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**CYBERBULLYING AMONG YOUTH: AN ANALYSIS BY GENDER,  
RACE/ETHNICITY, AND GRADE**

A Thesis in

Criminal Justice

by

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## **Abstract**

While there has been a significant amount of research dedicated to traditional forms of bullying and gender, race/ethnicity, and grade in school, the research on cyberbullying, being a relatively new phenomenon, has been lacking. While there are some studies on cyberbullying and grade, race/ethnicity and grade in school, no studies were found that looked at cyberbullying with a combination of these variables. This study looks to expand the body of literature on cyberbullying by examining the differences between White and Non-White males and females in middle and high school grades by examining data collected by the 2009 National Crime Victimization Survey-School Crime Supplement. The current research shows that females are more likely than males to report cyberbullying victimization and Whites were only slightly more likely than Non-Whites to report having been a victim of cyberbullying. Once gender and race/ethnicity were combined the current research shows no significant difference in reports of cyber victimization between White and Non-White males and only marginal differences between White and Non-White females. However, Non-White males were almost twice as likely as White males to report a high frequency of cyberbully victimization. There is no significant difference in cyberbullying victimization between middle and high school males and females, but it is occurring with greater frequency to both genders in middle school. This research shows no significant difference between middle and high school students' reports of cyberbully victimization, however, high school White students were slightly more likely than middle school White students to report having been a victim of cyberbullying at least once during the school year. Finally, middle school White students reported being frequently cyberbullied significantly more than high school White students and middle school Non-White students reported a high frequency of being cyberbullied slightly more than their high school counterparts.

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## **Chapter 1**

### **Introduction**

According to Carney and Merrell (2001), the term bullying is defined as “repeatedly (not just once or twice) harming other. This can be done by physical attack or by hurting others’ feelings through words, actions, or social exclusion. Bullying may be done by one person or by a group” (p. 365). Bullying comes in many forms, from exclusion of individuals, to gossiping about individuals, to even assaulting individuals. Close to one third of middle and high school students are involved with bullying as either a perpetrator, victim, or both (Nansel, Overpeck, Pilla, Ruan, Simmons-Morton, & Scheidt, 2001).

While bullying can occur in various settings, it is mostly associated with schools (Brunstein Klomek, Marracco, Kleinman, Schonfeld, & Gould, 2007; Hinduja & Patchin, 2008). With the popularity of social networking sites (e.g., Facebook) and phone texting, bullying is now carrying over from school to home life through technological means. Known as cyberbullying, this form of victimization is similar to traditional bullying but the difference is that it occurs on the internet, through texting, or through other electronic means (Hinduja & Patchin, 2008).

One of the biggest concerns about cyberbullying is its negative consequences on the victims, including eliciting suicide ideations or attempts. For instance, Ryan Halligan, a 13-year-old boy, killed himself after being cyberbullied by a girl from his school. The girl began chatting with Ryan online over the summer break from school.



She then sent his online messages to other students in school. When the summer break was over, Ryan approached her at school with amorous gestures but she rejected him in front of their peers (Hinduja & Patchin, 2009). According to Hinduja and Patchin (2009), the rejection alone had not been the main problem. Rather, it was the perception Ryan had that everyone in school knew about what happened because the girl sent several people the messages he had sent her.

Cyberbullying others is not exclusive to teenagers. For example, Megan Meier, a 13 year-old-girl from Missouri started an online relationship with a “boy” who told her he did not have a phone and was homeschooled (Hinduja & Patchin, 2009). Megan corresponded with this person for about a month before receiving a message on MySpace telling her he did not want to be friends with her anymore. After that, comments were posted on MySpace calling her names like “fat” and “slut.” Megan killed herself by hanging herself in her bedroom closet where her mother found her. Six weeks later Megan’s parents found out that this “boy” that Megan had been talking to was actually the mother of one of Megan’s friends. The mother had created a fake MySpace profile to find out what Megan had been saying about her daughter (Hinduja & Patchin, 2009). These stories are tragic and show how serious the effects of cyberbullying can be for teenagers.

Research has consistently shown that kids who are bullied are more likely to have thoughts of suicide (Brunstein Klomek, et al., 2007; Hinduja & Patchin, 2010; Rigby & Slee, 1999) and are more likely to have attempted suicide than kids who are not bullied (Brunstein Klomek et al., 2007; Cleary, 2000; Eisenburg, Neumark-Sztainer, & Story, 2003). Furthermore, Hinduja and Patchin (2010) found that both traditional bullying and

cyberbullying were associated with suicidal ideations and that students who were cyberbullied were twice as likely to have attempted suicide than students who were not cyberbullied. The connection between cyberbullying and suicide ideations and suicide attempts further demonstrates that the issue of cyberbullying among teens and preteens should be taken seriously and not be dismissed as “kids being kids.”

While research is starting to emerge on cyberbullying, much more research is needed in order to better identify and deal with the problem. One obstacle with identifying cyberbullying is that some adults are not familiar with texting and/or social networking sites. Teens and preteens, on the other hand, use these technologies seamlessly because most of them grew up with these types of technologies in their everyday life (Hinduja & Patchin, 2009). While youth may use the internet for things like checking new comments on their Facebook page, or to talk with friends, most adults do not. In fact, parents might not think to check their child’s social networking pages or the text messages that their children send and/or receive from others (Hinduja & Patchin, 2009). If children and teens have access to the internet at home and are able to use the internet in their bedrooms, where their parents cannot easily see what they are doing, parents could miss signs of cyberbullying, whether their child is being bullied, or is bullying someone else. Another problem with identifying and preventing cyberbullying is that many parents want school officials to do something about this issue even though, unlike traditional bullying, cyberbullying does not usually occur at school (Ybarra, Diener-West & Leaf, 2007). Modern cell phones have internet capabilities and combined with a child’s ability to text message means that cyberbullying can occur virtually anywhere.

Previous research typically identifies victims of cyberbullying by gender, race/ethnicity, or grade in school, however, the interaction between these variables is under examined. The purpose of the current research is to examine the prevalence of cyberbullying victimization among teens and preteens by gender, race/ethnicity, and grade. More specifically, this study examines whether specific groups are more prone to victimization than others. For example, victimization by gender, race/ethnicity, and grade will be explored.

