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Bullying Prevention in New York City Public Schools: School Safety Agents' Perceptions of Their Roles

Gabriel R. Paez
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BULLYING PREVENTION IN NEW YORK CITY PUBLIC SCHOOLS:
SCHOOL SAFETY AGENTS’ PERCEPTIONS OF THEIR ROLES

By

Gabriel R. Paez

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

The City University of New York

2016
This manuscript has been read and accepted for the Graduate Faculty in Criminal Justice to satisfy the dissertation requirement for the degree of Doctor of Philosophy

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THE CITY UNIVERSITY OF NEW YORK
ACKNOWLEDGEMENTS

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ABSTRACT

BULLYING PREVENTION IN NEW YORK CITY PUBLIC SCHOOLS:
SCHOOL SAFETY AGENTS’ PERCEPTIONS OF THEIR ROLES

By
Gabriel R. Paez

Advisor: Professor Roddrick Colvin

Research on school-based bullying gives little attention to how school-based law enforcement personnel perceive their roles while addressing alleged and real acts of bullying, and whether their roles influence their decisions to get involved in instances of bullying. Since research neglects to assess the extent to which personal and contextual factors of law enforcement personnel assigned to schools affect how they perceive themselves in this role and their degree of involvement in instances of bullying, this study addresses two questions:

1) How do New York City Police Department School Safety Agents (SSAs) in NYC public schools perceive their roles in their school’s anti-bullying efforts?

2) How do perceptions of SSAs regarding bullying affect their responses to reported incidents of bullying?

Assessing the ways SSAs perceive their roles in bullying prevention is important to understanding how their views construct their positions or importance in the process. Assessing the perceptions of SSAs concerning bullying is important to understanding how their views influence their involvement or abstention in reported instances of bullying. To address the research questions, personal and contextual factors of SSAs were developed by examining literature that identifies characteristics of officers (i.e., age, race, gender, education, and
experience) and their influences on how they perceive their roles and decision-making regarding taking police action. These factors were analyzed using logistic regression and path analysis to test the influence of personal, contextual, and mediating factors on SSA involvement or abstention in reported incidents of bullying. Logistic regression analyses of individual and contextual factors suggest that SSAs’ identification of bullying was a strong predictor of involvement and intervention. Path analyses supported these results, suggesting a strong, direct effect between SSA identification of bullying and degree of involvement. Results from this study suggest that ensuring that SSAs identify instances of adolescent bullying is vital to maintaining and enhancing a school’s anti-bullying efforts, and more importantly, increasing and maintaining law enforcement personnel assigned to schools’ awareness of bullying through training and strong partnerships with school officials aid prevention of school bullying.

**Keywords:** bullying, anti-bullying safety net, role theory, New York City Police Department, school safety agents, New York City public schools, logistic regression, path analysis
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CHAPTER 1: PROBLEM DEFINITION

INTRODUCTION

Bullying in schools is an important social issue that can have serious consequences for children and school environments. This issue gained media attention in recent years, especially after reports of victims committing suicide as a result of bullying (Eckholm & Zezima, 2010a, 2010b; Hu, 2011). Empirical research on harmful emotional, physical, and social effects of bullying on children and school climates increased over the past decade (Barton, 2006; Cloud, 2010; Crothers & Kolbert, 2004; Ericson, 2001; Esbensen & Carson, 2009; Farrington & Ttofi, 2009a; LeVasseur et al., 2013; Limber, 2011; Litwiller & Brausch, 2013; Moon et al., 2011; Olweus, 2011; Ttofi & Farrington, 2008, 2011, 2012; Watkins & Maume, 2011), and research that highlights use of law enforcement personnel to prevent bullying also increased during that period (Brown, 2006; James & McCallion, 2013; Raymond, 2010; Travis & Coon, 2005). Despite extensive research on use of law enforcement in public school safety, research on bullying has neglected to examine how school-based law enforcement personnel perceive their roles in addressing alleged and real acts of bullying, and whether their views influence their decisions to get involved in addressing reported incidents of bullying. In this study, perceptions of New York City Police Department’s School Safety Agents (SSAs) assigned to New York City public schools were assessed to determine whether a relationship exists between how they perceive their roles in preventing bullying and whether those perceptions affect their involvement in incidents of school bullying.

STATEMENT OF THE PROBLEM

Since research on bullying neglects to examine how perceived roles of school-based law enforcement personnel affect their decisions to address incidents of bullying, this study assesses
whether a relationship exists between how SSAs perceive their roles in preventing bullying and whether their perceptions affect their decision to intervene during incidents of school bullying. The second purpose of this study is to determine whether a relationship exists between SSAs perceptions of their roles and their involvement exists. SSAs were the unit of analysis, and personal (e.g., age, gender, race, and education) and contextual (e.g. rank and job experience) characteristics of SSAs served as independent variables. Research suggests that personal and contextual factors of law enforcement officers influence decision-making (Brooks et al., 1993; Brown & Frank, 2006; Paoline et al., 2000; Poteyeva & Sun, 2009; Ridgeway et al., 2009; Rydberg & Terrill, 2010; Sun, 2003; Terrill & Reisig, 2003; Worden, 1990; Worden, 1993). In this study, involvement in incidents of bullying was the dependent variable.

SIGNIFICANCE OF THE PROBLEM

Studies on bullying do not support the notion that bullying is a component of the typical school experience, and galvanize public and academic support for preventative strategies to combat bullying, including policies, laws, and programs (Limber, 2011; Mendard & Grotpeter, 2011; Olweus, 1991, 1993; Ttofi & Farrington, 2011; Wynne & Joo, 2011). A number of intervention strategies emerged from the literature and analyses of programmatic efforts to prevent bullying that often exhibit positive results such as a decrease in reported incidents from victims and reported perpetration from bullies (Farrington & Ttofi, 2009b; Limber, 2011; Olweus, 1991, 1993; Ttofi & Farrington, 2011; Ttofi, Farrington, Losel, & Loeb, 2011). Despite growth of research on bullying strategies, studies that focus on use of law enforcement to prevent bullying are limited (Farrington & Ttofi, 2009a; Robles-Piña & Denham, 2012).

Prior to 2000, assessments of the effectiveness of anti-bullying programs were critiqued for lack of theoretical foundation and methodological rigor to prevent and combat the prevalence
of school-based bullying (Baldry & Farrington, 2007; Farrington & Ttofi, 2009a, 2009b; Ferguson, San Miguel, Kilburn, & Sanchez, 2007; Robles-Piña & Denham, 2012). Recent meta-analyses of the effectiveness of anti-bullying programs implemented in the last decade show a 20% to 30% decrease in bullying, and a 17% to 20% decrease in victimization (Farrington & Ttofi, 2009a, 2009b; Ttofi & Farrington, 2011). Increased awareness of bullying corresponded with expansion of research that identifies leading practices for schools to prevent its occurrence such as use of law enforcement personnel in schools (Farrington & Ttofi, 2009a; Raymond, 2010; Robles-Piña & Denham, 2012; Sampson, 2012; Travis & Coon, 2005; Ttofi & Farrington, 2012). No study investigates how school-based law enforcement personnel perceive their roles in addressing alleged and real acts of bullying, and whether such views influence their decisions to get involved in instances of bullying.

BACKGROUND OF THE PROBLEM

Despite few systematic evaluations of the effectiveness of school-based law enforcement personnel in lowering incidents of school violence and crime, the presence of law enforcement in schools deters aggressive behaviors, including fights, threats, and bullying, and assists school staff members with maintaining order (James & McCallion, 2013; Raymond, 2010). Law enforcement officers are also able to detect and handle bullying situations (James & McCallion, 2013; Raymond, 2010; Sampson, 2012; Travis & Coon, 2005). In prevention literature, this approach is called a secondary prevention strategy (Espelage & Swearer, 2008). Research on the presence of law enforcement in schools focuses on the extent to which officers can help prevent bullying (Farrington & Ttofi, 2009a; Johnson, 1999; Raymond, 2010; Robles-Piña & Denham, 2012; Sampson, 2012; Travis & Coon, 2005; Ttofi & Farrington, 2012). These studies however
neglect to assess how officers assigned to schools perceive their roles, and whether their views influence decisions to intervene in instances of bullying.

**ANTI-BULLYING LAWS**

Although bullying is not a federal crime, state and local policymakers have taken action to prevent bullying and protect children through laws and model policies that vary across states. In 2011, the U.S. Department of Education (DOE) released an analysis of state bullying laws and policies (Stuart-Cassel, Bell, & Spring, 2011) in response to growing pressures on governments and school systems to identify solutions to prevent bullying. The purpose of the analysis was to examine the extent to which a state’s bullying laws and policing cover U.S. DOE identified legislation and policy components. The DOE identified 11 components to be included in anti-bullying laws. These components include but are not limited to a purpose statement, statement of scope, specification of prohibited conduct, enumeration of characteristics, development and implementation of Local Education Agency (LEA) policy, components of LEA policies, review of local policies, communication plans, training and prevention education, transparency and monitoring, and a statement of rights to legal recourse (Table 1.1).

Table 1.1

*Key Components in State Anti-bullying Laws*

<table>
<thead>
<tr>
<th>Purpose Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Summarizes the range of damaging effects bullying has on students, including influences on student learning, school safety, student interaction, and the school environment</td>
</tr>
<tr>
<td>• Affirms that any form, type, or level of bullying is unacceptable, and that each incident needs to take seriously by all school personnel, students, and students’ families</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement of Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Describes conduct that occurs on a school campus, at school-sponsored activities or events (irrespective of location), on school-provided transportation, or through school-owned technology that generates a substantial disruption to the school environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification of Prohibited Conduct</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offers a definition of bullying and cyberbullying</td>
</tr>
</tbody>
</table>
Is consistent with other federal, state and local laws

Prohibited conduct includes retaliation for asserting or alleging an act of bullying and spreading hurtful material even if another person created the material

**Enumeration of Specific Characteristics**

- Explicates that bullying includes but is not limited to acts based on perceived characteristics of students who have been traditionally been targets for bullying, and provides examples of such characteristics

**Development and Implementation of Local Education Agency (LEA) policies**

- Guides every LEA to develop and implement a policy prohibiting bullying through collaborative with all interested stakeholders, including school personnel, students, and students’ families

**Components of LEA policies**

- Contains a definition of bullying consistent with the definitions identified by state law
- Contains a procedure for students, students’ families, and all school personnel to report bullying

**Review of Local Policies**

- Contains a provision for the state to review local policies regularly

**Communication Plan**

- Contains a strategy for notifying students, students’ families, and all school personnel of policies related to bullying, including consequences for engaging in bullying

**Training and Prevention Education**

- Contains a provision for school districts to provide training to all school personnel on preventing, identifying, and responding to bullying
- Encourages school districts to implement bullying prevention programs

**Transparency and Monitoring**

- Contains a provision for LEAs to report to the state annually on the number of reported bullying incidents, and any responsive actions
- Contains a provision for LEAs to make data regarding bullying incidents available publicly, with appropriate privacy protection to ensure students are protected

**Statement of Rights to Other Legal Recourse**

- Contains a statement that the policy does not preclude victims from seeking other legal recourse

*Source: U.S. Department of Education*

Anti-bullying laws usually fall under state education codes, and in most states, provide protection for children from victimization, and offer victims the capacity to take legal action against perpetrators. These laws require school staff members to report witnessed or informed instances of bullying, and establish a comprehensive response to bullying that includes preventative programs, investigative and disciplinary measures, parent notification, and support and counseling for victims. Stuart-Cassel et al. (2011) highlight the rapid expansion and revision
of state bullying legislation over the last decade, and suggest this will continue as schools continue to find methods to prevent and address bullying.

Despite government efforts to curtail bullying, Sacks and Salem (2009) argue that federal and state laws neither deter nor provide remedies for victims of bullying. However, numerous anti-bullying laws enacted since 1999 were founded on existing civil rights legislation that safeguards groups from various forms of harassment (Stuart-Cassel et al., 2011). Language used when constructing anti-bullying laws derives frequently from harassment statues, and has led to a mixture of terms used to outline prohibited behavior, with *bullying* and *harassment* frequently used synonymously, despite legal differences.

Harassment is distinct from more common forms of bullying in that it must be driven by characteristics of a target victim. If a bully singles out a victim because of that victim’s race, ethnicity, gender, or sexual orientation, the bullying is often called harassment, one category of bullying among others (Stuart-Cassel et al., 2011). Sacks and Salem (2009) suggest that legal differences between bullying and harassment have significant implications for how laws are executed and enforced. For example, possible violation of a student’s civil rights in harassment cases propels schools to establish distinct policies and procedures to address bullying and harassment, or spurs schools to employ more rigorous criteria to investigate claims of any bullying incident to protect schools from liability (Stuart-Cassel et al., 2011).

Stuart-Cassel et al. (2011) suggest that the difference between bullying and harassment creates challenges for schools regarding determining how they must legally respond to various types of bullying and harassment claims. For example, an incident of harassment includes continued, unwanted, and annoying actions of an individual against another person(s), which coincides with bullying and is covered by the U.S. Department of Education (DOE) and
Department of Justice (DOJ). Harassment might be against the law under civil rights or hate statutes, and requires that a victim be a member of a legally protected group. In contrast, bullying is generally not against the law.

**FEDERAL ANTI-BULLYING LAW**

No federal law addresses bullying directly, and none requires any form of compliance from federally funded schools in the U.S. (Sacks & Salem, 2009; Stuart-Cassel et al., 2011). Nevertheless, bullying coincides with prohibited discriminatory harassment in federally funded schools, which is covered under federal civil rights law enforced by the U.S. DOE and the DOJ, including Title IV and VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Titles II and III of the Americans with Disability Act, and Individuals with Disabilities Education Act (IDEA) (Table 2). State regulations must provide all protections under federal law. Federal and state civil rights laws provide protection from bullying in some circumstances, but vulnerable groups might not always be covered, and thus have no legal recourse at the federal level (School Bullying, 2012). For example, federal agencies lack authority under civil rights statutes to pursue discrimination based exclusively on socioeconomic status or sexual orientation, and in some instances, state civil rights laws offer protection to victims of bullying that go beyond federal law (Government Accountability Office [GAO], 2002).

Table 1.2

<table>
<thead>
<tr>
<th>Overview of Federal Laws that Apply to Bullying</th>
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<tbody>
<tr>
<td><strong>Title IV of the Civil Rights Act of 1964</strong></td>
</tr>
<tr>
<td>• Prohibits discrimination based on race, color, sex, religion, or national origin by public elementary and secondary schools, and public institutions of higher learning</td>
</tr>
<tr>
<td><strong>Title VI of the Civil Rights Act of 1964</strong></td>
</tr>
<tr>
<td>• Prohibits discrimination based on race, color, and national origin in programs and activities receiving federal financial assistance</td>
</tr>
</tbody>
</table>
Title IX of the Education Amendments of 1972
• No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance

Title II of the Americans with Disability Act
• Prohibits discrimination based on disability by public entities (state and local government and any of its departments, agencies, or other instrumentalities)
• State and local governments cannot refuse to allow a person with a disability to participate in a service, program, or activity simply because the person has a disability
• State and local governments must ensure the non-discriminatory treatment of individuals with disabilities
• State and local governments must provide programs and services in an integrated setting, unless separate or different measures are necessary to ensure equal opportunity

Title III of the Americans with Disability Act
• State and local governments must ensure non-discriminatory treatment of individuals based on disability by public accommodations and in commercial facilities

Individuals with Disabilities Education Act (IDEA)
• Federal special education law ensures that public schools serve the educational needs of students with disabilities
• Requires that schools provide special education services to eligible students

Source: United States Department of Justice

Stuart-Cassel et al. (2011) found that most state model policies were developed after 2006, which demonstrates how recently these laws were passed, and most state anti-bullying laws encompass the previously mentioned components (Table 1.2). Stuart-Cassel et al. (2011) also found that 85% of state anti-bullying laws contain a purpose statement, and 96% include a statement of scope. However, 39% produce written records of bullying incidents, and 39% contain legal remedies for victims (Table 1.3). Several states developed explicit requirements that produced a framework for other jurisdictions, but it is unclear whether these policies are designed to prevent bullying or act as accountability measures to prevent the legal liability of schools and administrators in cases of bullying. If a state law requires that a school respond to observed acts of bullying, then it is not the bullying itself that is forbidden, but lack of response. By requiring schools to respond and then document a response, schools are protected from legal claims that they did nothing about bullying behaviors that caused harm.
Table 1.3

U.S. DOE Components in State Bullying Legislation

<table>
<thead>
<tr>
<th>State</th>
<th>Purpose</th>
<th>Scope</th>
<th>Prohibited behavior</th>
<th>Enumerated groups</th>
<th>District Policy</th>
<th>District Policy Review &amp; Development</th>
<th>District Policy Components</th>
<th>Additional Components</th>
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Source: 2011 U.S. Source: Department of Education Report

NEW YORK STATE ANTI-BULLYING LAW

New York State’s Dignity for All Students Act (DASA) was enacted in 2010 to provide students with a protected and empathetic environment, free from discrimination, intimidation, taunting, harassment, and bullying on school property, on a school bus, and/or at a school function (New York’s Dignity for All Students Act [DASA], 2013). The DASA requires that each public school in New York, including New York City, possess a curriculum that supports advancement of a school environment free from discrimination and harassment, a code of conduct that includes provisions prohibiting discrimination and harassment by school staff members or students, annual reports for the New York State Education Department of discrimination and/or harassment incidents that occur on school grounds or at school functions, a Dignity Act coordinator trained to handle instances of discrimination and/or harassment, and
employee training to enhance prevention and response to acts of discrimination and/or harassment.

On July 1, 2013, the DASA was amended to protect New York State students from cyber bullying by prohibiting harassment or bullying through any form of electronic communication (New York’s Dignity for All Students Act [DASA], 2013). The amendment legislation requires school principals to receive reports of harassment, bullying, and discrimination, and principals are required to lead or supervise a timely and thorough investigation of reports of discrimination, intimidation, taunting, harassment, or bullying. Instances of criminal conduct require a similar procedure, and notification of law enforcement. All school staff members who witness or are informed of an instance of harassment, discrimination, or bullying must notify the school principal within one school day, and are required to file a written report within two.

