A comparison of bullying in public and private schools in a small Midwestern community

Daniel J. Ryan
University of Northern Iowa

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A COMPARISON OF BULLYING IN PUBLIC AND PRIVATE SCHOOLS IN A SMALL MIDWESTERN COMMUNITY

A Dissertation

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

______________________________
Dr. Robert Decker, Chair

______________________________
Dr. Bruce Rogers, Co-Chair

______________________________
Dr. David Else, Committee Member

______________________________
Dr. Jan Bartlett, Committee Member

______________________________
Dr. Mohammed Fahmy, Committee Member

______________________________
Dr. Linda Nebbe, Committee Member

Daniel J. Ryan

University of Northern Iowa

December, 2011
DEDICATION

Michelle you are the reason this dissertation exists. Thank you for your perseverance and support throughout this long process. A special thank you to my Mother and Father, who made me understand the significance of hard work and believing in what could be instead of what is. Thank you to Ava, Emma, Lorelei, and Seamus. I love you all.
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A COMPARISON OF BULLYING IN PUBLIC AND PRIVATE SCHOOLS IN A SMALL MIDWESTERN COMMUNITY

An Abstract of a Dissertation

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

Dr. Robert Decker, Committee Chair

Dr. Michael J. Licari
Dean of the Graduate College

Daniel J. Ryan

University of Northern Iowa

December, 2011
ABSTRACT

Little attention has been given to the possible differences in bullying at private and public schools. Little significant research exists on bullying at private schools, its characteristics, and its differences from public schools. Inattention to this segment of the population can lead to broad and inappropriate generalizations that what works in public schools will work in private schools. This dissertation investigated to what degree there were differences between the number of incidences, types of bullying, and locations of bullying that took place at a public and private school in a small Midwestern community. The research examined the following factors and their relationship to bullying: gender, faith affiliation, number of years in residence in the current school system, race, and the socio-economic status of the school.

The methodology used to answer these questions was a quantitative based study where 412, sixth through eighth grade students from one public and one private school were surveyed about bullying. Five research questions guided the focus of this dissertation: (1) How many bullying incidences occur in both public and private schools? (2) What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)? (3) Where does bullying occur within private and public school buildings and campuses? (4) To what degree are there differences between the number of incidences, types, and locations of bullying that take place at public and private schools? (5) How do traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?
Within the limits of the study, the following conclusions were reached: (1) No statistically significant difference existed between the amount of bullying at the public and private school. (2) A statistically significant difference did exist in some types of bullying between the public and private school. (3) When comparing the two school systems a statistically significant difference did exist in some specific locations where bullying occurred. (4) A variety of relationships existed between certain student characteristics and the survey questions. (5) The lack of a statistically significant difference in the amount of bullying that occurred at the public and private school allows educators to apply research findings from public schools research to private schools within the parameters of this research.
CHAPTER 1

INTRODUCTION

Since the school shootings at Springfield, Oregon, Jonesboro, Arkansas and at Columbine High School in Colorado the media, politicians and educators have revisited the generally accepted theories on bullying and school atmosphere. As a result, changes have occurred in the creation of new state laws, school policies, and anti-bullying programs all aimed at reducing or stopping future school violence attributable to students feeling excluded or harassed at school.

The state of Iowa has created laws requiring school districts to have policies dealing with bullying in school and has gone as far as recommending the Olweus’ Core Program Against Bullying and Antisocial Behavior as a possible antidote to school bullying (Olweus, 2006). A training program to “Train the Trainers” was funded by the state of Iowa for educators, who have returned to their respective Area Education Agencies to train local school districts on the program.

However, while this effort has moved forward, little attention has been given to the possible differences in bullying at private and public schools. No significant research exists, of which the author is aware, on bullying at private schools, its characteristics, and its differences from public schools. Inattention to this segment of the population can lead to broad and inappropriate generalizations that what works in public schools will work in private schools.
Statement of the Problem

The problem of this study is to determine whether a significant difference in bullying exists between public and private schools in terms of prevalence, type, and location within the school building or campus.

Definition of Terms

_Bullying_: A person is bullied when he or she is exposed, repeatedly and over time, to negative action on the part of one or more other persons. Bullying involves three important characteristics: 1. The behavior is aggressive or malicious, 2. It is repeated and goes on over some time, 3. It occurs in an interpersonal relationship that is characterized by a certain imbalance in strength or power (Olweus, 1993a).

_Cyber-bullying_: Using the internet or other mobile devices to send or post harmful or cruel text or images to bully others (Willard, 2010).

_Olweus Survey Questionnaire for Students_: A survey created by Dan Olweus, a professor at the University of Bergen, Norway that is intended to measure the atmosphere of a school. Specifically, the survey measures actions and attitudes related to bullying (Olweus, 2006).

_Bully_: a student who repeatedly exposes another student to negative actions. An imbalance of power exists in the relationship (Olweus, 1984, 1993a).

_Victim_: a student who repeatedly is exposed to negative actions by another student/s. An imbalance of power exists in the relationship (Olweus, 1984, 1993a).
**Bully/victim (provocative victim):** A student who is bullied by others, but also bullies others. The student can be viewed as someone who provokes others to bully them (Olweus, 1993a).

**Assumptions**

General assumptions in this dissertation included the following elements. First, students answered the anonymous survey in an honest and accurate manner. Second, the administration of the survey followed the general guidelines created by the Olweus' Core Program Against Bullying and Antisocial Behavior. Third, the Olweus Survey Questionnaire for Students is an accurate tool for measuring the atmosphere in a private and public school. An analysis of the questionnaire was completed by Kyriakides, Kaloyirou, and Lindsay (2006) and determined the instrument to be psychometrically sound. Fourth, the research literature cited in this dissertation on bullying states several causes of and possible solutions for bullying behaviors. The literature is assumed to be accurate.

**Limitations**

This research is limited to private and public schools within the state of Iowa. While located in both rural and urban settings, Iowa private and public schools tend to be located in rural settings when compared with the rest of the United States. Differences in rural and urban settings thus might affect generalization of the data.

Socio-economic factors are another potential limitation on generalization of these research findings. The socio-economic background of families that send their children to private schools in Iowa could be dissimilar to the rest of the nation.
Another limitation regarding private schools in Iowa is the nature of their mission or founding group. A large percentage of private schools in Iowa were founded by religious groups with the intent of providing spiritual training in addition to the traditional educational mission of schools. Private schools in the state of Iowa are composed of the following groups: 68% Catholic, 29% Protestant, and 3% other. The composition and mission of private schools in other parts of the United States will vary and could affect the generalization of this project’s findings (State of Iowa: Department of Education, 2009).

Delimitations

Several delimitations were necessary to create a focused dissertation. First, this research dissertation is not meant to determine the causes of bullying within private schools. Although this is an interesting research topic, and a possible future venture, the lack of a foundation to base these concepts on limits the assertions that could effectively be made.

Another delimitation of this dissertation involves measuring parenting behaviors. Connections between parents’ behavior and children’s behavior do exist, but including this aspect in this dissertation was too problematic and beyond the scope of this research. Therefore, this research does not intend to analyze the relationship between parenting styles and bullying.
Conceptual Framework

Prevalence of Bullying

The prevalence of bullying varies by setting and country. The lowest rates of elementary school bullying were reported in Finland where 11.3% of over 5,000 students surveyed reported bullying behaviors (Kumpulainen et al., 1998). The highest reported occurrences of elementary bullying took place in Ireland where 49.8% of over 7,000 students surveyed reported bullying behaviors (O’Moore & Kirkham, 2001). One research finding in the United States indicates that 19% of elementary students were bullied (Pellegrini, Bartini, & Brooks, 1999).

Most research also indicates that the highest levels of bullying happened in elementary grades and declined as students reached middle school and high school (Lee, Buckthorpe, Craighead, & McCormack, 2008; Olweus, 1993a). However, one study showed that the decrease in bullying made a temporary jump when students transitioned to a new middle school (Pellegrini & Long, 2002). The reported levels of bullying in other countries contrast widely. The lowest reported levels of middle school bullying came from England with a 5% occurrence level (Menesini et al., 1997). The highest levels, for this age group, came from Italy with 14.7% of the population reporting being bullied (Baldry & Farrington, 1999).

Reports of bullying vary in the United States. Haynie et al. (2001) reported that 19.5% of U.S. youth reported bullying others three times or more over the past year and 8.8% stated they bullied others once a week or more. The victims’ results were similar with 16.9% being bullied three times or more over the past year and 8.4% being bullied...
once a week or more. A more recent survey in 2007 was conducted with students in three different school settings with wide ranging characteristics such as race, socio-economic status, and urbanicity. The results of this survey echoed the findings stated above with 76.5% of students reporting they felt safe at school (San Antonio & Salzfass, 2007).

Research on English high school age students found that 4.2% of students were bullied (Salmon, James, & Smith, 1998). One small study of Australian high school age students found that 25% of these students were the victims of bullying. While the percentage from this report was high compared to other countries for the same age group, the number was smaller than findings for elementary and middle school students in Australia (Peterson & Rigby, 1999).

Types of Bullying

The ways in which youth bully one another are endless, however youth have been surveyed to determine the types of bullying that occur most frequently (Baldry & Farrington, 1999; Nansel et al., 2001; Olweus, 1978). The most commonly identified type of bulling was verbal or name calling, followed by physical bullying, threats and spreading rumors about others (Smith & Madsen, 1999, Whitney & Smith, 1993). Boys and girls both suffered bullying in approximately the same amounts but the girls were involved in greater amounts of relational bullying such as spreading rumors (San Antonio & Salzfass, 2007).

The newest type of bullying to emerge in youth was cyber-bullying. The influx of electronic communication devices greatly increased students access to one another and their ability to communicate in mass. The Youth Internet Safety Survey-2 conducted by
Wolak, Mitchell, and Finkelhor (2006) surveyed 1,501 regular internet users between the ages of 10 and 17. The results from this survey indicated that 9% of these youth were harassed on-line in the past year. A much higher percentage used the internet to say something rude to another individual (28%) and nine percent admitted to using the internet to harass and embarrass others. Students who frequently use the internet were more likely to experience cyber-bullying. Cyber-bullying and in-school bullying were similar in nature and often occurred to the same students (Juvonen & Gross, 2008).

Location of Bullying

The location of bullying within a school is an area of great concern to those trying to reduce bullying. Whitney and Smith (1993) found that the majority of bullying occurred on playgrounds. Another study found that in addition to the playground, the hallway, cafeteria, and school bus were also frequent locations for bullying to take place (Astor, Meyer, & Pitner, 2001). A more recent survey in three schools with divergent characteristics found the hallway to be the most common location for bullying activity (San Antonio & Salzfass, 2007). The common trait for each of these bullying locations was a lack of adequate adult supervision (Astor et al., 2001; San Antonio & Salzfass, 2007).

Physical Characteristics

Differing opinions exist on the correlation or causation of physical disabilities, such as being overweight, personal hygiene and dress and the likelihood of being bullied. Researchers such as Olweus (1978, 1993a) found that physical characteristics, besides being physically bigger or smaller, do not correlate to being bullied. However, other
researchers determined that physical appearances such as the way a student dresses, attractiveness, or unusual mannerisms can increase the likelihood of being bullied (Natvig, Atbrektsen, & Zvarnstrom, 2001).

The gender of a student also affected the amount and type of bullying which occurs. The literature strongly suggested that boys are more likely to participate in bullying (Baldry & Farrington, 1999; Olweus, 1993a; Rigby, Cox, & Black, 1997). In regards to verbal bullying, a consensus also existed that boys and girls participated in an equivalent amount of bullying (Olweus, 1993b, 1994; Whitney & Smith, 1993). However, when considering bullying tactics such as social exclusion and rumors, research findings varied widely about who participates and at what levels (Baldry & Farrington, 1999; Olweus, 1994).

The role of race on the prevalence of bullying is unclear. In the United States, various conclusions were reached. One study found that bullying did not differ between Caucasian, African American and Hispanic children (Nansel et al., 2001). A second study within a school with a higher African American and Hispanic population found that Caucasian children were more likely to be the target of bullying (Graham & Juvonen, 2002). In a third study, African American and Caucasian children reported similar amounts of bullying, but Hispanic students reported lower levels of bullying (Hanish & Guerra, 2000).

Psychological Characteristics

Victims of bullying also show some specific characteristics or tendencies. Victims are more anxious and insecure than students in general and often are more
cautious, sensitive, and quiet. Students who reported being bullied on a regular basis were 3.2 to 4.2 times more likely to suffer from anxiety issues (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Salmon et al., 1998). Students who bullied others also reported having anxiety issues, but the evidence was mixed on this issue (Kaltiala-Heino et al., 2000; Olweus, 1993a). Bully/victims showed the highest level of anxiety. Their chances of having anxiety issues were 6.4 times higher than individuals not involved with bullying. Bullies, victims, and bully/victims all reported higher levels of suicidal ideation (Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999).

Another issue faced by victims was low self-esteem and negative self concepts. The current research in this area debated whether victims’ low self-esteem and negative self concept were the cause of them being a victim or whether it was a result of being a victim (Boulton & Underwood, 1993; Nansel et al., 2001). Despite this debate, the victim’s low self-esteem and negative self concept resulted in a high level of loneliness. When at school they were often alone and abandoned and failed to even have one good friend (Egan & Perry, 1998; Olweus, 1993a).

A common assumption was that bullies suffer from low self-esteem and negative self concepts. However, some research concluded that bullies do not suffer from underlying insecurity; instead bullies had unusually low insecurity or were roughly average (Olweus, 1993a). Bully/victims exhibited lower self-esteem and a higher degree of negative self concept. Individuals with these traits have been shown to repeat modeled behaviors more frequently than students with higher self-esteem. Some theorize this is an attempt to gain popularity with others (Mynard & Joseph, 1997). In regards to
bully/victims this could explain why they repeated the same negative bullying behaviors after they themselves are bullied.

The popularity of students involved in bullying varied depending on the students’ status as bully, victim, bully/victim, or uninvolved in bullying. In one study, bullies scored the same level of social acceptance as individuals who are not involved in bullying (Mynard & Joseph, 1997). Victims scored a lower level of social acceptance than both the bullies and those not involved. Bully/victims had the lowest level of social acceptance among their peers of all three groups involved in bullying (Mynard & Joseph, 1997).

In another study, the level of social acceptance and type of bullying varied by gender (Salmivalli, Lagerspetz, Bjorkqvist, Osertman, & Kaukiainen, 1996). Male bullies were found to be significantly less popular. The male bullies were rated by their peers as being low in social acceptance and high in social rejection. Female bullies, however, scored above the mean in social acceptance and social rejection. One possible theory was that since male bullying tends to be more physical and obvious that peers realized clearly what events were taking place. Since female bullying tended to be verbal or indirect it has been hypothesized that they can intimidate and draw admiration at the same time (Salmivalli et al., 1996).

The popularity or social acceptance of bullying has varied in different research projects. Mynard and Joseph (1997) found the social acceptance levels of bullies did not vary significantly from those who did not participate in bullying behavior. Olweus (1993a) also found that bullies did not suffer alienation from peers due to their bullying
behaviors. Other research indicated that some bullies were viewed as low status children. Salmivalli et al. (1996) stated in their research that boys who were bullies experienced lower social acceptance than peers who did not participate in bullying behaviors.

The current research solidly supports the notion that bully/victims are the least accepted of any group involved with bullying (Olweus, 1978; Salmivalli et al., 1996). The dual role of bully and victim seemed to elicit negative reaction from peers in two ways. First, the physical act of bullying caused disdain from peers, while prolonged exposure to peers as a victim reduced the group’s respect or value for the bully/victim (Mynard & Joseph, 1997; Olweus, 1993a).

Another important psychological characteristic related to bullying is the prevalence of psychiatric disorders. One study found that male bullies were 9.5 times more likely to suffer from psychiatric disorders (Kumpulainen, Rasanen, & Puura, 2001). Bully/victims were the second most likely to suffer from disorders overall. Among girls psychiatric illness was equally present in bullies and victims (4.1 to 4.3). The relationship to psychiatric disorders showed consistency over time since the study’s participants were examined at age eight and fifteen (Kumpulainen et al., 2001).

Causes of Bullying

The literature identified several causes of bullying such as the basic emotional attitude of parents, allowed permissiveness, and the use of power assertive child rearing methods. Overly involved or controlling parents were an indicator of children who become victims of bullying (Nansel et al., 2001; Olweus, 1993a). Other factors such as
socio-economic status and education level of parents were cited by some researchers as predictors of bully or victim status (Due et al., 2009).

The emotional attitude of the parent(s) and in particular the main caregiver influenced the likelihood of a child becoming a bully. If the primary caregiver was found to have a negative attitude, or showed a lack of warmth and involvement with the child there was an increased risk of aggressive and hostile action on the part of the child. Olweus (1993a) suggested that due to negative family life, bullies developed a certain degree of hostility toward the environment that makes them want to inflict injury and suffering on others. Bullies also demonstrated a strong desire to have power and dominance.

The level of permissiveness and allowed aggressive behavior tolerated by the primary caregiver increases the level of aggressive behavior by the child. If the caretaker did not set limits to a child's aggressive behavior towards peers, siblings, and adults the child's level of aggression was likely to increase (Olweus, 1993a).

The use of power assertive child rearing methods such as physical punishment and violent emotional outburst by the primary caregiver led to bullying behavior by children (Olweus, 1993a). One study found that bullies were 1.65 times more likely to have parents who used these methods instead of a participatory method (Baldry & Farrington, 2000). Bullies also were 1.71 times more likely to have endured severe discipline versus students who do not bully (Ladd & Ladd, 1998).