Although this research does not attempt to test any theories of crime and delinquency, social learning theory can be used to explain how cyberbullying emerges. Akers' social learning theory asserts that criminal or deviant behavior can be learned through imitating others who are close to an individual. Further, social learning theory states that the behavior will continue or desist depending on the positive or negative reinforcements that the behavior receives from others (Lilly, Cullen, & Ball, 2007). This theory could potentially explain traditional forms of bullying. Youths are exposed to violent behavior by simply turning on the television or with violent video games that are generally easily accessible. Taking it a step further, social learning theory can be used to explain cyberbullying because children often have a cell phone or computer access throughout the day. One could imitate cyberbullying by a peer, either by witnessing the cyberbullying, or by being a victim of cyberbullying, and perceive it as an easy way to pick on another person. This could be amplified if the imitation is of a family member such as an older sibling, or even the imitation of a parent who is cyberbullying someone else, as in the above example.

Because cyberbullying can be done with a certain level of anonymity, there may not necessarily be negative consequences to this behavior. It would not be hard for an adolescent to create a fake email account or a fake profile on a social networking site and begin cyberbullying others. Furthermore, parents who are aware that their child is engaging in some form of cyberbullying may have the perception that it is harmless bickering among children, thus not disciplining their child for this behavior.

## **Chapter 2**

### **Literature Review**

The purpose of this literature review is to examine the differences in several types of traditional bullying including physical, verbal, and relational as they relate to gender, race/ethnicity, and grade. While most of the previous research has reported similar findings when it comes to traditional bullying and gender or grade, research on bullying and race/ethnicity remains inconclusive. Research on cyberbullying, on the other hand, is just beginning to emerge as it is a relatively new phenomenon when compared to traditional types of bullying. While studies have been conducted in this area, there remains a need for further examination on the relationship between gender, race/ethnicity, grade, and cyberbullying.

### **Gender**

Reviewing previous research on the issue of gender and bullying helps provide a basic understanding of who is more likely to engage in, or be a victim of, different types of bullying. This information could help school officials set up effective bullying prevention programs by taking into consideration particular issues such as whether boys and girls should participate in prevention programs together or separately. If school officials know what the data show about bullying that occurs for boys and girls in their school, they can make better decisions about types of prevention programs that would work best. According to Li (2006), cyberbullying and traditional bullying show similar patterns with gender groups. It can be argued, then, that gaining an understanding of who

is more likely to be a victim of traditional bullying can help to inform who is at the highest risk of being a victim of cyberbullying.

### **Gender and Physical Bullying**

Previous research shows that males are, on average, more likely to engage in physical bullying compared to females (Bosworth, Espelage & Simon, 1999; Craig, 1998; Frisen, Jonsson & Persson, 2007; Jolliffe & Farrinton, 2006; Kowalski & Limber, 2007; Pellegrini & Bartini, 2000; Scheithauer, Hayer, Peterman & Jugert, 2006; Wang, Iannotti & Nansel, 2009). Research has also shown that boys are also more likely to be victims of physical bullying compared to females (Baldry, 2004; Berthold & Hoover, 2000; Gropper & Froschl, 2000; Scheithauer et al., 2006; Wang et al., 2009). For example, Gropper and Froschl (2000) studied bullying behavior through both observations and interviews. Overall, they observed a total of 25 classes in four different schools, which included 231 students in kindergarten through third grade. They found that both boys and girls were more likely to be physically bullied by boys and that male victims were more likely to respond to physical bullying by being physical back. Female victims, on the other hand, were more likely to respond to physical bullying verbally, such as calling the bully a name (Gropper & Froschl, 2000).

These findings are similar to a survey of younger students in a Midwestern, United States town. Berthold and Hoover (2000) surveyed 591 students in 4<sup>th</sup>-6<sup>th</sup> grade from five schools. Teachers distributed the surveys during class time. Then a student collected and took the surveys to the principal's office once completed. The results

showed that boys were significantly more likely than girls to report being a victim of physical bullying (37.4% of boys and 19.6% of girls) (Berthold & Hoover, 2000).

The differences in gender groups and physical bullying are not just specific to the United States. For example, Baldry (2004) surveyed 661 students in middle schools in and around Rome about their bullying experiences. There were significant differences across gender groups with more boys reporting that they were physically bullied compared to girls (male victims 14.6%, female victims 8.5%) (Baldry, 2004). Scheithauer and colleagues (2006) reported similar findings using a population of youth in grades 5 to 10. Specifically, these authors surveyed 2,086 from two German schools and found that boys reported being the victim of physical bullying more than girls (4.4% and 1.3%, respectively).

### **Gender and Indirect Bullying**

Indirect bullying can be broken down into two types: verbal and relational. Verbal bullying refers to calling someone mean or hurtful names and/or gossiping about someone. Relational bullying, on the other hand, is purposely excluding someone from a group and/or ignoring them. Because there are no physical signs of indirect bullying, it can be harder to identify unless the victim tells someone about it.

Not all forms of bullying victimization are more prevalent among males. Sawyer and colleagues (2007) gathered data pertaining to indirect bullying victimization of males and females. These authors surveyed students in 4<sup>th</sup>-12<sup>th</sup> grade from 107 schools in Maryland (N = 12,253 males and 12,092 females). Of the students that were surveyed,

more females (47.8%) than males (36.8%) reported being bullied relationally (Sawyer et al., 2007). Wang and colleagues (2009) collected data from 7,182 students in 230 schools and found similar patterns of gender differences in relational bullying victimization to that of Sawyer and colleagues (2007). Specifically, girls were significantly more likely than boys to be victims of relational bullying (girls 45.6% and boys 36.0%). Interestingly, Scheithauer and colleagues (2006) found no significant difference between gender groups for relational bullying in a study of 2,086 students in Germany. The authors attribute the differences in their findings from other studies to differences in methodology. For example, they used different definitions of bullying (Scheithauer et al., 2006).

While the findings of Wang and colleagues (2009) and Sawyer and colleagues (2007) were similar for gender and relational bullying victimization, they showed opposite patterns for gender and verbal bully victimization. For instance, Wang and colleagues (2009) found that boys were more often the victim of verbal bullying (38.0%) compared to girls (35.2%) but Sawyer and colleagues (2007) found that girls had a slightly higher verbal bully victimization rate (55.0%) compared to boys (51.8%). Even still, some researchers reported no significant difference between gender groups and verbal bullying victimization (Scheithauer et al., 2006).

### **Gender and Cyberbullying**

Even though cyberbullying does not usually occur during school hours (Ybarra, Diener-West & Leaf, 2007), surveying students during school classes is an opportune



way to gather data on the prevalence of cyberbullying. As previously mentioned, parents often expect school officials to try and combat this issue (Ybarra, Diener-West & Leaf, 2007) so integrating cyberbullying prevention programs with traditional bullying prevention programs could be a feasible option for school districts to satisfy the demands of parents while educating youth about cyberbullying at the same time.