DASA requires all school staff members applying for employment to attend training on identifying and preventing instances of harassment, discrimination, and bullying. The New York State Education Department provides guidance and education materials with best practices on addressing harassment, bullying, discrimination, and cyber bullying. New York’s DASA satisfies most of the components recommended by the United States DOE to protect students from discrimination, intimidation, harassment, and bullying (Table 1.1). New York’s DASA contains all 16 suggested components outlined in Stuart-Cassel et al.’s (2011) review of state anti-bullying laws. Recently, New York’s DASA added the ability of the New York State DOE to conduct annual reviews of its Code of Conduct to assess its effectiveness and compliance with state and federal laws. New York school districts must also follow investigative and reporting measures that the DOE sets.
ANTI-BULLYING POLICY

An anti-bullying policy is a set of principles that attempt to reduce and eliminate bullying against students by prohibiting and punishing for discrimination, intimidation, taunting, harassment, and bullying. Anti-bullying policies inform stakeholders (i.e., school personnel, students, and families) of the importance of making the school environment safe and inclusive to all students to ensure that schools remain conducive to learning. An effective anti-bullying policy should include components such as purpose statement, statement of scope, specification of prohibited conduct, components and review of local education agency policies, communication plans, training and prevention education, transparency and monitoring, and statement of rights to legal recourse (Table 1.2).

NEW YORK CITY ANTI-BULLYING POLICY

In 2010, DASA required New York City public schools to maintain a safe and supportive environment that is conducive to children’s learning. In response, in 2011, the New York City Department of Education (DOE) Chancellor’s Regulation A-832 was established to prohibit student-to-student discrimination, harassment, intimidation, and bullying committed by students against other students based on perceived race, color, creed, ethnicity, national origin, citizenship/immigration status, religion, gender, gender identity, gender expression, sexual orientation, disability, or weight. Such behaviors are also prohibited on school grounds during school hours, before or after school, at school sponsored events, while traveling on vehicles funded by the DOE, and at other locations other than school property when such behavior disrupts the entire school community.

In 2013, the Chancellor’s Regulation A-832 was revised to extend prohibited behaviors, including physical violence, stalking, threats, taunts, teasing, aggressive or menacing gestures,
exclusion from peer groups, use of derogatory language or jokes, and written or graphic materials circulated physically or electronically to harm others. Although the policy delineates prohibited behaviors, it does not offer explicit definitions of bullying and harassment. Such distinctions are unnecessary since research identifies that laws or policies that do not achieve this create issues for schools regarding legal responses to bullying and harassment claims (Sacks & Salem, 2009; Stuart-Cassel et al., 2011).

The revision to the Chancellor’s Regulation A-832 also increased the responsibilities of administrators and school staff members by instituting mandatory procedures. For example, principals/administrators are mandated to designate at least one staff member, called a Respect for All (RFA) liaison, to apprise them of reports by students or staff members of acts of discrimination, harassment, intimidation, and/or bullying. Complaints of discrimination, harassment, intimidation, and/or bullying must be recorded into the DOE’s Online Occurrence Reporting System (OORS) within twenty-four hours, and investigated quickly. During the 2013/2014 academic year, there were 1,973 substantiated incidents of discrimination and/or harassment, and 280 substantiated incidents of cyber bullying, in New York City public schools (New York State Education Department, 2015).

Any staff member who witnesses or is provided with information regarding discrimination, harassment, intimidation, and/or bullying incidents must report the allegation within one school day, and file a written report within two, to the RFA liaison or school administrator. Principals must ensure that all staff members receive training on the policies and procedures outlined in this regulation by October 31 of each school year, but this does not include School Safety Agents (SSAs). The goal of the training is to increase awareness of
bullying so all school staff members are able to identify, address, and prevent prohibited acts outlined in the DASA.

**NEW YORK CITY ANTI-BULLYING INITIATIVE**

In 2007, the New York City DOE launched the RFA program to enhance the ability of staff and students to support a community of inclusion in all public schools. The New York City DOE developed the RFA after 9/11 to promote respect for diversity and to combat harassment, discrimination, and bullying in school. Since inception, the RFA has been improved to provide comprehensive information and annual training to all students and staff members. The RFA program focuses on providing bullying awareness to students by outlining prohibited behaviors set forth in the Chancellors Regulations A-832, which complies with New York’s DASA.

The New York City DOE designates an RFA week for all schools during the academic year, during which New York City public schools are required to hold events to highlight and build on ongoing diversity programs and anti-bullying preventions. Each school is given the opportunity to develop new programs and activities that promote diversity and bullying awareness. Although the DOE requires all public schools to maintain a bullying prevention program, each acts autonomously concerning its approach, and more importantly, the role of law enforcement officers has not been delineated in state laws and policies.

**SCHOOL SAFETY AS AN EMERGING TREND**

Instituted during the 1950s, use of law enforcement in schools was established to help school officials manage an increase in school violence and create a safer environment for students and school staff. To support a safe environment, school-based law enforcement officers patrol areas within and around schools, and identify people or situations that might harm individuals in the school (Brown, 2006; Johnson, 1999; Robles-Piña & Denham, 2012). The
presence of law enforcement increased significantly as a result of school shootings that occurred during the 1990s, which generated immense media coverage and exposure of school violence and bullying (Brown, 2006; Robles-Piña & Denham, 2012).

The literature reports that police agencies have provided services to schools to protect children from school crime and violence since the 1950s (Brown, 2006; Girouard, 2001; Raymond, 2010; Robles-Piña & Denham, 2012; Travis & Coon, 2005). In 1968, the Omnibus Crime Control and Safe Street Act was passed, establishing the Office of Justice Programs to provide federal, state, and local justice systems with information and practices to prevent crime. Part Q of the federal law assigned authority to the U.S. Attorney General to provide grants to state and local governments for development of innovative programs to enhance proactive crime control and prevention. These initiatives centered on establishing relationships with enforcement agencies, schools, and community-based organizations (Girouard, 2001). In 1999, the Public Safety Partnership and Community Policing Act was passed, establishing the Community Oriented Policing Services (COPS) office. The COPS office falls under the purview of the United States Department of Justice, which promotes the practice of community policing for law enforcement agencies across the United States. The COPS office meets this objective through grant programs and funding to state and local law enforcement agencies.

Use of law enforcement in schools has varied since the 1960s, but increased considerably during the 1990s as a result of COPS grant programs aimed at hiring and supporting law enforcement personnel in schools (Girouard, 2001; Na & Gottfredson, 2011). For example, the COPS in Schools (CIS) program was designed to assist law enforcement agencies with hiring new officers, whose role focuses on community policing in and around schools. The CIS program offers an incentive for law enforcement agencies to develop partnerships with schools
and their communities to use community-policing applications to prevent school violence. A similar initiative, the Secure Our Schools (SOS) program, provides grants to state and local law enforcement agencies to enhance school safety. SOS grants provide financial assistance to law enforcement agencies in high-risk areas to purchase security measures such as metal detectors, locks, and lighting. SOS grants also provide funding for security training for students, school staff members, and security personnel to enhance school safety. Both the CIS and SOS programs focus on use and support of law enforcement personnel in schools.

Since inception in 1994, the COPS office has provided grants and funding to state and local police agencies to address crime-related issues. The COPS office developed best practice guides, also known as Problem-Oriented Guides for Police Response, to assist police agencies with reducing crime and disorder issues by involving communities. In 2010, the COPS office released a guide titled “Assigning Police Officers to Schools”, authored by Raymond (2010), that explains how assigning police officers in schools reduces or prevents crime and disorder.

New concerns about bullying have placed pressures on school administrators to ensure student safety by necessitating use of law enforcement officers in schools (Robles-Piña & Denham, 2012; Sampson, 2012). Consequently, COPS released a guide titled “Bullying in Schools”, authored by Sampson (2012), to provide police agencies across the United States with information to identify, understand, and explore successful anti-bullying approaches from empirical research. Since inception, the report has been revised to provide police agencies with effective strategies to prevent bullying in schools.

**SCHOOL RESOURCE OFFICER**

The concept for a School Resource Officer (SRO) originated during the 1950s in Flint, Michigan as an initiative to involve police officers in schools with the purpose of enhancing the
safety of students and school staff members (Girouard, 2001). According to Girouard (2001), no study explains how schools dealt with school safety or bullying prior to the 1950s. By 2010, approximately half of all public schools in the United States had police officers assigned to their location, demonstrating their expansion in public schools (Raymond, 2010). Brown (2006) suggests that school-based officers have become a new breed of public servant, an amalgam of educational, correctional, and law enforcement officials who play a role in ensuring the safety of students and school staff members.

Research questions whether having SROs in schools results in more children being placed in the criminal justice system (New York Civil Liberties Union, 2007, 2013). James and McCallion (2013) found that that few studies indicate that children in schools with SROs are more likely to be arrested for minor offenses compared to schools without SROs. Research suggests that the presence of SROs deters crime and aggressive behaviors such as fighting and bullying (Brown, 2006; James & McCallion, 2013; Na & Gottfredson, 2011; Raymond, 2010; Sampson, 2012), but the perception of what embodies an SRO differs among states and jurisdictions (Girouard, 2001). In some jurisdictions, SROs are armed like most law enforcement officers, but in other districts, they are not. Nevertheless, SROs have the legal authority to make arrests, search and seize, and issue summonses (Brown 2006; Raymond, 2010). Raymond (2010) posits that although the function of SROs varies among school districts, the most common roles of SROs are “safety expert and law enforcer, problem solver and liaison to community resources, and educator” (p. 1). This description enforces the roles SROs play in protecting children and school staff members.

As safety experts and law enforcers, SROs assume primary responsibilities for managing calls for service, coordinating emergency responses, and making arrests. SROs serve as hall
monitors, truancy enforcers, and crossing guards, and they manage the operation of metal detectors and other security devices. As problem solvers and liaisons among community resources, SROs coordinate efforts to prevent violence and increase awareness of issues in schools among principals, teachers, staff members, students, parents, local police departments, and community organizations. SROs commonly aid with resolving issues such as bullying or disorderly behavior that can result in or contribute to crimes. As educators, SROs serve as a resource for classroom presentations to educate students and staff members about alcohol and drug awareness, stranger awareness, gang resistance, bullying, school violence, and crime (James & McCallion, 2013; Raymond, 2010).

As indicated in the “Assigning Police Officers to Schools” guide, a strong relationship among schools, communities, and police agencies protect children from victimization and harm (Raymond, 2010), a recognition supported by research that demonstrates the effect SROs have on school crime and offenses. With a sample of 470 school principals during 2003 to 2008 from the School Crime Survey on Crime and Safety, Na and Gottfredson (2011) found that schools with SROs had a 12.3% higher rate of reporting non-serious crimes in comparison to schools that lacked SROs. These non-serious crimes included fighting or threats of physical violence that might occur as a result of bullying behaviors. Na and Gottfredson (2011) suggest that reporting non-serious crimes heightens awareness of such incidents and prevents future occurrences.

Researchers have studied the effectiveness of SROs in preventing juvenile victimization, which includes bullying (Brown, 2006; Robles-Piña & Denham, 2012). Robles-Piña and Denham (2012) found that SROs receive limited training and some could not confirm the prevention models established in their school systems, a conclusion reached after examining survey responses from 187 SROs from Texas that assessed knowledge and perceptions of
bullying prevention. Results revealed variations in the methods that participants cited to confront bullying incidents, which ranged from the use of conflict resolution to punitive sanctions. This result supports findings of studies on anti-bullying programs that differed in approach and had varying effects on the occurrence of bullying. (Baldry & Farrington, 2007; Farrington & Ttofi, 2009a, 2009b; Ttofi et al., 2011).

THE NYPD SCHOOL SAFETY DIVISION

For years, issues of security and safety in New York City public schools fell under the purview of the New York City DOE. However, in 1995, an investigatory commission established by New York City Mayor Rudolph Giuliani found that the New York City DOE’s Division of School Safety was managed inadequately and failed to maintain safety in schools (NYCLU, 2007). The commission suggested that the New York City Police Department (NYPD) play a larger role in ensuring school safety in all New York City public schools (NYCLU, 2007). As a result, on September 16, 1998, the NYC DOE voted to transfer authority of school security and safety from their Division of School Safety to the NYPD. The transfer was implemented on December 20, 1998 when Chief James H. Lawrence, then executive officer of NYPD’s Chief of Department Office, was designated by Commissioner Howard Safir to head the new School Safety Division (SSD). The merger was significant since it provided New York City public schools with an extensive support system from existing NYPD personnel with extensive knowledge and expertise in security and safety.

The SSD’s mission is to provide and maintain a safe environment that is conducive to learning for approximately 1.1 million students and staff members in 1,800 New York City public schools. Since the merger, the SSD expanded its duties and number of officers to maintain safety in New York City public schools. The NYPD’s SSD is comprised of
approximately 5,000 School Safety Agents (SSAs) and more than 200 police officers. If the SSD were an independent entity, it would be the fifth largest police force in the country. The SSD consists of four branches of management, including Patrol Operations, Support Services, Administrative Operations, and Investigations, all of which report to a Commanding Officer in the NYPD. In addition to these four branches, several organizational units provide staff support. These units include administrator/truancy coordinator, field intelligence coordinator, school safety plan unit, community outreach unit, training unit, special services unit, and an operation center that is open 24 hours a day.

As a result of the merger, the NYPD’s SSD enhanced crime reporting to promote greater transparency of what was occurring in New York City public schools to administrators, teachers, students, parents, and the community. This was achieved by creating what is called a criminal incident report. This initiative established an innovative and effective method of capturing crime data. These data are provided to the New York City DOE, and are later made available to parents, students, teachers, staff member, and the public. An incident recorded by a member of the SSD is classified in one of three categories: major crimes, other crimes, and non-criminal incidents. Major crimes are comparable to those reported commonly to the NYPD (e.g., murder, rape, robbery, felony assault, burglary, grand larceny, and grand larceny auto). Other crimes are comprised of offenses that range in severity from simple assaults to weapon possession. Non-criminal incidents are acts that are not normally categorized as crimes, but are disturbing to the school setting and are categorized as such at the discretion of SSAs.

Some crimes are not reported to law enforcement agencies due to jurisdictional factors (Finkelhor & Wolack, 2003), encompassing multiple authorities that exist for children—parents, schools, children protective agencies—who have jurisdiction managing victimization and serve
regularly as alternatives or gatekeepers to police reporting (Finkelhor & Wolack, 2003). Most schools have internal reporting and disciplinary options that have traditionally functioned autonomously from police agencies (Watkins & Maume, 2011). However, the NYPD’s SSD cooperates with the New York City DOE to address crimes that occur in all New York City public schools. Data from the New York City Mayor’s Management Report for Fiscal Year 2015, an analysis of city agencies’ performance from July 1, 2014 through June 30, 2015, indicates that major crimes in New York City public schools decreased approximately 53% from Fiscal Year 2005 (1,314) to 2015 (614), other crime decreased approximately 52% (4,741 to 2,286), and non-criminal incidents decreased approximately 60% (10,038 to 3,975), thus demonstrating the accomplishments of the NYPD’s SSD in the area of school safety (New York City Mayor’s Management Report, 2015).

**NYPD SCHOOL SAFETY AGENTS**

Prior to becoming SSAs, applicants must meet requirements established by the NYPD that require recruits to be 21 years old at the time of selection, have a high school diploma or GED, be a U.S. citizen, reside in one of the five boroughs of New York City, pass a drug screening, pass a character and background investigation, and meet medical and psychological requirements. Once selected, candidates must attend a 15-week academy managed by the NYPD, and receive six college credits on completion. In the academy, recruits are introduced to information from areas of law and police science, behavioral science, and physical training. Topics include department regulations, integrity, discretion, professionalism, impartiality, multiculturalism, terrorism, interaction with children and adults, stress management, investigation and report writing, and maintaining public order. On completion of the academy, SSAs are assigned to one of approximately 1,800 public schools throughout New York City that
serve nearly 1.1 million students. Once assigned to a school, SSAs are responsible for the personal safety of students, visitors, and school staff members. They are required to patrol all areas within school buildings and surrounding areas. SSAs are also required to prevent unlawful acts from occurring in public schools and notify NYPD police officers of incidents when necessary. Unlike most School Resource Officers (SROs), SSAs are not armed, but they have the same legal authority as SROs to arrest and detain, conduct searches and seizures, and issue summonses. NYPD precincts assign police officers to New York City public schools to assist SSAs during school hours to support them during instances that require advanced law enforcement expertise.

SSAs exercise their authority on school grounds by enforcing rules set by the NYPD and the New York City DOE. The New York City DOE establishes Chancellor’s regulations that cover a range of policies that involve principals, teachers, staff members, and SSAs. These policies guide SSAs in part from regulations set forth by the NYPD’s SSD (NYCLU, 2007, 2013). Chancellor’s Regulation A-412 (Security in the Schools) establishes reporting and notification requirements that SSAs and school officials must follow when a school-related incident or crime occurs. A-412 requires SSAs and the New York City DOE to notify the NYPD and then advise the principal/designee of instances of crimes or instances that might threaten student safety. This policy ensures that the NYPD’s SSD and the New York City DOE work cooperatively regarding school safety.

To address and prevent bullying in New York City public schools, the New York City DOE established Chancellor’s Regulation A-832 (Student-to-Student Discrimination, Harassment, Intimidation, and/or Bullying) on October 12, 2011. The policy was amended on August 21, 2013 to expand the regulation to prohibit bullying, harassment, and intimidation.
(New York’s Dignity for All Students Act, 2013). Although SSA involvement in bullying prevention in New York City schools is not explicitly stated in A-832, SSAs are required by Chancellor’s Regulation A-412 to notify the school principal/designee of situations that are not criminal but threaten student safety. SSAs are required to address crimes that fall under the purview of New York State Penal Law, New York City DOE Chancellor Regulations, and recent provisions established in the New York State DASA.

In addition to efforts made by the New York City DOE, the NYPD’s SSD has made organizational changes to prevent bullying in New York City public schools. The SSD recognizes the need to prevent and address bullying in New York City public schools since awareness of this issue continues to increase in the media and academic literature. Since 2012, the SSD has partnered with Life Space Crisis Intervention (LSCI), a nationally recognized training and certification program, to train SSAs on conflict resolution and bullying prevention. The goal of this 3-day training course is to provide SSAs with a framework with which to establish positive relationships with youth. The course also includes a component that informs SSAs of several aspects of bullying such as the definition of bullying, identifying and reporting instances of bullying, negative effects of bullying, and discussing myriad methods to assist victims. The policies of the New York City DOE and in service training by the SSD demonstrate a shared relationship that exists between both agencies regarding protection of children in New York City public schools.

SSAs share a primary role with SROs, which is to work closely with school officials to ensure the safety of students and all staff members in one of the largest public school systems in the United States. Although literature supports use of police officers and other safety personnel in schools to prevent crime and bullying (Brown, 2006; Girouard, 2001; Raymond, 2010;
Robles-Piña & Denham, 2012; Sampson, 2012), how SSAs perceive their role in preventing bullying, and whether those perceptions affect their involvement in incidents of school bullying, remains unexamined.