Victims of bullying displayed a tendency to have extremely close relationships with their parents. Some describe this relationship as overly protective or one in which
the child had little control over social situations (Ladd & Ladd, 1998). In particular the relationship to one’s mother was cited as a predictor to being a victim. In general, researchers suggested that controlling parents created more passive children who were more often the victims of bullying (Baldry & Farrington, 2000; Ladd & Ladd, 1998). Flouri and Buchanan’s (2002) work showed a relationship between a father’s level of involvement with his son and the son’s mental well being and level of peer victimization. When the father’s level of involvement increased then the likelihood of victimization went down. Bully/victims reported a higher level of maltreatment at home than non-victims of bullying. In particular, they reported instances of maltreatment from their mothers (Duncan, 1999; Schwartz, Dodge, Pettit & Bates, 2000).

A home environment was also cited by some as a predictor of bullying activities. Wolke, Woods, Stanford, and Schulz (2001) found a higher correlation between lower socio-economic status and the chance of both being a bully or a victim than children who were from higher socio-economic backgrounds. However, Sourander, Helstela, Helenius, and Piha (2000) found that family status, married or divorced, and socio-economic status were not predictors of being a bully or victim. Finally, research by Bond, Carlin, Thomas, Rubin and Patton (2002) stated that children with divorced parents were 1.5 times more likely to be the victim of bullying. No consensus existed in the literature on these issues (Bond et al., 2002; Sourander et al., 2000; Wolke et al., 2001).

Child abuse was also a significant predicator of a child becoming a bully, victim or bully/victim. Both bullies and victims were 2.2 times more likely to endure child abuse than children who were not abused. Although not all bullies and victims were
abused they were significantly more likely to have experienced physical and/or sexual abuse (Duncan, 1999).

The socio-economic status of victims was also an interesting topic in the research. Olweus (1993a) in his early research found that socio-economic status was not a factor in being bullied. More recent surveys brought this finding into question. Children of lower socio-economic status were at higher risk of being victims of bullying. In addition to this finding the research indicated that a greater economic inequality within a school is a strong indicator of a higher prevalence of bullying. A 10 percentage point increase in income disparity equaled a 34% higher prevalence in bullying (Due et al., 2009).

Effects of Bullying

The physical toll of being a bully, victim, or bully/victim was considerable. The victims of bullying reported a greater number of health issues than those students not involved with bullying (Williams, Chambers, Logan, & Robinson, 1996). Issues that were often reported include bed wetting, problems sleeping, and headaches. Contrary to conventional wisdom, bullies also reported significantly higher levels of physical health issues. One study found that victims were 4.6 times more likely, bullies 5.1 times more likely, and bully/victims 8.7 times more likely to experience psychosomatic symptoms such as lower back pain, neck and shoulder pain, feeling anxious, and stomach aches (Rigby, 1999).

Researchers linked being a victim of bullying to a decrease in academic achievement (Juvonen, Nishina, & Graham 2000; Mynard & Joseph, 1997). Evidence showed that bullies and bully/victims had a negative correlation between involvement in
bullying and academic performance. However, one study found no correlation between being a victim or bully/victim and academic performance. The study found that bullies were 1.8 times more likely to achieve below average (Nansel et al., 2001).

**Purpose of the Study**

Documentation and studies of bullying at public schools were significant and were reproduced in a large variety of settings; however, limited attention was given to the topic of bullying in private schools. Understanding the general characteristics of bullying at private schools would make significant impacts on the body of knowledge. First, this study determined whether or not a significant difference exists in the amount of bullying that occurs at private and public schools. Second, this study provided analysis of differences in the types of bullying behaviors at public and private schools. Third, by examining the location of bullying this study added important insights into the research on this topic.

**Research Questions**

Five research questions guided the focus of this dissertation:

1. How many bullying incidences occur in both public and private schools?
2. What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)?
3. Where does bullying occur within private and public school buildings and campuses?
4. To what degree are there differences between the number of incidences, types, and locations of bullying that take place at public and private schools?
5. How do traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?

**Population and Sample**

Within the state of Iowa there are approximately 35,000 students who attend 182 private schools. Iowa also had over 300 public school districts with approximately 1,400 schools. The number of students attending these schools numbered 483,122 in 2009. (State of Iowa: Department of Education, 2009). The sample being studied in this dissertation was 150 to 300 private school students and 150-300 public school students in grades 6-8.

The schools selected for this research project were an important aspect of the dissertation. One public school and one private school were selected. The schools were similar in size, in percentage of free and reduced lunch students, and finally, were the only two middle schools in the same city.

**Instrumentation**

The measurement tool for the dissertation included questions from the “Olweus Survey Questionnaire for Students” (Olweus, 1996), which provided Likert interval data on student’s opinions. The research also created two additional questions, which were questions 12 and 13. Question twelve asked if students were the victim of cyber-bullying. Questions 13a through 13e asked the student to indicate what type of cyber-bullying took place. The five possible type of cyber-bullying were email, texting, twitter, Facebook or other social networking sites, and another means of electronic
communication. The survey was administered to sixth through eighth grade students and contains thirteen questions. To view the survey tool see Appendix A.

The validity and reliability of the "Olweus Survey Questionnaire for Students" was documented by Kyriakides et al. (2006). The survey questions were used with permission from Hazelden Publishing. The large numbers of students who have completed the questionnaire provide sufficient results to verify internal consistency and test-retest reliability according to Kyriakides et al. (2006). Also, at the individual level, the combination of question items for being victimized or bullying others has resulted in satisfactory internal consistency reliabilities with values of Cronbach alpha higher than .80. The cultural difference and/or translation of the original survey into English were also accounted for making the instrument effective in international research. Finally, overall design of the instrument has made it a psychometrically appropriate instrument (Kyriakides et al., 2006).

Data Collection

The majority of research questions used in this dissertation were created by Dan Olweus, a professor at the University of Bergen, Norway. The survey was used to measure how much bullying is occurring in a school. The data collected also showed where bullying occurred in the school and student’s attitudes towards bullying. All student data was gathered anonymously. One private and one public school from the same city in Iowa were selected to participate in the survey. The two middle schools were the only schools for students of this age in the city. The survey was administered to students in grades 6-8.
Data Analysis

This dissertation answered five research questions revolving around bullying at private and public schools. In the following paragraphs the specific statistical analysis test/s for each question were listed and explained.

1. How many bullying incidences occur in both public and private schools?

To answer research question one the dissertation analyzed survey question number 1 on the survey. The survey question asked students, “How often have you been bullied at school in the past couple of months?” The students selected from six answers which ranged from, “I haven’t been bullied at school in the past couple of months” to “several times a week.” This question and its responses determined the answer to research question number one and allowed the reader to determine if a difference existed in the prevalence of bullying in public and private schools.

2. What types of bullying activities take place in both public and private schools (Physical, verbal, cyber bullying, etc.)?

Research question 2 asked what types of bullying happened at private and public schools. Survey questions 2 through 10 and question 12 asked what specific form of bullying took place. For example, survey question 2 stated, “I was called mean names, was made fun of, or teased in a hurtful way.” The types of bullying students responded to positively were tabulated to provide a number and percentage for each category of bullying. The ten types of bullying activity measured were name calling, exclusion, physical acts, spreading rumors, money or items taken away, threatened of forced to do something, racial comments, sexual comments, cyber-bullying, and a general category of
other. Examining these results allowed the reader to know what types of bullying take place in the private and public schools.

3. Where does bullying occur within private and public school buildings and campuses?

The data from survey questions 11 and 13 answered research question 3, “Where have you been bullied.” The respondents selected from ten choices on survey question 11. When answering survey question 13 the students indicated what type of cyber-bullying they were subjected to. The students selected from five possible types of cyber-bullying. A copy of the survey was included as Appendix A to this document if readers wish to see the choices. The students’ answers were calculated to provide the number and percentage of bullying incidents at each location. Examining these results allowed the reader to know the locations at which bullying occurs in the private and public schools.

4. To what degree are there differences between the number of incidences, types and location of bullying that takes place at public and private schools?

Research question 4, was answered by performing three separate statistical tests. To determine if a statistically significant difference existed in the amount of bullying that occurred in a private and public school an independent samples t-test was used to compare the interval data. This dissertation assumed the sample of schools selected was similar to a random sample of the general population. The data are independent because the private and public school populations being compared were separate from each other. An independent samples t-test addressed the degree of difference in the level of bullying at private and public schools. If the p-value found by the independent samples t-test was
≤ .05 then the difference between the public and private school results was statistically significant.

By comparing the student responses for survey questions 2 through 10 and question 12 from the private and public schools allowed the reader to know whether or not a statistically significant difference existed in the types of bullying being measured. The ten types of bullying activity measured were name calling, exclusion, physical acts, spreading rumors, money or items taken away, threatened of forced to do something, racial comments, sexual comments, cyber-bullying, and a general category of other. To determine if a statistically significant difference existed in the types of bullying at the private and public schools an independent samples *t*-test was used to compare the interval data. A *p*-value of ≤ .05 was viewed as statistically significant.

By examining survey question 11, “Have you been bullied...?” and survey question 13, “How often have you been bullied while using electronic communication devices such as a cell phone or a computer?” one can determine if a statistically significant difference exists between the location of bullying at the private and public schools. Survey questions 11 and 13 provide fifteen possible locations for respondents to indicate where bullying took place. The results for each of the fifteen possible answers from the private and public school were compared using a Chi-Square. A Chi-Square test was used because the data is nominal; it has no set order or interval. Also, the large number of possible answers made Chi-Square analysis the appropriate statistical test. If Chi-Square analysis produced a *p*-value of ≤ .05 the difference in bullying at that location was statistically significant.
5. How do traits such as gender, faith affiliation, the number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?

Research question 5 was answered by performing a cross tabulation analysis. Four traits for each student; gender, faith affiliation, number of years in attendance at the school, and race were gathered. The student and school characteristics were compared to the prevalence, type, and location of bullying using cross tabulation analysis. The results of the cross tabulation analysis were examined to determine if certain characteristics either do or do not indicate a stronger likelihood of being involved in bullying.

Organization of Study

The dissertation contained five chapters overall. The chapters were titled in the following manner: 1. Introduction, 2. Review of Literature, 3. Methodology, 4. Results, 5. Conclusions, Implications and Recommendations. The first chapter spelled out the problems to be investigated in the five research questions. In addition to the research questions, the first chapter gave a description of the anticipated outcomes of the research. The delimitations of the topic along with the limitations and assumptions were also clearly stated, helping to frame the context of the research. Next, the justification of why this research is significant to the body of knowledge was laid out. Finally, the definition of terms was included in this chapter, helping to avoid confusion on usage of terms.

Chapter 2 focused on the current literature related to this topic. An overview of the current writings on the prevalence of bullying, types of bullying, locations where bullying occurs, physical characteristics of those involved in bullying behaviors,
psychological characteristics and causes of bullying was discussed. Current research and theories on bullying by Olweus, Rigby, Smith and others were outlined in this chapter. Finally, directly and tangentially related studies were included for the reader to reference.

Chapter 3 described the methodology utilized in the dissertation. The areas of data collection, data analysis, description of population and sample were all explained through the course of this chapter. Additional detail about the sampling method, sample size, statistical power, and instruments used for the dissertation were included. Finally, the research procedures and the research's validity were outlined in this chapter.

The fourth chapter shared the results obtained by the researcher. The research findings and their significance were communicated in this section of the dissertation.

Finally, the fifth chapter summarizes the findings and conclusions that were drawn from the research findings. Discussion concerning the results of the research and its application to the school setting were stated. Additional discussion included possible topics for future research projects.
CHAPTER 2
REVIEW OF LITERATURE

Prevalence of Bullying

The current research on bullying showed that the highest levels of bullying take place at elementary grades and slowly decline as the students' age (Olweus, 1993a). The reported rate of bullying varies significantly from country to country with only a few explanations offered (Wolke et al., 2001). Finland reported the lowest rates of elementary school bullying at 11.3% of over 5,000 students surveyed reporting bullying behaviors (Kumpulainen et al., 1998). The highest reported occurrences of elementary bullying took place in Ireland where 49.8% of over 7,000 students surveyed reported bullying behaviors (O’Moore & Kirkham, 2001). One research finding in the United States indicated that 19% of elementary students were bullied (Pellegrini et al., 1999).

Most research also indicated that the highest levels of bullying happened in elementary grades and declined as students reached middle school and high school (Olweus, 1993a; Lee et al., 2008). However, one study showed that the decrease in bullying made a temporary jump when students transitioned to a new middle school (Pellegrini & Long, 2002). The reported levels of bullying in other countries contrast widely. The lowest reported levels of middle school bullying came from England with a 5% occurrence level (Menesini et al., 1997). The highest levels, for this age group, came from Italy with 14.7% of the population reported being bullied (Baldry & Farrington, 1999).
Reports of bullying varied in the United States. Haynie et al. (2001) reported that 19.5% of U.S. youth reported bullying others three times or more over the past year and 8.8% stated they bullied others once a week or more. The victims’ results were similar with 16.9% being bullied three times or more over the past year and 8.4% being bullied once a week or more. A more recent survey conducted in 2007 compared students in three different school settings with wide ranging characteristics such as race, socio-economic status, and urban versus rural status. The results of this survey echoed the findings stated above with 76.5% of students reporting they felt safe at school (San Antonio & Salzfass, 2007).

Research on English high school age students found that 4.2% of students were bullied (Salmon et al., 1998). One small study of Australian high school age students found that 25% of these students were the victims of bullying. While the percentage from this report was high compared to other countries for the same age group, the number was smaller than findings for elementary and middle school students in Australia (Peterson & Rigby, 1999).

Various ideas existed on why bullying decreases as students’ age increases. One possible reason is that as students mature there are fewer students older than themselves left to bully them. Breaks in schools such as grades K-5 and 6-8 along with age segregation at recess may also be artificial means of decreasing bullying according to this theory (Olweus, 1993a; Smith & Madsen, 1999). A second potential reason for the decline was that victims are becoming more socially astute and reflective in nature making bullying them more difficult. Finally, a younger child’s ability to understand
truly what bullying is could be a primary factor in higher reported rates at lower grades. Bullying requires an imbalance of power in the relationship. Younger children may be inaccurately placing disagreements with socially equal peers in the realm of bullying (Smith & Madsen, 1999).

One study examined the levels of bullying in England and Germany. In England, students were more likely to experience bullying than students in Germany were. The researchers offered two possible explanations. The structure of the school day in England was longer, although the instructional time was very similar, and allowed for greater breaks with little supervision. The authors cited the lack of supervision during these breaks as a possible cause. The instructional strategies used in the two schools varied and were also noted as possible causes of the bullying. The German classrooms more frequently used frontal teaching with the teacher leading the majority of activities. In England, the classrooms had a higher number of student activities, often in groups, which provided opportunities for bullying (Wolke et al., 2001).

Bullying behaviors as a bully or victim declined during the childhood and adolescent years. A group of students were studied at eight years of age and then again at sixteen years of age. The number of students who were still bullies or victims declined. Those who were still victims and bullies at the age of sixteen were almost all involved with bullying behaviors at the age of eight showing a high level of consistency for this group. Within this group that reported being involved in bullying at age eight and sixteen, a high number reported depressive symptoms at eight years of age (Sourander et al., 2000).
Types of Bullying

The ways in which youth bully one another are endless, however youth have been surveyed to determine which categories of bullying occur most frequently (Baldry & Farrington, 1999; Nansel et al., 2001; Olweus, 1978). The most commonly identified type of bulling is verbal or name calling followed by physical bullying, threats and spreading rumors about others (Smith & Sharp, 1994; Whitney & Smith, 1993; Wolke et al., 2001).

Students bullying behaviors have taken the form of comments about religion, race, looks, sexual comments and speech (Nansel et al., 2001). Students bullied one another through verbal and physical acts. One survey found 8% of bullying behaviors were about religion or race. Twenty percent of bullying behaviors were about looks or speech, while 14.6% of bullying actions were physical acts. Spreading rumors compromised 17% of bullying and nearly 19% of bullying took the form of sexual comments (Nansel et al., 2001). Researchers based these percentages on student who reported bullying behaviors occurred once a week or several times a week.

Boys and girls both suffered bullying in approximately the same amounts but the girls were involved in greater amounts of relational bullying such as spreading rumors (San Antonio & Salzfas, 2007) Various researchers noted that girls participated in non-physical bullying such as spreading rumors, exclusion, and name calling with the intent of inflicting psychological damage (Baldry & Farrington, 1999; Whitney & Smith, 1993). Exclusion, for example, could take the form of simply leaving others out of an activity or an orchestrated plan where a large group of girls ignored one individual. Several studies
stated that boys were more likely to be involved with direct or physical types of bullying (Olweus, 1994; Wolke et al., 2001).

The newest type of bullying to emerge in youth is cyber-bullying. The influx of electronic communication devices greatly increased student’s access to one another and their ability to communicate in mass. The Youth Internet Safety Survey-2 conducted by Wolak et al. (2006) surveyed 1,501 regular internet users between the ages of 10 and 17. The results from this survey indicated that 9% of these youth were harassed on-line in the past year. A much higher percentage, 28%, used the internet to say something rude to another individual and nine percent admitted to using the internet to harass and embarrass others. Students who frequently used the internet experienced cyber-bullying more often. Typically, the forms of bullying were similar regardless of whether they happened over the internet or in the school building (Juvonen & Gross, 2008).

One extreme case of bulling involved Phoebe Prince at South Hadley High School in Massachusetts. Prince was a newly enrolled student when she dared to date boys perceived to be out of her social class by other students. These actions resulted in cyber-bullying such as Prince being called a whore on Facebook. After repeated cyber-bullying Prince committed suicide (Holladay, 2011). While the results of this incident are not typical they do clearly indicate the importance of dealing with cyber-bullying.

Location of Bullying

The location of bullying activity within a school was an area of great concern to those trying to reduce its bullying. Whitney and Smith (1993) found that the majority of bullying occurred on playgrounds. A separate study comparing bullying in Germany and
England confirmed the playground as the most common location for bullying activity (Wolke et al., 2001). Another study stated that in addition to the playground, the hallway, the cafeteria, and school bus were also frequent locations for bullying to take place (Astor et al., 2001). A more recent survey at school in three schools with divergent characteristics found the hallway to be the most common location for bullying activity (San Antonio & Salzfass, 2007). The common trait for each of these bullying locations was a lack of adequate adult supervision (Astor et al., 2001; San Antonio & Salzfass, 2007).