In a study of 150 students in middle and high school, Agatston, Kowalski, and Limber (2007) found that the majority of females believed that cyberbullying was an issue among peers in their school while most of the boys did not. Previous research has shown that boys are more likely to engage in cyberbullying than girls, but that girls are just as likely, if not more likely, to be the victim of cyberbullying (Li, 2006; Wang et al., 2009; Kowalski & Limber, 2007). For example, Wang and colleagues (2009) collected data from 3,395 boys and 3,787 girls and found that the rate of boys who reported engaging in cyberbullying was significantly higher than girls (4.8% of boys vs. 2.9% of girls). However, the results of this study showed that girls were more often the victim of cyberbullying. This is similar to the findings of Kowalski and Limber (2007) who administered a 21-item cyberbullying questionnaire to 1,852 boys and 1,915 girls in the 6-8<sup>th</sup> grades in 6 different schools. Specifically, they found that while girls were significantly more likely to be the victim of cyberbullying compared to boys (15% and 7%, respectively), boys were actually more likely to be perpetrator of cyberbullying.

Similarly, Li (2006) also found that more boys than girls engaged in cyberbullying among 264 students in 7<sup>th</sup>-9<sup>th</sup> grade. However, their results revealed no significant difference between males and females in terms of being a victim of cyberbullying (Li, 2006).

Reyns, Henson, and Fisher (2010) found that the pattern of female cyber victimization continues beyond high school and into college. Specifically, in a web-based survey of 974 undergraduate college students, they found a significantly higher number of females reported being cyber victims of unwanted contact (after the person was asked to stop the contact), harassment, unwanted sexual advances, and cyberstalking. However, there were no significant differences between males and females for threats of violence online or identity fraud (Reyns et al., 2010).

Overall, using a wide range of populations from elementary school through college, the studies conducted to date show that males report being a cyberbully more than females but females report more occurrences of cyber victimization than males. More research should be done to determine the extent of the relationship between gender and cyberbullying, as well as explore the reasons why males tend to cyberbully and why females tend to be the victims of cyberbullying.

### **Race/Ethnicity**

To date, research on the topic of race/ethnicity and traditional bullying has been inconclusive. Some studies showed that African Americans are more likely to bully others (Juvonen, Graham, & Schuster, 2003; Wang et al., 2009), another showed that Hispanics were more likely to bully others (Spriggs, Iannotti, Nansel, & Haynie, 2007) and some showed no significant difference in race/ethnicity when it comes to being bullied in the traditional sense (Bosworth et al., 1999; Seals & Young, 2003).

## **Race/Ethnicity and Physical Bullying**

Wang and colleagues (2009) examined whether there were racial/ethnic differences in various forms of traditional bullying. The classifications for race/ethnicity in their study included 42.6% Caucasian, 18.2% African American, 26.4% Hispanic, as well as 12.8% who marked “other.” Using self-reported data from 7,182 students, they found significant differences across race/ethnicity for physical, verbal, and relational bullying as well as cyberbullying. Specifically, African Americans were more likely to engage in bullying behaviors across all types of bullying, including cyberbullying. However, African Americans were the least likely to report being the victims of all types of bullying, except for cyberbullying. Caucasians were least likely to report being the victim of cyberbullying. In terms of being physically bullied, those who marked “other” had higher rates of being victimized (Wang et al., 2009). Sawyer and colleagues (2007) reported similar patterns of physical bullying victimization across different races/ethnicities. Of the middle school students surveyed, there were 6,933 Caucasians, 2,215 African Americans, 517 Hispanics, 401 Asians/Pacific Islanders and 1,342 who marked “other” in the race category. For physical bullying, Caucasians were the least likely to report victimization although there was no statistical difference between African American students and other minorities (Sawyer et al., 2007). Sawyer and colleagues (2007) attribute the differences between Caucasians, African Americans and other minorities in the way bullying victimization is reported to cultural differences or beliefs about being a victim.

## **Race/Ethnicity and Indirect Bullying**

The patterns of results on the relationship between race/ethnicity and indirect bullying (i.e., verbal and relational) are similar to those reported on race/ethnicity and physical bullying. For example, Sawyer and colleagues (2007) found that those who marked “other” had the highest rates of victimization for both verbal and relational bullying. These findings are similar to those of Wang and colleagues (2009) for relational bullying victimization but are different from Wang and colleagues (2009) for verbal bullying victimization. According to Wang and colleagues (2009), Hispanics were more often the victim of verbal bullying.

Sawyer and colleagues (2007) found that while African Americans are less likely to report bullying victimization than Caucasians, other minorities are more likely to report bullying victimization than Caucasians. The authors state that African American students may have in fact experienced more incidents of bullying victimization but simply did not report it due to a perceived stigma associated with victimization (Sawyer et al., 2007). More specifically, African American students could be embarrassed or teased by their peers for being bullied or picked on more than other minorities or Caucasians. They could also be afraid of appearing weak or unable to fight back. More observational research should be done to determine if African Americans really are bullied less often than other races/ethnicities or if they are simply less likely to report victimization than others.

## **Race/Ethnicity and Cyberbullying**

Because cyberbullying is just starting to emerge as a problem among youth, there has been limited research conducted on racial/ethnic differences among cyberbullying incidents. However, the research that has been conducted suggests that race/ethnicity is not a significant factor in either being a cyberbully or being the victim of cyberbullying (Hinduja & Patchin, 2009; Ybarra, Diener-West, & Leaf, 2007). Caucasian students are only slightly more likely to report being involved with cyberbullying, as either the bully or the victim (Hinduja & Patchin, 2009). Similarly, Ybarra, Diener-West and Leaf (2007), in a study of 1,515 students found that there were no significant differences for race/ethnicity and reports of cyberbullying.

Wang and colleagues (2009) reported different findings than those mentioned above. In their study, African Americans reported engaging in cyberbullying more than Caucasians, Hispanics, and those who marked “other” for their race/ethnicity. Caucasians were the least likely to be involved with cyberbullying as the bully or the victim while those who marked “other” for their race/ethnicity were most likely to be cyberbullied compared to Caucasians, African Americans and Hispanics (Wang et al., 2009). These findings are similar to those reported on racial/ethnic differences in traditional forms of bullying.

Using a sample of college students, Reynolds and colleagues (2010) found that significantly more Non-Whites than Whites were the victim of unwanted contact (after the person was told to stop contacting the victim) and cyberstalking. There were no

racial/ethnic differences for online harassment, unwanted sexual advances online, threats of violence online or identify fraud (Reyns et al., 2010).