**RESEARCH QUESTIONS**

In contrast with extant research on the use of law enforcement in schools (Raymond, 2010, Robles-Piña & Denham, 2012; Sampson, 2012), this study assesses whether personal and contextual factors (e.g., age, gender, job experience) are determinants of SSA involvement in incidents of bullying. This study also examines whether personal and contextual factors have direct or indirect effects on SSA involvement with bullying. This was performed through use of logistic regression and path analysis. In so doing, the following questions are addressed:

**Primary Questions**

(1) *How do School Safety Agents in NYC public schools perceive their roles in their schools’ anti-bullying efforts?* Assessing the way in which SSAs perceive their roles in bullying prevention is important to understanding how their views construct their positions or importance in this process. How SSAs view their role in the process of bullying prevention might influence their commitment to their schools’ anti-bullying efforts.

(2) *How do perceptions of SSAs regarding bullying affect their responses to reported incidents of bullying?* Assessing perceptions of SSAs regarding bullying is important to understanding how their views influence their involvement or abstention with reported instances of bullying. How SSAs view their roles in the process of bullying prevention might influence their inclination toward involvement or abstention with reported instances of bullying. This information informs decision-makers about disparities in the expectations of SSAs, and identifies gaps between policies and practices.
Secondary Questions

Research demonstrates a link between organizational, environmental, contextual, and individual factors with police behavior and decision-making (Brooks et al., 1993; Brown & Frank, 2006; Paoline et al., 2000; Poteyeva & Sun, 2009; Rydberg & Terrill, 2010; Sun, 2003; Worden, 1990; Worden, 1993). However, the relationships between these factors, and how SSAs perceive their roles and identify and respond to reported instances of bullying, are unclear. The following questions are important to address because personal and contextual characteristics of law enforcement officers influence their perceptions and decision-making.

(1) What personal characteristics of SSAs influence their perceptions of their roles in their schools’ anti-bullying efforts?

(2) What contextual characteristics of SSAs influence their perceptions of their roles in their schools’ anti-bullying efforts?

(3) What personal characteristics of SSAs influence their identification of reported instances of bullying?

(4) What contextual characteristics of SSAs influence their identification of reported instances of bullying?

(5) What personal characteristics of SSAs influence their level of involvement in reported instances of bullying?

(6) What contextual characteristics of SSAs influence their level of involvement in reported instances of bullying?

SUMMARY
This study tests whether a relationship exists between how SSAs perceive their roles in preventing bullying and whether those views influence their involvement in incidents of school bullying. This study contributes to the existing body of knowledge on bullying prevention by exploring relationships between personal and contextual factors of SSAs and their effects on SSAs involvement in incidents of bullying through use of logistic regression and path analysis. This issue is important since law enforcement officers have the ability to protect children from bullying victimization and assist other school actors to foster a bully-free environment.
CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

In 1983, three boys in northern Norway committed suicide due to being bullied by classmates (Farrington & Ttofi, 2009b; Limber, 2011; Olweus, 1991, 1993). This event prompted development of the Olweus Bullying Prevention Program (OBPP) by Dan Olweus to aid Norway’s Ministry of Education’s efforts to address bullying behaviors in public schools (Limber, 2011). OBPP mitigates existing bullying issues among students by preventing future occurrences, and enhances peer relationships in schools (Limber, 2011; Olweus, 1991, 1993). To achieve these goals, Olweus proposes that schools employ components to reconstruct their environments to diminish opportunities for bullying, and establish a sense of community among children (Limber, 2011, p.72). The OBPP uses an age-cohort design that measures the occurrence of bullying victimization at a baseline, and subsequently the frequency of victimization during two post-tests at eight and twenty months following intervention. The components operate at several levels—school, classroom, individual, and (in some settings) community (Limber, 2011; Olweus, 1991, 1993). It is beyond the scope of this study to describe all of the program’s components. However, Limber (2011) developed a summary (Table 2.1), and research suggests that these elements are most effective when combined, establishing a whole-school approach (Limber, 2011; Olweus, 1991; Sampson, 2012).

Table 2.1

Components of Olweus Bullying Prevention Program

<table>
<thead>
<tr>
<th>School-level components</th>
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<tr>
<td>• Establish a bullying prevention coordinating committee (BPCC)</td>
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<tr>
<td>• Conduct trainings for the BPCC and all staff members</td>
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<td>• Administer the Olweus Bullying Questionnaire (Grades 3 through 12)</td>
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<tr>
<td>• Hold staff discussion-group meetings</td>
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<tr>
<td>• Introduce school rules against bullying</td>
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- Review and refine the school’s supervisory system
- Hold a school-wide kick-off event to launch the program
- Involve parents

**Classroom-level components**
- Post and enforce school-wide rules against bullying
- Hold regular (weekly) class meetings to discuss bullying and related topics
- Hold class-level meetings with parents

**Individual-level components**
- Supervise students’ activities
- Ensure all staff members intervene on-the-spot when bullying is observed
- Meet with students involved in bullying (separately for those bullied and who bully)
- Meet with parents of involved students
- Develop individual intervention plans for involved students as needed

**Community-level components**
- Involve community members on the BPCC
- Develop school-community partnerships to support the school’s program
- Help spread anti-bullying messages and principles of best practices to the community

*Source:* Limber (2011, p. 73)

The OBPP examined approximately 2,500 Norwegian children from 1983 to 1985 regarding instances of bullying. A preliminary evaluation of OBPP revealed a 50% decrease in bullying among participants after the program was implemented (Farrington & Ttofi, 2009a, 2009b; Limber, 2011; Olweus, 1991, 1993). Results of the OBPP study later served as a model for other countries to develop similar programs aimed at preventing school-based bullying (Baldry & Farrington, 2007). Since its creation, researchers recognize the OBPP’s effectiveness as a comprehensive program that encompasses a whole-school approach and includes principals, teachers, parents, students, and their communities who, when working cooperatively, can prevent and reduce instances of bullying (Baldry & Farrington, 2007; Farrington & Ttofi, 2009a, 2009b; Limber, 2011). Law enforcement officers are part of the community component since they are sworn to protect those within the communities they serve, and cooperate with citizens to enhance community safety (Raymond, 2010, Sampson, 2012).

To examine the effectiveness of anti-bullying programs, Baldry and Farrington (2007) conducted a comprehensive review of 16 large-scale programs implemented in the United States,
Australia, Belgium, Canada, England, Finland, Germany, Italy, Ireland, Norway, South, Africa, Spain, and Switzerland. The study suggests that eight programs administered in Canada, England, Finland, Ireland, and Norway produced a decrease in reported bullying, two programs implemented in England and Italy produced mixed results, four programs administered in Australia, Belgium, and the United States produced a minor decrease in reported bullying, and two program implemented in Norway and the United States produced no decrease in bullying.

Farrington and Ttofi (2009a) analyzed the results of studies that examine the effectiveness of 44 bullying prevention programs implemented in the United States and abroad, finding that each program reduced bullying and victimization. Bullying declined 20% to 23%, and victimization by 17% to 20%, on average (Farrington & Ttofi, 2009a). Farrington & Ttofi (2009a) note that the majority of the programs they analyzed contained elements of Olweus’s (1991) study of the OBPP (Table 2.1). However, programs that followed the OBPP used various research designs such as random experiments, pre-test and post-test designs with and without control groups, and use of other experimental controls (Ttofi & Farrington, 2011). Researchers suggest that many anti-bullying programs might have used components of the OBPP because of its desirable effect on bullying prevention and reduction (Baldry & Farrington, 2007; Farrington & Ttofi, 2009a; Limber, 2011).

DEFINITION OF BULLYING

A common, conceptual definition of bullying consists of three components (Barton, 2006; Farrington & Ttofi, 2009a, 2009b; Hutzell & Payne, 2012; Limber, 2011; Olweus, 1978; Peguero, 2008; Popp, 2012a; Ttofi & Farrington, 2011, 2012). Bullying is (1) intentional harmful behavior that (2) usually occurs with some repetitiveness and is (3) aimed at an individual who has difficulty defending against such harm. Bullying involves hurtful behaviors
that intend to cause harm to victims through physical, verbal, or psychological attacks or intimidation (Farrington & Ttofi, 2009a; Limber, 2011; Olweus, 1978). In contrast, the U.S. DOE defines bullying as aggressive behaviors among school-aged children that involves a real or perceived power imbalance and that is repeated or has the potential to be repeated over time. This description is different from how researchers define bullying. Specifically, bullying is rooted in a social context, making school settings an ideal site for bullying to occur (Gendron, Williams, & Guerra, 2011). Notwithstanding the repetitive nature of bullying behaviors, a single incident involving the other previously mentioned aspects is considered bullying. The most salient aspect of bullying is that it constructs an imbalance of power when a more powerful individual (or child) torments a less powerful child over a period (Limber, 2011). Research conducted by Barton (2006) found that a power imbalance is derived from physical stature, strength, or psychological influence that a child possesses and uses to fit in or because he/she feels that he/she is better than his/her victim. An imbalance of power based on disparities of physical, mental, and verbal strength is necessary for bullying to occur (Limber, 2011; Ttofi & Farrington, 2008).

Research identifies children as a population highly susceptible to victimization, including bullying (Baum, 2005; Davis, Lurigio, & Herman, 2007; Reid & Sullivan, 2009; Schreck, Miller, & Gibson, 2003; Van Dorn, 2004). Baum (2005) found that from 1993 to 2003, adolescents between the ages of 12 and 17 were victims of violent crimes at a rate two and a half times greater than adults. According to the National Crime Victimization Survey (NCVS), from 2004 to 2013, the number of violent crime victims between the ages of 12 to 17 decreased from 714,180 to 545,370. However, this age group continues to account for a significant proportion of the total number of victims of violent crime (Truman & Langton, 2014). Most states, with the
exception of Montana, have bullying laws to protect children. However, some children often endure acts that are not prohibited under bullying laws such as teasing or name calling. These acts often go unpunished and are handled by other forms of social controls such as sanctions enforced by local school boards (Davis et al., 2007; Wynne & Joo, 2011). Traditionally, authority over school-based bullying has fallen under the purview of school districts that lacked comprehensive legislation to protect victims. To examine legislation aimed at protecting children from bullying, Stuart-Cassel et al. (2011) reviewed local and state bullying legislation, the purpose of which was to present extensive information regarding the current status of state legislation, and how present laws and policies translate into practice. For example, in New York State, DASA, which prohibits bullying behaviors and requires training for all school personnel to identify and respond to incidents of bullying, was signed into law on September 13, 2010. Research recognizes bullying as a form of aggressive behavior because it might result in physical contact between offenders and victims (Barboza et al., 2009; Moon et al., 2011; Olweus, 1991; Wynne & Joo, 2011). Farrington and Ttofi (2009b) suggest that bullying should not be entirely associated with aggression or violence since not all acts of bullying involve either or both. Consequently, much literature classifies bullying into one of four categories: physical, verbal, social, and cyber (Farrington & Ttofi, 2009a; Hinduja & Patchin, 2007; Olweus, 1991, 1993). For example, bullying involves victims being called offensive names, being rejected and excluded from activities, and having rumors spread about them.

**Physical Bullying**

Physical bullying involves the intentional use of force on a weaker person, which often results in injury (Olweus, 1993). Physical bullying encompasses acts of violence during which a student hits, pushes, kicks, slaps, or spits on another student (Menard & Grotpeter, 2011; Moon
et al., 2011; Olweus, 1993). Olweus (1993) argues that this form of bullying is direct or overt since the bully chooses to harm the victim face-to-face. Research suggests that a gender bias exists regarding those involved in physical bullying; males are more likely to be involved in physical bullying (i.e., as either bully or victim) than females are (Bernstein & Watson, 1997; Burrow & Apel, 2008; Olweus, 1991, 1993; Kuntsche & Klingemann, 2004; Van Dorn, 2004; Wynne & Joo, 2011). Concerning age, Popp (2012a) examines self-reports from 8,031 adolescents (12 to 18 years old) in the United States and found that age and GPA had an inverse relationship with the risk of physical bullying victimization. Popp’s (2012a) results support previous studies that suggest that as children mature and excel academically, they are less likely to be bullied physically (Burrow & Apel, 2008; Kuntsche & Klingemann, 2004; Olweus, 1991, 1993; Van Dorn, 2004; Wynne & Joo, 2011).

**Verbal Bullying**

Verbal bullying involves name-calling, taunting, teasing, and threatening harm (Olweus, 1991). Bullies use words to humiliate others and display dominance over peers (Olweus, 1993). This method of bullying is unique in that these actions occur more directly since they occur more often in person (Olweus, 1991, 1993). This approach also includes language that is not necessarily negative, yet can still annoy or frustrate a child (e.g., being called a nerd or suck-up). In a study of bullying among Norwegian youths, Olweus (1991) found that female students are usually more involved in verbal bullying in comparison to males. This finding is significant because it supports the assertion that female students more often engage in verbal bullying than males do, and are less likely to engage in physical bullying (Burrow & Apel, 2008; Kuntsche & Klingemann, 2004; Olweus, 1991, 1993; Van Dorn, 2004; Wynne & Joo, 2011).
Social Bullying

Social bullying entails hurting another individual’s reputation or social standing by excluding him/her from a group, spreading rumors, or embarrassing an individual publicly (Barboza et al., 2009; Menard & Grotz, 2011; Olweus, 1993). Research suggests that females are more likely than males are to be involved in social forms of bullying (i.e., as the bully or victim) (Burrow & Apel, 2008; Kuntsche & Klingemann, 2004; Olweus, 1993; Van Dorn, 2004; Wynne & Joo, 2011). Popp (2012a) supports this notion, finding that females are 1.3 times more likely to experience social bullying victimization in comparison to males. Popp (2012a) also found an inverse relationship between students’ academic achievement and their risk of social bullying, which supports research that suggests that as children mature and excel academically, they are less likely to be bullied socially (Burrow & Apel, 2008; Kuntsche & Klingemann, 2004; Olweus, 1993; Van Dorn, 2004; Wynne & Joo, 2011).

Cyber Bullying

Cyber bullying is “willful and repeated harm inflicted through the medium of electronic text” (Patchin & Hinduja, 2006, p. 152). The means through which cyber bullying occurs include an Internet-enabled computer, cellular phone, and other Internet-enabled devices. These devices allow a child to send hurtful messages and content (e.g., pictures, video, and text) to a victim or public sites accessible to third parties. Hinduja and Patchin (2008) argue that evolving social media accessible through the Internet provides unrestricted opportunities for bullies to seek weaker children to harm. Cyber bullying, much like physical and verbal bullying, involves an aggressor who seeks pleasure from harassing or harming others (Hinduja & Patchin, 2008). However, cyber bullying relates more closely to social bullying. The relationship is due to the “distinct latent construct” that is absent during physical or verbal bullying (Bonanno & Hymel,
Cyber bullying involves technology that adolescents use as a tool to hide behind, unlike physical and verbal bullying that forces those who engage in the behavior to do so in person. This type of bullying has become an emerging problem due to the effortlessness current technology provides to bullies to harm peers and affect the climate of their schools negatively (Patchin & Hinduja, 2008).

THE SCHOOL ENVIRONMENT

This study explains how and why SSAs respond, prevent, and reduce incidents of bullying. Accordingly, the environment in which SSAs work, and the individuals involved in incidents of bullying such as the bully, victim, bully/victim, bystanders, and those who have the ability to prevent their occurrence, must be discussed. According to the United States Department of Education (DOE), a school is an institution designed to educate children under the direction of principals, teachers, and other staff members. The school environment is comprised of individuals who interact in a physical space with the purpose of providing formal instruction to children. Unfortunately, bullying can occur in this environment, and affect those involved negatively.

The Bully

A bully is an individual who uses strength or power to harm or intimidate those who are weaker. A primary trait of bullies is their tendency to act aggressively toward others during common social interactions or situations such as carrying conversations or playing at school (Olweus, 1993). Some bullies encounter few conflicts, but can be extremely aggressive during conflict situations (Barton, 2006). Highly aggressive bullies tend to possess personality flaws such as having a positive outlook toward violence while simultaneously viewing themselves negatively (Barton, 2006). Bullies also tend to have elevated levels of hyperactivity,
spontaneity, and inattentiveness, and low levels of scholastic achievement (Ttofi & Farrington, 2008). They generally encounter slight resistance from their victims, whom they target based on perceived weaknesses (Barton, 2006). Bullies have different levels of popularity, which depend on their level of effectiveness in harming others (Barton, 2006). However, most bullies are considered unpopular by peers since they seldom show compassion or empathy toward their victims.

Research suggests that bullying in school associates with gender (Barboza et al., 2009; Esbensen & Carson, 2009; Hutzell & Payne, 2012; Olweus, 1993; Popp, 2012a, 2012b; Wang, Iannotti, & Nasel, 2009). Using responses from the 2005/2006 Health Behavior in School-Aged Children (HBSC) survey of 7,182 children (11 to 17 years old), Wang et al. (2009) found that males were more likely to be involved in physical bullying, and females in social bullying. These findings are similar to those found in other research that examines bullying victimization and engagement (Esbensen & Carson, 2009; Hutzell & Payne, 2012; Olweus, 1993; Popp, 2012a, 2012b). Gender differences are also noticeable in victim selection; males are equally likely to bully weaker males and females. In contrast, females usually bully other females (Barton, 2006).

Research identifies a relationship between age and types of bullying perpetrated (Barboza et al., 2009; Olweus, 1991). Olweus (1993) shows that younger children tend to carry out physical bullying, while older children engage in verbal or social bullying. In similar research, Wang et al. (2009) concludes that older students (14 to 16 years) report less involvement in physical bullying in comparison to younger classmates (11 to 13 years). Olweus (1993) suggests that the cause is that children find other ways to manage anger and frustration as they mature and shift away from physical aggression. The relationship between race/ethnicity and bullying has
not been studied extensively (Seals & Young, 2003). In a survey of 454 children (7th and 8th graders) in Mississippi, Seals and Young (2003) did not find evidence to support a relationship between race/ethnicity and bullying perpetration. However, Wang et al. (2009) argues that in comparison to white and Hispanic students, African-American students are more likely to be bullies and less likely to be victims. Seals and Young (2003) used a small sample in comparison to Wang et al. (2009). Regardless of previous outcomes, more research is needed to determine whether race/ethnicity predicts bullying.

