
   ☐ Yes
   ☐ No
As an educator, are you aware of the physical and psychological effects that can occur as a result of online activities and/or victimization? Please answer the following questions.

19. Students who are victims of cyberbullying or cyberstalking exhibit (check all that apply):
   - Depression
   - Anger
   - Loss of academic focus
   - Loss of friendships
   - Sexual aggression
   - I Don’t Know

20. These adult behaviors are a result of being victimized as a child:
   - Smoking
   - Drinking alcohol
   - Depression
   - I Don’t Know

21. Sexual predators finalize their stalking by meeting in person with their victim.
   - Yes
   - No
   - I Don’t Know

22. The violence that a student sees over and over in online gaming will carry over into their everyday life.
   - Yes
   - No
   - I Don’t Know
23. Online gambling is as addictive as its face-to-face counterpart.
   □ Yes
   □ No
   □ I Don’t Know

24. Child pornography crosses international boundaries, and threatens the lives of its victims.
   □ Yes
   □ No
   □ I Don’t Know

25. Are you aware of the Jeffrey Johnston Stand Up for All Students Act?
   □ Yes
   □ No

   If yes, briefly explain your knowledge of school district implications regarding this act.

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

26. My school has policies regarding Internet safety for students, including instructional programs.
   □ Yes
   □ No

   If yes, briefly explain how you, personally, implement such policy.

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
27. My district has policies regarding Internet safety and/or cyberbullying, including the expectation of instructional programs.
   □ Yes
   □ No

28. I have attended a district professional development session related to this policy or cyberbullying?
   □ Yes
   □ No

Please recall the title of your professional development session.

__________________________________________________________________
__________________________________________________________________

Demographic Information

To complete this survey, please answer the following demographic information.

29. What is your gender?
   □ Female
   □ Male

30. What is your age range?
   □ 20 – 29
   □ 30 – 39
   □ 40 – 49
   □ 50 – 59
   □ 60+
31. Level taught:
   - Elementary – Primary (Grades 2-3)
   - Elementary – Intermediate (Grades 4-5)
   - Elementary Other (Media, Technology)
   - Middle School (Grades 6-8)
   - High School (Grades 9-12)

32. Years of Teaching Experience:
   - 0-5
   - 6-10
   - 11-15
   - 16-20
   - 21+

33. As an educator, my ability to instruct my students on the dangers they will encounter while using the Internet is:
   - Excellent; I am highly educated with regards to the Internet (I can easily maneuver through e-mail, blogs, gaming areas, chat rooms, social networking sites, etc.).
   - Good; I am familiar with many aspects of the Internet (I am aware of the different types of social sites or chat rooms, but do not access them much).
   - Moderate; I use the Internet when I need to (e-mail, research), but have never been on social networking sites, etc.
   - Poor; I rarely use the Internet and am not familiar with many of its’ sites.

Thank you for taking your valuable time to answer this survey. Your answers will expand the field of research, and may lead to new methods of instructing students on the dangers of Internet use.
APPENDIX C: IRB APPROVAL
Approval of Exempt Human Research

From: UCF Institutional Review Board #1
   FWA00000351, IRB00001138

To: Kathleen M. Baker

Date: March 29, 2010

Dear Researcher:

On 3/29/2010, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination

Project Title: Florida Teacher Perceptions Concerning Internet Dangers for Students
Investigator: Kathleen M Baker
IRB Number: SBE-10-06847
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB.

When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/29/2010 10:56:28 AM EST

IRB Coordinator
APPENDIX D: DISTRICT APPROVAL LETTERS
April 27, 2010

Dear Ms. Baker,

Thank you for your application to conduct research in the Brevard Public Schools. This letter is official verification that your application has been accepted and approved through the Office of Accountability, Testing, & Evaluation. However, approval from this office does not obligate the principal of the schools you have selected to participate in the proposed research. Please contact the principals of the impacted schools in order to obtain their approval. Upon the completion of your research, submit your findings to our office. If we can be of further assistance, do not hesitate to contact our office.

Sincerely,

Sylvia Mijuskovic
Sylvia Mijuskovic, Resource Teacher
Office of Accountability, Testing, and Evaluation
April 23, 2010

Ms. Michelle Baker
454 Haveloc Cove
Oviedo, FL 32765

Dear Ms. Baker,

I am in receipt of the proposal and supplemental information that you submitted for permission to conduct research in the Seminole County Public Schools. After review of these documents, it has been determined that you are granted permission to conduct the study described in these documents under the conditions described herein.

Each school principal has the authority to decide if he/she wishes to participate in your study. Teachers also have the option to choose to participate. Therefore, your first order of business is to contact the principals of the schools that you wish to involve in your research and explain your project and seek permission to conduct the research. You are expected to make appointments in advance to accommodate the administration and/or staff for research time. Please do not use SCPS email or courier mail to disseminate your research information.

Please forward a summary of your project to my office upon completion. Good Luck!

Sincerely,

Ronald L. Pinnell, Ed.D.
Executive Director
Secondary Education

Visit Our Web Site:
www.scps.k12.fl.us
April 15, 2010

Ms. Kathleen Michelle Baker
454 Haveloc Cove
Oviedo, FL 32765

Dear Ms. Baker:

I have received your request to conduct research within Volusia County Schools.
I have approved your request to conduct research on the topic of “Florida Teacher Perceptions Concerning Internet Dangers for Students.” As with all requests to do research, participation is at the sole discretion of the principals, teachers and parents of all students involved. Parent Consent Forms will be necessary for all data gathered from the students of Volusia County Schools.