Overall, the research is inconclusive on the relationship between cyberbullying and race/ethnicity. More research should be done on race and cyberbullying to determine if there is a significant relationship between cyberbullying and race/ethnicity. School officials and parents could then target at-risk youth for prevention and intervention programs.

### **Grade**

Knowing the patterns of bullying behavior by grade level will help school officials determine appropriate prevention and intervention programs. For example, if school officials believe it is best to implement these programs at a very young age, the program might need to be tailored according to the population, particularly in terms of definitions used. For example, instead of using the broad term of physical bullying with a younger population, those teaching the program would need to ask questions about being “hit or pushed”. Similarly, instead of using the term verbal bullying, those teaching the program would need to ask questions such as, “have you ever been called a mean name?”

Previous research shows that the number of students who report being a bully tends to increase during elementary school, peak in junior high and then decrease in high school (Frisen et al., 2007; Williams & Guerra, 2007). For example, Williams and Guerra (2007) found this pattern of results across the various types of bullying including physical, verbal and cyber. Specifically, data were collected from students in Colorado in

the 5<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grades. In 8<sup>th</sup> grade, the percentages were higher than the students in 5<sup>th</sup> grade for verbal, physical and cyber bullying while the numbers dropped in 11<sup>th</sup> grade (Williams & Guerra, 2007). Of the 5<sup>th</sup> grade students, 32.6% reported bullying others verbally, 34.8% reported bullying others physically and 4.5% reported cyberbullying others. For verbal, physical and cyberbullying perpetration by the 8<sup>th</sup> grade students, the percentages reported were higher at 78.5%, 44.6% and 12.9% respectively. Again, the percentages of 11<sup>th</sup> grade students who reported bullying other verbally, physically, and cyberbullying, were less than those in 8<sup>th</sup> grade (72.3%, 37.8% and 9.9% respectively) (Williams & Guerra, 2007).

As for bullying victimization, current research shows that the figures are highest in elementary school, and then decrease through middle and high school (Frisen et al., 2007; Sawyer et al., 2007). Frisen and colleagues (2007) found the same to be true for both male and female victims in two high schools in Sweden (N=119). The students were asked about bullying incidents throughout their school years instead of collecting data from students of different ages (Frisen et al., 2007). Although this might be less reliable considering students were asked to recall specific incidents at a certain age and their memory may be inaccurate because of it, their results were still interesting. For both boys and girls, the older the bullied students got, the less likely they were to report being bullied (Frisen et al., 2007). Sawyer and colleagues (2007) also reported a decrease in the number of reported bullying victims as the grade levels in school increased. This is not to say that the number of bullying incidents or the number of bullies actually decreased, just the number of reported victims of the bullying acts.

These findings suggest that bullying prevention programs should be implemented in elementary school. Teaching younger students about different types of bullying behaviors and why it is wrong could help prevent them from engaging in these behaviors as they progress through school. Moreover, these programs could also help teach students why it is important to report bullying behaviors even if he or she is a bystander and not a victim. Education on bullying behaviors and programs designed to stop it might have prevented Ryan Halligan, Megan Meier, and others like them taking such drastic measures as to end their own lives.

### **Grade and Cyberbullying**

Determining the age at which cyberbullying typically begins could potentially have a large impact on decisions made by school officials as to when to begin prevention and intervention programs. For example, if students are so young that they are not even aware of what the internet is, or how text messaging works, they would more than likely be too young to understand what it means to be a cyberbully. These younger students may, however, understand what it means to call someone a mean name or push someone. So while prevention programs for traditional bullying may be effective at that age, incorporating cyberbullying prevention into traditional bullying prevention programs might not be as effective. The findings from research on grade and cyberbullying could also provide parents with an idea of when to begin talking to their children about this issue. Parents could discuss and explain cyberbullying to their child when giving him/her a cell phone, or more access to the internet at home.



Research has shown that cyberbullying differs from traditional bullying in that it tends to increase later in middle school (Williams & Guerra, 2007) or high school (Ybarra & Mitchell, 2004). This is expected because as children get older they are more likely to have access to the tools needed to be involved with cyberbullying, such as a phone and/or computer. Williams and Guerra (2007) indicate that only 4.5% of 5<sup>th</sup> grade students reported being cyberbullied. These figures are low so one could reasonably argue that cyberbullying most likely begins to occur at some point in elementary school. Hinduja and Patchin (2009) found that children who are involved with traditional forms of bullying are also more likely to be involved with cyberbullying both in terms of being the victim and being the offender. Because of the link between traditional and cyberbullying, teachers and school officials could target youth who are known to be involved with traditional forms of bullying for programs dealing with cyberbullying. More research should be done on this topic in order for parents and school officials to obtain a better understanding of the issue.

### **Gender, Race/Ethnicity, and Grade**

Examining the relationship between cyberbullying behaviors with multiple variables (i.e. gender and race/ethnicity, grade and gender, and grade and race/ethnicity, or some combination of the three) will give a more specific description of who is most likely to be victimized. While no cyberbullying study has yet to examine the issue in this way, Sawyer and colleagues (2007) have explored the relationship between traditional forms of bullying with regards to gender and race/ethnicity as well as gender and grade.

## **Gender and Race/Ethnicity**

Sawyer and colleagues (2007) surveyed 11,408 middle school students in Maryland about their experiences being the victim of physical bullying. This survey was extensive, grouping the demographic variables into several categories, including gender and race/ethnicity, gender and grade, and a combination of gender, race/ethnicity, and grade. Bullying was also broken down into the traditional categories of physical, verbal, and indirect (relational). Comparing gender and racial/ethnic differences among those bullied in middle school, minority females were more likely than Caucasian females to be the victim of physical bullying. Caucasian females were least likely to report being physically and verbally victimized while African American females were least likely to report being relationally bullied (Sawyer et al., 2007).

The same was true for the boys in that those who marked “other” for their race/ethnicity had the highest rate of being bullied physically, verbally and relationally. Furthermore, Hispanic boys reported the lowest rates of being bullied verbally and relationally and African American boys reported the lowest rates of being bullied physically (Sawyer et al., 2007).