Patchin and Hinduja (2006) note that although bullying has been examined extensively, little is known about cyber bullies. In a telephone survey of 1,498 adolescents between the ages of 10 and 17 in the United States, Ybarra and Mitchell (2004) found that respondents who reported cyber bullying others spent more time on the Internet, viewed themselves as experts in the use of current technology (i.e., computers and cell phones), and were infrequently monitored by parents and caregivers. Respondents identified as cyber bullies were usually victims of traditional forms of bullying (i.e., physical, verbal and social). Results also suggest that older children (15 to 17 years) are more likely than their younger peers (10-12) to harass others while online (Ybarra & Mitchell, 2004). In a similar study, Patchin and Hinduja (2006) identify characteristics of cyber bullies and victims by examining survey data collected from 1,388 Internet users in the United States and abroad. Adolescents who reported bullying others using traditional methods in-person (i.e., physical, verbal and social) were 2.5 times more likely to bully others over the Internet, and respondents who reported cyber bullying others identified the anonymity provided by the Internet as a primary motive for engaging in this form of bullying. However, not all cyber bullies engage in this harmful behavior anonymously. In some cases, cyber bullies follow an overt approach by using open social media forums such as chat rooms
and online forums to send hurtful messages and content. Technology makes it easier for cyber bullies to reach victims, and decreases the possibility of adult or peer intervention (Patchin & Hinduja, 2006).

**The Victim**

Much research on bullying examines individual and contextual predictors of victimization such as age, gender, race/ethnicity, extracurricular activities, and home environment (Burrow & Apel, 2008; Esbensen & Carson, 2009; Hart, Hart, & Miethe, 2013; Hay, Meldrum, & Mann, 2010; Hutzell & Payne, 2012; Peguero, 2008; Popp, 2012a, 2012b; Schreck et al., 2003; Seals & Young, 2003; Van Dorn, 2004; Wynne & Joo, 2011). These studies recognize a pattern of social and psychological susceptibilities among victims (Popp, 2012a, 2012b; Wynne & Joo, 2011). Victims of physical and verbal bullying are passive, are physically weak, lack social skills, and have low self-esteem (Barton, 2006; Bernstein & Watson, 1997; Farrington & Ttofi, 2009a, 2009b; Olweus, 1993; Popp 2012a, 2012b). Victims of bullying are usually disliked by peers, and lack strong social networks, making it difficult for them to develop support, a deficit that leads to social isolation (Barton, 2006; Olweus, 1993; Popp, 2012a, 2012b). Victims become more withdrawn from school and avoid some areas in school because of their inability to protect themselves physically or verbally against bullies (Esbensen & Carson, 2009; Hutzell & Payne, 2012; Popp 2012a, 2012b; Wynne & Joo, 2011). These children also often lack parental support, affection, and monitoring (Barboza et al., 2009; Burrow & Apel, 2008; Olweus, 1993; Wang et al., 2009).

A relationship exists between age and the likelihood of school-based victimization (Augustine, Wilcox, Ousey, Clayton, 2002; Burrow & Apel, 2008). Victims of both violent and non-violent school-based crimes are typically younger than their offenders. In a sample of 3,911
students (12 to 18 years) in the United States who responded to the 1999 School Crime Supplement (SCS) survey, Van Dorn (2004) found that younger children (12 to 15 years) were more likely to be victimized in school in comparison to older students (16 to 18 years). Wynne and Joo (2011) similarly assessed bullying victimization among a sample of 5,592 adolescents (12 to 18 years) who responded to the 2003 SCS survey, finding that age is a protective factor, suggesting that children are less likely to become victims of bullying as they age.

Research identifies gender and race/ethnicity as risk factors of bullying victimization, but the nature of the relationship is complex and findings are inconsistent across studies (Popp, 2012a, 2012b; Seals & Young, 2003; Wynne & Joo, 2011). Using self-reported data from 7,900 adolescent respondents in the Education Longitudinal Study of 2002, Peguero (2008) found that female students are less likely to be bullied than male students while in school. Wynne and Joo (2011) also examine individual factors and their influence on victimization, finding that females are less likely to be bullied in comparison to males while in school. Conversely, Van Dorn (2004) and Popp (2012a) demonstrate that gender is not a strong predictor of bullying victimization. Peguero’s (2008) study uses a different data source, while the three studies mentioned previously use data from the SCS survey during varying periods, which might explain the mixed results.

Ybarra and Mitchell (2004) observed that some Internet use correlates with a higher likelihood of online harassment; adolescents who spend more time on the Internet are more likely to experience cyber bullying. Hinduja and Patchin (2007, 2008) argue that adolescents who experience traditional forms of bullying (i.e., physical, verbal and social) experience increased risk of cyber bullying. The relationship between gender or race/ethnicity and cyber bullying victimization has also been examined, but the strength of the relationship has not been
established (Hinduja & Patchin, 2007, 2008, 2010). Research also suggests that age, computer
expertise, and the extent of time adolescents spend online predict cyber bullying victimization

The Bully/Victim

Olweus (1993) describes a bully/victim as a child who has been victimized and later
bullies other children. Bully/victims and traditional bullies are similar in that they harm other
children as actors in the process of bullying perpetration (O’Moore & Kirkham, 2001; Pollastri,
Cardemil, & O’Donnell, 2010), but a distinction is that obtaining some form of power or
dominance does not motivate the former type of bully. Instead, the bully/victim is motivated by
earlier experiences of victimization from other adolescents. These children usually yearn for
retribution by acting out aggressively toward peers (Olweus, 1993; Pollastri et al., 2010). These
aggressive actions are influenced by previous mistreatments from parents or other adults, which
includes physical punishment or abuse, threats of violence, and bullying (Barboza et al., 2009;
Bernstein & Watson, 1997). Hypersensitivity from experiences of victimization from peers also
cause children to become aggressive with even the slightest interpretation of acts deemed as
cruel or aggressive while at school (Olweus, 1993; Reid & Sullivan, 2009).

Bystanders

Children who are not involved in the bully-victim relationship but are present during such
instances are called bystanders (Obermann, 2011; Salmivalli, Lagerspetz, Björkqvist, Österman,
& Kaukiainen, 1996; Sutton & Smith, 1999; Wiens & Dempsey, 2009). To examine the roles of
children in bullying situations, Salmivalli et al. (1996) expand on previous research that
examines the victim-bully relationship and focuses on the experiences of bystanders. In a survey
of 573 Finnish children (12 to 13 years), Salmivalli et al. (1996) placed bystanders in distinct
categories based on responses regarding their roles during bullying. Bystanders can enable bullying behaviors by promoting the victimization of other children to gain acceptance from peers (Salmivalli et al., 1996; Sutton & Smith, 1999; Wiens & Dempsey, 2009). Results suggest that boys are more likely to reinforce or encourage bullying (Salmivalli et al., 1996). Sutton and Smith (1999) assessed the roles of 206 children (7 to 10 years) in London regarding their roles during bullying, finding similar results.

Bystanders can either ignore bullying by passively accepting the behavior or defend victims of bullying by intervening or informing school staff members and parents (Salmivalli et al., 1996; Sutton & Smith, 1999; Wiens & Dempsey, 2009). Some bystanders choose to ignore bullying out of fear of being associated with victim(s), and not wanting to be drawn into such situations (Obermann, 2011). Children that intervene during bullying are prompted to defend victims because they disagree with bullies and their behaviors (Barton, 2006), but Obermann (2011) argues that such instances are rare. Both Salmivalli et al. (1996) and Sutton and Smith (1999) found that girls defend more often against bullying, and both studies found that children identified as defenders are held at higher social statuses in comparison to all individuals involved during bullying (i.e., bully, victim and bystander), which results in preventative measures when victims look to children who are more popular to defend them against bullies (Ttofi & Farrington, 2012; Wiens & Dempsey, 2009).

**Actors Involved in Anti-Bullying Safety Net**

A school is a unique social system in which principals, teachers, safety personnel, parents, and other school staff members cooperate to advance academic achievement, and act individually as part of a larger safety net that protects children from bullying behaviors while in school. Each actor has the ability to develop and enhance bully-resistant environments to protect
children from victimization through sanctions, preventative programming, and initiatives (Barton, 2006; Olweus 1991, 1993; Ttofi & Farrington, 2011, 2012). Preventing incidents of bullying requires collective efficacy of actors who have the ability to do so.

The role of principal is to act as a primary leader by providing clear direction and establishing a sense of belonging for students, teachers, parents, and the community. These actors have the ability to implement, execute, and institutionalize change (Olweus, 1991, 1993). School principals are typically skilled at managing a school in addition to motivating and communicating clear expectations to staff members, students, and communities. Principals are also required by federal, state, and local protocols to ensure that children remain in safe and supportive learning environments. Principals have the ability to assess the extent of problems that their schools face, and thus can reduce incidents of bullying by adhering to laws and managing bully-resistance environments.

Teachers engage with students while in a classroom and can act in cases of bullying. However, how teachers view and handle cases of bullying might differ. In a study from Olweus (1991), students reported that teachers did not interfere when a student was bullied, and were at times unaware of instances of bullying. Olweus (1993) suggests that teachers often do little to prevent bullying behaviors and make limited contact with students involved to address the issue. However, using semi-structured interviews of 37 teachers from a middle school in southwest Pennsylvania, Crothers and Kolbert (2004) found that teachers indicate that students were occasionally unable to identify aggressive behaviors they witnessed or received from peers as bullying because they lacked adequate information on what bullying entails. These results accord with findings from Olweus (1993). Crothers and Kolbert (2004) also found that some teachers voiced concerns that their school’s administration lacked strategies and training for
intervention. Using semi-structured interviews of 13 Canadian grade school teachers (i.e., 4th and 5th grades), Minsha, Pepler, and Wiener (2006) found that most teachers complained about a lack of time and resources to address bullying. These findings suggest that teachers must be adequately and routinely trained on anti-bullying strategies to ensure that such behaviors are addressed and prevented. Children who engage in bullying behaviors might construe non-intervention from teachers as implicit approval for their behaviors (Crothers & Kolbert, 2004). Teachers must communicate to students that bullying behaviors are not socially acceptable in school (Crothers & Kolbert, 2004). Teachers have the ability to influence children’s behavior since they are in frequent and direct contact with them, in comparison to principals and other school staff members.

Other school staff members such as counselors, administrative personnel, nurses, librarians, volunteers, and school bus drivers provide a supportive role to ensure schools maintain a safe environment that is conducive to learning. Although other school staff members do not interact with students as frequently as teachers do, they can keep teachers and school principals informed of bullying behaviors. These actors also have the ability to identify and respond to instances of bullying.

Safety personnel are expected to ensure the safety of students and all personnel in a school by conducting periodic inspections throughout and around the school, and must make students and all school personnel aware of safety issues. Research suggests that safety personnel are an important part of establishing a bully-resistant environment (Robles-Piña & Denham, 2012; Sampson, 2012). Sampson (2012) argues that bullying affects students’ sense of security and might force them to not go to school when they perceive their safety is threatened.
Incorporating police and other safety personnel enhances students’ sense of security and prevents bullying (Robles-Piña & Denham, 2012; Sampson, 2012).

THE IMPACT OF BULLYING ON CHILDREN

The emotional and mental effects of bullying are documented well, including short- and long-term internalizing/externalizing behaviors on both perpetrators and their victims such as sadness, low self-esteem, depression, aggression, drug use, and violence (Gendron et al., 2011; Hart et al., 2013; LeVasseur et al., 2013; Limber, 2011; Olweus, 1991, 1993, 2011; Ttofi & Farrington, 2008, 2011). Research suggests that bullying affects the physical health of both perpetrators and their victims (Barton, 2006; Esbensen & Carson, 2009; Menard & Grotpeter, 2011; O’Moore & Kirkham, 2011; Popp, 2012a, 2012b; Ttofi & Farrington, 2008, 2011; Turner, Exum, Brame, & Holt, 2013; Vivolo, Holt, & Massetti, 2011). Research continues to support a need for persistent improvement of preventative measures (Barton, 2006; Esbensen & Carson, 2009; Menard & Grotpeter, 2011; O’Moore & Kirkham, 2011; Popp, 2012a, 2012b; Ttofi & Farrington, 2008, 2011; Turner et al., 2013; Vivolo et al., 2011).

Effects on Bullies

Research demonstrates that bullies are more likely to engage in risky and delinquent behaviors such as drinking, smoking, drug use, truancy, vandalism, and shoplifting (Barton, 2006; Menard & Grotpeter, 2011; Ttofi et al., 2011; Ttofi, Farrington, & Losel, 2012; Ttofi & Farrington, 2008; Olweus, 2011; Vivolo et al., 2011). They are also more likely to bring weapons to school, fight in and outside of school, have some involvement with gangs, and face suspension from school (Hutzell & Payne, 2012; Kuntsche & Klingemann, 2004; Wynne & Joo, 2011). In a longitudinal study using three cohorts (N=780) of Swedish children (16 to 24 years), Olweus (2011) found that, on average, bullies are more likely to commit crimes as adults. Ttofi
et al. (2011) observed that adolescent bullying correlates highly with later adult criminality. Ttofi et al. (2012) supported this finding with a meta-analysis of 15 studies on bullying, finding that bullies have increased risk of engaging in violence later in life by approximately 66%. These findings mirror research from Olweus (2011), who finds a correlation between bullying and criminality later in adulthood.

Research suggests that bullying victimization is a risk factor for low self-esteem and depression (Barton, 2006; Esbensen & Carson, 2009; Menard & Grotpeter, 2011; Olweus, 1993; O’Moore & Kirkham, 2001; Popp, 2012a, 2012b; Ttofi & Farrington, 2008, 2011; Vivolo et al., 2011). However, some studies suggest that bullies are just as likely to experience similar effects (Barton, 2006; Ttofi et al., 2012; Ttofi & Farrington, 2008). In a sample of 2,500 Norwegian children, Olweus (1993) found that bullies did not suffer from low self-esteem as a result of victimizing other children, but O’Moore and Kirkham (2001) maintain that bullies share feelings of lower self-worth, similar to their victims, as a result of bullying. In a survey of 307 middle school children in the United States, Pollastri et al. (2010) used cross-sectional and longitudinal analyses and found that female bullies’ self-esteem increases with age. Researchers argue that in some cases, underlying contextual factors have varying effects on those who bully in comparison to their victims (Hart et al., 2013; Ttofi et al., 2012; Ttofi & Farrington, 2008). Children identified as bullies often remain bullies throughout their lives (Olweus, 2011; Ttofi et al., 2011, 2012). When compared to their victims, bullies are less likely to experience the magnitude of negative consequences associated with bullying (Barton, 2006).

**Effects on Victims**

Research identifies a strong association between bullying victimization and low self-esteem (Barton, 2006; Esbensen & Carson, 2009; Menard & Grotpeter, 2011; Olweus, 1993;
O’Moore & Kirkham, 2001; Popp, 2012a, 2012b; Ttofi & Farrington, 2008, 2011; Vivolo et al., 2011). In a survey of 3,798 children (10 to 19 years) in the United States, Gendron et al. (2011) found that children who perceive their school as an unsupportive environment that lacked sufficient preventive measures and support for victims have lower self-esteem. This is significant because incidents of bullying that remain unchecked or unresolved precipitate low self-esteem in victims and lead to dangerous short- and long-term behaviors (Hart et al., 2013).

For some children, low self-esteem develops into feelings of shame due to their inability to defend themselves physically, verbally, and socially from bullying, and generates aversion to school (Hernandez, Floden, & Bosworth, 2010; Hutzell & Payne, 2012; Olweus, 1993; Popp, 2012a, 2012b).

In a sample of 1,117 children (10 to 15 years) who responded to the 2007 School Crime Supplement (SCS) survey, Hutzell & Payne (2012) found that children who report being the victims of bullying have higher perceived risk of victimization and lower perceived school safety. Results of this study suggest that students who report some type of bullying victimization are more likely to avoid locations in and around their schools due to fear of being bullied (Hutzell & Payne, 2012). These results parallel research that indicates that victims of bullying are more likely to find ways to avoid school and withdraw from social activities to escape victimization (Farrington & Ttofi, 2009a, 2009b; Menard & Grottpeter, 2011; Olweus, 1993; Wynne & Joo, 2011). Research also suggests that a strong correlation exists between bullying victimization and school avoidance due to fear of further victimization, which might lower the likelihood of academic success (Esbensen & Carson, 2009; Hutzell & Payne, 2012; Popp 2012a, 2012b; Wynne & Joo, 2011).
In some cases, victims report short-term psychosomatic effects such as headaches and stomachaches, but evidence also suggests that victims of bullying are at greater risk of severe depression and suicidal ideation (Esbensen & Carson, 2009; Farrington & Ttofi, 2009a, 2009b; Hutzell & Payne, 2012; LeVasseur et al., 2014; Litwiller & Brausch, 2013; Menard & Grotpeter, 2011; Olweus, 1993; Ttofi et al., 2012; Ttofi & Farrington, 2008, 2011; Turner et al., 2013; Vivolo et al., 2011). In a sample of 4,643 students from a rural area of a Midwestern U.S. state that completed mental health screening surveys, Litwiller and Brausch (2013) found that physical and social bullying have a direct effect on suicidal ideation and behaviors. LeVasseur et al. (2013) use data from the 2009 New York City Youth Risk Behavior Survey of 12 to 19 year olds to assess the role of bullying in suicide attempts, finding that respondents who reported bullying victimization had a higher risk of attempting suicide in comparison to peers who were not victimized. Literature also suggests that victims of bullying suffer from anxiety and depression that can last into adulthood (Barton, 2006; Esbensen & Carson, 2009; Litwiller & Brausch, 2013; Olweus, 1993; Pollastri et al., 2010; Ttofi et al., 2011, 2012; Ttofi & Farrington, 2008, 2011; Turner et al., 2013; Vivolo et al., 2011). Barton (2006) suggests that victims of bullying often demonstrate poorer social and emotional adjustment than those who are not victimized. Barton (2006) submits that this might be the product of personal views of worthlessness and inadequacy as a result of bullying victimization, which contribute to depression. As a result of bullying victimization, some adolescents adopt negative coping strategies, and in some extreme cases resort to violence to combat bullying (Hutzell & Payne, 2012; Ttofi et al., 2012; Vivolo et al., 2011). The effects on children who are cyber bullied parallel those victimized by traditional means (i.e., physical, verbal, and social) such as low self-esteem, depression, and suicidal ideation (Hinduja & Patchin, 2013; Litwiller & Brausch, 2013).
In a survey of 1,963 students in middle schools (6th through 8th grades) in one of the largest school districts in the United States, Hinduja and Patchin (2010) found that bullying and cyber bullying victimization are strong predictors of suicidal ideation and behaviors. Respondents identified as victims expressed feelings of sadness, anger, and embarrassment. As a result of those emotions, victims avoided school or looked to violence to retaliation. Similar studies identify drug use in victims of bullying to cope with such acts, and higher likelihood of suicidal ideation (Bonanno & Hymel, 2013; Hinduja & Patchin, 2013; Litwiller & Brausch, 2013, Turner et al., 2013; Ybarra & Mitchell, 2004). Turner et al. (2013) use survey data from a national sample of 1,874 youths to explore the effects of bullying victimization on mental health, the results of which suggest that females’ levels of depression correlate with rates of cyber and verbal bullying, and males’ more closely with rates of verbal bullying. Bullying victimization was also a higher risk factor for suicidal ideation in females. Results also suggest that although males use computer technology more frequently, females are more likely to suffer from depression as a result of cyber bullying (Turner et al., 2013). These findings accord with research from Hindjua and Patchin (2008, 2010), who attribute this outcome to the fact that females more frequently engage in social bullying.