**Physical Characteristics**

Differing opinions existed on the correlation or causation of physical traits, such as being overweight, personal hygiene and dress and the likelihood of being the victim of bullying. Researchers such as Olweus (1978, 1993a) found that physical characteristics, besides being physically bigger or smaller, did not correlate to being bullied. However, other research determined that physical appearances such as the way a student dresses, attractiveness, or unusual mannerisms increased the likelihood of being bullied (Natvig, Atbrektsen, & Zvarnstrom, 2001).

The gender of a student also affected the amount and type of bullying which occurred. The literature strongly suggests that boys were more likely to participate in bullying than girls (Baldry & Farrington, 1999; Olweus, 1993a; Rigby et al., 1997). In regards to verbal bullying, a consensus also exist that boys and girls participate in an equivalent amount of bullying (Olweus, 1993a, 1994; Whitney & Smith, 1993). However, when bullying tactics such as social exclusion and rumors were considered
research findings varied widely about who participates and at what levels (Baldry & Farrington, 1999; Olweus, 1994).

The role of race in bullying was unclear. In the United States, numerous studies reached a variety of conclusions. One study found that bullying did not differ between Caucasian, African American and Hispanic children (Nansel et al., 2001). A second study within a school with a higher African American and Hispanic population stated that Caucasian children were more likely to be the target of bullying (Graham & Juvonen, 2002). In a third, study African American and Caucasian children reported similar amounts of bullying, but Hispanic students reported lower levels of bullying (Hanish & Guerra, 2000).

Psychological Characteristics

Victims of bullying also displayed some specific characteristics or tendencies. Victims were more anxious and insecure than students in general and often were more cautious, sensitive, and quiet. Victims who reported being bullied on a regular basis were 3.2 to 4.2 times more likely to suffer from anxiety issues (Kaltiala-Heino et al., 2000; Salmon et al., 1998). Students who bullied others also reported having anxiety issues, but the evidence was mixed on this issue (Kaltiala-Heino et al., 2000; Salmon et al., 1998). One study maintained that bullies were strongly anti-social behaviors (Baldry & Farrington, 2000). Bully/victims showed the highest level of anxiety. Their chances of having anxiety issues were 6.4 times higher than individuals not involved with bullying. Bullies, victims, and bully/victims all recounted having higher levels of suicidal ideation (Kaltiala-Heino et al., 1999).
Another issue faced by victims is low self-esteem and negative self-concepts. The current research in this area debated whether victims’ low self-esteem and negative self-concept were the cause of them being a victim or whether it was a result of being a victim (Nansel et al., 2001; Boulton & Underwood, 1993). Despite this debate, the victim’s low self-esteem and negative self-concept resulted in a high level of loneliness. When at school they were often alone and abandoned and failed to even have one good friend (Egan & Perry, 1998; Olweus, 1993a).

Conversely, the effects of friendship mitigated bullying and reduced the frequency of its occurrence according to Schwartz et al. (2000). This research concurred with the literature (Baldry & Farrington, 2000; Olweus, 1993a) that harsh home environments which utilized punitive, harsh, stressful, and violence created children more likely to suffer from bullying. However, they also observed that friendships decreased the likelihood of being bullied. The authors of this research stated that friendship either served as a buffer to bullying perhaps by simply reducing the chances of being alone in bullying situations or by increasing social skills. Another possibility was that friendship did not decrease the pathways for being bullied, but was a marker of individuals whose attributes minimized the potential to be bullied (Schwartz et al., 2000). Students in this research with greater numbers of friendships experienced bullying less often.

Overall research showed students not involved in bullying experienced a higher quality of life. These students also perceived that teachers and peers supported them. Victims of bullying felt less supported by peers and teachers and had a lower quality of life than those who bullied others (Flaspohler, Elfstrom, Vanderzee, Holli, & Birchmeier,
The same research showed that teacher support alone was not sufficient to increase the quality of life for victims. Therefore, the effect of other student was a powerful determinate for quality of life (Flaspohler et al., 2009).

A common assumption was that bullies suffered from low self-esteem and negative self-concepts. However, some research concluded that bullies do not suffer from underlying insecurity; instead, bullies had unusually low insecurity (Oliver, Hoover, & Hazier, 1994; Olweus, 1993a). Rigby and Cox (1996) discovered that male bullies did not suffer from lower self-esteem, but female bullies did suffer from low self-esteem. Bully/victims showed lower self-esteem and a higher degree of negative self-concept. Individuals with these traits repeated modeled behaviors more frequently than students with higher self-esteem (Mynard & Joseph, 1997). Some theorized that this was an attempt to gain popularity with others. In regards to bully/victims this could be viewed as an explanation of why they repeated the same negative bullying behaviors they endured from others (Mynard & Joseph, 1997).

The popularity of students involved in bullying varied depending on the students’ status as bully, victim, bully/victim or individual uninvolved in bullying. In one study, bullies scored the same level of social acceptance as individuals who were not involved in bullying (Mynard & Joseph, 1997). Another study indicated that bullies held a higher status among peers then did the victims (Oliver et al., 1994). Victims scored a lower level of social acceptance than both the bullies and those not involved. Bully/victims had the lowest level of social acceptance among their peers of all three groups involved in bullying (Mynard & Joseph, 1997).
In another study, the level of social acceptance and type of bullying differed by gender (Salmivalli et al., 1996). Research indicated male bullies were significantly less popular. Peers rated male bullies as being low in social acceptance and high in social rejection. Female bullies, however, scored above the mean in social acceptance and social rejection. One possible theory is that since male bullying tended to be more physical and obvious that peers realized clearly what events were taking place. Since female bullying tended to be verbal or indirect it has been hypothesized that, they intimidated other while simultaneously drawing their admiration (Salmivalli et al., 1996).

The popularity or social acceptance of bullying fluctuated depending on the research project. Mynard and Joseph (1997) found the social acceptance levels of bullies did not vary significantly from those who did not participate in bullying behavior. Olweus (1993a) also stated that bullies did not suffer alienation from peers due to their bullying behaviors. Other research indicated bullies view victims as low status children. Salmivalli et al. (1996) stated in their research that boys who were bullies experienced lower social acceptance than peers who did not participate in bullying behaviors.

The current research solidly supported the notion that bully/victims were the least accepted of any group involved with bullying (Olweus, 1978; Salmivalli et al., 1996). The dual role of bully and victim elicited negative reaction from peers in two ways. First, the physical act of bullying caused disdain from peers, while prolonged exposure to peers as a victim reduced the groups respect or value for the bully/victim (Mynard & Joseph, 1997; Olweus, 1993a).
Another important psychological characteristic related to bullying is the prevalence of psychiatric disorders. Overall, those involved with bullying were much more likely to be psychologically disturbed (Kumpulainen et al., 1998). One study discerned that male bullies were 9.5 times more likely to suffer from psychiatric disorders (Kumpulainen et al., 2001). Bully/victims were the second most likely to suffer from disorders overall. Among girls, psychiatric illness was equally present in bullies and victims (4.1 to 4.3). The study examined the participants at age eight and fifteen and the participants showed a consistent level of psychiatric disorders over time (Kumpulainen et al., 2001).

The most common psychiatric disorder among bullies was Attention Deficit Disorder (ADD; Kumpulainen et al., 2001). This supports Olweus’ (1994) theory that bullies suffered from impulsivity. Kumpulainen et al. (2001) cited depression and conduct disorder as frequent psychiatric disorders experienced by bullies, bully/victims, and victims. Victim status increased the likelihood of being sad, feeling hopeless and other symptoms of depression. While not all bullying was severe, the results nevertheless were significant and affected students’ mental health (Fleming & Jacobsen, 2009). The number of students who received mental health assistance was small, a greater number of students involved in bullying behaviors reported receiving mental health services overall, and during the past three months (Kumpulainen et al., 2001).

Causes of Bullying

The literature identified several causes of bullying such as the basic emotional attitude of parents, allowed permissiveness, and the use of power assertive child rearing
methods. Overly involved or controlling parents were an indicator of children who become victims of bullying (Olweus, 1993a). Some researchers noted that factors such as socio-economic status and parents' education level were predictors of bully or victim status (Due et al., 2009).

The emotional attitude of the parent(s) and in particular the main caregiver influenced the likelihood of a child becoming a bully. If the primary caregiver displayed a negative attitude, or showed a lack of warmth and involvement with the child there was an increased risk of aggressive and hostile action on the part of the child. Olweus (1993a) suggested that due to negative family life bullies developed a certain degree of hostility toward the environment, which made them want to inflict injury and suffering on others. Bullies also demonstrated a strong desire to have power and dominance.

The level of permissiveness and allowed aggressive behavior tolerated by the primary caregiver increased the level of aggressive behavior by the child. If the caretaker did not set limits on child’s aggressive behavior towards peers, siblings, and adults the child’s level of aggression was likely to increase (Olweus, 1993a). Some research suggested that being the victim of bullying in the home by either parents or siblings was also a strong indicator of whether a child would be involved in bullying activity. Being a victim at home and at school also had a strong correlation with clinically significant behavior problems (Martin, 2005).

The use of power assertive or authoritarian child rearing methods such as physical punishment and violent emotional outburst by the primary caregiver lead to bullying behavior by children (Baldry & Farrington, 2000; Olweus, 1993a). One study
ascertained that bullies were 1.65 times more likely to have parents who used these methods instead of a participatory method (Baldry & Farrington, 2000). Bullies also were 1.71 times more likely to have endured severe discipline versus students who did not bully (Ladd & Ladd, 1998).

Additional research indicated that parents of bullies failed to keep track of their child’s whereabouts and used ineffective disciplinary methods. Bullies’ parents failed to know the location of their children on either a consistent basis or the company that they kept during this unsupervised time. When the parents administered discipline the actions tended to fall into the category of empty threats. These parents frequently verbally scolded their children, but no loss of privileges, timeout, or removal of toys, etc. occurred. The combination of these two factors led to greater negative incidences between the child and authority figures (Patterson & Stouthamer-Loeber, 1984).

Victims of bullying displayed a tendency to have extremely close relationships with their parents. Some described this relationship as overly protective or one in which the child had little control over social situations (Ladd & Ladd, 1998). Boys were more likely to suffer as victims of bullying if they had an intense relationship with their parent/s. Researchers argued that these relationships encouraged children to develop passive-dependent behaviors and a willingness to express weakness as a means of gaining attention from parents. However, when in a male socializing situation this practice invited bullying behaviors because the boys viewed this behavior as a sign of weakness. In particular, the relationship to one’s mother was cited as a predictor to being a victim.
In general, researchers felt that controlling parents created more passive children who often experienced bullying (Baldry & Farrington, 2000; Ladd & Ladd, 1998).

Flouri and Buchanan’s (2004) work showed a relationship between a father’s level of involvement with his son and the son’s mental well being and level of peer victimization. When the father’s level of involvement increased the likelihood of victimization went down (Flouri & Buchanan, 2004). Bully/victims recounted a higher level of maltreatment at home than non-victims of bullying. In particular, they reported instances of maltreatment from their mothers (Duncan, 1999; Schwartz et al., 2000).

The socio-economic status of victims was also an interesting topic in the research. Olweus (1993a) in his early research found that socio-economic status was not a factor in bullying. Recent surveys disagreed with this finding. Children of lower socio-economic status were at higher risk of being victims of bullying. In addition to this finding, the research indicated that a greater economic inequality within a school was a strong indicator of a higher prevalence of bullying. A 10% point increase in income disparity equaled a 34% higher prevalence in bullying (Due et al., 2009). Wolke et al. (2001) found a higher correlation between lower socio-economic status and the chance of both being a bully or a victim than children who were from higher socio-economic backgrounds.

Research indicated that a negative home environment predicted involvement in bullying activities. Sourander et al. (2000) stated that family status, married or divorced, and socio-economic status were not predictors of being a bully or victim. Research by Bond et al. (2002) recounted that children with divorced parents were 1.5 times more
likely to be the victim of bullying. No consensus existed in the literature on these issues (Bond et al., 2002; Sourander et al., 2000; Wolke et al., 2001).

Child abuse was also a significant predictor of a child becoming a bully, victim or bully/victim. Children who suffered through sexual abuse as a child were more likely candidates to become victims of bullying. These incidents of sexual abuse typically happened prior to the age of thirteen with a much older perpetrator and in the case of physical abuse, the cases occurred prior to the age of eighteen with the use of physical force or threats of force. Bully/victims reported a much higher level of physical abuse or maltreatment by their parents, in particular their mothers than those not involved in bullying activities (Duncan, 1999).

**Effects of Bullying**

The physical toll of being a bully, victim, or bully/victim was considerable. The victims of bullying described a greater number of health issues than those students not involved with bullying (Williams et al., 1996). Issues that were often reported include bed-wetting, problems sleeping, and headaches. Contrary to conventional wisdom, bullies also reported significantly higher levels of physical health issues. One study found that victims were 4.6 times more likely, bullies 5.1 times more likely, and bully/victims 8.7 times more likely to experience psychosomatic symptoms such as lower back pain, neck and shoulder pain, feeling anxious, and stomach aches. Theses health effects were stable over multiple years (Rigby, 1999).

Researchers linked being a victim of bullying to a decrease in academic achievement (Juvonen et al., 2000; Mynard & Joseph, 1997). Evidence verified that
bullies and bully/victims had a negative correlation between involvement in bullying and academic performance. However, one study found no correlation between being a victim or bully/victim and academic performance. The study testified that bullies were 1.8 times more likely to achieve below average (Nansel et al., 2001). Olweus (1983) stated his research data did not backup the theory that bullies acted out because they suffered from low academic achievement. Instead, he found no correlation between the two factors. Research turned up evidence that bully/victims and victims of bullying have higher levels of absenteeism from school (Kumpulainen et al., 1998). One may assume that less time spent in class could be a factor leading to lower academic performance.

Bullies also reported long-term effects on relationships. Research indicated that bullies entered into dating earlier. Since bullies tended to be larger physically and physically more mature which provided a partial explanation of their earlier dating. However, findings also indicated a connection between the bullying behavior and earlier dating. As bullies matured they reported their girlfriend or boyfriends to be less emotionally supportive and less equitable than their non-bullying peers. The bullies also participated in a greater number of physical and social aggressive behaviors than the non-bully group (Connolly, Pepler, Craig, & Taradash, 2000).

**Bullying and School Atmosphere**

An interesting aspect of the literature was the observed differences in the level of bullying that occurred between schools. One researcher studied thirty-five schools, which represented 35% of schools in that area and obtained 928 completed questionnaires. Some of the schools in the study had significantly lower levels of
reported bullying than the remaining schools in the study. Also, in these same schools there was a correlation to how the children perceived the adults in the school. Children in these schools felt that adults paid attention to behavior and the social organization of the school (Lee et al., 2008).

Research also stated that bullying activity is a significant predictor of the psychosocial environment of the school. A negative psychosocial environment was also linked to increases in low-level violence and a higher likelihood of students carrying weapons to school, skipping school and cutting class (Meyer-Adams & Conner, 2008). Due to the significant disruption and danger caused by low-level violence and weapons, school must be cognizant of these factors.

Adult attention to children’s feelings and concerns was a significant factor in reducing bullying. An inverse relationship existed between protective factors and the amount of bullying that took place in schools with healthy atmospheres (Harlow & Roberts, 2010). In schools where the adults were aware and in tune to student actions, fears, and concerns the school seemed to be better able to reduce bullying activity. One researcher stated that creating a caring majority where 85% of students are neither bullies nor victims was essential in creating a healthy school environment (Garrity & Jens, 1997).

If a school was unable to deal with these issues even more serious issues could arise. Higher levels of bullying activity were significant indicators of a negative school environment, which also led to a higher likelihood that students could bring weapons to school (Meyer-Adams & Connor, 2008). Therefore, it was essential that school
atmosphere be measured using tools such as the School Climate Bullying Survey to determine the school's atmosphere and potential issues (Bandyopadhyay, Cornell, & Konold, 2009).

**Intervention Programs for Schools**

In reaction to bullying incidents and press coverage of school violence, several intervention programs have been created over the past decade. Olweus' Core Program Against Bully and Antisocial Behavior is a well-known international program. The program is based on four primary principles: (1) Warmth, positive interest and involvement on the part of adults, (2) Firm limits for unacceptable behavior, (3) Consistent use of non-physical and non-hostile negative consequences when rules are broken, (4) Adults in the school who function as authorities (Olweus, 2006). Schools implement these principles by gathering data about the school and its students through a survey. The schools then use the data as a basis for training with a leadership group within the school. The leadership group then trains the remaining staff on the program which then leads to a school-wide implementation with educational meetings for parents. Implementation of school-wide rules regarding bullying and consequences is essential to eliminate bullying activity (Olweus, 2006).

Transtheoretical model (TTM) is a bullying intervention program created more recently than Olweus' approach. The TTM system is a theory of behavior change that applies particular change processes like decision-making and reinforcement to help individual progress at particular stages of change (Evers, Prochaska, Van Marter, Johnson, & Prochaska, 2007). One particular study using TTM found that providing
students with three half hour trainings over computers along with a ten-page guide for teachers and parents was effective in reducing bullying by 30% for victims, bullies, and bully/victims in U.S. middle school students. The researchers concluded the design of the TTM approach was significant in producing the results. The program responds to students’ answers by adjusting the material to fit the individuals’ needs. The authors’ also felt that shorter and less complicated implementation process was an added benefit when compared with other intervention programs (Evers et al., 2007).