## **Gender and Grade**

When categorized by gender and grade, Sawyer et al. (2007) reported interesting results. For boys in elementary school, 53% reported being the victim of verbal bullying while 54% of boys in middle school and 46% of boys in high school reported the same. For physical bullying among males, the research again showed that bullying victimization

in elementary school was lowest at 47%, peaked in middle school at 70% and then decreased to 35% in high school. However, relational bullying victimization among males decreased throughout the grade levels from 43% in elementary school to 35% in middle school and was the lowest in high school at 32% (Sawyer et al., 2007). The figures for females were similar for relational bully victimization in that it decreased as the school grade increased and verbal victimization peaked in middle school as it did for the boys. However, physical victimization for females decreased from 44% in elementary school to 40% in middle school and then decreased again to 26% in high school. This differs from the boys accounts of being physically bullied where it actually peaked in middle school (Sawyer et al., 2007).

### **Purpose of Study**

Further research on the combined variables of gender, race/ethnicity, and grade with cyberbullying will give parents and school officials a better indication of who is most prone to this type of victimization. Using a sample of youth in 6<sup>th</sup>-12<sup>th</sup> grade from the 2009 National Crime Victimization Survey-School Crime Supplement, the current study examines the relationship between combinations of gender, race/ethnicity, and grade when it comes to cyberbullying victimization. Specifically, differences between White and Non-White males and females, middle and high school males and females, and between White and Non-White, middle and high school students, will be examined. The hypotheses for the current research are: 1. High school males are more likely than middle school males to report being cyberbullied; 2. High school females are more likely than middle school females to report being cyberbullied; 3. Non-White males are more likely

than White males to report being cyberbullied; and 4. Non-White females are more likely than White females to report being cyberbullied.

## **Chapter 3**

### **Methods**

#### **Data**

The current study uses secondary data from the 2009 National Crime Victimization Survey (NCVS) School Crime Supplement (SCS). The NCVS is an ongoing survey that was created in 1972 and was originally made up of the National Crime Panel Surveys and the Central City surveys (Hagan, 2000). The purpose of the NCVS is to collect data from individuals on his or her experiences and on crimes even if the crimes were not reported to police ([www.icpsr.umich.edu/icpsrweb/NACJD/NCVS](http://www.icpsr.umich.edu/icpsrweb/NACJD/NCVS)). The approximately 100,000 participants included in the NCVS are selected from roughly 50,000 homes, which are divided into subsamples of approximately 10,000 homes each. Each individual in the home that is 12 years of age or older participates in the survey every six months for three years. After the last survey, the household is removed from the panel and another one is added. According to the NCVS 2009 report, this is done in order to reduce the burden that could occur if participants were permanently included in the study. The first interview is done in person with each subsequent interview being done by phone unless an in-person interview is needed for some reason (e.g., if an individual indicated he or she did not have a telephone).

The SCS is a set of questions asked to members of the household that are 12-18 years old. In addition to the NCVS, participants are asked several questions relating to their perception of, or experiences with school-related crimes. This supplement was used in 1989, 1995, 1999, 2001, 2003, 2005, 2007, and in 2009. For the purposes of the

current study, only questions pertaining to cyberbullying, gender, race/ethnicity and grade in school in the 2009 report will be used. The 2009 SCS was added to the NCVS from January 2009-June 2009 and the sample of 8,986 students was made up of: 4,597 males, 4,372 females; 7,085 White students, 1,245 African American students, 658 other minority students; and 1,740 middle school students and 2,586 high school students.

### **Hypotheses**

As previously stated, the current research question is, “Are certain groups of youth more prone to be victims of cyberbullying than others?” Subsumed under this overall research question are the following hypotheses: 1. High school males are more likely than middle school males to report being cyberbullied; 2. High school females are more likely than middle school females to report being cyberbullied; 3. Non-White males are more likely than White males to report being cyberbullied; and 4. Non-White females are more likely than White females to report being cyberbullied. These hypotheses are based on research by Williams and Guerra (2007) as well as Ybarra and Mitchell (2004) found that cyberbullying increases with age. While studies on race and cyberbullying have been inconclusive, Hinduja and Patchin (2009) found that children who are involved with traditional forms of bullying are also more likely to be involved with cyberbullying both in terms of being the victim and being the offender. Studies with traditional forms of bullying have found that, in general, African Americans are least likely to report being victimized and other minorities are most likely to report being victimized (Sawyer and colleagues, 2007; Wang et al., 2009). Furthermore, Wang and colleagues (2009) reported that minorities, other than African Americans, were more likely to report being the victim cyberbullying when compared to African Americans and Caucasians. In addition, Reynolds

and colleagues (2010) found that significantly more Non-Whites than Whites reported being the victim of some types of cyber victimization. As such, my hypothesis states that Non-Whites are more likely than Whites to be a victim of cyberbullying.

## **Measures**

### *Dependent Variable*

Cyberbullying victimization was operationalized in the 2009 NCVS-SCS by way of the following six questions: “During this school year, has another student: 1) Posted hurtful information about you on the Internet, for example, on a social networking site like MySpace or Facebook? 2) Threatened or insulted you through email? 3) Threatened or insulted you through instant messaging? 4) Threatened or insulted you through text messaging? 5) Threatened or insulted you through online gaming, for example, while playing a game, through Second Life, or through XBOX? 6) Purposefully excluded you from an online community, for example, a buddy list or friends list?” If a respondent answered “yes” to any of these six questions, a score of 1 was given for the measure of cyberbullying victimization. On the other hand, if a respondent answered “no” to all of these six questions, then a score of 0 was given for the measure of cyberbullying victimization.

### *Independent Variables*

The independent variables included in the study are gender, race, and grade. First, participants self-reported their sex (0 = male; 1 = female) and race (1 = White; 2 = Black/African American; 3 = American Indian/Alaska Native; 4 = Asian; 5 =Native Hawaiian/Other Pacific Islander; 4 = Other). The variable race was then collapsed into three categories (0 = White; 1 = African American; and 2 = other minority). Participants

were then asked what grade they were in and answered from the following options: 0 = fifth or under; 1 = sixth; 2 = seventh; 3 = eighth; 4 = ninth; 5 = tenth; 6 = eleventh; 7 = twelfth; 8 = other-specify; 9 = college/GED/post-graduate/other. If a participant answered 0, 8, or 9, he or she was ineligible for the SCS portion of the NCVS. The variable of grade was then collapsed into two categories (0 = middle school; 1 = high school). Where middle school included only respondents who indicated that they were in grades 6-8 and high school included respondents who indicated they were in grades 9-12.

### **Plan of Analysis**

This study will examine the differences between different combinations of gender, race/ethnicity and grade with regards to reports of cyberbullying victimization. Using Chi-square, I will first determine if there are any significant differences between males and females, White and Non-White students, as well as middle and high school students when asked if he or she had experienced at least one form of cyberbullying within the 2008-2009 academic year.