**Effects on Bystanders**

Children who witness bullying have the opportunity to intervene, but some fail to act because they expect others to take action (Barton, 2006). Their lack of interference might be the result of viewing the inactions of their peers as an indication that exchanges between bullies and victims is not serious. More often, bystanders who choose not to intervene experience guilt for their inability to help their peers (Obermann, 2011). In a survey of 660 Danish children (11 to 14 years) in eight state schools, Obermann (2011) found that respondents who experienced guilt and
felt responsible for not intervening were less likely to disconnect morally from witnessed incidents of bullying. Respondents were divided into four groups, depending on their bystander, status as outsiders, defenders, guilty bystanders, and unconcerned bystanders. Results suggest a relationship between active involvement in bullying and the way a child reacts when witnessing bullying interactions among other children.

**Effects on School Climate**

Schools are instrumental to the socialization of children, which affects development of relationships and friendships (Gendron et al., 2011; Waasdorp, Pas, O’Brennan, & Bradshaw, 2011; Zaykowski & Gunter, 2012). An environment that does not prevent bullying behaviors generates an atmosphere conducive to its occurrence. Gendron et al. (2011) suggest that if children learn that bullying behaviors are acceptable and tolerable, they are more likely to engage in bullying. In a survey of 11,674 students, 960 parents, and 1,027 school staff members’ perceptions of school climate and bullying in a large Maryland public school district, Waasdorp et al. (2011) found discrepancies among participants regarding perceptions of safety. Both students and school staff members who had been a victim of bullying were less likely to report sentiments of acceptance and safety, and yet they were more likely to witness instances of bullying in comparison to respondents who were not bullied. Results also suggest that when bullying persists and is not prevented, the entire school climate is affected. For example, a school climate that is supportive of bullying might influence an individual’s views adversely concerning bullying as acceptable behavior. An environment that supports bullying creates a climate of fear and disrespect, and thus hinders the ability of students to learn while in school (Waasdorp et al., 2011). Literature also suggests that when children are bullied, it decreases eagerness to attend school and thereby lowers academic success (Esbensen & Carson, 2009;
Hutzell & Payne, 2012; Popp 2012a, 2012b; Wynne & Joo, 2011). In a longitudinal survey of 1,100 students in nine cities across four U.S. states, Esbensen and Carson (2009) observed that repeated bullying victimization led to higher fear, less use of conflict resolution skills, lower school commitment, and higher perceived risk of victimization. These results are significant since they reaffirm evidence that suggests victims of bullying develop an aversion to school, which influences them academically since they withdraw from school due to fear of future victimizations (Hernandez et al., 2010; Hutzell & Payne, 2012; Olweus, 1993; Popp, 2012a, 2012b).

**CONCEPTUAL FRAMEWORK OF SSA’s PERCEPTION OF THEIR ROLE**

Theories of human behavior such as association, identification, and rationalization are traditionally rooted in sociological, psychological, and anthropological research. These theories are used to examine social roles and interactions. Role theory appears as a paradigm in sociology to explore perceptions of individuals in a community or organization, and their conduct based on the primary principle that an individual’s behavior is context specific, based on real or perceived social positions within a group, organization, or setting (Biddle, 1986). This perspective is the result of empirical tests that examine how individual outlooks affect subsequent behaviors based on organizational, environmental, contextual, and individual factors (Biddle, 1986). Although distinctions have been identified in the attitudes and behaviors of individuals, and how they affect social conduct (Gordon, 1976), role theory serves as a framework to demonstrate the way SSAs view their roles in their schools’ anti-bullying efforts, which affect decision-making when addressing bullying. The focus of this research is on perceptions of SSAs, which substantiates application of role theory rather than criminological theories such as social learning, routine activities, and general strain that have been used to
identify risk factors associated with victimization, a topic not emphasized in this study (Augustine et al., 2002; Burrow & Apel, 2008; Hay et al., 2010; Hinduja & Patchin, 2007, 2013; Mendard & Grotpeter, 2011; Moon et al., 2011; Popp, 2012a, 2012b; Peguero, 2008; Reid & Sullivan, 2009; Schreck et al., 2003).

**Role Theory**

Biddle (1986) argues that role theory is concerned with the most significant aspect of social behavior—the reality that individuals act differently contingent on perceived or real roles (Gordon, 1976). This theory posits that social behavior is influenced by the role an individual assumes, and an individual’s role reflects social norms, contextual demands, personal views, and how they define an act or situation. Role theory explains actions and performance of individuals in a given context or work setting (Biddle, 1986). This premise situates role theory in the current study, which tests its use through a survey instrument (Appendix B) to examine whether perceptions of SSAs affect involvement in incidents of bullying.

Role theory was conceived as a theatrical metaphor. Since actors are bound to parts based on predetermined scripts, social behaviors in other contexts also associate with parts or scripts understood by social actors. Role theory involves aspects of social interactions such as social behaviors, assumed identities, and social expectations of actors. Thus, this framework is important in explicating how SSAs perceive their positions in social interactions and exchanges. Role theory was initially applied in theoretical works of George Herbert Mead, Ralph Linton, and Jacob L. Moreno. During the 1920s and 1930s, these scholars applied the theatrical metaphor to examine individual behavior patterns and roles in social settings, which led to development of role theory (Biddle, 1986). Biddle (1986) maintains that confusion surrounded role theory because its originators differed regarding the means by which they used *role* and
associated terms. Although these disparities persisted in subsequent literature, Biddle (1966) expanded on role theory by exploring concepts and research associated with this unique premise. Five perspectives followed as a result of various examinations of role theory in varying contexts, each with subcategories in its founding framework, including functional, structural, organizational, cognitive, and symbolic interactionist role theory (Biddle, 1986).

Functional role theory explains how social systems influence behavioral conformity in individuals. Actors within a system are presumed to have been taught social norms, and as a result, teach others to conform to such norms (Biddle, 1986). Rather than focusing on the individual, structural role theory takes a different approach to explain individual behavior by proposing that social structures have more of an effect on individuals and their actions. These social structures are viewed more as social positions or statuses that influence individual behaviors (Biddle, 1986). Organization role theory expands the basic notion of structural role theory, but views official demands of an organization in a defined role as a cause of individual behaviors. Cognitive role theory focuses on relationships between role expectations and behavior (Biddle, 1986). Although these subcategories explain social behaviors and positions in varying contexts, symbolic interactionist role theory is most applicable to SSAs. Symbolic interactionist role theory suggests that symbols or meanings assigned to things (e.g., words, gestures, rules, and roles) influence individual behavior. Certain roles reflect social norms, views, contextual demands, and the evolving definition of a situation as understood by actors. Symbols or meanings are assigned to interactions based on social interactions, and by how individuals interpret their own and others’ conduct (Biddle, 1986). This framework also suggests that symbolic interactionism is a construction of an individual’s social reality. Therefore, social behavior is influenced by how an individual views his/her role, or the meaning
he/she assigns to it. For example, the way SSAs view themselves as a component of their schools’ anti-bullying efforts (e.g., important or effective), or the meaning they assign to their role, might influence how they react to incidents of school bullying. It is also plausible to assume that if SSAs do not perceive themselves as playing a role in preventing bullying, such views might influence their lack of appropriate responses to instances of reported school bullying.

Biddle (1986) points out that this perspective contributed substantially to understanding the relationship between roles and self-perspective. Gordon (1976) notes that an individual’s self-perceptions are developed during interpretation of his/her own actions, and through relationships with others. These interpretations are affected by the individual’s learning history, and lead to construction of role identity. This process allows individuals to evaluate their personal attributes, positions in an organization, and degree of significance (Gordon, 1976). Therefore, these views influence an employee’s interactions with others and the way he/she responds to events or job requirements. Since public schools represent a unique social system, each SSA is part of a system of interconnected elements that play a role in preventing bullying. School Resource Officers play a role in creating a school environment free from violence, and as assistants to teachers and administrators when solving issues related to violence and bullying (Brown, 2006; Robles-Piña & Denham, 2012). SSAs similarly operate in an environment with defined roles that require them to protect students from violence and victimization set by NYPD’s SSD regulations and in part by New York City DOE policies, which includes bullying. However, the ways schools direct or use SSAs to establish a bully-resistant environment might influence how they perceive their roles in this process. SSAs’ personal and contextual characteristics might affect how they perceive their roles and involvement in incidents of
bullying. Thus, examining how SSAs perceive their roles in the school environment is important because their views might affect the ways they react to incidents of bullying.

Although considerable research applies symbolic interactionist role theory to explain how social behavior is influenced by how an individual views his/her role, or the meaning he/she assigns to it, this framework has been criticized. Biddle (1986) argues that not all symbolic interactionists use the role concept appropriately; symbolic interactionists occasionally fail to explore contextual factors, and ignore the unique dynamics of human exchanges that affect social behavior. Thus, this study considers SSAs’ personal and contextual characteristics to examine how they view their roles and their decisions to intervene.

SUMMARY

Scholarly interest in bullying surfaced four decades ago from Dan Olweus, and remains the focus of growing literature that spread across various fields such as education, psychology, criminal justice, and public administration (Hart et al., 2013). Research on bullying identifies bullying interventions and preventative measures. Some studies suggest a whole-school approach to prevent bullying that should include involvement of stakeholders such as principals, teachers, school staff members, law enforcement, students, parents, and communities (Limber, 2011; Olweus, 1991; Sampson, 2012). Despite research that identifies law enforcement officers assigned to schools as a valued resource to prevent bullying, no attention has been given to how personal and contextual factors of these officers influence their perceptions of their roles and decision-making regarding bullying intervention. No study analyzes personal and contextual factors of NYPD SSAs and how these factors influence how they perceive their roles, identify instances of bullying, and view their involvement in those instances. SSAs provide a unique
perspective on bullying and on the mechanisms of prevention and modification that strengthen prevention.
CHAPTER 3: METHODOLOGY

INTRODUCTION

This study examines how SSAs perceive their roles in preventing bullying, and how SSAs’ perceptions of bullying affect their responses to reported incidents of bullying. SSAs’ personal and contextual characteristics (i.e., independent variables), and how SSAs identify instances of bullying (i.e., mediating variable), were used to determine whether these factors predict SSAs’ involvement in instances of bullying (i.e., dependent variable). The dependent variable was constructed as a binary measure of SSA involvement or abstention during instances of bullying. Constructing a binary dependent measure upholds use of logistic regression to explore the probabilities of SSA involvement or abstention. Since this study explores relationships among several independent variables and a binary outcome measure, use of a multivariate logistic regression model was warranted (Wright, 2010). Path analysis was used to supplement initial logistic regression analyses by providing additional information regarding relationships among variables such as direct and indirect effects of predictors on the dependent variable (Klem, 2010). Path analysis adds value to a regression analysis by examining underlying causes of observed relationships in a regression analysis. Path analysis also assesses the significance of alternative paths that are unapparent from results of a logistic regression model. Path analysis also offers the ability to use multiple measures as both independent and dependent variables in a model (Olabatuyi, 2006). In this study, several measures operated as both independent and dependent variables. Understanding relationships between predictors and SSAs involvement or abstention in instances of bullying informs the NYPD, school administrators, other police agencies, and scholars with insight into bullying prevention and how SSAs operate in the process.
RESEARCH DESIGN

Using a mixed-methods approach that draws from both quantitative and qualitative assumptions, this study uses a cross-sectional survey research design that collected quantitative and qualitative data through a questionnaire, from which to conduct multivariate logistic regression analyses (Appendix B). The instrument developed for this study, titled Bullying Survey, consisted of close-ended questions designed to gather quantitative data, and open-ended questions to obtain qualitative data. The purpose was to gain additional context, or a broader perspective, than being limited to use of only one data collection method (Small, 2011). The motivation to combine these types of data was that both types contribute to the study. Despite the quantitative design for the majority of the survey questions, some questions were framed qualitatively to gather unique responses, rather than providing limited responses that might limit the outcomes. A mixed-methods approach for collection and analysis of data was used to increase the validity of the instrument. A mixed-methods approach assists with ensuring validity of the instrument, and that it measures its intended focus on bullying and SSAs’ perceptions of their roles in preventing instances of bullying. Using mixed methods also enhances the reliability of findings by confirming that similar responses are observed from respondents using validated qualitative and quantitative measures (Bachman & Schutt, 2013; Creswell, 2013).

SURVEY INSTRUMENT

A survey instrument captured personal and contextual data, and unique perspectives, from SSAs assigned to public schools throughout New York City (Appendix C). This study uses a survey research design because the method provides the ability to capture quantitative and qualitative descriptions of tendencies, perspectives, and views of a well-defined population by examining a sample. Capturing data from a segment of a population also provides the ability to
draw inferences on the population based on findings acquired from the sample (Creswell, 2013; Czaja & Blair, 2005). The survey consisted of close-ended questions that restricted respondents to a list of responses from which to choose. For example, respondents were asked what their primary role as a SSA should be, and whether it plays a role in preventing or intervening during bullying. Open-ended responses were used to obtain further insight into the views of SSAs. One question asked respondents to define bullying in their own terms, rather than offer fixed responses from which to choose. This approach was used to assess whether SSAs’ definitions of bullying coincide with the academic definition. SSAs were also asked to give their views on contextual and social factors associated with bullying.

On completion of the surveys, a few SSAs participated in informal interviews and follow-up field observations. The basis for holding these sessions came as a result of spontaneous discussions with SSAs during the pilot test of the survey. Initially, time was provided during the pilot to obtain feedback from SSAs regarding the survey. Some SSAs used this opportunity to provide their views on bullying and their roles in their schools’ anti-bullying efforts. Several SSAs also offered to participate in informal interviews and follow-up field observations to provide a comprehensive view of their perspectives on bullying that the survey could not capture. An allotment of time after the pilot provided respondents with the opportunity to speak candidly about their views on bullying and their roles in preventing it. This information was used to corroborate sentiments provided from survey respondents.

**SURVEY DEVELOPMENT**

A survey was developed to examine SSAs’ perceptions of school-based bullying and their roles in their schools’ anti-bullying efforts. Survey questions were developed for the SSAs to capture data necessary to address the research questions. Development of the survey was an
iterative process that established two parts from which to capture data. During the first, demographic and environmental information was solicited since extant research suggests that personal and contextual characteristics of law enforcement officers influence their perceptions and decision-making (Brooks et al., 1993; Brown & Frank, 2006; Paoline et al., 2000; Poteyeva & Sun, 2009; Rydberg & Terrill, 2010; Sun, 2003; Worden, 1990; Worden, 1993). In the context of this study, demographic factors of SSAs might influence how they perceived their roles in their schools’ anti-bullying efforts, and responses to reported incidents of bullying. These data are important for the purposes of providing a description of respondents in this study, and addressing the research questions. This section also captured information regarding SSAs’ opinions on various aspects of bullying victimization and engagement. Some of these questions included views on who experiences the most cases of bullying, who engages in bullying, and whether most cases involve children of the same age, gender, etc. Information regarding SSAs’ awareness of anti-bullying programs and the seriousness of bullying in their respective schools was collected. SSAs were also asked to define bullying in their own words. One question (“Do you think you play an important role in preventing bullying in your school building?”) was used to determine how SSAs perceive their roles. These responses were examined to determine whether these perceptions influence involvement or abstention to reported incidents of bullying.

The second portion of the study was constructed to solicit SSAs’ identification and involvement or abstention in instances of bullying. Vignettes were constructed to collect this data. Construction of each vignette was based on scholarly work that classifies bullying into one of four categories: physical, verbal, social, and cyber (Patchin & Hinduja, 2006; Olweus, 1991). After reading each vignette, SSAs were asked several questions. SSAs were first asked to identify whether a vignette represented an incident of bullying, and if the respondent answered
affirmatively, he/she was then asked to evaluate the degree of seriousness. SSAs were then asked whether they would get involved. If the SSA again answered affirmatively, he/she was asked to choose an action.

**Demographic Characteristics**

SSAs’ personal characteristics have the potential to influence their views on bullying and their involvement or abstention during bullying. SSA demographics, and how respondents define bullying, were captured using the survey instrument. Research suggests that personal characteristics influence how police officers perceive their roles and their decision-making concerning taking police action (Brooks et al., 1993; Brown & Frank, 2006; Paoline et al., 2000; Poteyeva & Sun, 2009; Rydberg & Terrill, 2010; Sun, 2003; Worden, 1990; Worden, 1993). Poteyeva & Sun (2009) analyzed results from 33 studies that focused on the affect gender has on how police officers perceive the scope of their work. Findings from three studies suggest that female officers are less likely to use force, are affected less by legal restrictions when taking police action, and view their roles more broadly than simply enforcing the law (Brooks et al., 1993; Sun, 2003; Worden, 1990). Poteyeva and Sun (2009) conclude that the influence gender has on police officers’ perceptions of their roles remains unclear.

Race might also affect police officers’ decision-making regarding taking police action, but research offers no evidence that demonstrates that an officer’s race/ethnicity predicts arrests during police-citizen encounters (National Research Council, 2004; Smith & Klein, 1983; Worden, 1989). In a sample of 614 suspect interactions with Cincinnati Police Department (CPD) officers between April 1997 and 1998, Brown and Frank (2006) found that an officer’s race did not predict arrest outcomes, according with extant research on arrest outcomes in police-citizen encounters. However, Brown and Frank (2006) suggest that arrest decisions of African-
American and Caucasian officers were influenced by other factors such as the seriousness of the offense, whether the suspect was intoxicated, and quantity of evidence. Despite results from research on race and its effect on police decision-making, in the context of this study, race might influence how SSAs perceive their roles and their decisions to intervene during bullying.

Research examines the effect of education on an officer’s inclination to arrest and use force (Bozza, 1973; Finckenauer, 1975; Glasgow, Green, & Knowles, 1973; Riksheim & Chermak, 1993; Rydberg and Terrill (2010); Sherman, 1980; Smith & Klein, 1983; Worden, 1996). According to Skogan and Frydl (2004), extant studies are flawed by use of weak methodologies such as insufficient samples and failure to control for theoretically significant factors. To examine the influence of education on police officer behaviors, Rydberg and Terrill (2010) examine observational and interview data from 322 police officers in Indianapolis, Indiana and St. Petersburg, Florida as part of the Project on Policing Neighborhoods (POPN) collected by Paoline et al. (2000). They found that neither some college education nor a 4-year degree predicts arrests during public interactions, in comparison to officers with no college education. Officers with some college experience or 4-year degrees are less likely to use force during public interactions, in comparison to officers with no college education.