The Seville method to bullying prevention is a third approach. The Seville method strongly resembles the whole school approach of the Sheffield method developed in England which includes use of the bully, victim, and bystander approach (Ortega & Lera, 2000). This method uses an ecological approach to stopping bullying where each schools is viewed as numerous micro-systems with complex relationships between teachers, students, and parents. The Seville method first develops a program for organizing management for school life. The method organizes items such as supervision, time and resources into a positive framework. The second part of the Seville method involves curriculum and teaching strategies. Cooperative and interactive activities become the norm in this system with regular sharing of ideas, workload, and the development of self-evaluation skills. Finally, the Seville method gives students direct instruction on emotional and value judgments to help students understand themselves and others. The Seville system produced positive qualitative results that have sparked additional developments for this approach (Ortega & Lera, 2000.)
The Sheffield project is another school based anti-bullying program. The program uses a whole school approach similar to the Seville method. In addition to this approach curriculum based strategies, the schools actively intervened in bullying situations, and made changes to cafeteria and playground environment to reduce bullying behaviors (Whitney, Rivers, Smith, & Sharp, 1994). The Sheffield model resulted in an overall reduction of bullying at all grade levels. The greatest reduction occurred at the primary grade levels. The researchers noted that the schools which saw the greatest reduction in bullying also enacted the highest level of interventions and believe the intervention method is worth the effort required. However, they did not achieve the same level or reduction that other researchers reported (Olweus 1993a; Whitney et al., 1994).
CHAPTER 3

METHODOLOGY

Introduction

Documentation and studies of bullying at public schools were significant and were reproduced in a large variety of settings; however, limited attention was given to the topic of bullying in private schools. Understanding the general characteristics of bullying at private schools will make significant impacts on the body of knowledge. First, this study determined whether or not a significant difference exists in the amount of bullying that occurs at private and public schools. Second, this study provided analysis of differences in the types of bullying behaviors at public and private schools. Third, by examining the location of bullying this study lent important insights into the research on this topic.

Statement of the Problem

The problem of this study is to determine whether a significant difference in bullying exists between public and private schools in terms of prevalence, type, and location within the school building or campus.

Research Questions

Five research questions guided the focus of this dissertation:

1. How many bullying incidences occur in both public and private schools?
2. What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)?
3. Where does bullying occur within private and public school buildings and campuses?
4. To what degree are there differences between the number of incidences, types, and locations of bullying that take place at public and private schools?

5. How do traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?

Population and Sample

Within the state of Iowa there were approximately 35,000 students who attended 182 private schools. Iowa also had over 300 public school districts with approximately 1,400 schools. The number of students attending these schools numbered 483,122 in 2009. (State of Iowa: Department of Education, 2009). The sample being studied in this dissertation was 208 public school students and 204 private school students in grades 6-8.

The schools selected for this research project were an important aspect of the dissertation. One public school and one private school were selected. The schools are similar in size, in percentage of free and reduced lunch students, and finally, located in the same community.

Instrumentation

The measurement tool for the dissertation included questions from the “Olweus Survey Questionnaire for Students” (Olweus, 1996), which provided Likert interval data on student’s opinions. The research also created two additional questions, which are questions number 12 and 13. Question 12 asked if students had been the victim of cyber-bullying. Question 13 asked the student to indicate what type of cyber-bullying took place. The five possible type of cyber-bullying were email, texting, twitter, Facebook or
other social networking sites, and another means of electronic communication. The survey was administered to sixth through eighth grade students and contains thirteen questions.

The validity and reliability of the “Olweus Survey Questionnaire for Students” was documented by Kyriakides et al. (2006). The questions were used with permission from Hazelden Publishing. The large numbers of students who have completed the questionnaire provide sufficient results to verify internal consistency and test-retest reliability according to Kyriakides et al. (2006). Also, at the individual level, the combination of question items for being victimized or bullying others has resulted in satisfactory internal consistency reliabilities with values of Cronbach alpha higher than .80. The cultural difference and/or translation of the original survey into English was also accounted for making the instrument effective in international research. Finally, overall design of the instrument has made it a psychometrically appropriate instrument (Kyriakides et al. 2006).

Data Collection

The majority of research questions used in this dissertation were created by Dan Olweus, a professor at the University of Bergen, Norway. The survey was used to measure how much bullying is occurring in a school. The data collected also shows where bullying occurred in the school and student’s attitudes towards bullying. All student data was gathered anonymously. One private and one public school in Iowa were selected to participate in the survey. The survey was administered to students in grades 6-8.
The following six steps provide details on how permission was obtained from schools, parents, and students. The steps also outline how the survey was conducted.

Step 1: Reach an agreement with one public and private school in Iowa at which the student survey was administered.

Step 2: Agree upon a two to three week window in which the survey was administered at both schools.

Step 3: A parent consent form was sent home prior to administration of the survey. The school permission slip was sent home to all families via their child or children. The students were read the following statement when handed the parent permission slip.

This paper is a permission slip for your parents to read and complete. The permission slip allows your parents to decide if you can complete a survey on bullying for a research project for Dan Ryan, a doctoral student at University of Northern Iowa (UNI). No negative consequences will be given to those who do not participate. Please return the permission slip by (date) at which time it will be placed in an envelope and kept in a secure location.

Step 4: Students were allowed the opportunity to choose if they would participate in the survey by completing the assent form no less than one week prior to the administration date. Each student individually completed the assent form. After completing the assent form each student came to the front of the room and placed it in an envelope. After all assent forms were in the envelope the teacher sealed the envelope and returned it to the office. The sealed envelopes were then transferred to the researcher.

The students' teacher completed this task during the school day. The following script was read by the teacher to the students.
This paper is an assent form. An assent form is a form where you either do or do not give your permission to participate in this research project. You are being asked to participate in a survey on bullying. The assent form allows you to decide if you can complete the survey on bullying for a research project for Dan Ryan, a doctoral student at the University of Northern Iowa (UNI). No negative consequences will be given to those who do not participate. Please complete the assent form and when you complete it bring it to the front of the room at which time it will be placed in an envelope. When all of the assent forms are in the envelope it will be sealed and given to the researcher without anyone at the school seeing it.

Step 5: Dan Ryan, the primary researcher, administered the survey to all students. The survey was administered in the school gym/lunch room to all students from one grade level that had the appropriate permission. Each grade was administered the survey at separate times. During the administration of the survey the students sat in alphabetical order. If any students were absent due to illness their seats remained open. The students who had the appropriate forms completed were handed the survey with a cover sheet. The students who did not have the appropriate paper work were handed a packet with the same cover sheet. However, no survey was in the packet. The directions on the packet directed the student to sit quietly and complete the crossword puzzle in the packet. All students were instructed to bring their packet/survey directly to the researcher when the session ended.

Step 6: Student surveys were collected and the results were tabulated for the dissertation. Individual student data was not be shared with school officials, students, or parents.

Research and Data Analysis

This dissertation answered five research questions revolving around bullying at private and public schools. Questions from the Olweus Survey Questionnaire for
Students were used to gather the data to be analyzed. The specific statistical analysis tools for each question were explained following the research question.

1. How many bullying incidences occur in both public and private schools?

   To answer research question 1 the dissertation analyzed survey question 1 on the survey. The survey question asked students, “How often have you been bullied at school in the past couple of months?” The students selected from six answers which ranged from, “I haven’t been bullied at school in the past couple of months” to “several times a week.” This question and its responses determined the answer to research question number one and allow the reader to determine if a difference existed between bullying in public and private schools.

2. What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)?

   Research question 2 asked what types of bullying happen at private and public schools. Survey questions numbers 2 through 10 and question 12 asked what specific form of bullying took place. For example, survey question 2 stated, “I was called mean names, was made fun of, or teased in a hurtful way.” The types of bullying students responded to positively were tabulated to provide a number and percentage for each category of bullying. The ten types of bullying activity being measured were name calling, exclusion, physical acts, spreading rumors, money or items taken away, threatened of forced to do something, racial comments, sexual comments, cyber-bullying, and a general category of other. Examining these results allowed the reader to know what types of bullying take place in the private and public schools.
3. Where does bullying occur within private and public school buildings and campuses?

The data from survey questions 11 and 13 answer the third research question, “Where have you been bullied.” The respondents selected from ten choices on question eleven on the survey. When answering survey question 13 the students indicated what type of cyber-bullying they were subjected to. The students selected from five possible types of cyber-bullying. A copy of the survey has been included as appendix A to this document if readers wish to see the choices. The students’ answers were calculated to provide the number and percentage of bullying incidents at each location. Examining these results allowed the reader to know the locations at which bullying occurs in the private and public schools.

4. To what degree are there differences between the number of incidences, types and location of bullying that takes place at public and private schools?

Research question 4 was answered by performing three separate statistical tests. To determine if a statistically significant difference exists in the amount of bullying that occurs in a private and public school an independent samples t-test was used to compare the interval data. This dissertation assumes the sample of schools selected was similar to a random sample of the general population. The data are independent because the private and public school populations being compared are separate from each other. An independent samples t-test addressed the degree of difference in the level of bullying at private and public schools. If the p-value found by the independent samples t-test was ≤ .05 then the difference between the public and private school results was statistically significant.
Comparing the student responses for survey questions 2 through 10 and question 12 from the private and public schools allowed the reader to know whether or not a statistically significant difference exists in the types of bullying measured. The ten types of bullying activity being measured were name calling, exclusion, physical acts, spreading rumors, money or items taken away, threatened of forced to do something, racial comments, sexual comments, cyber-bullying, and a general category of other. To determine if a statistically significant difference existed in the types of bullying at the private and public schools an independent samples t-test was used to compare the interval data. A p-value of ≤ .05 was viewed as statistically significant.

By examining survey question 11, “Where have you been bullied?” one can determine if a statistically significant difference existed between the location of bullying at the private and public schools. Survey questions 11 and 13 provide fifteen possible locations for respondents to indicate where bullying took place. The results for each of the fifteen possible answers from the private and public school were compared using Chi-Square. A Chi-Square test was used because the data is nominal; it has no set order or interval. Also, the large number of possible answers makes Chi-Square analysis the appropriate statistical test. If Chi-Square analysis produced a p-value of ≤ .05 the difference in bullying at that location was statistically significant.

5. How do traits such as gender, faith affiliation, the number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?
Research question 5 was answered by performing a cross tabulation analysis. Four traits for each student: gender, faith affiliation, number of years in attendance at the school, and race was gathered. The student and school characteristics were compared to the prevalence, type, and location of bullying using cross tabulation analysis. The results of the cross tabulation analysis were examined to determine if certain characteristics either do or do not indicate a stronger likelihood of being involved in bullying.
CHAPTER 4

RESULTS

Examining the differences in bullying at a public and private school shed new light upon previously unasked questions. This dissertation asked five key research questions. The five research questions that guided the focus of this dissertation were; (1) How many bullying incidences occur in both public and private schools? (2) What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)? (3) Where does bullying occur within private and public school buildings and campuses? (4) To what degree are there differences between the number of incidences, types, and locations of bullying that take place at public and private schools? (5) How do traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors? A student survey conducted at both a public and private school provided the data to answer these research questions. To see the survey instrument refer to Appendix A.

Demographic Information

To determine the demographic breakdown of the students surveyed each student answered questions about their personal characteristics such as gender, years in attendance faith affiliation, if any, and their race.

A total of 412 students from the public and private school took the survey. The students were all in grades 6, 7, and 8 in the same city. At the public school, 208 students took the survey and 204 students at the private school participated. Of the 412 total participants, 206 were male and 205 were female. One participant failed to enter an
answer for gender. At the public school, 98 males and 110 females took part, while at the private school there were 108 males and 95 females. The two middle schools surveyed were the only middle schools in the city. The complete results can be viewed in Appendix B.

The students were asked to identify how many years they attended their current school system. The students selected one of three options; 1-3 years, 4-6 years, or 7-9 years. At the public school, 14.4%, or 30 students, indicated they attended their current system for 1-3 years, 19.2%, or 40 students, selected 4-6 years, and 66.3%, or 138 students, choose 7-9 years. At the private school, 8.3%, or 17 students, attended their current school system for 1-3 years, 10.7%, or 22 students, attended for 4-6 years, and 80.1%, or 165 students, selected 7-9 years. As a whole, both groups of students experienced a high level of stability in their population. The complete results for the number of years the students attended each school can be viewed in Appendix C.

The students also stated what faith affiliation, if any, they held. The students choose between Catholic, Protestant, Muslim, other, and none. At the public school, 58.7%, or 122 of the students, were Catholic, 1.4%, or three students were Protestant, and 1.4%, or three students were Muslim. In addition, 27.9% or 58 students, stated they were members of some other faith and 10.6%, or 22 students, stated they had no faith affiliation. At the private school, 95.1%, or 196 of the students, were Catholic, 1.5%, or three students were Protestant, 0%, or no students were Muslim, 1.9%, or four students, were of some other faith. Finally, 0.5%, or one student, did not have any faith affiliation. Appendix D contains a table with the faith affiliation results.
The racial breakdown of students at both schools revealed the populations are homogenous. At the public school, 96.2%, or 200 of the students, were Caucasian, a small percentage 1%, or two students, were Hispanic and 2.4%, or five students, were African American. Finally, 0.5%, or one student, was Asian/Pacific Islander. The private school reported similar percentages. The vast majority of the private school students were Caucasian 97.5% or 199 students. No Hispanic students attended the private school with only 0.5%, or one African-American student enrolled. Four Asian students or 0.5% of the private school population fell into this category. The breakdown of the student’s race is explained in Appendix E.

Research Question 1

The first research question asked how many bullying incidences occurred in both the public and private school. The data that answered this question was found in the first survey question: “How often have you been bullied at school in the past couple of months?” The respondents choose between, “I haven’t been bullied in the past couple of months,” “it has only happened once or twice,” “2 or 3 times a month,” “about once a week,” or “several times a week.”

Of the public school students, 59.9%, or 124 students, picked, “I haven’t been bullied in the past couple of months.” The second option was that it had happened “only once or twice” and 23.7%, or 49 of the public school students, selected this option. A small percentage of public schools students answered that it happened “2 or 3 times,” 5.8%, or 12 students, and 6.3%, or 13 students, selected the answer “about once a week.” Finally, 4.3% or nine of the respondents stated it happened “several times a week.”
At the private school, 59.3%, or 121 students, stated they had not been bullied at school “in the past couple of months,” while 28.9%, or 59 students, stated “it happened only once or twice in the past couple of months.” The percentage of students bullied “2 or 3 times” in the past couple of months was 4.9%, or 10 students. The least frequently selected response at the private school was “several times a week” with only 2%, or four students, marking this answer. The respondents’ complete results may be found in Appendix F.

Research Question 2

The second research question asked what types of bullying happened at the private and public schools. Survey questions 2 through 10 and question 12 provided the data to answer the second research question.

Survey question 2 asked the students if they were called mean names, were made fun of, or teased in a hurtful way. The possible answers were, “it hasn’t happened to me in the past couple of months,” “only once or twice,” “2 or 3 times a month,” “about once a week” or “several times a week.” At the public school, 59.6%, or 124 students, indicated they had not been bullied in the past couple of months and 23.6%, or 49 students, stated that it happened “only once or twice.” A total of 5.3%, or 11 students, felt they were bullied “2 or 3 times a month,” while 8.2%, or 17 students, were bullied with verbal comments “about once a week.” A small percentage, 3.4 %, or 7 students, were bullied multiple times a week.

At the private school, 62.7%, or 128 students, indicated they were not bullied “in the past couple of months” with verbal comments. A relatively large percentage, 27.9%,
or 49 students, stated it occurred “only once or twice a month” and 2.9%, or six students, contended it happened two or three times a month. Finally, 5.4%, or 11 students, felt they were verbally bullied “about once a week” and another 1%, or two students, stated it happened numerous times a week. The students’ response frequencies and percentages can be found in Appendix G.

Survey question 3 asked if other students left them out of things on purpose, excluded them from their group of friends, or completely ignored them. The majority, 62%, or 129 public school students, did not experience this “in the past couple of months” and 26.4%, or 55 students, were excluded or ignored “only once or twice” in the same time frame. Being ignored two or three times a month occurred infrequently with only 2.9%, or six students, reporting this experience, while 2.4%, or five students, stated it happened “about once a week.” At the public school, 6.3%, or 13 students, felt this happened to them “several times a week.”

The private school students encountered similar rates of exclusion. A majority, 66.7%, or 136 students, felt this had not happened to them “in the past couple of months.” An additional 24%, or 49 students, acknowledged that it happened “only once or twice” whereas 3.9%, or eight of the private school students, stated they were bullied in this manner “2 or 3 times a month.” The two fewest selected responses for the private schools were the 3.4%, or seven students, who believed it happened to them “about once a week” and the 2%, or four students, who reported it occurred “several times a week.” The student responses are shared in Appendix H.
Physical bullying was the topic covered in survey question 4. At the public school, 85.1%, or 177 students, did not face this type of bullying and 12.5%, or 26 students, experienced it “only once or twice.” Very small percentages of students faced frequent physical bullying, 1%, or two students, felt it happened “2 or 3 times a month” and another 1%, or two students, stated it occurred “about once a week.” Less than 1%, or one student, reported it transpired “several times a week.”

At the private school, 88.2%, or 180 students, were not physically bullied in the past couple of months. The percentage of students being bullied “only once or twice” a month with physical acts was 9.3%, or 19 students, while 0.5%, or one student, stated it occurred two or three times in the same time period. Lastly, 2%, or four students, stated it happened “about once a week” and no students experienced this “several times a week.” Appendix I lists a complete breakdown of the students’ responses.

Survey question 5 inquired about whether other students told lies or spread false rumors about them and tried to make others dislike them and 65.9%, or 137 of the public schools students, did not experience this “in the past couple of months.” Whereas 24.5%, or 51 students, felt others spread false rumors about them “only once or twice” in the same timeframe, only 5.8%, or twelve students, felt these actions happened to them “2 or 3 times a month.” The smallest percentage of the public school students, 1%, or two students, endured this type of bullying “about once a week.” Finally, 2.9%, or six public school students, stated this happened “several times a week.”

The preponderance of private school students, 72.1%, or 147 of them, did not have rumors maliciously spread about them “in the past couple of months.” An
additional 22.1%, or 45 students, acknowledged that it happened “only once or twice,” while 2.5%, or five students, stated they were bullied in this manner two or three times a month. Only 2%, or four students, believed it happened to them “about once a week.” Lastly, 1.5%, or three students, felt it occurred “several times a week.” See Appendix J for a listing of the students’ responses.