Again, using Chi-square, differences between the following students will then be examined with regards to cyberbully victimization: 1. Middle and high school males; 2. Middle and high school females; 3. White and Non-White males; 4. White and Non-White females; 5. Middle and high school White students; and 6. Middle and high school Non-White students. Following this, I will use a subsample of the students who reported at least one incidence of cyberbully victimization to determine if there are any significant differences between the same categories of students with regards to the frequency of cyberbully victimization (i.e., low vs. high rates).



## Chapter 4

### Results

Table 1 shows the differences across gender, race/ethnicity, and grade in school in whether or not students reported being cyberbullied. The results revealed that males (4.93%) were significantly less likely than females (7.58%) to report being a victim of cyberbullying at least once during the 2008-2009 academic school year. The sample size in this data did not support diving race/ethnicity into more categories than White and Non-White. The difference between Whites and Non-Whites was marginally significant with 6.55% of Whites and 5.04% of Non-Whites reporting that they had been the victim of cyberbullying at least once. There was, however, no significant difference between middle and high school students with regards to their likelihood of reporting cyber victimization.

**Table 1: Reports of cyberbullying victimization among students by sex, race/ethnicity, and grade.**

	<b>Never cyberbullied N (%)</b>	<b>At least one form of cyberbullying N (%)</b>	<b>Chi-square</b>
<b>Sex</b>			13.16***
Male	2103 (95.07%)	109 (4.93%)	
Female	1986 (92.42%)	163 (7.58%)	
<b>Race/Ethnicity</b>			2.76 <sup>t</sup>
White	3241 (93.45%)	227 (6.55%)	
Non-White	848 (94.96%)	45 (5.04%)	
<b>Grade</b>			1.11
Middle School	1621 (94.30%)	98 (5.70%)	
High School	2391 (93.51%)	166 (6.49%)	

<sup>t</sup>p < .10 \*\*\*p < .001

Table 2 assesses differences in the rate of victimization among students who reported at least one form of cyber victimization during the 2008-2009 academic school year. Victimization occurring once or twice during the school year is considered a low rate of cyberbullying victimization while victimization that occurs at least once a month is considered a high rate of cyberbullying victimization. As shown in Table 2, there was no significant difference between males and females or between white and Non-White students on the rate of cyberbullying victimization. There was, however, a significant difference in frequency of cyberbullying victimization between middle and high school students. That is, of the middle school students who reported being victimized, 43.01% reported high rates of cyberbullying victimization while 28.05% of high school students reported the same.

**Table 2: Frequency of cyberbullying among students who reported at least one form of cyber victimization by sex, race/ethnicity, and grade.**

	<b>Low-Once or twice per school year N (%)</b>	<b>High-At least once per month N (%)</b>	<b>Chi-square</b>
<b>Sex</b>			0.44
Male	73 (69.52%)	32 (30.48%)	
Female	105 (65.63%)	55 (34.37%)	
<b>Race/Ethnicity</b>			0.81
White	151 (68.33%)	70 (31.67%)	
Non-White	27 (61.36%)	17 (38.64%)	
<b>Grade</b>			5.97*
Middle School	53 (56.99%)	40 (43.01%)	
High School	118 (71.95%)	46 (28.05%)	

\*p < .05

When combining the demographic variables to further examine differences in cyberbullying victimization, the results show that there is no significant difference between middle school and high school males and females, White and Non-White males,

or middle and high school Non-White students (see Tables 3, 4, and 5). The difference between White and Non-White females, however, was marginally significant with 7.98% of White females reporting that they had been cyberbullied at least once and 5.95% of Non-White females reporting the same (see Table 4). The difference between middle and high school White students was also marginally significant. Of the middle school White students, 5.73% reported being the victim of cyberbullying at least once and 4.80% of high school White students reported the same (see Table 5).

**Table 3: Reports of cyberbullying victimization among middle and high school males and females.**

<b>Sex/Grade</b>	<b>Never cyberbullied N (%)</b>	<b>At least one form of cyberbullying N (%)</b>	<b>Chi-square</b>
<b>Males</b>			1.02
Middle School	853 (95.63%)	39 (4.37%)	
High School	1209 (94.68%)	68 (5.32%)	
<b>Females</b>			0.20
Middle School	768 (92.87%)	59 (7.13%)	
High School	1182 (92.34%)	98 (7.66%)	

**Table 4: Reports of cyberbullying victimization among White and Non-White males and females.**

<b>Sex/Race</b>	<b>Never cyberbullied N (%)</b>	<b>At least one form of cyberbullying N (%)</b>	<b>Chi-square</b>
<b>Males</b>			0.63
White	1650 (94.88%)	89 (5.12%)	
Non-White	453 (95.77%)	20 (4.23%)	
<b>Females</b>			1.99 <sup>t</sup>
White	1591 (92.02%)	138 (7.98%)	
Non-White	395 (94.05%)	25 (5.95%)	

<sup>t</sup>p <0.10

**Table 5: Reports of cyberbullying victimization among White and Non-White middle and high school students.**

<b>Grade/Race</b>	<b>Never cyberbullied N (%)</b>	<b>At least one form of cyberbullying N (%)</b>	<b>Chi-square</b>
<b>Whites</b>			1.93 <sup>t</sup>
Middle School	1283 (94.27%)	78 (5.73%)	
High School	1895 (93.07%)	141 (6.93%)	
<b>Non-Whites</b>			0.27
Middle School	338 (94.41%)	20 (5.59%)	
High School	496 (95.20%)	25 (4.80%)	

<sup>t</sup>p <0.10

Some differences emerge when examining the rate of reported cyberbullying victimization among students who had reported at least one occurrence of cyberbullying during the academic year. For example, Table 6 shows that 24.24% of males in middle school reported a high rate of cyberbullying victimization with a significant increase to 43.24% of males in high school reporting the same. Table 6 also shows that the difference between middle school females (42.86%) and high school females (30.61%) who reported a high rate of cyberbullying victimization is marginally significant. Table 7 further reveals a significant difference in frequency of cyberbullying victimization between White and Non-White males with 50% of Non-White males reporting a high frequency of being a victim of cyberbullying and 25.88% of Non-White males reporting the same.