**Contextual Characteristics**

SSAs’ contextual characteristics have the potential to influence their views on bullying and decisions to intervene during bullying. Factors such as rank, job experience, location of assignment (i.e., inside, outside, both, or other locations in an assigned school), and geographical area (e.g., New York City borough) of patrol were captured using the survey instrument. Research suggests that contextual characteristics influence police behaviors regarding decision-making during public interactions. Examining contextual factors that contribute to police abuse,
Terrill and Reisig (2003) assess data collected as part of the POPN, finding that police are more likely to use greater force in socioeconomically disadvantaged areas and when interacting with suspects in high-crime areas. Ridgeway et al. (2009) assess police-community relationships in Cincinnati, finding that neighborhoods that experience high crime and poverty are more likely to have a higher volume of arrests and use-of-force incidents.

**Vignettes**

The second part of the survey contained eight vignettes, followed by several questions to elicit views from SSAs regarding bullying. The vignette technique explored how SSAs identify instances of bullying, judge the seriousness of the incident, and decide to intervene or refrain. Vignettes are commonly followed by questions containing fixed-choice responses, and open-ended questions that offer respondents the opportunity to provide unique responses (Finch, 1987). In this study, questions that follow the vignettes contained fixed-choice responses. Eight vignettes represented the four types of bullying discussed in bullying literature (Table 3.2). Patchin and Hinduja (2006) and Olweus (1993) served as major resources to ensure that the vignettes agreed with established types of bullying. The vignettes appeared in no particular order to limit social response bias. However, this technique does not guard against response bias in all respects from unique perspectives of SSAs that might be influenced by personal and contextual factors.

**Table 3.1**

*Categories of Bullying in the Vignettes*

<table>
<thead>
<tr>
<th>Vignette</th>
<th>Bullying Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physical</td>
</tr>
<tr>
<td>2</td>
<td>Verbal</td>
</tr>
<tr>
<td>3</td>
<td>Cyber</td>
</tr>
<tr>
<td>4</td>
<td>Physical</td>
</tr>
<tr>
<td>5</td>
<td>Social</td>
</tr>
</tbody>
</table>
Prior to administering the survey, a validation process was implemented by gathering data from a small group of SSAs who participated in a pilot test. This was done to evaluate the validity of the instrument, estimate the time to complete the survey, and examine whether the venue was appropriate in which to administer the survey (Bachman & Schutt, 2013; Creswell, 2013). This pretest was the final step in revising the survey questions prior to administration of the instrument to participating SSAs. Responses from the pretest lacked gradation or variation, suggesting absence of vagueness or confusion in the survey questions since most of the responses were uniform, and supporting this phase during survey development to ensure quality, clarity, and validity (Czaja & Blair, 2005).

It was initially planned to use two small groups (20 to 30 participants) of SSAs to pilot the survey, and then provide participants the opportunity to share opinions through focus groups from May 19th to June 20th, 2014. During the academic year (i.e., September through June), approximately 20 to 30 SSAs were selected to attend monthly training sessions at their designated command locations in each of the five boroughs of New York City due to staffing issues. One school in Brooklyn and another in Manhattan were originally selected as pretest sites. The reason for this approach was that according to the NYPD’s SSD, these boroughs have a high concentration of SSAs assigned to schools, in comparison to the other boroughs, and should have yielded a diverse pool of respondents that was representative of the workforce. However, due to logistics and at the recommendation of SSD executives, the pilot test was moved to September 25, 2014 at the SSD main office. The rationale for this change was to
coordinate selection of SSAs from all assigned patrol boroughs, rather than just two. This change provided a more diverse and inclusive group from which to test the survey and enhance the soundness of the pilot test.

**Survey Validation**

The pilot group was comprised of 41 SSAs from all patrol boroughs, including SSAs who operated as both supervisors and non-supervisors. Participants were informed of the study and asked for their participation, as explained in the consent form prior to participation (Appendix A). Following administration of the survey, SSAs in the pilot group offered feedback and suggestions concerning questions on the survey and its structure. This approach assisted with assessing the content validity of the survey by confirming that the questions corresponded accurately with the conceptualization of the study, and focused on the context of SSAs’ work environments. Participants supported use of vignettes on the survey, and specifying that only one response (i.e., do nothing or report the incident to the principal or designee) should be selected for the majority of questions to limit selection of two responses, which might affect analysis. When asked about the vignettes, most SSAs agreed with the realistic nature of the scenarios. This inquiry led to an open discussion on experiences of witnessing or being notified by student of bullying. The purpose of the pilot test was to validate the survey instrument, not collect data.

Administration of the survey was initially scheduled to occur during SSD training sessions from June 30th to August 29th, 2014 at the SSAs’ assigned patrol boroughs. During this time, most New York City public schools do not operate at full capacity, and thus require a smaller number of SSAs. During summer months, it is logistically feasible to coordinate training for SSAs, in comparison to during the academic year (i.e., September through June), since a
fixed number of SSAs are required to patrol assigned schools. Discussions with SSD executives regarding coordination of citywide administration of the survey indicated that many SSAs take vacations during this period, suggesting administering the surveys during the New York City DOE 2014 winter recess (December 24th through December 31st) was better, when a larger number of SSAs were available. The surveys were distributed during training sessions held at school sites within each SSD patrol borough from December 24th through December 31st, 2014. SSAs at each school had an opportunity to participate in this study. SSAs were informed about the study and asked for their participation, as explained in a consent form distributed prior to participation (Appendix A). During each session, the SSAs were informed of the purpose of the study and that surveys were anonymous and did not require their names or other identifying information.

**Survey Reliability**

The reliability of the survey was assessed regarding consistency of responses. Internal consistency (i.e., reliability) was used to measure how consistently SSAs responded to identification of bullying and involvement during bullying (Bachman & Schutt, 2013; Creswell, 2013; Green and Salkind, 2013). Split-half reliability, a category of internal consistency, was used to examine responses regarding identification of bullying incidents and involvement during bullying. The split-half method generates coefficients that are correlated using the Spearman-Brown formula (Field, 2013; Green & Salkind, 2013). Table 3.2 shows the correlation between items, grouped by corresponding types of bullying (i.e., physical, verbal, social, and cyber). The Spearman-Brown split-half reliability coefficients between responses regarding identification of bullying incidents was .682. The reliability coefficient alpha was .71, which is an acceptable
value in the literature determined by the context and design of a study (Rosenthal & Rosnow, 2008).

Table 3.2

Reliability Statistics for Identification of Bullying

<table>
<thead>
<tr>
<th>Spearman-Brown Coefficient</th>
<th>Equal Length</th>
<th>.682</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.714</td>
<td></td>
</tr>
<tr>
<td>N of Items</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>


Table 3.3 shows the correlation between items grouped by corresponding types of bullying (i.e., physical, verbal, social, and cyber). The Spearman-Brown split-half reliability coefficients between SSAs’ responses regarding involvement in bullying incidents was .742. The reliability coefficient alpha was .77, which is an acceptable value. Based on the validation procedures, the survey captured the identification and involvement in bullying incidents among SSAs. Reliability statistics were distributed evenly among responses, and coefficient values suggest consistency of responses from the SSAs.

Table 3.3

Reliability Statistics for Involvement during Bullying Incidents

<table>
<thead>
<tr>
<th>Spearman-Brown Coefficient</th>
<th>Equal Length</th>
<th>.742</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.774</td>
<td></td>
</tr>
<tr>
<td>N of Items</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

*The items are: Vignette 1, would you get involved?; Vignette 2, would you get involved?; Vignette 5, would you get involved?; Vignette 3, would you get involved?; Vignette 4, would you get involved?; Vignette 6, would you get involved?; Vignette 8, would you get involved?; Vignette 7, would you get involved?

The qualitative measure designed to capture SSAs’ definitions of bullying was assessed to ensure reliability of responses. Responses were assessed to determine whether the information
provided by SSAs accorded with the definition of bullying most common in the literature (Barton, 2006; Farrington & Ttofi, 2009a, 2009b; Hutzell & Payne, 2012; Limber, 2011; Olweus, 1978; Peguero, 2008; Popp, 2012b; Ttofi & Farrington, 2012, 2011). Table 3.5 shows the percentage of bullying definitions provided by SSAs, which indicates that a large proportion (43%) of respondents did not provide a definition. Regarding the reliability of this qualitative measure, lack of responses was consistent and equal to the number of SSAs who provided a definition. However, lack of responses for this question affected analysis, and is addressed later in this chapter.

Table 3.4

Definitions of Bullying Provided by SSAs

<table>
<thead>
<tr>
<th>SSA Definition of Bullying</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Entry</td>
<td>376</td>
<td>43%</td>
</tr>
<tr>
<td>Entry Provided</td>
<td>506</td>
<td>57%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100%</td>
</tr>
</tbody>
</table>

Survey Revisions

Revisions were made to the survey based on feedback from the SSAs. A pre-prospectus meeting was held with SSD executives to refine the survey design and questions. Following the meeting and subsequent approval from the dissertation committee, several revisions were made to the instrument. In the original version of the bullying survey (Appendix B), question 5 asked respondents to indicate their level of education, and one option was labeled professional degree. This option was omitted on the revised survey since it was similar to graduate degrees such as a master’s or doctoral degrees. Question 7 asked respondents to indicate their rank within the SSD. It was originally open-ended, but was modified to include two options to indicate whether respondents operated in a non-supervisory or supervisory role (Appendix B). Regarding a respondent’s location of assignment, question 13, which asked SSAs to indicate their area of
patrol, was disaggregated from the five boroughs of New York City to the following nine areas of patrol: Bronx West, Bronx East, Manhattan North, Manhattan South, Brooklyn North, Brooklyn South, Queens North, Queens South, and Staten Island. Locations were disaggregated to examine whether a representative sample was collected for the study, and to assess whether trends existed among the locations. Question 14 was originally open-ended (Appendix B), but was modified so respondents could indicate their roles. Choices for these questions were grounded in extant research from Raymond (2010) on bullying, which identifies roles of School Resource Officers as “safety expert and law enforcer, problem solver and liaison to community resources, and educator” (p. 1). Question 18 was originally open-ended (Appendix B), but was modified so respondents could indicate their perceptions of where most incidents of bullying occur.

The second part of the survey required SSAs to read eight vignettes to assess their responses to incidents of bullying. The initial iteration of the vignettes concluded with an open-ended question that asked what actions SSAs would take if they identified the vignette as an incident of bullying. However, a meeting with executives from SSD revealed that since 2012, the department has informed SSAs about the seriousness of bullying, and therefore require SSAs to notify their supervisors and school principals or designees of an incident of bullying. Therefore, the final question for each vignette was revised to include fixed-choice responses that accord with the New York City DOE policy.

CONCEPTUAL DEFINITIONS OF THE VARIABLES

Operationalization of Primary Variables

The survey was designed to gather data using various closed- and open-ended questions that were coded for statistical analyses. However, based on the scope of this study, a conceptual
model was used to test whether SSAs’ personal and contextual characteristics (i.e., independent variables) and perceptions of their roles and identification of bullying (i.e., mediating variables) predict involvement (i.e., dependent variable).

**Definitions of the Independent Variables**

Age was constructed as a quantitative variable, measured in terms of numerical values respondents provided. The SSAs were asked to provide the last two numbers of their birth years. To calculate SSA age, the birth year provided was subtracted from the current year (i.e., 2015) to determine an approximate age. Gender was recoded to simplify the interpretation of data (0 = female, 1 = male). Race was composed as a qualitative measure (1 = Black, 2 = Hispanic, 3 = White, 4 = Asian, 5 = Native American, 6 = Pacific Islander, 7 = Other). Marital status was constructed as a qualitative variable (1 = Single, 2 = Married, 3 = Widowed, 4 = Divorced, 5 = Separated). Education was aggregated into five categories, and positioned in order from lowest to highest education attained (1 = High School, 2 = Associate’s Degree, 3 = Bachelor’s Degree, 4 = Master’s Degree, 5 = Doctorate Degree).

Family status was coded as a dichotomous variable (0 = No School-Aged Children, 1 = School-Aged Children) to indicate whether SSAs had school-age children. Victimization of child was recoded as a binary measure (0 = Not a victim of bullying, 1 = Victim of bullying), signifying whether SSAs had school-aged children who were victims of bullying. Having children or children that experienced bullying might influence how SSAs identify and react to instances of bullying. For example, being a parent might make SSAs more aware of bullying incidents, and more responsive if their child was victimized, in comparison to SSAs who do not have children or children who were victimized. How SSAs defined bullying was constructed as an open-ended question for comparison with responses to the conceptual definition of bullying.
from the literature (Barton, 2006; Farrington & Ttofi, 2009a, 2009b; Hutzell & Payne, 2012; Limber, 2011; Olweus, 1978; Peguero, 2008; Popp, 2012b; Ttofi & Farrington, 2011, 2012). These data are significant because it is possible that as individuals with varying perspectives, SSAs might not view all incidents presented in the survey as bullying, which might influence how they identify or react to such instances.

SSA rank was constructed as a dichotomous variable to differentiate those in supervisory and non-supervisory positions (0 = Non-Supervisor, 1 = Supervisor). This information is important since SSAs in supervisory positions are required to take certain actions such as notifying SSD or DOE staff members of situations based on department policies. Operating in a supervisory position might compel SSAs to identify and react to instances of bullying more than SSAs in non-supervisory positions because of their status in the SDD or based on requirements and expectations of their rank.

Job experience was composed as a qualitative variable to measure the number of years employed by the NYPD’s SSD, positioned in order from lowest to highest (1 = 1 to 5 years, 2 = 5 to 10 years, 3 = 10 to 15 years, 4 = Over 15 years). Data regarding SSA experience were significant to procure for this study since it is possible that SSAs with more experience have a higher likelihood of exposure to bullying incidents, and consequently might be more aware or informed of bullying incidents in comparison to SSAs with less experience. SSAs with more experience dealing with bullying incidents might be more likely to recognize or respond to bullying in comparison to SSAs who have less experience. School assignment was constructed as a qualitative variable (1 = Elementary, 2 = Middle School, 3 = High School, 4 = Multi-Grade). The school assignment of SSAs might affect how they recognize or respond to bullying since research identifies a relationship between a child’s age and types of bullying (Barboza et al.,
Therefore, the age range of students in a school might affect the type of bullying that SSAs encounter. Geographical borough was constructed as a qualitative variable (1 = Brooklyn, 2 = Manhattan, 3 = Bronx, 4 = Queens, 5 = Staten Island).

**Definitions of the Mediating Variables**

In addition to assessing direct, causal relationships, inclusion of mediating variables served to detect indirect relationships between independent and dependent variables. Two measures were used as mediating variables. First, SSAs’ perceptions of their roles regarding bullying prevention were constructed as a dichotomous variable (0 = No, 1 = Yes) based on question 30 (i.e., “Do you think you play an important role in preventing bullying in your school bullying?”) (Appendix C).

Research suggests that SROs, similar in scope to SSAs, are effective at preventing school violence, which includes bullying (Brown, 2006; Na & Gottfredson; 2011; Raymond, 2010; Robles-Piña & Denham, 2012; Sampson, 2012). However, Robles-Piña and Denham (2012) suggest that SROs’ training for employing bullying interventions is not as documented well due to issues with identifying the number of SROs on school campuses, types of SRO contracts (i.e., public or private), and types of training received. In a study of 187 SROs that assessed their knowledge and perceptions of bullying prevention, Robles-Piña and Denham (2012) found that officers hired by independent school districts (ISD SROs) and contracted from law enforcement agencies (CSROs) had limited training. ISD SROs were more likely than CSROs to have knowledge of their assigned school’s anti-bullying policies, which might affect their identification of such instances, supporting the need to explore how SSAs identify bullying. On the second part of the survey, SSAs were asked to read eight vignettes and identify whether each scenario was an instance of bullying. For example, one vignette stated, “You are walking down
a hallway and you see one student spit on another student’s face.” Each vignette was followed by a question that asked SSAs to determine whether it is an incident of bullying. This question was constructed to assess how SSAs identify incidents of bullying. These responses were constructed as a binary measure (0 = No, 1 = Yes). No study investigates how school-based law enforcement personnel perceive their roles in preventing bullying, or whether they can identify incidents of bullying and whether their views influence their involvement during bullying (i.e., dependent variable).

**Definition of the Dependent Variable**

The second section of the survey contained eight original, school-based bullying vignettes. Each vignette ended with a close-ended question that asked respondents about their primary roles as an SSA, and whether they would get involved in each instance of bullying. This question was constructed to assess SSAs’ involvement in incidents of bullying. Each vignette was an instance of bullying based on extant research that classifies bullying into one of four categories: physical, verbal, social, and cyber (Patchin & Hinduja, 2006; Olweus, 1991). These responses were recoded into one dichotomous variable (0 = No, 1 = Yes) to be included in a multivariate regression model to test the influence that SSA personal and contextual characteristics have on SSA involvement or abstention during bullying.

**RESEARCH SAMPLE**

**Sampling Strategy**

Inclusion in the study occurred only if an SSA: (a) returned a signed copy of the Consent to Participate in a Research Project Form (Appendix A), and (b) completed the survey properly (Appendix C). As of July 2015, there were approximately 5,098 SSAs, which include supervisors, officers, and officers-in-training, comprising the population of SSAs. This study
used self-administered survey responses from SSAs who were assigned to New York City public schools. Access to the population of SSAs was granted by the NYPD and SSD executives. However, the sampling frame used in the study consisted of 4,678 SSAs assigned to New York City public schools, and did not include SSAs who worked in other capacities such as administrative positions in the School Safety Division’s (SSD) main office.

Administration of the survey applied a stage, self-selection (i.e., non-probability) design to obtain a representative sample of SSAs during training sessions held at their respective New York City boroughs. Training sessions included SSAs who were assigned to New York City public schools regardless of their rank, age, gender, or length of employment with the SSD, which eliminated the need to identify groups or clusters within the population, and later samples within. Using a self-selection, or non-random approach, limits bias during selection of participants. This sampling approach ensures completeness in that responses provided an overall sense of SSAs’ views, recurring or divergent themes, and processes (Bachman & Schutt, 2013). Although a non-probability approach was used, the data provided generalizable findings from a sample that represented the population of NYPD SSAs.