Students were asked to indicate if money was taken from them or if other items were taken from them or damaged in survey question 6. The greater part of those surveyed, 84.6%, or 176 public school students, did not face this type of bullying and 12%, or 25 students, experienced it “only once or twice.” A small percentage, 2.4%, or five students, felt it happened “2 or 3 times a month” and another 1%, or two students, stated it occurred “about once a week.” No public school student stated that this happened “several times a week.”

Likewise, at the private school, 87.7%, or 179 students, did not have items taken from them in the past couple of months. A smaller amount, 10.8%, or 22 students, had items taken from them “only once or twice” in the past couple of months, while 0.5%, or one student, stated it occurred two or three times in the same time frame. The same percentage, 0.5%, or one student, reported that it happened “about once a week” or “several times a week.” A complete breakdown of the students answers are in Appendix K.

Survey question 7 asked if the students were threatened or forced to do things they did not want to. A very large majority, 89.4%, or 186 public school students, indicated they had not experienced this “in the past couple of months” and 7.7%, or 16
students, stated that it happened "only once or twice." No students felt they were bullied in this way "2 or 3 times a month," while 2.4%, or five students, were bullied in this way "about once a week." A small percentage, 0.5%, or one student, was threatened "several times a week."

At the private school, 86.8%, or 177 students, indicated they were not threatened "in the past couple of months." In addition to this number, 11.3%, or 23 students, stated it occurred "only once or twice" a month and 2%, or four students, stated it happened "2 or 3 times a month." No students were threatened "about once a week" or "several times a week" at the private school. The respondents' answers are in Appendix L.

Bullying that involves racial slurs or racial name calling was the subject of survey question 8. At the public school, 92.8%, or 193 students, did not experience this "in the past couple of months" and 4.3%, or nine students, experienced racial bullying "only once or twice" in the same timeframe. Whereas 1.4%, or three students, felt these actions happened to them two or three times a month, no students stated it happened "about once a week." The last category, "several times a week" only received 1.4% or three affirmative marks on the survey.

An overwhelming percentage, 93.1%, or 190 of the private school students, felt this did not happened to them "in the past couple of months." An additional 4.9%, or ten students, acknowledged that it happened "about once or twice." A very small number of respondents, 1%, or two students, stated they were bullied in this manner "2 or 3 times a month" and 0.5%, or one student, believed it happened to them "about once a week."
Finally, 0.5%, or one student, felt it occurred “several times a week.” To view the responses for survey question eight see Appendix M.

Survey question 9 asked if the students were bullied with “mean names, comments, or gestures with a sexual meaning.” At the public school, 76%, or 158 students, did not face this type of bullying and 15.4%, or 32 students, experienced it “only once or twice.” A small remainder reported more frequent bullying involving sexual comments, such as 3.8%, or eight student, who felt it happened “2 or 3 times a month” and another 2.9%, or six students, stated it occurred “about once a week.” Lastly, 1.9%, or four public school students, stated that this happened “several times a week.”

Sexual comments were made at the private school less frequently with 89.2%, or 182 students, reporting they were not bullied with “mean name, comments, or gestures with a sexual meaning” “in the past couple of months.” An additional 7.4%, or fifteen students, felt they were bullied with sexual comments “only once or twice” in the past couple of months, while 2.5%, or five students, stated it occurred two or three times in the same period of time. Only 1%, or two students, stated it happened “about once a week” and no private school students experienced this “several times a week.” Appendix N contains the students’ responses to survey question nine.

Survey question 10 asked if students were bullied in “another way.” The public school students responded at a rate of 77.4%, or 161 students, that they were not bullied in “another way” “in the past couple of months” and 11.5%, or 24 students, stated that it happened “only once or twice.” Only 5.3%, or 11 students, felt they were bullied “2 or 3 times a month,” while 2.4%, or five students, were bullied in “another way” “about once
a week.” A small percentage, 2.9 %, or six students, were bullied in “another way several times a week.”

An almost equal percentage of public and private school students were not bullied in “another way.” At the private school, 77.5%, or 158 students, indicated they were not bullied in “another way” “in the past couple of months.” A strong percentage, 19.6%, or 40 students, stated it occurred “only once or twice” a month and 1.5%, or three students, stated it happened “2 or 3 times a month.” A very small percentage, 1.5%, or three students, were bullied in “another way” “about once a week.” No private school students were bullied in “another way” “several times a week.” Refer to Appendix O for comprehensive results.

Survey question 12 sought to determine the level of cyber-bullying at each site. The results indicated that 67.3%, or 140 of the public schools students, did not experience cyber-bullying “in the past couple of months” and 22.1%, or 46 students, experienced cyber-bullying “only once or twice” in the same time frame. A relatively small group, 6.3%, or thirteen students, felt these actions happened to them “2 or 3 times a month,” while 1.9%, or four students, stated it happened “about once a week.” Only 0.5%, or one student, stated this happened “several times a week.”

A higher percentage of private school students, 85.8%, or 175 students, than public school students pointed out they had not endured cyber-bullying. An additional 11.8%, or 24 students, acknowledged that it happened “only once or twice.” Finally, 1.5%, or three of the private school students, stated they were bullied in this manner “2 or 3 times a month” and 0.5%, or one student, believed they were bullied in this way on a
weekly basis. Likewise, only 0.5%, or one student, felt they were the victim of cyber-bullying “several times a week.” The students’ responses are in Appendix P.

Research Question 3

Research question 3 asked where bullying occurred within private and public school buildings and campuses. To answer this research question the frequency of responses and the corresponding percentages were calculated for survey questions 11a through 11j. Questions 11a through 11j asked the students to indicate if they had been bullied at various locations over the past couple of months. The following locations were on the survey: playground, hallways/stairwells, in the classroom with the teacher present, in the classroom with the teacher absent, bathroom, in gym class or locker room/shower, lunch room, on the way to and from school, school bus, and somewhere else in the school. The students choose between yes and no as possible answers. If the students had not been bullied in the past few months then they could leave the responses blank. The following paragraphs and referenced appendices allow the reader to clearly understand how many bullying incidences took place in particular locations at each school.

The students indicated if they were bullied on the playground when answering survey question 11a. Of the overall public school population that participated in the survey 21.6%, or 45 students, responded that they had been bullied. At the private school, 2.4%, or five students, indicated they were bullied on the playground. The frequency and percentages for the respondents’ answers are in Appendix Q. When examining the number of bullying incidences in the hallways or stairwells 15.4%, or 32
public school students, experienced bullying in this location, while 17%, or 35 of the private school students, came into contact with bullying at this location. See Appendix R for a listing of the students’ responses.

With a teacher present in the public school classroom 10.6%, or 22 students, were bullied by others. The private school students reported a higher percentage with 12.6%, or 26 students, facing bullying in a classroom with a teacher present. Appendix S shares the students’ answers. When the teacher was absent from the classroom the levels of bullying increased at both schools. At the public school 13.5%, or 28 students, suffered bullying in this situation and at the private school, 16.5%, or 34 students, underwent a similar experience. Review Appendix T for thorough details on the replies to this question.

The bathroom is an unsupervised setting in most schools, but a relatively small number of bullying incidences took place in this location for the respondents in this survey. The public students reported that 3.8%, or eight students, were subjected to bullying, while 2.4%, or five private school students, experienced bullying in the bathroom. Examine Appendix U to view the students’ answers. The gym locker room and shower is another possibly unsupervised setting. Again the reported cases of bullying were not terribly high when compared with other locations in the school. At the public school, 6.7%, or 14 students, and 13.6%, or 28 students at the private school, answered positively to this survey question. The respondents’ answers are listed in Appendix V.
The lunchroom was a location where bullying occurred on regular basis in both schools. Of the public school participants, 20.7%, or 43 students, encountered bullying at this location, whilst at the private school 15.5%, or 32 students, faced the same actions. View the students' responses in Appendix W. Similar levels of bullying took place on the way to and from school in the two settings. At the public 8.7% or 18 students and 8.8% or 18 of the private school students, felt they this was a location where they encountered bullying. The students' answers are available in Appendix X.

The trip on the school bus presented students with an opportunity to subject one another to bullying behaviors and 20.7%, or 43 of the public school students, experienced bullying here. Whereas, 16.5%, or 34 private school students, responded in the affirmative to this question leading one to think greater supervision on busses is necessary. Appendix Y contains an analysis of the students' responses. Lastly, the students were asked if they were bullied “somewhere else in the school.” A small percentage, 4.3%, or nine of the public school students, and 1.9% or four students at the private school, indicated this took place. Examine Appendix Z to view the respondents' answers.

The final question to be answered in research question 3 involves cyber-bullying. This research seeks to gain a better understanding of where cyber-bullying takes places. Much like physical or verbal bullying, cyber-bullying tended to happen in certain places or on certain types of communication platforms. Therefore the students selected the types of communication devices on which they experienced cyber-bullying in survey questions 13a-13e. Their choices included email, texting, Twitter, Facebook or other
social networking sites, and other means of electronic communication. The students selected either yes or no as a response. The students could also leave the answers blank if they did not experience cyber-bullying in the past few months.

A small number of students indicated they encountered bullying while using email. At the public school, 6.3%, or 13 students, stated they were bullied in this manner, while 1%, or two private school students, felt they faced this type of bullying. Appendix AA shares the complete frequency and percentage of responses. A higher positive response rate was seen regarding texting. Of the public school students, 20.7%, or 43 students, identified texting as a location for cyber-bullying and 6.8%, or 14 private school students, had the same experience. View Appendix AB for the complete breakdown of responses.

Twitter was not a frequent location of cyber-bullying for the students surveyed. No public school students felt they were bullied while using Twitter and only 0.5%, or one private school student, responded positively to this question. The results are in Appendix AC. Facebook and other social networking sites were involved in higher amounts of bullying particularly at the public school where 17.8%, or 37 students, faced bullying. At the private school, 6.8%, or 14 students, stated they were bullied in this manner. The respondents' answers are listed in Appendix AD. Finally, the students were asked if cyber-bullying occurred in another way. The positive responses were infrequent with only 3.8%, or eight public, and 2.9%, or six private school students, stating this took place. Interestingly, several students who answered yes to this question indicated internet
gaming sites were a place where bullying cropped up, the students responses are listed in Appendix AE.

Research Question 4

Research question 4 asks to what degree there are differences between the number of incidences, types, and location of bullying that take place at public and private schools. To determine if a statistically significant difference exists between the number of bullying incidences that occur at the public and private school the survey results were compared using an independent samples t-test. A p-value ≤ .05 was judged to be significant.

Survey question 1 measured the difference between the number of bullying incidences at the public and private school. The results produced a t-value of 1.012, and a p-value of .312. Since the p-value is > .05 the difference in the number of bullying incidences at the public and private school is not statistically significant.

To determine if a statistically significant difference exists in the types of bullying that occurred at the public and private school survey questions 2 through 10 and 12 were compared using a t-test. Again a p-value of ≤ .05 was considered to show that a significant difference existed in the amount of a particular type of bullying between the two schools. Ten types of bullying were measured that included name calling, excluding others, hitting others, spreading false rumors, having money taken from them, being threatened, racial comments, sexual comments, cyber-bullying and other types of bullying.
The *t*-test results for survey question 2 produced a $p$-value equal to .063. Since the $p$-value is $>.05$ the difference in the number of bullying incidences involving name calling at the public and private school is not statistically significant. When calculating the *t*-test results for survey question number three a $p$-value equal to .14 was found. Given that the $p$-value is $>.05$ the difference in the number of bullying incidences involving exclusion at the public and private school is not statistically significant.

For survey question 4 the *t*-test generated a $p$-value equal to .31. Because the $p$-value is $>.05$ the difference in the number of bullying incidences involving name calling at the public and private school is not statistically significant. The *t*-test results for survey question 5 produced a $p$-value equal to .148. The $p$-value is $>.05$ therefore; the disparity in the number of bullying incidences involving spreading false rumors at the public and private school is not statistically significant.

When conducting the *t*-test for survey question 6 a $p$-value equal to .357 was calculated. Due to the $p$-value being $>.05$ the difference in the number of bullying incidences involving having money or items taken away from the student at the public and private school is not statistically significant. The *t*-test results for survey question 7 produced a $p$-value equal to .861. Since the $p$-value is $>.05$ the difference in the number of bullying incidences involving threats at the public and private school is not statistically significant.

The $p$-value for survey question 8 is .323. Again, the $p$-value is $>.05$ so the difference in the number of bullying incidences involving racial comments at the public and private school is not statistically significant.
The *t*-test results for survey question number 9 produced a *p* -value equal to .0005. Because the *p* -value is < .05 the variation in the number of bullying incidences involving sexual comments at the public and private school is statistically significant. As noted earlier in Chapter 4, two types of bullying were found to have statistically significant differences in the two groups surveyed. The survey results indicated that the number of bullying incidents using comments or gestures with a sexual meaning were significantly higher at the public school than at the private school. At the public school, 50 students stated that they were subject to this type of bullying over the past couple of months, while 22 students at the private school had this same experience. The *p*-value of the *t*-test is .0005 and the effect size is .346. Therefore, the effect size is small and the implications of the findings are not to be overstated (Cohen, 1969). A difference between the two schools exists for sexual comments in bullying, but the difference is not overly noteworthy.

The *t*-test results for survey question 10 produced a *p* -value equal to .062. Due to the fact that the *p* -value is > .05 the difference in the number of bullying incidences involving other types of bullying at the public and private school is not statistically significant.

The *t*-test results for survey question 12 produced a *p* -value < .0005. Since the *p* -value is < .05 the difference in the number of bullying incidences involving cyber-bullying at the public and private schools is statistically significant. Another area with a statistically significant different outcome is the number of cyber-bulling incidents. At the public school 64 students and 29 students at the private school conveyed they were the
victims of cyber-bullying. The $p$-value of the $t$-test was .0005 with an effect size of .390. The disparity between the two schools is statistically significant; however the effect size is small (Cohen, 1969). The implication is that the results alone do not justify any momentous claims of differences in the public and private school setting. The complete results for the $t$-test performed on the data gathered from survey questions 1 through 10 and survey question 12 are contained in Table 1.
Table 1

*Results of t-test for Survey Question 2 through 10 and Question 12*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>$T$</th>
<th>Df</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
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<td>.063</td>
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<tr>
<td>Question 3</td>
<td>1.477</td>
<td>410</td>
<td>.140</td>
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<tr>
<td>Question 4</td>
<td>.588</td>
<td>410</td>
<td>.557</td>
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<tr>
<td>Question 5</td>
<td>1.448</td>
<td>410</td>
<td>.148</td>
</tr>
<tr>
<td>Question 6</td>
<td>.922</td>
<td>410</td>
<td>.570</td>
</tr>
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<td>Question 7</td>
<td>-.175</td>
<td>410</td>
<td>.861</td>
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<td>Question 8</td>
<td>.989</td>
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<td>.323</td>
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<td>Question 9</td>
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<td>410</td>
<td>.0005</td>
</tr>
<tr>
<td>Question 10</td>
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<td>409</td>
<td>.062</td>
</tr>
<tr>
<td>Question 12</td>
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<td>406</td>
<td>.0005</td>
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</tbody>
</table>

The third and final section of research question number 4 regards the location of bullying within the public and private schools. Specifically, the question asks if a statistically significant difference in the amount of bullying in a particular location exists when comparing the two schools. To determine this, survey questions 11a through 11j and 13a through 13e for both schools were compared using Chi-Square. If the $p$-value was $\leq .05$ the results were significant. The locations that resulted in statistically significant differences are explained below.
Survey question 11a resulted in a $p$-value equal to .0005 which is < .05 and therefore was statistically significant. The number of bullying incidences reported on the playground at the public and private school was significantly different. The survey results for survey question 11g created a $p$-value equal to .012 which is < .05 and is statistically significant. On the playground, 45 public school students and five private school students affirmed that they were bullied.

The amount of bullying taking place in the lunchroom varied significantly between the two schools. Student responses to survey question 11i produced a $p$-value equal to .025 which is < .05 and is statistically significant. In the lunch room 43 public school and 32 private school students asserted they came into contact with bullying. The $p$-value of the Chi-Square test is .012.

The divergence of responses between the public and private school students regarding bullying on the school bus resulted in a $p$-value on Chi-Square test of .025 which is statistically significant. The number of students at the public and private schools that stated they were bullied on the bus was 43 and 34. The complete results for the Chi-Square test for survey questions 11a through 11j are included in Table 2.
### Table 2

*Results of Chi-Square test for Survey Questions 11a through 11j*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
<th>p-value</th>
<th>Public School Responses</th>
<th>Private School Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Yes</td>
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</tr>
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<td>Question 4</td>
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<td>45</td>
<td>114</td>
</tr>
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<td>Question 11a</td>
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<td>1</td>
<td>.552</td>
<td>32</td>
<td>126</td>
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<tr>
<td>Question 11b</td>
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<td>.842</td>
<td>22</td>
<td>136</td>
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<td>Question 11c</td>
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<td>130</td>
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<tr>
<td>Question 11d</td>
<td>1.585</td>
<td>1</td>
<td>.208</td>
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<td>Question 11e</td>
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<td>.117</td>
<td>14</td>
<td>144</td>
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<td>115</td>
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<tr>
<td>Question 11g</td>
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<td>.484</td>
<td>18</td>
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<td>Question 11h</td>
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</tbody>
</table>

(table 2 continued)
To understand if the students in the public and private school cyber-bully each other in disparate rates on particular communication tools survey questions 13a through 13e were also compared using a Chi-Square test. By comparing these questions one can determine if a statistically significant difference exists in the amount of cyber-bullying that occurs when using a particular type of communication device or medium. The outcomes add to the conversation on whether or not a public or private school environment makes a difference in cyber-bullying.