**Table 6: Frequency of cyberbullying among middle and high school males and females who reported at least one form of cyber victimization.**

<b>Sex/Grade</b>	<b>Low-Once or twice per school year N (%)</b>	<b>High-At least once per month N (%)</b>	<b>Chi-square</b>
<b>Males</b>			4.00*
Middle School	21 (56.76%)	16 (43.24%)	
High School	50 (75.76%)	16 (24.24%)	
<b>Females</b>			2.35 <sup>t</sup>
Middle School	32 (57.14%)	24 (42.86%)	
High School	68 (69.39%)	30 (30.61%)	

<sup>t</sup>p < 0.10 \*p < .05

**Table 7: Frequency of cyberbullying among White and Non-White males and females who reported at least one form of cyber victimization.**

<b>Sex/Race</b>	<b>Low-Once or twice per school year N (%)</b>	<b>High-At least once per month N (%)</b>	<b>Chi-square</b>
<b>Males</b>			4.45*
White	63 (74.12%)	22 (25.88%)	
Non-White	10 (50.00%)	10 (50.00%)	
<b>Females</b>			0.34
White	88 (90.59%)	48 (35.29%)	
Non-White	17 (70.83%)	7 (29.17%)	

\*p < .05

There was also a significant difference in the frequency of being a victim of cyberbullying between White middle and high school students (see Table 8).

Specifically, of the White middle school students who reported being cyber victimized in the academic school year, 40.54% reported a high victimization rate but this percentage decreased to 28.06% for White students in high school. A marginally significant difference in the rate of cyberbullying victimization was also found for Non-White middle and high school students. That is, the percentage of Non-White students who

reported a high rate of cyberbullying victimization decreased from 52.63% in middle school to 28% in high school.

**Table 8: Frequency of cyberbullying among White and Non-White middle and high school students who reported at least one form of cyber victimization.**

<b>Grade/Race</b>	<b>Low-Once or twice per school year N (%)</b>	<b>High-At least once per month N (%)</b>	<b>Chi-square</b>
<b>Whites</b>			3.44*
Middle School	44 (59.46%)	30 (40.54%)	
High School	100 (71.94%)	39 (28.06%)	
<b>Non-Whites</b>			2.76 <sup>t</sup>
Middle School	9 (47.37%)	10 (52.63%)	
High School	18 (72.00%)	7 (28.00%)	

<sup>t</sup>p < 0.10 \*p < .05

## **Chapter 5**

### **Discussion**

This research examined the differences in not only cyberbully victimization of certain groups of youth, but also the frequency at which the bullying occurred among those who had reported at least one incident of victimization. The current research shows that females are more likely to report cyberbullying victimization than males. These findings are mirrored by previous research by Wang and colleagues (2009), Reynolds and colleagues (2010), as well as Kowalski and Limber (2007) which all showed that females are just as likely as boys, if not more so, to be a victim of cyberbullying. This difference could be that male students are not as likely to be cyberbullied, or it could be that they are less likely to report any cyberbully victimization that might be occurring due to a perceived stigma attached to males who are picked on or bullied. These students might not want to appear to be weak or unable to defend themselves.

#### **Gender and Race/Ethnicity**

Previous research has been inconclusive on the issue of race/ethnicity and cyberbullying and the current research shows only a marginal difference between Whites and Non-Whites with regards to reporting at least one form of cyberbully victimization. Whites were only slightly more likely than Non-Whites to report having been a victim of cyberbullying. Hinduja and Patchin (2009) had similar findings in that Whites were only slightly more likely to report cyberbully victimization than other race/ethnicity groups. Wang and colleagues (2009), however, found the opposite to be true. In this study, Whites were least likely to be involved with cyberbullying as either the victim or the

bully. In general, previous research has included more categories for Non-White students. For example, previous research by Wang and colleagues (2009) as well as Sawyer and colleagues (2007) found differences between African-American students and other minorities with regards to bullying victimization. Because of this, it could be useful to break up the Non-White category in this research into 3 other categories including African-American, Hispanic and a category marked “other” for those students who are not White but do not fall into the other minority categories.

Once gender and race/ethnicity were combined the current research shows no significant difference in reports of cyber victimization between White and Non-White males and only marginal differences between White and Non-White females. Although no previous studies were found to examine the combination of gender and race/ethnicity with cyberbullying victimization, Sawyer and colleagues (2007) combined these variables with traditional forms of bullying. The results of this study were different than those of the current study, showing that Non-White, Non-African American boys and girls were more likely than their White counterparts to report being the victim of traditional bullying.

One reason for this difference could be caused by the differences of categories for race/ethnicity. Sawyer and colleagues (2009) had separate categories for minorities who were not African American. Another reason the results may be different for cyberbullying is because of the anonymity that can come with cyberbullying. A victim of cyberbullying may not even know the person who is cyberbullying him or her. As previously mentioned, Megan Meier, the 13 year-old-girl from Missouri, was victimized



by the parent of a peer while Megan thought she had been communicating with a boy her own age the whole time.

Looking at the rate of victimization, however, there was no difference found between White and Non-White females, but there was a significant difference between White and Non-White males. Non-White males were almost twice as likely as White males to report a high frequency of cyberbully victimization. This difference could be due to the categories being limited to White and Non-White without more categories for minorities. Adding additional categories could not be done with this research because there were 85 White males and only 20 Non-White males.

### **Gender and Grade**

When examining the frequency with which the cyberbullying victimization had occurred among those who had reported at least one form of victimization during the school year, middle school males and females reported a high frequency significantly more than their high school counterparts. So, while there is no significant difference in cyberbullying victimization between middle and high school males and females, it is occurring with greater frequency to both genders in middle school.

Sawyer and colleagues (2007), in a study of traditional forms of bullying, found that for both males and females, there was a decrease of victimization from middle school to high school. These traditional forms of bullying include verbal, relational and physical bullying. While this study included elementary school students and found that some of these forms of bullying increased from elementary to middle school, the number of male

and female students who were traditionally bullied in any way decreased from middle to high school (Sawyer et al., 2007).

Terrie Moffitt's life-course-persistent/adolescence-limited theory (1993) could be an explanation as to why cyberbullying is occurring with greater frequency in middle school. Life-course-persistent individuals are those who engage in delinquent acts as a juvenile but do not stop their anti-social behavior as they reach young adulthood. Adolescence-limited individuals begin delinquent behavior as a teenager but desist as they mature into young adults (Moffitt, 1993).

The adolescence-limited approach, coupled with a probable increase in access to technology in middle school could explain the greater frequency of cyberbullying during this time period. Males and females in middle school are just reaching their teenage years when, according to Moffitt (1993), is when those who fall into the adolescence-limited category, are beginning to engage in delinquent behavior. Once these students reach high school, they are, in general, not new to the technology anymore, and are beginning to mature into young adults. Because Moffitt (1993) states that most juvenile offenders fall into the adolescence-limited category as opposed the life-course-persistent category, it would make sense that cyberbullying frequency would decline as the age of the cyberbullies increase.