Data Collection

Data were collected during training sessions held at school sites within each SSD patrol borough from December 24th to December 31st, 2014. The sample consisted of 933 SSAs who completed the survey out of 4,678 SSAs assigned to New York City public schools. However, 51 responses from participating SSAs were not used in the study because they were incomplete or had important information missing. The final sample consisted of 882 complete responses. The number of SSAs assigned to schools (4,678) did not include SSAs assigned to an administrative role, away for military duty, or away for medical reasons. The sample comprised
approximately 18% (n=882) of the SSAs assigned to schools (N=4,678). Applying a 95% confidence level and a margin of error of 5% for the collection of the sample, based on the total number of SSAs, requires 356 responses, therefore making the sample adequate for the study. The sample was more than two times the recommended sample size based on standard probability assumptions that members of a population have an equal chance of selection, and therefore results from the sample can be inferred on the study’s population (Czaja & Blair, 2005).

Demographic data (e.g. age, gender, and race) for SSAs assigned to schools (N=4,678) were unavailable from the NYPD or SSD. This information would have been useful in determining whether the sample was representative of the population regarding demographic composition. The data gathered from the survey were later disaggregated into personal (i.e., age, gender, race, marital status, education, family status, definition of bullying, etc.) and contextual (i.e., rank, job experience, school assignment, geographical borough) characteristics associated with SSAs’ perceptions of their roles in their schools’ anti-bullying efforts, identification of bullying, and involvement during bullying.

**STATISTICAL MODELS**

**Initial Conceptual Model for Perception of SSAs Roles in Preventing Bullying and Involvement**

This study identifies predictors of SSAs’ involvement or abstention in reported instances of bullying. The dependent variable was a binary indicator (0 = No, 1 = Yes) of SSAs involvement in or abstention from reported instances of bullying. Construction of the dependent variable merited use of multivariate logistic regression to assess the relationship between indictors and the outcome measure (Wright, 2010). Figure 3.1 shows a theoretical relationship
among SSAs’ personal and contextual characteristics, perceptions of SSAs’ roles, identification of bullying incidents, and involvement with incidents of bullying. A stepwise process was used to examine how independent and mediating factors affected SSAs’ involvement in or abstention from reported incidents of bullying (i.e., dependent variable). A stepwise process was used to identify predictors and eliminate non-significant independent variables from the model (Licht, 2010; Wright, 2010).

**Independent Variables**

**Personal Characteristics**
- Age (A)
- Gender (G)
- Race (R)
- Marital Status (MS)
- Education (ED)
- Family Status (FS)
- Victimization of Child (VC)
- Definition of Bullying (DB)

**Contextual Characteristics**
- Rank (RA)
- Job Experience (JE)
- School Assignment (SA)
- Geographical Borough (GB)

**Mediating Variables**
- SSAs’ Perception of Role (SPR)
- Identification of Bullying (IB)

**Dependent Variable**
- Involvement (I)

**Figure 3.1.** Initial Conceptual model for perception of SSAs role, identification of bullying, and involvement in incidents of bullying.

**Initial Multivariate Logistical Regression and Path Analysis Equations**

Grounded in the conceptual framework presented in Figure 3.1, the multivariate logistic regression analysis for the dependent variable, Involvement (I), consisted of three regression equations. The first equation assessed whether Age (A), Gender (G), Race (R), Marital Status (MS), Education (ED), Family Status (FS), Victimization of Child (VC), Definition of Bullying (DB), Rank (RA), Job Experience (JE), School Assignment (SA), and Geographical Borough (GB) predict SSAs’ Perception of Role (SPR):
\[ \hat{Y}_{\text{SPR}} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \epsilon_{\text{SPR}} \]

The second equation assessed whether A, G, R, MS, ED, FS, VC, DB, RA, JE, SA, GB, and SPR predict Identification of Bullying (IB):

\[ \hat{Y}_{\text{IB}} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \beta_{13}SPR + \epsilon_{IB} \]

The third equation assessed whether A, G, R, MS, ED, FS, VC, DB, RA, JE, SA, GB, SPR, and IB predict Involvement (I):

\[ \hat{Y}_{I} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \beta_{13}SPR + \beta_{14}IB + \epsilon_{I} \]

Path analysis for SSA Involvement (I) consisted of three regression equations. The first assessed whether A, G, R, MS, ED, FS, VC, DB, RA, JE, SA, and GB correlate with SSAs’ Perception of Role (SPR):

\[ \hat{Y}_{\text{SPR}} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \epsilon_{\text{SPR}} \]

The second equation assessed whether A, G, R, MS, ED, FS, VC, DB, RA, JE, SA, GB, and SPR had direct and indirect effects on Identification of Bullying (IB):

\[ \hat{Y}_{\text{IB}} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \beta_{13}SPR + \epsilon_{IB} \]

The third equation assessed whether A, G, R, MS, ED, FS, VC, DB, RA, JE, SA, GB, SPR, and IB have direct and indirect effects on Involvement (I):

\[ \hat{Y}_{I} = \alpha + \beta_1A + \beta_2G + \beta_3R + \beta_4MS + \beta_5ED + \beta_6FS + \beta_7VC + \beta_8DB + \beta_9RA + \beta_{10}JE + \beta_{11}SA + \beta_{12}GB + \beta_{13}SPR + \beta_{14}IB + \epsilon_{I} \]

A stepwise process was used to identify independent and mediating variables that were predictors of SPR, IB, and I.

**Initial Statistical Hypotheses**

Based on a central hypothesis, symbolic interactionist role theory, whether SSAs get involved in an occurrence of bullying is affected by how they perceive their roles in preventing bullying. This study theorizes that independent variables (i.e., personal characteristics, contextual characteristics, perception of SSAs role, and the identification of bullying) predict
involvement in an incident of bullying (i.e., dependent variable). Relationships were examined through several general hypotheses (Table 3.6). Table 3.7 summarizes the null and alternative hypotheses of the three regression equations for SSA involvement in incidents of bullying. The first equation in the causal model used personal and contextual characteristics of SSAs as independent variables. Each beta (β) was tested at α=.01. For the second equation, each β was tested at α=.01, with βs for SSAs’ Perception of Role (SPR) and Identification of Bullying (IB), the mediating variables, tested at α=.01. In the third equation, the βs for the independent and mediating variables were tested at α=.01.

Table 3.6

**General Statistical Hypotheses**

<table>
<thead>
<tr>
<th>H1</th>
<th>Personal characteristics of SSAs will positively affect their perception of their role with respect to bullying prevention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>Contextual characteristics of SSAs will positively affect their perception of their role with respect to bullying prevention.</td>
</tr>
<tr>
<td>H3</td>
<td>Personal characteristics of SSAs will positively affect their identification of a bullying incident.</td>
</tr>
<tr>
<td>H4</td>
<td>Contextual characteristics of SSAs will positively affect their identification of a bullying incident.</td>
</tr>
<tr>
<td>H5</td>
<td>Personal characteristics of SSAs will positively affect their level of involvement in an incident of bullying.</td>
</tr>
<tr>
<td>H6</td>
<td>Contextual characteristics of SSAs will positively affect their level of involvement in an incident of bullying.</td>
</tr>
<tr>
<td>H7</td>
<td>SSAs perception of their role will positively affect their identification of a bullying incident.</td>
</tr>
<tr>
<td>H8</td>
<td>SSAs perception of their role will positively affect their level of involvement in an incident of bullying.</td>
</tr>
<tr>
<td>H9</td>
<td>SSAs identification of a bullying incident will positively affect their level of involvement in an incident of bullying.</td>
</tr>
</tbody>
</table>

Table 3.7

**Original Null and Alternative Hypothesis for SSA Perception of Role, Identification of Bullying, and Involvement during Incidents of Bullying**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>SSAs Perception of Role (SPR)</th>
<th>Identification of Bullying (IB)</th>
<th>Involvement (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>Hₐ: α = 0 at α = .01</td>
<td>Hₐ: α = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hₐ: α ≠ 0 at α = .01</td>
<td>Hₐ: α ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Age (A)</td>
<td>Hₐ: β1 = 0 at α = .01</td>
<td>Hₐ: β1 = 0 at α = .01</td>
<td>Hₐ: β1 = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td>Hₐ: β1 ≠ 0 at α = .01</td>
<td>Hₐ: β1 ≠ 0 at α = .01</td>
<td>Hₐ: β1 ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Gender (G)</td>
<td>Hₐ: β2 = 0 at α = .01</td>
<td>Hₐ: β2 = 0 at α = .01</td>
<td>Hₐ: β2 = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td>Hₐ: β2 ≠ 0 at α = .01</td>
<td>Hₐ: β2 ≠ 0 at α = .01</td>
<td>Hₐ: β2 ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Race (R)</td>
<td>Hₐ: β3 = 0 at α = .01</td>
<td>Hₐ: β3 = 0 at α = .01</td>
<td>Hₐ: β3 = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td>Hₐ: β3 ≠ 0 at α = .01</td>
<td>Hₐ: β3 ≠ 0 at α = .01</td>
<td>Hₐ: β3 ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Marital Status (MS)</td>
<td>Hₐ: β4 = 0 at α = .01</td>
<td>Hₐ: β4 = 0 at α = .01</td>
<td>Hₐ: β4 = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td>Hₐ: β4 ≠ 0 at α = .01</td>
<td>Hₐ: β4 ≠ 0 at α = .01</td>
<td>Hₐ: β4 ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Education (ED)</td>
<td>Hₐ: β5 = 0 at α = .01</td>
<td>Hₐ: β5 = 0 at α = .01</td>
<td>Hₐ: β5 = 0 at α = .01</td>
</tr>
<tr>
<td></td>
<td>Hₐ: β5 ≠ 0 at α = .01</td>
<td>Hₐ: β5 ≠ 0 at α = .01</td>
<td>Hₐ: β5 ≠ 0 at α = .01</td>
</tr>
<tr>
<td>Family Status (FS)</td>
<td>H_{6}: \beta_{6} = 0 \text{ at } \alpha = .01</td>
<td>H_{6}: \beta_{6} = 0 \text{ at } \alpha = .01</td>
<td>H_{6}: \beta_{6} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>H_{6}: \beta_{6} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{6}: \beta_{6} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{6}: \beta_{6} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
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<tr>
<td>Victimization of Child (VC)</td>
<td>H_{7}: \beta_{7} = 0 \text{ at } \alpha = .01</td>
<td>H_{7}: \beta_{7} = 0 \text{ at } \alpha = .01</td>
<td>H_{7}: \beta_{7} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>H_{7}: \beta_{7} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{7}: \beta_{7} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{7}: \beta_{7} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Definition of Bullying (DB)</td>
<td>H_{8}: \beta_{8} = 0 \text{ at } \alpha = .01</td>
<td>H_{8}: \beta_{8} = 0 \text{ at } \alpha = .01</td>
<td>H_{8}: \beta_{8} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>H_{8}: \beta_{8} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{8}: \beta_{8} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{8}: \beta_{8} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Rank (RA)</td>
<td>H_{9}: \beta_{9} = 0 \text{ at } \alpha = .01</td>
<td>H_{9}: \beta_{9} = 0 \text{ at } \alpha = .01</td>
<td>H_{9}: \beta_{9} = 0 \text{ at } \alpha = .01</td>
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<tr>
<td>H_{9}: \beta_{9} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{9}: \beta_{9} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{9}: \beta_{9} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Job Experience (JE)</td>
<td>H_{10}: \beta_{10} = 0 \text{ at } \alpha = .01</td>
<td>H_{10}: \beta_{10} = 0 \text{ at } \alpha = .01</td>
<td>H_{10}: \beta_{10} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>H_{10}: \beta_{10} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{10}: \beta_{10} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{10}: \beta_{10} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>School Assignment (SA)</td>
<td>H_{11}: \beta_{11} = 0 \text{ at } \alpha = .01</td>
<td>H_{11}: \beta_{11} = 0 \text{ at } \alpha = .01</td>
<td>H_{11}: \beta_{11} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>H_{11}: \beta_{11} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{11}: \beta_{11} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{11}: \beta_{11} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Geographical Borough (GB)</td>
<td>H_{12}: \beta_{12} = 0 \text{ at } \alpha = .01</td>
<td>H_{12}: \beta_{12} = 0 \text{ at } \alpha = .01</td>
<td>H_{12}: \beta_{12} = 0 \text{ at } \alpha = .01</td>
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<tr>
<td>H_{12}: \beta_{12} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{12}: \beta_{12} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{12}: \beta_{12} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Mediating Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSAs Perception of Role (SPR)</td>
<td>H_{13}: \beta_{13} = 0 \text{ at } \alpha = .01</td>
<td>H_{13}: \beta_{13} = 0 \text{ at } \alpha = .01</td>
<td>H_{13}: \beta_{13} = 0 \text{ at } \alpha = .01</td>
</tr>
<tr>
<td>H_{13}: \beta_{13} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{13}: \beta_{13} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{13}: \beta_{13} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
<tr>
<td>Identification of Bullying (IB)</td>
<td>H_{14}: \beta_{14} = 0 \text{ at } \alpha = .01</td>
<td>H_{14}: \beta_{14} = 0 \text{ at } \alpha = .01</td>
<td>H_{14}: \beta_{14} = 0 \text{ at } \alpha = .01</td>
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<tr>
<td>H_{14}: \beta_{14} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{14}: \beta_{14} \neq 0 \text{ at } \alpha = .01</td>
<td>H_{14}: \beta_{14} \neq 0 \text{ at } \alpha = .01</td>
<td></td>
</tr>
</tbody>
</table>

**Revised Conceptual Model for Perception of SSAs Role in Preventing Bullying and Involvement**

To prevent double counting individuals into multiple races, SSAs’ races were disaggregated into six dichotomous categories: Black (0 = Non-Black, 1 = Black), Hispanic (0 = Non-Hispanic, 1 = Hispanic), White (0 = Non-White, 1 = White), Asian (0 = Non-Asian, 1 = Asian), Native American (0 = Non-Native American, 1 = Native American), Pacific Islander (0 = Non-Pacific Islander, 1 = Pacific Islander), and Other (0 = Non-other, 1 = Other). The qualitative measure designed to capture SSAs’ definitions of bullying was removed from the model (Figure 3.2). The rationale was that responses varied considerably, which made coding difficult and compromised the robustness of the model. A large portion (42%) of respondents did not provide a definition, supporting the decision to exclude this measure from the model. These results are a product of post-analysis revisions.
Independent Variables

**Personal Characteristics**
- Age (A)
- Gender (G)
- Black (B)
- Hispanic (H)
- White (W)
- Asian (AS)
- Native American (NA)
- Pacific Islander (PI)
- Other (O)
- Marital Status (MS)
- Education (ED)
- Family Status (FS)
- Victimization of Child (VC)

**Contextual Characteristics**
- Rank (RA)
- Job Experience (JE)
- School Assignment (SA)
- Geographical Borough (GB)

**Mediating Variables**
- SSAs Perception of Role (SPR)
- Identification of Bullying (IB)

**Dependent Variable**
- Involvement (I)

*Figure 3.2.* Revised conceptual model for perception of SSAs role, identification of bullying, and involvement in incidents of bullying.

**Revised Multivariate Logistical Regression and Path Analysis Equations**

Grounded in the revised conceptual framework presented in Figure 3.2, the multivariate logistic regression analysis for the dependent variable, Involvement (I), consisted of three regression equations. The first equation assessed whether Age (A), Gender (G), Black (B), Hispanic (H), White (W), Asian (AS), Native American (NA), Pacific Islander (PI), Other (O), Marital Status (MS), Education (ED), Family Status (FS), Victimization of Child (VC), Rank (RA), Job Experience (JE), School Assignment (SA), and Geographical Borough (GB) predicted SSAs’ Perception of Role (SPR):

\[
\hat{y}_{SPR} = \alpha + \beta_1 A + \beta_2 G + \beta_3 B + \beta_4 H + \beta_5 W + \beta_6 AS + \beta_7 NA + \beta_8 PI + \beta_9 O + \beta_{10} MS + \beta_{11} ED + \beta_{12} FS + \beta_{13} VC + \beta_{14} RA + \beta_{15} JE + \beta_{16} SA + \beta_{17} GB + \epsilon_{SPR}
\]

The second equation assessed whether A, G, B, H, W, AS, NA, PI, O, MS, ED, FS, VC, RA, JE, SA, GB, and SPR predicted Identification of Bullying (IB):
\[ \hat{Y}_{IB} = \alpha + \beta_1A + \beta_2G + \beta_3B + \beta_4H + \beta_5W + \beta_6AS + \beta_7NA + \beta_8PI + \beta_9O \beta_10MS + \beta_{11}ED + \beta_{12}FS + \beta_{13}VC + \beta_{14}RA + \beta_{15}JE + \beta_{16}SA + \beta_{17}GB + \beta_{18}SPR + \varepsilon_{IB} \]


\[ \hat{Y}_{I} = \alpha + \beta_1A + \beta_2G + \beta_3B + \beta_4H + \beta_5W + \beta_6AS + \beta_7NA + \beta_8PI + \beta_9O \beta_10MS + \beta_{11}ED + \beta_{12}FS + \beta_{13}VC + \beta_{14}RA + \beta_{15}JE + \beta_{16}SA + \beta_{17}GB + \beta_{18}SPR + \beta_{19}IB + \varepsilon_{I} \]

Path analysis for SSA Involvement (I) consisted of three regression equations. The first assessed whether A, G, B, H, W, AS, NA, PI, O, MS, ED, FS, VC, RA, JE, SA, and GB correlated with SSAs’ Perception of Role (SPR):

\[ \hat{Y}_{SPR} = \alpha + \beta_1A + \beta_2G + \beta_3B + \beta_4H + \beta_5W + \beta_6AS + \beta_7NA + \beta_8PI + \beta_9O \beta_10MS + \beta_{11}ED + \beta_{12}FS + \beta_{13}VC + \beta_{14}RA + \beta_{15}JE + \beta_{16}SA + \beta_{17}GB + \varepsilon_{SPR} \]

The second equation assessed whether A, G, B, H, W, AS, NA, PI, O, MS, ED, FS, VC, RA, JE, SA, GB, and SPR had direct and indirect effects on Identification of Bullying (IB):

\[ \hat{Y}_{IB} = \alpha + \beta_1A + \beta_2G + \beta_3B + \beta_4H + \beta_5W + \beta_6AS + \beta_7NA + \beta_8PI + \beta_9O \beta_10MS + \beta_{11}ED + \beta_{12}FS + \beta_{13}VC + \beta_{14}RA + \beta_{15}JE + \beta_{16}SA + \beta_{17}GB + \beta_{18}SPR + \varepsilon_{IB} \]

The third equation assessed whether A, G, B, H, W, AS, NA, PI, O, MS, ED, FS, VC, RA, JE, SA, GB, SPR, and IB had direct and indirect effects on Involvement (I):

\[ \hat{Y}_{I} = \alpha + \beta_1A + \beta_2G + \beta_3B + \beta_4H + \beta_5W + \beta_6AS + \beta_7NA + \beta_8PI + \beta_9O \beta_10MS + \beta_{11}ED + \beta_{12}FS + \beta_{13}VC + \beta_{14}RA + \beta_{15}JE + \beta_{16}SA + \beta_{17}GB + \beta_{18}SPR + \beta_{19}IB + \varepsilon_{I} \]

A stepwise process was used to identify independent and mediating variables that predicted SPR, IB, and I.