As noted earlier, the amount of electronic bullying at each school is divergent enough to result in a statistically significant difference between the two schools. Thus, it is not surprising that certain type of electronic communication, such as email, texting and social networks also created a statistically significant difference. When questioned about the amount of bullying using email 13 public school and two private school students

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
<th>p-value</th>
<th>Public School Responses</th>
<th>Private School Responses</th>
</tr>
</thead>
<tbody>
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<td>Question</td>
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<td>1</td>
<td>.025</td>
<td>43 115 34 162</td>
<td></td>
</tr>
<tr>
<td>11i</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>3.385</td>
<td>1</td>
<td>.066</td>
<td>9 148 4 193</td>
<td></td>
</tr>
<tr>
<td>11j</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
indicated this had happened to them. The $p$-value of the Chi-Square test is .001, since the value is < .05 the finding is significant.

Similarly, survey question 13b created a $p$-value equal to .0005 which is < .05. Because the $p$-value is < .05 the difference in bullying that occurs while texting is statistically significant. The quantity of bullying via texting is higher with 43 public school students and 14 private schools students stating they were bullied using this type of electronic communication.

Finally, survey question 13d created a $p$-value equal to .0005 when calculated using Chi-Square. Since the $p$-value is < .05 the difference in the amount of bullying taking place within each group while using Facebook and other social network sites is statistically significant. Bullying on Facebook or other social networks is a growing area of investigation. The students acknowledged being bullied at a substantial level on these sites with 37 public and 14 private school students answering affirmatively. The complete results of the Chi-Square test for questions 13a through 13e are listed in Table 3.
Table 3

Results of Chi-Square test for Survey Questions 13a through 13e

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
<th>p-value</th>
<th>Public School Responses</th>
<th>Private School Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 13a</td>
<td>11.725</td>
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<td>.001</td>
<td>13 135</td>
<td>2 188</td>
</tr>
<tr>
<td>Question 13b</td>
<td>28.816</td>
<td>1</td>
<td>.0005</td>
<td>43 103</td>
<td>14 177</td>
</tr>
<tr>
<td>Question 13c</td>
<td>.756</td>
<td>1</td>
<td>.382</td>
<td>0 145</td>
<td>1 189</td>
</tr>
<tr>
<td>Question 13d</td>
<td>20.717</td>
<td>1</td>
<td>.0005</td>
<td>37 109</td>
<td>14 176</td>
</tr>
<tr>
<td>Question 13e</td>
<td>1.121</td>
<td>1</td>
<td>.290</td>
<td>8 137</td>
<td>6 183</td>
</tr>
</tbody>
</table>

Research Question 5

The final research question within this research compared the 13 survey questions answered by the students at the private and public school with the basic demographic information gathered about each student. The four types of demographic data gathered were gender, faith affiliation, race, and number of years in attendance at the school system. Research question number 5 was answered by performing a cross tabulation analysis with Chi-square. The demographic characteristics of the students in each school were compared individually with their answers to the survey questions. Therefore the comparisons which are significant for each school will be shared individually. After presenting the data for each school any common statistically significant results will be also be discussed. Again, only results with a p-value ≤ .05 were statistically significant.
At the public school, several demographic characteristics were found to be statistically significant. When examining gender, three survey questions produced a \( p \)-value < .05. In survey question 11b the students indicated if they encountered bullying in the hallways or stairwells at their school. The Chi-Square test produced a \( p \)-value equal to .035 which was statistically significant. The evaluation also generated a \( p \)-value equal to .001 for question 13b which compared texting and gender. The Chi-Square result for question 13b was significant. Question 13d asked about bullying on Facebook or other social networking sites and when compared with gender produced a \( p \)-value = .047 which was < .05 and was significant. See Table 4 for the complete results.
Table 4

*Results of Chi-Square Test Comparing Public School Gender and Survey Questions 1-13*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
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</thead>
<tbody>
<tr>
<td>Question 1</td>
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<td>.521</td>
</tr>
<tr>
<td>Question 2</td>
<td>6.644</td>
<td>4</td>
<td>.156</td>
</tr>
<tr>
<td>Question 3</td>
<td>8.170</td>
<td>4</td>
<td>.086</td>
</tr>
<tr>
<td>Question 4</td>
<td>2.829</td>
<td>4</td>
<td>.587</td>
</tr>
<tr>
<td>Question 5</td>
<td>8.362</td>
<td>4</td>
<td>.079</td>
</tr>
<tr>
<td>Question 6</td>
<td>4.567</td>
<td>3</td>
<td>.206</td>
</tr>
<tr>
<td>Question 7</td>
<td>6.415</td>
<td>3</td>
<td>.093</td>
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<td>Question 8</td>
<td>3.390</td>
<td>3</td>
<td>.335</td>
</tr>
<tr>
<td>Question 9</td>
<td>4.138</td>
<td>4</td>
<td>.388</td>
</tr>
<tr>
<td>Question 10</td>
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<td>.305</td>
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<tr>
<td>Question 11a</td>
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<td>.436</td>
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<td>Question 11b</td>
<td>6.683</td>
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<td>.035</td>
</tr>
<tr>
<td>Question 11c</td>
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<td>Question 11d</td>
<td>3.735</td>
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<td>.155</td>
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<tr>
<td>Question 11e</td>
<td>.958</td>
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<td>.620</td>
</tr>
<tr>
<td>Question 11f</td>
<td>.279</td>
<td>2</td>
<td>.870</td>
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</tbody>
</table>

( table 4 continued)
The Chi-Square assessment of number of years in attendance at the public school system and the survey questions found many significant outcomes. The results of twelve survey questions and the students' demographic data created statistically significant results.

When evaluating the number of years in attendance at the public school and the amount of physical bullying the Chi-Square test created a \( p \)-value equal to .05. Since the \( p \)-value is < .05 the finding was significant. The number of incidences involving threats and years in attendance resulted in a \( p \)-value equal to .032. Because the \( p \)-value was < .05 the results were significant. The students responses to being bullied while on the

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
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<th>( p )-value</th>
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</thead>
<tbody>
<tr>
<td>Question 11g</td>
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<tr>
<td>Question 11h</td>
<td>.948</td>
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<td>.622</td>
</tr>
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<td>Question 11i</td>
<td>.620</td>
<td>2</td>
<td>.734</td>
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<tr>
<td>Question 11j</td>
<td>.343</td>
<td>2</td>
<td>.843</td>
</tr>
<tr>
<td>Question 12</td>
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<td>Question 13a</td>
<td>.431</td>
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<td>.806</td>
</tr>
<tr>
<td>Question 13b</td>
<td>14.099</td>
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<td>.001</td>
</tr>
<tr>
<td>Question 13c</td>
<td>.009</td>
<td>1</td>
<td>.924</td>
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<tr>
<td>Question 13d</td>
<td>6.117</td>
<td>2</td>
<td>.047</td>
</tr>
<tr>
<td>Question 13e</td>
<td>.062</td>
<td>2</td>
<td>.969</td>
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</table>
playground resulted in a \( p \)-value equal to .045. Since the \( p \)-value is < .05 the results were significant. Also, a \( p \)-value equal to .005 was created when the number of years in attendance and bullying in the hallways and stairwells were analyzed. Since the \( p \)-value was equal to .05 this result was significant. The number of bullying incidences in a classroom with a teacher present at the public school found a \( p \)-value equal to .048. Because the result was < .05 the outcome was significant. The amount of bullying in the bathroom brought about a \( p \)-value equal to .035. Due to the \( p \)-value being < .05 the results was significant. Likewise the amount of the bullying in gym class found a \( p \)-value equal to .041. Because the \( p \)-value was < .05 the findings are significant.

The comparison of number of years in attendance at the public school and bullying in the lunch room yielded a \( p \)-value equal to .028. Again the \( p \)-value was < .05 so the outcome was significant. In a similar manner, bullying on the school bus produced a \( p \)-value equal to .045 and bullying that occurred in somewhere else in the school created a \( p \)-value equal to .010. Since both \( p \)-values were < .05 the results were significant.

Two types of cyber-bullying generated significant outcomes. Analysis of survey question numbers 13a, email, and 13b, texting, turned out the following two \( p \)-values respectively; .014 and .031. The results for these two types of cyber-bullying were < .05 therefore they are significant. All of the Chi-Square outcomes for number of years in attendance were listed in Table 5.
Table 5

Results of Chi-Square Test Comparing Public School Year in Attendance and Survey Questions 1-13

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
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<th>p-value</th>
</tr>
</thead>
<tbody>
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</tr>
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<td>Question 2</td>
<td>8.863</td>
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<td>.354</td>
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<tr>
<td>Question 3</td>
<td>14.724</td>
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<td>.065</td>
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<td>Question 4</td>
<td>15.504</td>
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<td>Question 11d</td>
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<td>.051</td>
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(table 5 continued)
When considering race at the public school and the survey results two questions were found to have significant results. The comparison of physical bullying and race created a \( p \)-value equal to .0005 which was < than .05 and therefore significant. The student's race and the number of bullying incidences involving racial comments produced a \( p \)-value equal to .0005. See Table 6 for a comparison of the results for race and the survey questions.
Table 6

*Results of Chi-Square Test Comparing Public School Race and Survey Questions 1-13*

<table>
<thead>
<tr>
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<th>df</th>
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<td>Question 11j</td>
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<td>6</td>
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The final demographic variable, faith affiliation, also found areas of interest.

Faith and the amount of reported bullying at the public school in survey question 1 found a $p$-value equal to .002. Since the $p$-value is $< .05$ the outcome was significant. While examining the number of cyber-bullying incidences and faith affiliation yielded a $p$-value.
= .0005. Because the p-value is < .05 the finding was significant. The complete result for the Chi-Square analysis of faith and the survey questions is available in Table 7.

Table 7

Results of Chi-Square Test Comparing Public School Faith and Survey Questions 1-13

<table>
<thead>
<tr>
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<th>p-value</th>
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<td>Question 4</td>
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<td>.617</td>
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<td>Question 7</td>
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<td>Question 8</td>
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Table 7 continued
The comparison of the private school demographics and the 13 survey questions produced a much smaller number of significant results. The assessment of gender and bullying comments with a sexual connotation produced a $p$-value equal to .014. Because the $p$-value is < .05 the result was significant. See Table 8 for a complete record of these results.

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
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<th>$p$-value</th>
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Table 8

*Results of Chi-Square Test Comparing Private School Gender and Survey Questions 1-13*

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(table 8 continued)
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<td>.198</td>
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The Chi-Square test for the private school’s years in attendance and the survey questions found two outcomes with significance. The areas with significance involved bullying located in the gym locker room, a $p$-value equal to .049. Since the $p$-value is < .05 the finding is significant. When comparing number of years in attendance and texting the Chi-Square analysis found a $p$-value equal to .022. To view the product of this test see Table 9 contains the results for this test.
Table 9

Results of Chi-Square Test Comparing Private School Year in Attendance and Survey

Questions 1-13

<table>
<thead>
<tr>
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<th>Pearson Chi-Square Value</th>
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<th>p-value</th>
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</thead>
<tbody>
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At the private school no relationships were found between a student’s race and the survey questions, view Table 10 for an overview of these results.
Table 10

*Results of Chi-Square Test Comparing Private School Race and Survey Questions 1-13*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
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*(table 10 continued)*
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</table>

Faith affiliation at the private school established significant relationships with two survey questions. A connection was found between faith affiliation and the spreading of rumors. A p-value of .0005 was created by the Chi-Square analysis of these factors. Since the p-value is < .05 the outcome is significant. Faith affiliation and race generated a p-value equal to .014. Since the p-value is < .05 the finding was significant. The complete results of the Chi-Square test for faith affiliation and questions 1-13 are listed in Table 11.
Table 11

Results of Chi-Square Test Comparing Private School Faith and Survey Questions 1-13

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
<th>p-value</th>
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<td>.866</td>
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<td>.998</td>
</tr>
<tr>
<td>Question 11b</td>
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<td>.368</td>
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<tr>
<td>Question 11c</td>
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<td>Question 11d</td>
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<td>Question 11g</td>
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CHAPTER 5
SUMMARY, CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The five research questions posed in this dissertation enhanced the research on bullying in public and private schools. Documentation and studies of bullying at public schools were significant and have been reproduced in a large variety of settings; however, limited attention was given to the topic of bullying in private schools and whether the current research was applicable to both settings. The lack of research on bullying in private school settings left unanswered questions and too many assumptions in the literature. For example, no research was conducted to verify that the same types of bullying occur in both public and private schools. Also, little analysis on the prevalence of bullying in private schools had been gathered.

By finding answers to these and other questions the current assumptions in the literature were tested and found to be either accurate or inaccurate. With these findings in hand, additional steps can be taken by both researchers and educators. The differences in bullying at public and private schools were subjected to further research to determine the causes for the variance. On the other hand, if no difference existed between particular aspects of bullying at the public and private school one could apply current research to the private school with greater confidence. In either situation the knowledge on this important topic will be more exhaustive and accurate for private schools. Hopefully, the results led to a more precise use of anti-bullying techniques to improve the education and emotional well being of students in private schools.
To improve the knowledge on bullying five key research questions were answered. The five research questions that guided the focus of this dissertation were: (1) How many bullying incidences occur in both public and private schools?, (2) What types of bullying activities take place in both public and private schools (Physical, verbal, cyber-bullying, etc.)?, (3) Where does bullying occur within private and public school buildings and campuses?, (4) To what degree are there differences between the number of incidences, types, and locations of bullying that take place at public and private schools?, (5) How do traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying)?

Conclusions

Research question 1 sought to determine if a difference existed in the number of bullying incidents that occurred at the public and private school in this study. Of the public school students, 59.9%, or 124 students, picked, “I haven’t been bullied in the past couple of months.” The second option was that it had happened “only once or twice” and 23.7%, or 49 of the public school students, selected this option. A small percentage of public school students answered that it happened “2 or 3 times a month,” 5.8%, or 12 students, and 6.3%, or 13 students, selected the answer “about once a week.” Finally, 4.3% or nine of the respondents stated it happened “several times a week.”

At the private school, 59.3%, or 121 students, stated they had not been bullied at school “in the past couple of months,” while 28.9%, or 59 students, stated “it happened only once or twice in the past couple of months.” The percentage of students bullied “2
or 3 times” in the past couple of months was 4.9%, or 10 students. Also, 4.9% or 10 students reported being bullied once a week. The least frequently selected response at the private school was “several times a week” with only 2%, or four students, marking this answer. Research such as Haynie et al. (2001) reported that 19.5% of U.S. youth reported bullying others three times or more over the past year and 8.8% stated they bullied others once a week or more. The timeframes used to measure bullying in Haynie et al. research were different than those used in this research but there was a similarity in the overall bulling rates and a smaller number of students from this research reporting being bullied several times a week.

Research question 2 compared the types of bullying that occurred in the public and private school (physical, verbal, cyber-bullying, etc.). When considering the students who were bullied at least two or three times a month this research reaffirms the current literature that verbal bullying was the most common type with 16.9%, or 35 public school students and 9.3%, or 19 private school students reporting this occurred. Smith and Sharp (1994), Whitney and Smith (1993), Wolke, Woods, Stanford, and Schulz (2001) also found that verbal comments made up the single highest category of bullying.

Exclusion was the second highest class of bullying in both the public and private schools in this study; 11.6%, or 24 public school students and 8.3%, or nineteen private school students. Spreading rumors about students was the third most common type of bullying at the public school with 9.7%, or 20 public school students indicating this occurred. Spreading rumors at the private school was reported by 9.3%, or 19 private
school students, which was tied for the most common type of bullying at the private school.

Physical acts of bullying at both schools were significantly lower than those reported in national surveys. At both schools 2.5%, or five students, experienced physical acts of bullying. In comparison, 14.6% of bullying actions were physical in nature according to national statistics (Nansel et al., 2001). Nearly 19% of bullying took the form of sexual comments (Nansel et al., 2001) in the same national survey, but the overall percentage at the public school in this survey was 8.6%, or 18 students, and 3.5%, or seven students, at the private school. Thus the schools in this research had lower rates of bullying using sexual comments. Finally, at the public school 8.7%, or 18 students, reported being the victims of cyber-bullying. Cyber-bullying was reported by 2.5%, or five students, at the private school. The Youth Internet Safety Survey-2 conducted by Wolak et al. (2006) surveyed 1,501 regular internet users between the ages of 10 and 17. The results from this survey indicated that 9% of these youth were harassed on-line in the past year. The public schools rates approach those of the national survey; however the private schools rates were much lower. In conclusion, the level of bullying overall in both the public and private school in this Midwestern community were significantly lower than national samples.

Research question 3 compared where bullying incidents occurred in the public and private school. The most common locations for bullying in previous research were the playground, hallways, lunchroom and the school bus. Whitney and Smith (1993) found that the majority of bullying occurred on playgrounds. A separate study comparing
bullying in Germany and England also confirmed the playground as the most common location for bullying activity (Wolke et al., 2001). Another study found that in addition to the playground, the hallway, the cafeteria, and school bus were also frequent locations for bullying to take place (Astor et al., 2001). A more recent survey conducted in three schools with divergent characteristics found the hallway to be the most common location for bullying activity (San Antonio & Salzfass, 2007).

At the public school in this research the playground, lunchroom and bus were the most often cited location where bullying took place. At the private school the hallway, the classroom with no teacher present, and the bus were the most frequent locations of bullying. As noted in the previous paragraph all of these locations were cited in the literature as common locations for bullying. Therefore, this research agreed with the literature on many of the most common locations where bullying occurred.

Research question 4 compared the results of the public and private school students' survey results to determine if differences were present in the number of bullying incidents, types of bullying, and location of bullying incidents in the public and private school. Regarding the number of bullying incidents at the public and private school no statistically significant difference was found between the two schools' populations. No references to this topic were found in the literature.

When considering the types of bullying ten specific categories of bullying such as physical, verbal, exclusion, spreading rumors, having items taken from them, being threatened, racial comments, sexual comments, another way, and cyber-bullying were examined. Two types of bullying were found to have statistically significant different
results when comparing the public and private school. The survey results indicated that the number of bullying incidents using comments or gestures with a sexual meaning were significantly higher at the public school than at the private school. At the public school, 50 students stated that they were subject to this type of bullying over the past couple of months, while 22 students at the private school had this same experience.