By copy of this letter, you may contact the school principals who allow this research to be conducted with their faculty and students. We request that you conduct your survey with as little disruption to the instruction day as possible.

I would appreciate receiving a copy of your project at the completion of your study.

Sincerely,

[Signature]

Chris J. Colwell, Deputy Superintendent
Instructional Services

CJC/mh
Dear [Principal],

I am currently an Assistant Principal in Seminole County, Florida, and a doctoral student at the University of Central Florida. I am completing my dissertation research; the topic is Florida Teacher Perceptions Concerning Internet Dangers for Students. This research will investigate teacher knowledge of the dangers students face on the Internet, if teacher personal use affects their perception of these dangers, can they recognize the signs of victimization, and have they had school or district training regarding cyberbullying or sexual predators. The research will also seek to determine if there is a difference in perception depending on grade level, age or years of experience.

I would like to invite and request your school’s participation in this study. Please read the attached waiver (which will not require your signature should you wish to participate), district authorization, teacher letter, and survey instrument. For your convenience, I will follow up with you via e-mail. If you agree to your school’s participation, please reply to this e-mail.

Timeline: Within your reply, please designate a school contact that will receive and distribute the pre-labeled teacher packets. The survey (33 questions) should take approximately 10 minutes to complete, and is voluntary. Teachers should seal completed survey in envelope provided and return it to the school contact within one week. After one week, I will be in contact with school designee for return of the surveys.

Thank you for your time, and I look forward to your school’s participation.

Sincerely yours,

K. Michelle Baker
Doctoral Student
Department of Educational Leadership
University of Central Florida
Dear [Contact],

Thank you for agreeing to be the school contact for this survey implementation. Enclosed are surveys for your teachers. In order to get a full complement of the content areas, please distribute to the following teachers (whose counts I took from your website):

[LISTING OF GRADE LEVEL TEACHERS]
Media Specialist
Technology Teacher/Facilitator

I have provided a self-addressed envelope for the return of the surveys. If there are any extra surveys, please return them in the envelope as well. Please give them a gentle reminder to return them to you on Monday. If you have any questions before then, you may reach me at 407-XXX-XXXX.

Thank you so much for your assistance. I hope to collect much needed data in the field of cyberbullying and teacher knowledge thereof.

Michelle Baker
Doctoral Candidate
Educational Leadership and Technology
University of Central Florida
APPENDIX G: LETTER TO TEACHER AND EXPLANATION OF EXEMPT RESEARCH
Dear Fellow Educator,

My name is Michelle Baker, and I am a doctoral student at the University of Central Florida. As part of my dissertation research on student Internet safety, I am conducting a survey among fellow educators to gain insight into the working knowledge we, as teachers, have of our students’ Internet use and of the dangers they can encounter.

This particular survey instrument is an adaptation of previous research instruments used by renowned cyberbully researchers Sameer Hinduja, Ph.D., Justin Patchin, Ph.D., and Nancy Willard. They have interviewed teens on their views, and I have received permission to use the instruments to interview teachers. It is my hope that the information gained can be used for future research on instructional programs that will help safeguard our students with regards to cyberbullies and sexual predators.

Thank you for taking the time to complete this survey. You will remain anonymous, as there are no identifying markers. This researcher is seeking answers to knowledge of the Internet only, with the only demographic identifiers being level taught and years of experience.

Please return the survey to [school contact] by [date] or upon its completion. He/she will return your school’s results to me in a postage paid envelope. If you would like to view the results of my survey, please e-mail me at kmbaker001@msn.com.

Sincerely,

Michelle Baker
EXPLANATION OF EXEMPT RESEARCH

Title of Project: Florida Teacher Perceptions Concerning Internet Dangers for Students
Principal Investigator: Kathleen Michelle Baker
Faculty Supervisor: Janet McGee

You are being invited to take part in a research study. Whether you take part is up to you.

The purpose of this research is to determine your perception of the safety of students when using the Internet. The survey aims to discover your knowledge of Internet use, as well as your knowledge of the websites (social or other) available to students, and how your students are using the Internet or other electronic devices (cell phones). It also seeks to discover your knowledge of cyberbullying and cyberstalking, and if you could recognize the symptoms of a student who was being bullied or stalked, and what the long-term effects of such victimization would be. Finally, the survey will seek to discover whether you are familiar with the state of Florida’s Internet safety laws, and the requirements for your school district; have you had professional development or training?

Your principal has chosen [name] as my contact for your school. He/she has provided you with this introduction letter, a survey, and an envelope to seal the survey in once completed (for your anonymity). The 32 question survey should take only ten minutes of your time to complete, and will not identify you, personally, in any way. Once completed, please place it inside the envelope, seal it and take it to [name], who will place it in a large return envelope. Your school’s valuable information will be returned to me after one week for completion of the study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints Michelle Baker, Graduate Student, Educational Leadership, College of Education (407) 595-5228 or Dr. Janet McGee, Faculty Supervisor, Educational Leadership, College of Education, (407) 823-1080 or by email at Michelle.Baker@knights.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

University of Central Florida IRB
IRB NUMBER: SBE-10-06847
IRB APPROV'L DATE: 3/29/2010
APPENDIX H: EXTRA TABLES FOR RESEARCH QUESTION #1
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LIST OF REFERENCES


CQ Researcher. (2005). Bullying; are schools doing enough to stop the problem? CQ


Davis v. Munroe County Board of Education, 120 1390 (F.3d 1999).