### **Grade and Race/Ethnicity**

Interestingly, the current research shows no significant difference between middle and high school students reports of cyberbully victimization, however, when combined with race/ethnicity, marginal differences emerged between middle and high school White

students. High school White students were slightly more likely than middle school White students to report having been a victim of cyberbullying at least once during the school year.

Among those who reported this victimization occurring at least once there was a significant difference between middle and high school White students with regards to frequency of cyberbully victimization. Middle school White students reported being frequently cyberbullied significantly more than high school White students. Middle school Non-White students also reported a high frequency of being cyberbullied slightly more than their high school counterparts. Sawyer and colleagues (2007) had similar findings of a decrease in traditional bullying victimization from middle to high school. It is interesting then, that high school White students were slightly more likely to report being cyberbullied at least once, but middle school White students were more likely to report a high frequency of cyberbully victimization.

Because of the significant difference in the frequency of cyberbully victimization between middle and high school White students and the slight difference between middle and high school Non-White students, Moffitt's adolescence-limited category of offenders (1993) could be applied here as well. When age and gender, as well as age and race/ethnicity are combined it appears that the differences that emerged have less to do with race, and more to do with the age of the victims.

### **Limitations**

As previously mentioned, one limitation of this study is the collapsed variable of race/ethnicity into the two categories of White and Non-White with no categories to

separate African-American students from other minorities. When race/ethnicity was put into three categories of White, African American or Other, there was no significant difference in cyberbully victimization due to the small number of students who fell into these categories. This is important as previous research has shown that African American students are generally less prone to different forms of bully victimization than other minorities.

The separation of students' grade in school might also be insightful to show exactly when the frequency of cyberbullying begins to decrease. In this data, middle school is 6<sup>th</sup>-8<sup>th</sup> grades and high school is 9<sup>th</sup>-12<sup>th</sup> grades. The age of the students in these grades is generally 14-18 and sometimes goes up to the age of 19 depending on if a student was held back a grade for academic reasons. Because of the difference in age between 9<sup>th</sup> and 12<sup>th</sup> grade students, the frequency of cyberbullying victimization could be significantly higher in 9<sup>th</sup> grade than in 12<sup>th</sup> grade. Again, the low number of positive response rates did not allow for this variable to be separated into various categories.

As with any self-reported data, there is always a chance that the respondents have not given accurate information. The reasons for this could be intentional or unintentional. Students may have misunderstood the definition given of cyberbullying, or may have just been unwilling to admit to being cyberbullied even if the respondent was told their personal information was confidential. Future studies should include questions about the link between the victims and the cyberbullies to better understand the relationship, or if the victim knows the perpetrator at all.

## **Policy Implications**

Some studies have shown that certain bullying prevention/intervention techniques have no effect on bullying rates (Whitney, Rivers, Smith, & Sharp, 1994), some showed that the prevention technique actually increased bully victimization (Cowie & Olafsson, 2000; Pepler, Craig, Ziegler, & Charach, 1994) and another showed a significant decrease in bullying behaviors (Bagley & Prichard, 1998;). Of the two studies that showed significant decreases in bullying victimization, one included a social worker being assigned to the building (Bagley & Prichard, 1998) and the other included role playing by students, open discussions and reflective journals (Mueller & Parisi, 2000). These studies were done for traditional bullying prevention and not necessarily cyberbully prevention. Because cyberbullying does not usually occur during school hours or on school property, adding a social worker to the school building would probably not have the same effect on cyberbullying as it had on traditional bullying.

Hinduja and Patchin (2007) identified the following six components that should be a part of cyberbullying prevention techniques: 1. Specific definitions of cyberbullying and harassment; 2. Graduated consequences and remedial actions; 3. Procedures for reporting; 4. Procedures for investigating; 5. A clear statement that the students will be disciplined if his/her behavior (on or off campus) results in a considerable disruption of the educational environment; and 6. Procedures for educating students, teachers, staff, and parents about cyberbullying. Adding these six components to an already existing, effective bullying prevention program would be a good way to address concerns by parents and be cost effective for the school district as well.

As previously mentioned, there are some techniques that have been shown to significantly increase the bully victimization rate for those who participated in the program. School officials should be cautious when introducing such programs to their students and make sure that it is evaluated on a regular basis to ensure positive outcomes are being achieved.

### **Future Research**

Future studies should use longitudinal data to determine the relationship of these variables with cyberbullying in order to target specific youth who are at highest risk of cyberbullying victimization.

While no study on cyberbullying with all three variables has been found, Sawyer and colleagues (2007) did combine all three variables with traditional bullying. The overall results of this study show that African American boys and girls report less victimization across all types of bullying as grade in school increases. To date, no study has been found that examined the differences in cyberbullying when it comes to the combined variables of gender, race/ethnicity, and grade. Doing so will help identify trends of cyberbullying victimization and determine if it follows the same patterns as traditional bullying victimization. If appropriate, incorporating cyberbullying prevention and intervention techniques into existing programs for traditional bullying could be more cost and time effective than developing an entirely different program.

While it is important to know if specific groups of youth are more prone to being a victim of cyberbullying, future studies should examine if certain groups are more likely

to be the perpetrator. Prevention and intervention programs should be aimed at preventing or stopping cyberbullies by teaching youth who are at the age when cyberbullying is most likely to begin the effects that cyberbullying can have on the victims and the consequences that their specific school has in place for those who are caught cyberbullying peers.

## **Conclusion**

Despite these limitations, the current study adds to the previous research in several ways. Previous research on cyberbullying is lacking in regards to combining variables to determine more specific groups of youth who are prone to cyberbully victimization. While studies have combined these variables for traditional forms of bullying, studies on cyberbullying have generally not examined the relationship between cyberbully victimization and different combinations of gender, race/ethnicity, and grade.

Also, instead of giving a general definition of cyberbullying, the survey from which the data that was taken included questions about specific types of cyberbullying. This allows for a better understanding by students about what exactly cyberbullying entails, including the use of messaging or chatting on different gaming devices such as X-Box.

Because of the growth of social networking sites, the access to the internet from phones, and the ease with which youth seem to use this technology, it would be important to replicate this study with different areas to determine what kind of cyberbullying prevention program suit the specific needs of the individuals in those schools. Cyberbullying prevention programs should include topics that would not only teach

students how to safely use the internet, but also to empower students to tell an adult when they, or someone they know, is being cyberbullied.



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