The second category of bullying that demonstrated a statistically significant difference in this research was cyber-bullying. At the public school 64 students and 29 students at the private school conveyed they were the victims of cyber-bullying. Due to the lack of research that has been conducted on the differences in the types of bullying in public and private schools no comparisons can be made between this research and other published literature.

When researching the location of bullying in the public and private school three locations were found to have statistically significant results. The number of bullying incidences reported on the playground at the public and private school was significantly different. On the playground, 45 public school students and five private school students affirmed that they were bullied. The amount of bullying taking place in the lunchroom varied significantly between the two schools. In the lunchroom 43 public school and 32 private school students asserted they came into contact with bullying. The divergence of responses between the public and private school students regarding bullying on the school bus resulted in a statistically significant result. The number of students at the public and private schools that stated they were bullied on the bus was 43 and 34. Again, limited research on the differences on the location of bullying at public and private
schools has been conducted, so no references in the literature were available with which to compare these results.

Research question 5 researched how traits such as gender, faith affiliation, number of years in residence in the current school system, and race relate to participation in bullying behaviors (Prevalence, type, and location of bullying). At the public school, several demographic characteristics were found to be statistically significant. When examining gender, three survey questions produced statistically significant results. The survey results indicated a statistically significant relationship between bullying in the hallways or stairwells, texting and, bullying on Facebook or other social networking sites when compared with gender.

When examining the gender and social networks at the public school a relationship existed. A larger number of females, 26, than males, 11, indicated they felt bullied while on a social networks. Girls in the public school showed a stronger likelihood to participate in this activity. According to other research boys and girls both suffer bullying in approximately the same amounts, but the girls were involved in greater amounts of relational bullying such as spreading rumors (San Antonio & Salzfass, 2007). This research found that public school girls were more likely to be involved in bullying on social networks which raises the question, are social networks the newest location of relational bullying. Also, why public school girls participated in higher numbers is an important question but one that little research existed to compare with this research. No direct links to the literature were found to explain why girls at the public school reported higher levels of bullying on social networking sites.
The public school also showed a significant relationship between gender and bullying that occurred while texting. At the public school 33 girls and 10 boys reported that they were bullied while texting. The potential that girls bully more frequently through electronic means may be linked to the general research that girls participate in verbal or relational bullying (San Antonio & Salzfass, 2007).

When examining gender and bullying that took place in the hallways a statistically significant result was observed. At the public school 23 girls and nine boys stated they were bullied in the hallway. The higher number of girls reporting this as a location where bullying occurred is not supported by any references in the literature, therefore it is difficult to ascertain why this relationship existed at this school.

Another area of interest that arose from this research is the number of years in attendance and bullying at the public school. Twelve different survey questions were found to have significant outcomes when compared with this variable. The twelve survey questions with statistically significant results were physical bullying, threats, bullying on the playground, bullying in the hallways, in the classroom with the teacher present, in the bathroom, in gym class, in the lunchroom, on the school bus, somewhere else in the school, email, and texting. This large number of significant findings produced many questions. It is possible this factor may be related to the probability of being bullied or bullying others. The number of years a student resided in a school and the amount of bullying they endured has not been explored in the current literature.

A relationship also manifested itself between race and physical bullying at the public school. Race was a well researched factor in bullying, but its role as a cause of
bulling was unclear. In the United States, numerous studies reached a variety of conclusions. One study found that bullying did not differ between Caucasian, African American and Hispanic children (Nansel et al., 2001). A second study within a school with a higher African American and Hispanic population found that Caucasian children were more likely to be the target of bullying (Graham & Juvonen, 2002). In a third, study African American and Caucasian children reported similar amounts of bullying, but Hispanic students reported lower levels of bullying (Hanish & Guerra, 2000). In this completed dissertation the small number of minorities in the public school could have increased this type of bullying.

When considering race at the public school two questions were found to have significant results. The comparison of physical bullying and race created a statistically significant result. The student’s race and the number of bullying incidences involving racial comments produced a p-value equal to .0005. The disturbing factor was the higher trend towards physical bullying of minorities.

The comparison of faith and the prevalence of cyber-bullying was statistically significant at the public school. Of the public school students 58.7% indicated they were Catholic with “other” being the next highest category at nearly 30%. The possibility existed that faith affiliation played a role in bullying at the public school. If faith was a prevalent identifying factor within the community it could have served as a catalyst for selecting bullying targets. Limited research on the role of faith and specifically its connection to cyber-bullying existed so no comparison was made.
The comparison of the private school demographics and the 13 survey questions produced a much smaller number of significant results. The assessment of gender and bullying comments with a sexual connotation produced a statistically significant result. Nearly 19% of verbal bullying took the form of sexual comments in one study (Nansel et al., 2001). Researchers based these percentages on students who reported bullying behaviors that occurred once a week or several times a week. At the private school the overall percentage of students who reported they were bullied with sexual comments was 10.8% or 21 students. Eleven boys reported being bullied in this way while 10 girls reported the same actions happened to them. The difference in the private school results and the national results showed that bullying with sexual comments was less frequent at the private school in the small Midwestern community than in the nation as a whole. No references between gender and bullying with sexual comments were available currently making direct comparisons with other research difficult.

The Chi-Square test for the private school’s years in attendance and the survey questions found bullying located in the gym locker room and bullying while using texting to have statistically significant results. The literature on bullying showed that bullying in locations without adequate adult supervision were frequently hotspots for bullying activity (Astor et al., 2001, Whitney & Smith 1993, Wolke et al., 2001). However, no direct comparisons of the a student’s number of years in attendance at a school and bullying in the gym locker room was made due to the lack of research on this topic. The current literature on texting suggested this is growing category of bullying (Wolak et al., 2006). However, the literature did not explore the connection between the number of
years in attendance at a school and bullying in the form of texting, therefore no comparisons to other research was made regarding this finding.

Faith affiliation at the private school established significant relationships with two survey questions. A connection was found between faith affiliation and the spreading of rumors. Other research found that faith was a factor in bullying (Nansel et al., 2001). The relationship between faith and spreading rumors was not well documented and does not allow for a connection to other research.

Faith affiliation and race generated a statistically significant result. One survey found 8% of bullying behaviors were about religion or race (Nansel et al, 2001). Both of these factors were viewed as possible factors in bullying for a number of years. Also the current research on race resulted in a variety of outcomes with both minorities being the victims and perpetrators of bullying (Graham & Juvonen, 2002 Hanish & Guerra, 2000 Nansel et al., 2001). No research was currently available if students of a particular race or faith participate in bullying in particular measurable trends.

Implications for Public and Private Schools: Personal Reflections

When considering the findings of this research the reader needs to consider the faith affiliation of the students in the two schools. As noted in Chapter 4, 58.7% or 122 of the public school students surveyed stated they were Catholic. At the private school 95.1% of the students stated they were Catholic. The high percentage of Catholic students in both schools was reflective of the community as a whole. The high level of homogeneity in the city's population makes the results more representative of the school environment than the faith affiliation of the children. Also, the fact that only two
middle schools existed in the city, one public and one Catholic, made the comparison of public and private more dynamic. The high level of homogeneity and small number of schools were factors in selecting the site of the study. These two issues placed more weight on the schools as the determining factor in the bullying at each location.

However, if a generalization of this research was to be made to communities with a more diverse population, additional replication of this research could be advantageous. By replicating this research in more diverse setting future researchers may find different results. Research on bullying should always consider regional factors affecting the population and allow for these when generalizing other’s research.

A noteworthy outcome when considering the differences between the two schools involved cyber-bullying. The students’ answers revealed a statistically significant divergence in the amount of electronic bullying in three of the five possible types of cyber-bullying; email, texting and social-networking sites. The number of discrepancies suggested the existence of an underlying difference in environment for the two populations. One possible explanation revolved around the nature of cyber-bullying. One can assume that most students were not using email, texting, and social networks extensively during the school day. Rather, the students presumably used these outside of school hours. The differences could be related to home environments issues such as access to electronic communication devices, monitoring of student usage of electronic communication devices, or parental guidance.

An unexpected result was listed by several students, who listed on-line gaming sites as a location where bullying occurred. This answer was not anticipated when this
research project was designed, but it may lend insight into a future wave of bullying schools will encounter. Several disturbing factors were associated with this type of bullying. First, the ability to detect and stop bullying which occurs at these sites will be difficult. Participants were typically anonymous since they often use assumed names, therefore identifying the perpetrators would be challenging. Also, the victim and bully could be a great distance from each other since they are playing on line. This great distance could make stopping bullying extremely difficult. Finally, who would oversee or monitor the events on these sites was unclear. School personnel would appear to have no authority in this situation and parents may be unaware that bullying was taking place. No clear answers for this issue currently exist.

The "Olweus Survey Questionnaire for Students" was used as a basis for many of the questions on the survey instrument used in this research. Additional questions were created to examine the areas of cyber-bullying. In the future greater attention should be given to this category of bullying to ascertain the best means of determining what types of bullying is taking place through electronic communication devices. Society constantly encounters new methods to communicate with one another. Each new communication tool such as texting and Skype bring new potential opportunities and dangers for youth. The distance and impersonal nature of these communication platforms challenges children and adults on how to appropriately use them. School officials and parents will be hard pressed to keep up with these changes therefore; new methods of detecting where bullying is occurring and preventing this bullying will be an ongoing challenge.
The lower level of bullying involving physical attacks at both the public and private school in the small Midwestern community was surprising when compared with other research and elicited several questions and considerations. Several factors could be viewed as the cause of this finding. First, the rural location of the town where the research was conducted may be a factor. The community has a much more homogenous population than larger cities and urban settings. The possibility existed that the more homogenous society in this study shared closer views on societal norms; thereby limiting the amount of physical bullying that took place. Larger cities with more diverse populations could lack this common viewpoint resulting in higher levels of physical bullying. Also, the small size of the city may make it more realistic that parents, teachers or other authority figures would learn about physical bullying. If these figures had a greater probability of knowing about this behavior and acting to stop the behavior in smaller cities this could result in less physical bullying. This argument assumes that physical bullying is much harder to hide and would generate greater amounts of conversation within the community. Other factors, such as socio-economic, cultural norms, etc., could also be at play in this setting that make physical bullying less likely to occur, if these factors were pinpointed they may help other locations to prevent physical bullying.

Finally, the effect of state initiatives to stop bullying could have affected both educators’ ability to deal with bullying and how students react to bullying. The state where the study took place led an initiative to provide regional trainers on research based
anti-bullying programs. While the level of implementation varied around the state the fact that such an effort was made could curtail physical bullying.

Another area of interest that arose from this research was the number of years in attendance and bullying at the public school. Twelve different survey questions were found to have significant outcomes when compared with the number of years in attendance. Perhaps the students' relative longevity within the same system is adding to the level of bullying. However, the longevity of the private school population was even stronger and did not display the same results. The possibility that stability of a student population over a number of years could affect the number of bullying incidents is a new consideration in the field of bullying research and may elicit new additional findings.

The analysis of the private school demographic variables also rendered statistically significant results. Faith affiliation and the spreading of rumors were significant at the private school. The private school population was 96% Catholic. No clear reason emerged to explain this connection unless the minority faith groups were overly involved in spreading rumors. However the possibility exists that students at the private school avoided involvement in more concrete observable bullying such as physical actions because of the religious nature of their school. In essence the students may have felt that physical bullying was too dangerous and then bullied using verbal comments, spreading rumors, or exclusion. Hence, there is a need for further research in this area.

Faith and bullying involving racial comments was also found to be significant. The student population at the private school was composed of 97.5% Caucasian students.
The homogenous nature of the private school population definitely makes it possible that racial comments were directed at the small number of minorities. The majority of private schools in this Midwestern state have small minority populations. The small number of minorities may make them a target in private schools. In some studies the race of those bullied had less to do with being a traditional minority group such as African-Americans; rather it was linked to the group whose population was smaller in membership or number. This could explain the higher level of bullying by the minorities in this setting. It is disappointing however, that a private school with a religious mission experienced this type of bullying.

The role faith affiliation plays in bullying is an area that has not received a great deal of attention and its effects are still unclear. However, one may want to research several items related to faith and bullying. For example, a comparison of a student’s level of involvement in faith activities and the amount of the bullying they are involved with as either a perpetrator or victim would be an interesting future research project. Another question could be raised about the religious affiliation of the private school used in the research. The private school used in this research was a Catholic school; would similar research using a private school with a Protestant or Muslim affiliation reveal similar findings? Also, researching the levels of bullying at a private school with no religious affiliation may add to the general understanding of bullying. These are factors that are worthy of additional consideration.

The findings of this research which were not statistically significant add to the general knowledge about bullying in schools. No statistically significant difference was
found in the amount of bullying occurring at the two school settings. Also, no significant variance was found between the two schools in the following types of bullying; verbal, exclusion, physical, spreading false rumors, having items taken or damaged, being threatened, racial comments, or being bullied in another way.

Due to these findings one could not assume that research on bullying which was conducted exclusively at public schools can be applied to the private school setting. With a few exceptions, sexual comments and cyber-bullying, the students at the private and public schools encountered the same level and types of bullying. Logically, one can assume that if similar amounts and types of bullying occur in both setting the causes or solutions can be applied to both environments. The causes of the bullying could be different at each school, but this particular research question is outside the scope of this dissertation.

While not covered by the research questions in this study, additional revelations did arise. Roughly 40% of the students in both settings indicated they experienced bullying. The terrible impact of bullying on the student and their educational process was briefly discussed in Chapter 2. However, in the future dealing with bullying may enter new realms and become more of a legal manner. Cases have emerged where police have become involved in bullying situations and lawsuits have been filed against perpetrators and school systems. While no one can fault a parent for seeking to remedy a bullying situation, the cost of being involved with a court case is significant and can lead to higher liability insurance. If bullying becomes more of a legal matter significant financial burdens would be placed on schools and make educating students even more difficult.
These factors only underscore the importance of educators ending bullying in our schools.

The final implication to be discussed regards how to reduce bullying in school sites. If schools are to curtail bullying in the future several strategies should be considered. Schools need to have a strong understanding of what bullying is and is not. As noted in this dissertation, bullying involves an imbalance of power. Many teachers, students, and parents have difficulty recognizing this crucial factor. However, when they recognize this imbalance it often makes identifying bullying easier. Another important step to stop bullying is knowing where and how often it occurs. A simple method to obtain this information is by conducting a student survey like the one used in this dissertation. By knowing the frequency and location of bullying in a school, staff can increase supervision at those locations with the highest occurrences of bullying. The survey often enlightens staff members about the actions of their students.

Students will need ongoing training and education on bullying and what to do in specific situations. These lessons can come in the form of a computer based set of individual lessons or through regular classroom meetings. This on-going education element keeps bullying in the minds of teachers and students. Many times teachers can form lessons on anti-bullying on issues they see occurring in their classroom, making the lesson especially pertinent and helpful.

Administrators may also find it helpful to create a matrix listing the types of bullying by seriousness and the normal consequences that students may be subject to if they are involved. For example, a first time offender who bullies another with verbal
comments may simply have to take a note home or talk with the principal. However, the consequence would increase in significance with each reoccurring offense. The more certain a student feels the consequence will actually occur, the less likely the perpetrator will be to commit the offense.

A key element in any plan is communication with the parents. Helping parents understand the definition of bullying is a crucial first step. Holding a kick-off event to explain the types of bullying helps parents feel they are included in the school’s actions and plan. Regular updates through newsletters and emails can also help form parents’ outlook on bullying. These regular communications are essential, they help form the thinking of parents of victims and perpetrators. For instance, if a child informs a parent they were bullied at school, their parent could likely call the school asking why the school’s bullying program is not working or being applied. Or if a child is found to have bullied another student, the teacher or administrator could be contacting the parent to inform them of the offense. In either situation, an administrator or teacher may use their understanding of their plan and the parent communications as principles to guide the conversation, hopefully to a successful conclusion.

Recommendations for Future Research

The research in this dissertation serves as a starting point for several other possible future research projects. Future research on the differences in cyber-bullying at public and private schools could delve deeper into this topic by surveying students and their parents about cyber-bullying and home environment issues. When examining female bullying and social networks at the public school a statistically significant
relationship was found to exist. Additional research could explain why this tendency exists and how to combat it in the future.

The amount of bullying occurring to children while using on-line gaming sites is also an area needing greater attention. Several disturbing factors are possibly associated with this type of bullying. The research could help determine how to detect and stop bullying which occurs at these sites. Additional issues needing research include the effect of anonymity on these sites since they often use assumed names. Also, since participants can be located anywhere stopping the bullying incidents could be extremely difficult. No clear answers for this issue currently exist.

The number of years in attendance at the public school and the level of involvement in bullying was an area of significance in this dissertation. This could be an area for future research. Future research could examine if minority students were victimized with physical bullying at higher rates than in the majority population of students.

While many of the results in this research found similarities in the public and private school additional questions could be researched using different types of private schools. Private schools have various religious affiliations while some have no religious affiliation. Future research using different types of private schools may result in new findings that may add to the general understanding of why bullying does or does not occur in certain settings. This research could assist efforts to further understand student bullying. The research conducted in this study was focused on middle school students.
The results may vary depending on the grade level where future research is conducted.

Again, further research is needed for better understanding of bullying in schools.
REFERENCES


APPENDIX A

SAMPLE SURVEY

Bully Survey Questionnaire for Students

(name of school) Middle School

Date:

Please mark the space below for your grade.

GRADE:  _6  _7  _8

GENDER _Male  _FEMALE

Number of years you have been attending (name of school system):

___1-3 years  ___4-6 years  ___7-9 years

What faith or church affiliation do you have:

___Catholic  ___Protestant  ___Muslim  ___Other  ___None

You will find questions in this booklet about your life in school. There are several
answers below each question. Each answer has a blank next to it. Answer the question
by placing an X next to the answer that best describes how you feel about school. Only
mark one answer per question. If you put an X in the wrong response draw a line through
the answer and place an X in the correct answer. Don’t put your name on this booklet.
No one will know how you have answered these questions. But it is important that you
answer carefully and how you really feel. Sometimes it is hard to decide what to answer.
Then just answer how you think it is. If you have questions, raise your hand.
Most of the questions are about your life in school in the past couple of months, that is, the period from the start of school until now. So when you answer your question, you should think of how is has been during the past 2 or 3 months and not only how it is now.

ABOUT BEING BULLIED BY OTHER STUDENTS

The following questions are about being bullied by other students. First we define or explain the word bullying. We say a student is being bullied when another student, or several other students

- Say mean and hurtful things or make fun of him or her or call him or her mean and hurtful names
- Completely ignore or exclude him or her from their group or friends or leave him or her out of things on purpose
- Hit, kick, push, shove around, or lock him or her inside a room
- Tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her
- And other hurtful things like that.

When we talk about bullying these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying, when a student is teased repeatedly in a mean and hurtful way.

But we don’t call it bullying when the teasing is done in a friendly and playful way.

Also, it is not bullying when two students of about equal strength or power argue or fight.

1. How often have you been bullied at school in the past couple of months?
   ____ I haven’t been bullied at school in the past couple of months
   ____ It has only happened once or twice
Have you been bullied at school in past couple of months in one or more of the following ways? Please answer all questions.

2. I was called mean names, was made fun of, or teased in a hurtful way
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

3. Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

4. I was hit, kicked, pushed, shoved around, or locked indoors
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

5. Other students told lies or spread false rumors about me and tried to make others dislike me
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week
6. I had money or other things taken away from me or damaged
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

7. I was threatened or forced to do things I didn’t want to
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

8. I was bullied with mean names or comments about my race or color
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

9. I was bullied with mean names, comments, or gestures with a sexual meaning
   ___ It hasn’t happened to me in the past couple of months
   ___ Only once or twice
   ___ 2 or 3 times a month
   ___ About once a week
   ___ Several times a week

10. I was bullied in another way
    ___ It hasn’t happened to me in the past couple of months
    ___ Only once or twice
    ___ 2 or 3 times a month
    ___ About once a week
    ___ Several times a week
Continue here if you have been bullied in the past couple of months:

**Have you been bullied**

11a. on the playground   ___ yes   ___ no
11b. in the hallways/stairwells   ___ yes   ___ no
11c. in classroom (with teacher present)?   ___ yes   ___ no
11d. in the classroom (with teacher absent)?   ___ yes   ___ no
11e. in the bathroom?   ___ yes   ___ no
11f. in gym class or the gym locker room/shower?   ___ yes   ___ no
11g. in the lunch room?   ___ yes   ___ no
11h. on the way to and from school?   ___ yes   ___ no
11i. on the school bus?   ___ yes   ___ no
11j. somewhere else in the school?   ___ yes   ___ no

In this case, please write where: __________________________________________

12. How often have you been bullied while using electronic communication devices such as a cell phone or a computer?

___ I haven’t been bullied in this way in the past couple of months
___ It has only happened once or twice
___ 2 or 3 times a month
___ About once a week
___ Several times a week

Continue here if you have been bullied while using electronic communication devices such as a cell phone or a computer:

**Have you been bullied while using**

13a. email   ___ yes   ___ no
13b. texting   ___ yes   ___ no
13c. twitter   ___ yes   ___ no
13d. Facebook or other social networks   ___ yes   ___ no
13e. Another means of electronic communication   ___ yes   ___ no

In this case, please write the name of the electronic communication ________________________
## APPENDIX B

### PUBLIC AND PRIVATE SCHOOL GENDER

<table>
<thead>
<tr>
<th>Gender</th>
<th>Public School</th>
<th>Private School</th>
<th>Public School</th>
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<td></td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
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<td>Male</td>
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<td>Female</td>
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APPENDIX C

PUBLIC AND PRIVATE SCHOOL NUMBER OF YEARS IN ATTENDANCE

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<td>4-6</td>
<td>40</td>
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<td>7-9</td>
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<td>165</td>
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**APPENDIX D**

PUBLIC AND PRIVATE SCHOOL FAITH AFFILITATION

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<th>Private School Percentage</th>
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<tr>
<td>Catholic</td>
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<td>Protestant</td>
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<td>Other</td>
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APPENDIX E

PUBLIC AND PRIVATE SCHOOL RACE

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<td>0</td>
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<td>African-American</td>
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<td>Asian/Pacific</td>
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<td>0.5</td>
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<td>Islander</td>
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APPENDIX F

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 1

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<th>Responses</th>
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<th>Private School Frequency</th>
<th>Public School Percentage</th>
<th>Private School Percentage</th>
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<td>It haven't been bullied at school in the past couple of months</td>
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<td>121</td>
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<td>It has only happened once or twice</td>
<td>49</td>
<td>59</td>
<td>23.7</td>
<td>28.9</td>
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<tr>
<td>2 or 3 times a month</td>
<td>12</td>
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<td>5.8</td>
<td>4.9</td>
</tr>
<tr>
<td>About once a week</td>
<td>13</td>
<td>10</td>
<td>6.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Several times a week</td>
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<td>4.3</td>
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</tr>
<tr>
<td>Total</td>
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APPENDIX G

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 2

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<th>Private School Frequency</th>
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<th>Private School Percentage</th>
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<td>It hasn’t happened to me in the</td>
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<td>62.7</td>
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<tr>
<td>past couple of months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only once or twice</td>
<td>49</td>
<td>57</td>
<td>23.6</td>
<td>27.9</td>
</tr>
<tr>
<td>2 or 3 times a month</td>
<td>11</td>
<td>6</td>
<td>5.3</td>
<td>2.9</td>
</tr>
<tr>
<td>About once a week</td>
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<td>11</td>
<td>8.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Several times a week</td>
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<td>2</td>
<td>3.4</td>
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### APPENDIX H

**PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 3**

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<th>Private School</th>
<th>Percentage</th>
<th>Public School</th>
<th>Private School</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It hasn’t happened to me in the past couple of months</td>
<td>129</td>
<td>136</td>
<td>62</td>
<td>62.4</td>
<td>66.7</td>
<td></td>
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<tr>
<td>Only once or twice</td>
<td>55</td>
<td>49</td>
<td>26.4</td>
<td>24.0</td>
<td></td>
<td></td>
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<tr>
<td>2 or 3 times a month</td>
<td>6</td>
<td>8</td>
<td>2.9</td>
<td>2.9</td>
<td>3.9</td>
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<tr>
<td>About once a week</td>
<td>5</td>
<td>7</td>
<td>2.4</td>
<td>2.4</td>
<td>3.4</td>
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<tr>
<td>Several times a week</td>
<td>13</td>
<td>4</td>
<td>6.3</td>
<td>6.3</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
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## APPENDIX I

### PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 4

<table>
<thead>
<tr>
<th>Responses</th>
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<th>Public School Percentage</th>
<th>Private School Frequency</th>
<th>Private School Percentage</th>
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<td>Only once or twice</td>
<td>26</td>
<td>12.5</td>
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<td>9.3</td>
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<tr>
<td>2 or 3 times a month</td>
<td>2</td>
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<td>0.5</td>
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<tr>
<td>About once a week</td>
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<td>1</td>
<td>4</td>
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<tr>
<td>Several times a week</td>
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<td>0.5</td>
<td>0</td>
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## APPENDIX J

**PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 5**

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<th>Responses</th>
<th>Public School Frequency</th>
<th>Private School Frequency</th>
<th>Public School Percentage</th>
<th>Private School Percentage</th>
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<td>It hasn’t happened to me in the</td>
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<td>past couple of months</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Only once or twice</td>
<td>51</td>
<td>45</td>
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<td>22.1</td>
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<td>2 or 3 times a month</td>
<td>12</td>
<td>5</td>
<td>5.8</td>
<td>2.5</td>
</tr>
<tr>
<td>About once a week</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Several times a week</td>
<td>6</td>
<td>3</td>
<td>2.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
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# APPENDIX K

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 6

<table>
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<tr>
<th>Responses</th>
<th>Public Frequency</th>
<th>Private Frequency</th>
<th>Public Percentage</th>
<th>Private Percentage</th>
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<tbody>
<tr>
<td>It hasn’t happened to me in the past couple of months</td>
<td>176</td>
<td>179</td>
<td>84.6</td>
<td>87.7</td>
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<tr>
<td>Only once or twice</td>
<td>25</td>
<td>22</td>
<td>12</td>
<td>10.8</td>
</tr>
<tr>
<td>2 or 3 times a month</td>
<td>5</td>
<td>1</td>
<td>2.4</td>
<td>0.5</td>
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<tr>
<td>About once a week</td>
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<td>1</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Several times a week</td>
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<td>1</td>
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<td>0.5</td>
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APPENDIX L

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 7

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<th>Private School Frequency</th>
<th>Private School Percentage</th>
</tr>
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<tr>
<td>It hasn’t happened to me in the past couple of months</td>
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<td>2 or 3 times a month</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
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<tr>
<td>About once a week</td>
<td>5</td>
<td>2.4</td>
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<tr>
<td>Several times a week</td>
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<td>0.5</td>
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## APPENDIX M
PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 8

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<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
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<td>190</td>
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<td>past couple of months</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only once or twice</td>
<td>9</td>
<td>10</td>
<td>4.3</td>
<td>4.9</td>
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<tr>
<td>2 or 3 times a month</td>
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<td>2</td>
<td>1.4</td>
<td>1</td>
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<tr>
<td>About once a week</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
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<tr>
<td>Several times a week</td>
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<td>1</td>
<td>1.4</td>
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# APPENDIX N

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 9

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<th>Public Percentage</th>
<th>Private Frequency</th>
<th>Private Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It hasn’t happened to me in the past couple of months</td>
<td>158</td>
<td>76</td>
<td>182</td>
<td>89.2</td>
</tr>
<tr>
<td>Only once or twice</td>
<td>32</td>
<td>15.4</td>
<td>15</td>
<td>7.4</td>
</tr>
<tr>
<td>2 or 3 times a month</td>
<td>8</td>
<td>3.8</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>About once a week</td>
<td>6</td>
<td>2.9</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Several times a week</td>
<td>4</td>
<td>1.9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>100</td>
<td>204</td>
<td>100</td>
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</table>
## APPENDIX O

### PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 10

<table>
<thead>
<tr>
<th>Responses</th>
<th>Public School</th>
<th>Private School</th>
<th>Public School</th>
<th>Private School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td>It hasn’t happened to me in the past couple of months</td>
<td>161</td>
<td>158</td>
<td>77.4</td>
<td>77.5</td>
</tr>
<tr>
<td>Only once or twice</td>
<td>24</td>
<td>40</td>
<td>11.5</td>
<td>19.6</td>
</tr>
<tr>
<td>2 or 3 times a month</td>
<td>11</td>
<td>3</td>
<td>5.3</td>
<td>1.5</td>
</tr>
<tr>
<td>About once a week</td>
<td>5</td>
<td>3</td>
<td>2.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Several times a week</td>
<td>6</td>
<td>0</td>
<td>2.9</td>
<td>0</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
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<td>100</td>
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</tbody>
</table>
## APPENDIX P

### PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 12

<table>
<thead>
<tr>
<th>Responses</th>
<th>Public School Frequency</th>
<th>Public School Percentage</th>
<th>Private School Frequency</th>
<th>Private School Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It hasn’t happened to me in the past couple of months</td>
<td>140</td>
<td>67.3</td>
<td>175</td>
<td>85.8</td>
</tr>
<tr>
<td>Only once or twice</td>
<td>46</td>
<td>22.1</td>
<td>24</td>
<td>11.8</td>
</tr>
<tr>
<td>2 or 3 times a month</td>
<td>13</td>
<td>6.3</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>About once a week</td>
<td>4</td>
<td>1.9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Several times a week</td>
<td>1</td>
<td>0.5</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>No response</td>
<td>4</td>
<td>1.9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>100</td>
<td>204</td>
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</table>
**APPENDIX Q**

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11a

<table>
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<tr>
<th>Location</th>
<th>Response</th>
<th>Public School</th>
<th>Private School</th>
<th>Public School</th>
<th>Private School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playground</td>
<td>Yes</td>
<td>45</td>
<td>5</td>
<td>21.6</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>114</td>
<td>192</td>
<td>54.8</td>
<td>94.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49</td>
<td>7</td>
<td>23.6</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
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<td>208</td>
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<td>100</td>
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</table>
### APPENDIX R

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11b

<table>
<thead>
<tr>
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<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>School</td>
<td>School</td>
<td>School</td>
<td>School</td>
</tr>
<tr>
<td>In the hallways/stairwells</td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32</td>
<td>35</td>
<td>15.4</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>126</td>
<td>162</td>
<td>60.6</td>
<td>79.4</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
<td></td>
</tr>
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<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
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<td>100</td>
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<td></td>
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</tbody>
</table>
## APPENDIX S

### PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11c

<table>
<thead>
<tr>
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<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the classroom (with the teacher present)</td>
<td>Yes</td>
<td>22</td>
<td>26</td>
<td>10.6</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>136</td>
<td>171</td>
<td>65.4</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td><strong>Total</strong></td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>
APPENDIX T
PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11d

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public School</th>
<th>Private School</th>
<th>Public Percentage</th>
<th>Private Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the classroom (with teacher absent)</td>
<td>Yes</td>
<td>28</td>
<td>34</td>
<td>13.5</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>130</td>
<td>163</td>
<td>62.5</td>
<td>79.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
</tr>
<tr>
<td>Response</td>
<td>Total</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
APPENDIX U

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11e

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School</td>
<td>Frequency</td>
<td>8</td>
<td>5</td>
<td>3.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Private School</td>
<td>Frequency</td>
<td>150</td>
<td>192</td>
<td>72.1</td>
<td>94.1</td>
</tr>
<tr>
<td>No</td>
<td>Frequency</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Response

| Total          |          | 208    | 204     | 100    | 100     |
APPENDIX V

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11f

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public Frequency</th>
<th>Private Frequency</th>
<th>Public Percentage</th>
<th>Private Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In gym class</td>
<td>School</td>
<td>14</td>
<td>28</td>
<td>6.7</td>
<td>13.7</td>
</tr>
<tr>
<td>or the gym</td>
<td>Frequency</td>
<td>144</td>
<td>168</td>
<td>69.2</td>
<td>82.3</td>
</tr>
<tr>
<td>locker room/shower</td>
<td>Yes</td>
<td>50</td>
<td>8</td>
<td>24</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Frequency</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
## APPENDIX W

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11g

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the lunchroom</td>
<td>Yes</td>
<td>43</td>
<td>32</td>
<td>20.7</td>
<td>15.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>115</td>
<td>165</td>
<td>55.3</td>
<td>80.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
### APPENDIX X

**PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11h**

<table>
<thead>
<tr>
<th>Location to and from school</th>
<th>Response</th>
<th>Public School Frequency</th>
<th>Private School Frequency</th>
<th>Public School Percentage</th>
<th>Private School Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the way</td>
<td>Yes</td>
<td>18</td>
<td>18</td>
<td>8.7</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>140</td>
<td>179</td>
<td>67.3</td>
<td>87.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50</td>
<td>7</td>
<td>24</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
APPENDIX Y

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11i

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the school bus</td>
<td>School</td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43</td>
<td>34</td>
<td>20.7</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>115</td>
<td>162</td>
<td>55.3</td>
<td>79.4</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50</td>
<td>8</td>
<td>24</td>
<td>3.9</td>
</tr>
<tr>
<td>Response</td>
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<td>100</td>
<td>100</td>
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</tbody>
</table>
## APPENDIX Z

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 11j

<table>
<thead>
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<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhere else in the</td>
<td>School</td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td>school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>4</td>
<td>4.3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>148</td>
<td>193</td>
<td>71.2</td>
<td>94.6</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>7</td>
<td>24.5</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>
APPENDIX AA

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 13a

<table>
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<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td></td>
<td>School</td>
<td>School</td>
<td>School</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>2</td>
<td>6.3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>135</td>
<td>188</td>
<td>64.9</td>
<td>92.2</td>
<td></td>
</tr>
<tr>
<td>No</td>
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<td>28.8</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td>208</td>
<td>204</td>
<td>100</td>
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</table>

|
## APPENDIX AB

### PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 13b

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
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<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texting</td>
<td>School</td>
<td>School</td>
<td>School</td>
<td>School</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43</td>
<td>14</td>
<td>20.7</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>103</td>
<td>177</td>
<td>49.5</td>
<td>86.8</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>13</td>
<td>29.8</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Response</td>
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<td>204</td>
<td>100</td>
<td>100</td>
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</table>
### APPENDIX AC

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 13c

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public School</th>
<th>Private School</th>
<th>Public Percentage</th>
<th>Private Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>School</td>
<td>Frequency</td>
<td>Frequency</td>
<td>%</td>
<td>%</td>
</tr>
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<td>Yes</td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>No</td>
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<td>69.7</td>
<td>92.6</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>63</td>
<td>14</td>
<td>30.3</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>208</td>
<td>204</td>
<td>100</td>
<td>100</td>
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</table>
APPENDIX AD

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 13d

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public School</th>
<th>Private School</th>
<th>Public Percentage</th>
<th>Private Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook or other social networks</td>
<td>Yes</td>
<td>37</td>
<td>14</td>
<td>17.8</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>109</td>
<td>176</td>
<td>52.4</td>
<td>86.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>62</td>
<td>14</td>
<td>29.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Response</td>
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<td>204</td>
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<td>100</td>
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</tbody>
</table>
APPENDIX AE

PUBLIC AND PRIVATE SCHOOL RESPONSES TO SURVEY QUESTION 13e

<table>
<thead>
<tr>
<th>Location</th>
<th>Response</th>
<th>Public</th>
<th>Private</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another means of electronic communication</td>
<td>School</td>
<td>Frequency</td>
<td>School</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>6</td>
<td>3.8</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>137</td>
<td>183</td>
<td>65.9</td>
<td>89.7</td>
<td></td>
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