**Revised Statistical Hypotheses**

Mentioned above, the central hypothesis remained unchanged and is consistent with symbolic interactionist role theory. Table 3.8 summarizes the null and alternative hypotheses of the three regression equations. Presented in Figure 3.3, the first equation in the causal model used personal and contextual characteristics of SSAs as independent variables. Each \( \beta \) was tested at \( \alpha = .01 \). For the second equation in the model, each \( \beta \) was tested at \( \alpha = .01 \), with \( \beta s \) for SSAs’ Perception of Role (PR) and Identification of Bullying (IB), the mediating variables,
tested at $\alpha = .01$. In the third equation, the $\beta$s of the independent and mediating variables were tested at $\alpha = .01$.

Table 3.8

Revised Null and Alternative Hypothesis for SSA Perception of Role, Identification of Bullying, and Involvement during Incidents of Bullying

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>SSAs Perception of Role (SPR)</th>
<th>Identification of Bullying (IB)</th>
<th>Involvement (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>$H_0: \alpha = 0$ at $\alpha = .01$</td>
<td>$H_0: \alpha = 0$ at $\alpha = .01$</td>
<td>$H_0: \alpha = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Age (A)</td>
<td>$H_1: \beta_1 = 0$ at $\alpha = .01$</td>
<td>$H_1: \beta_1 = 0$ at $\alpha = .01$</td>
<td>$H_1: \beta_1 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Gender (G)</td>
<td>$H_2: \beta_2 = 0$ at $\alpha = .01$</td>
<td>$H_2: \beta_2 = 0$ at $\alpha = .01$</td>
<td>$H_2: \beta_2 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Black (B)</td>
<td>$H_3: \beta_3 = 0$ at $\alpha = .01$</td>
<td>$H_3: \beta_3 = 0$ at $\alpha = .01$</td>
<td>$H_3: \beta_3 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Hispanic (H)</td>
<td>$H_4: \beta_4 = 0$ at $\alpha = .01$</td>
<td>$H_4: \beta_4 = 0$ at $\alpha = .01$</td>
<td>$H_4: \beta_4 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>White (W)</td>
<td>$H_5: \beta_5 = 0$ at $\alpha = .01$</td>
<td>$H_5: \beta_5 = 0$ at $\alpha = .01$</td>
<td>$H_5: \beta_5 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Asian (A)</td>
<td>$H_6: \beta_6 = 0$ at $\alpha = .01$</td>
<td>$H_6: \beta_6 = 0$ at $\alpha = .01$</td>
<td>$H_6: \beta_6 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Native American (N)</td>
<td>$H_7: \beta_7 = 0$ at $\alpha = .01$</td>
<td>$H_7: \beta_7 = 0$ at $\alpha = .01$</td>
<td>$H_7: \beta_7 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Pacific Islander (PI)</td>
<td>$H_8: \beta_8 = 0$ at $\alpha = .01$</td>
<td>$H_8: \beta_8 = 0$ at $\alpha = .01$</td>
<td>$H_8: \beta_8 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Other (O)</td>
<td>$H_9: \beta_9 = 0$ at $\alpha = .01$</td>
<td>$H_9: \beta_9 = 0$ at $\alpha = .01$</td>
<td>$H_9: \beta_9 = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Marital Status (MS)</td>
<td>$H_{10}: \beta_{10} = 0$ at $\alpha = .01$</td>
<td>$H_{10}: \beta_{10} = 0$ at $\alpha = .01$</td>
<td>$H_{10}: \beta_{10} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Education (ED)</td>
<td>$H_{11}: \beta_{11} = 0$ at $\alpha = .01$</td>
<td>$H_{11}: \beta_{11} = 0$ at $\alpha = .01$</td>
<td>$H_{11}: \beta_{11} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Family Status (FS)</td>
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<td>$H_{12}: \beta_{12} = 0$ at $\alpha = .01$</td>
<td>$H_{12}: \beta_{12} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Victimization of Child (VC)</td>
<td>$H_{13}: \beta_{13} = 0$ at $\alpha = .01$</td>
<td>$H_{13}: \beta_{13} = 0$ at $\alpha = .01$</td>
<td>$H_{13}: \beta_{13} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Rank (RA)</td>
<td>$H_{14}: \beta_{14} = 0$ at $\alpha = .01$</td>
<td>$H_{14}: \beta_{14} = 0$ at $\alpha = .01$</td>
<td>$H_{14}: \beta_{14} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Job Experience (JE)</td>
<td>$H_{15}: \beta_{15} = 0$ at $\alpha = .01$</td>
<td>$H_{15}: \beta_{15} = 0$ at $\alpha = .01$</td>
<td>$H_{15}: \beta_{15} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>School Assignment (SA)</td>
<td>$H_{16}: \beta_{16} = 0$ at $\alpha = .01$</td>
<td>$H_{16}: \beta_{16} = 0$ at $\alpha = .01$</td>
<td>$H_{16}: \beta_{16} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td>Geographical Borough (GB)</td>
<td>$H_{17}: \beta_{17} = 0$ at $\alpha = .01$</td>
<td>$H_{17}: \beta_{17} = 0$ at $\alpha = .01$</td>
<td>$H_{17}: \beta_{17} = 0$ at $\alpha = .01$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mediating Variables</th>
<th>SSAs Perception of Role (SPR)</th>
<th>Identification of Bullying (IB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$H_{18}: \beta_{18} = 0$ at $\alpha = .01$</td>
<td>$H_{18}: \beta_{18} = 0$ at $\alpha = .01$</td>
</tr>
<tr>
<td></td>
<td>$H_{19}: \beta_{19} = 0$ at $\alpha = .01$</td>
<td>$H_{19}: \beta_{19} = 0$ at $\alpha = .01$</td>
</tr>
</tbody>
</table>

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**Limitations**

Since this study solicited responses from SSAs regarding their roles and involvement in preventing bullying, there was the possibility of several biases, including social response and self-selection biases (Bachman & Schutt, 2013; Creswell, 2013). Since the survey collected personal and contextual data, and personal views, the unique perspectives of SSAs might be influenced by preexisting personal and contextual factors. Consequently, these unique perspectives might have affected identification of or involvement with bullying incidents. Recent efforts made by the NYPD School Safety Division to inform SSAs of factors and outcomes associated with bullying victimization by means of formal training conducted by their partners at Life Space Crisis Intervention (LSCI) or through informal meetings and communications with SSAs might have influenced responses on the survey. For example, informing SSAs of various aspects associated with bullying might make them more aware and more inclined to identify and respond to instances of bullying, in comparison to those not exposed to formal training or informal meetings. With respect to selection bias, all SSAs who attended the training sessions during the New York City DOE 2014 winter recess (December 24th through December 31st) were eligible to participate in the study. To solicit participation from SSAs, the purpose of the study and a statement regarding the autonomous nature of this study were conveyed to all SSAs present during the survey sessions. The survey and consent form were reviewed prior to administration (Appendices A and C). This procedure was used to inform the SSAs that participation in this study was voluntary, and that the study was independent of the NYPD and SSD. SSAs present during survey administration were informed that their responses were confidential, anonymous, and would not jeopardize their current employment with SSD. The SSAs were also informed of their ability to participate regardless of
rank or time of employment, and again that participation was voluntarily. These measures were taken to ensure that respondents answered honestly, and to mitigate responses given under duress. The SSAs were provided with sufficient time to ask questions regarding all aspects of this study.

**DATA ANALYSIS**

This study used SPSS to analyze and present data. SPSS was used to conduct multivariate logistic regressions with a stepwise process to regress multiple independent and mediating variables on SSA involvement in incidents of bullying, combined with testing the statistical model and hypotheses. A stepwise approach was selected to identify significant and non-significant predictors of SSA involvement in reported instances of bullying (Litch, 2010; Wright, 2010), and the stepwise process was selected to identify direct and indirect effects associated solely with significant predictors.
CHAPTER 4: BULLYING SURVEY ANALYSIS

INTRODUCTION

Included in this chapter are descriptive statistics associated with the characteristics of the data sample used in this study. Frequency analyses of the variables delineated from the research questions and hypotheses were performed to illustrate the number of occurrences of each response chosen by respondents. Multiple logistic regression and path analyses were conducted to test the revised conceptual model discussed in chapter 3 (Figure 3.3). Since eight vignettes were developed for the survey, eight regressions were conducted. To ensure consistency and accuracy during each regression analysis, the independent variables and SSAs’ perceptions of their roles remained constant. However, identification of bullying and the involvement variable were linked from matching vignettes.

DESCRIPTIVE STATISTICS

Demographics

Figure 4.1 illustrates age demographics of respondents. Among 882 respondents, 832 indicated their ages. Of the 832 respondents, the average age was approximately 43 years, with an approximate standard deviation of 10.7.
Figure 4.1. Respondents’ age distribution.

Participants self-selected their gender, race, marital and family statuses, level of education, rank, job experience, and school assignment. SSAs who did not want to select male or female were not require to select an option. A blank response indicated that SSAs did not wish to reveal their gender for reasons unknown. Table 4.1 shows the genders of the participants, with nearly 71% female and 29% male.

Table 4.1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>625</td>
<td>70.9%</td>
</tr>
<tr>
<td>Male</td>
<td>255</td>
<td>28.9%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.2 shows participants’ frequencies of races. Percentages of responses by race in rank order were Black (59.8%), Hispanic (29.4%), White (3.2%), Other (3.1), Asian (2.0%), Unknown (1.8%), Native American (0.6%), and Pacific Islander (0.2%).

Table 4.2
Table 4.3 shows the frequencies of marital statuses. Percentages of responses in rank order were Single (47.8%), Married (35.9%), Divorced (9.1%), Separated (3.2%), Unknown (2.3%), and Widowed (2.2%).

Table 4.3

Marital Status Frequencies (n=882)

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>418</td>
<td>47.3%</td>
</tr>
<tr>
<td>Married</td>
<td>317</td>
<td>35.9%</td>
</tr>
<tr>
<td>Divorced</td>
<td>80</td>
<td>9.1%</td>
</tr>
<tr>
<td>Separated</td>
<td>28</td>
<td>3.2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>20</td>
<td>2.3%</td>
</tr>
<tr>
<td>Widowed</td>
<td>19</td>
<td>2.2%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Among the 882 respondents, 51.6% indicated that they had school-aged children (Table 4.4). Table 4.5 shows that of the SSAs who reported having school-aged children, 17.3% had a child who had been a victim of bullying.

Table 4.4

Family Status Frequencies (n=882)

<table>
<thead>
<tr>
<th>Have Children</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>425</td>
<td>48.2%</td>
</tr>
<tr>
<td>Yes</td>
<td>455</td>
<td>51.6%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table 4.5

*Bullying Victimization of Child Frequencies (n=882)*

<table>
<thead>
<tr>
<th>Victimization of Child</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>306</td>
<td>34.7%</td>
</tr>
<tr>
<td>Yes</td>
<td>153</td>
<td>17.3%</td>
</tr>
<tr>
<td>Unknown</td>
<td>423</td>
<td>48.0%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Figure 4.2 shows frequencies regarding education. Percentages of responses in rank order were High School (76.9%), Associate’s Degree (14.4%), Bachelor’s Degree (7.6%), Master’s Degree (0.8%), Unknown (0.5%), and Doctoral Degree (0.2%).

![Level of Education](image)

*Figure 4.2. Respondents’ education distribution.*

With respect to rank, 88.9% of respondents operated in a non-supervisory capacity (Table 4.6). Table 4.7 shows demographic frequencies for job experience (i.e., years of service). Percentages of responses by years in rank order were 5 to 10 years (30.4%), 1 to 5 years (26.5%), 10 to 15 years (23.1%), Over 15 years (19.7%), and Unknown (0.2%).

Table 4.6
**Rank Frequencies (n=882)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 - Agent</td>
<td>784</td>
<td>88.9%</td>
</tr>
<tr>
<td>Level 3 - Supervisor</td>
<td>96</td>
<td>10.9%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.7

**Job Experience Frequencies (n=882)**

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 10 Years</td>
<td>268</td>
<td>30.4%</td>
</tr>
<tr>
<td>1 to 5 Years</td>
<td>234</td>
<td>26.5%</td>
</tr>
<tr>
<td>10 to 15 Years</td>
<td>204</td>
<td>23.1%</td>
</tr>
<tr>
<td>Over 15 Years</td>
<td>174</td>
<td>19.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.8 shows demographic frequencies for school assignment. Percentages of responses by school assignment in rank order were High School (39.2%), Multi-grade (26.5%), Elementary (17.6%), Middle School (14.7%), and Unknown (1.9%).

Table 4.8

**School Assignment Frequencies (n=882)**

<table>
<thead>
<tr>
<th>Level of School Assigned</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>346</td>
<td>39.2%</td>
</tr>
<tr>
<td>Multi-grade</td>
<td>234</td>
<td>26.5%</td>
</tr>
<tr>
<td>Elementary</td>
<td>155</td>
<td>17.6%</td>
</tr>
<tr>
<td>Middle School</td>
<td>130</td>
<td>14.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4.9 shows demographic frequencies for geographical borough of assignments. Percentages of responses by borough in rank order were Brooklyn (36.1%), Bronx (27.1%), Manhattan (23.4%), Queens (11.5%), and Staten Island (2.0%). Table 4.10 shows that SSAs overwhelmingly perceived the importance of their roles in preventing bullying (89.2%).

Table 4.9
Table 4.10

Table 4.10

Geographical Borough of Assignment Frequencies (n=882)

<table>
<thead>
<tr>
<th>Borough of Assignment</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn</td>
<td>318</td>
<td>36.1%</td>
</tr>
<tr>
<td>Bronx</td>
<td>239</td>
<td>27.1%</td>
</tr>
<tr>
<td>Manhattan</td>
<td>206</td>
<td>23.4%</td>
</tr>
<tr>
<td>Queens</td>
<td>101</td>
<td>11.5%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>18</td>
<td>2.0%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Perception of Role Frequencies (n=882)

<table>
<thead>
<tr>
<th>Importance of Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>86</td>
<td>9.8%</td>
</tr>
<tr>
<td>Yes</td>
<td>787</td>
<td>89.2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>9</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Figures in Table 4.11 indicate that overall, SSAs identified the vignettes as incidents of bullying, and indicated involvement. These data suggest that the SSAs generally understood what constitutes bullying, including the four types found in extant literature (i.e., physical, verbal, social, and cyber-based). Responses also demonstrate a high degree of awareness, which contrasts with extant findings that suggest that other actors who are part of anti-bullying safety nets such as parents and teachers are unaware of bullying among children (Minsha et al., 2006; Olweus, 1991).
Table 4.11

*Descriptive Statistics for Vignette Measures (n=882)*

<table>
<thead>
<tr>
<th>Identification of Bullying</th>
<th>Vignette 1</th>
<th></th>
<th>Vignette 2</th>
<th></th>
<th>Vignette 3</th>
<th></th>
<th>Vignette 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
<td>4%</td>
<td>99</td>
<td>11%</td>
<td>44</td>
<td>5%</td>
<td>363</td>
<td>41%</td>
</tr>
<tr>
<td>Yes</td>
<td>845</td>
<td>96%</td>
<td>783</td>
<td>89%</td>
<td>838</td>
<td>95%</td>
<td>519</td>
<td>59%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Involvement in Bullying</th>
<th>Vignette 1</th>
<th></th>
<th>Vignette 2</th>
<th></th>
<th>Vignette 3</th>
<th></th>
<th>Vignette 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
<td>Physical Bullying</td>
<td>% of Response</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>2%</td>
<td>25</td>
<td>3%</td>
<td>34</td>
<td>4%</td>
<td>57</td>
<td>6%</td>
</tr>
<tr>
<td>Yes</td>
<td>866</td>
<td>98%</td>
<td>857</td>
<td>97%</td>
<td>848</td>
<td>96%</td>
<td>825</td>
<td>94%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Vignette 5</th>
<th></th>
<th>Vignette 6</th>
<th></th>
<th>Vignette 7</th>
<th></th>
<th>Vignette 8</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social Bullying</td>
<td>% of Response</td>
<td>Social Bullying</td>
<td>% of Response</td>
<td>Social Bullying</td>
<td>% of Response</td>
<td>Social Bullying</td>
<td>% of Response</td>
</tr>
<tr>
<td>No</td>
<td>199</td>
<td>23%</td>
<td>459</td>
<td>52%</td>
<td>69</td>
<td>8%</td>
<td>92</td>
<td>10%</td>
</tr>
<tr>
<td>Yes</td>
<td>683</td>
<td>77%</td>
<td>423</td>
<td>48%</td>
<td>813</td>
<td>92%</td>
<td>790</td>
<td>90%</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
<td>882</td>
<td>100%</td>
</tr>
</tbody>
</table>

SUMMARY

Demographics collected from the respondents suggest that the current SSA workforce is diverse regarding age, marital status, family status, job experience, schools, and geographical assignment. The data also revealed that respondents were overwhelmingly non-white, high school graduates, and non-supervisors, and nearly 75% were female. The majority of the SSAs indicated playing an important role in preventing bullying in their respective schools.
CHAPTER 5: LOGISTIC REGRESSION RESULTS

INTRODUCTION

Included in this chapter are tables that summarize the multivariate logistic regression coefficients that represent the influence of SSAs’ personal and contextual factors on the perceptions of their roles, identification of bullying, and involvement in reported bullying. Each table presents results for each vignette according to the three-part conceptual model developed and later revised for this study (Figure 3.3). The Nagelkerke coefficient of determination ($R^2$) was used to measure the strength of the association between a dependent variable and predictors. Although logistic regression offers no true $R^2$ value as found with ordinary least square (OLS), the $R^2$ reported for logistic regression has an analogous interpretation to the $R^2$ in OLS (Menard, 2000; Tjur, 2009). However, SPSS does not report the various $R^2$ techniques associated with logistic regression.

Model 1 examines whether personal and contextual characteristics of SSAs influence the ways in which they perceive the importance of their roles regarding preventing bullying in their respective schools of assignment for all eight vignettes. The model produced analogous findings throughout the eight analyses, which supports the failure to reject the null hypothesis (see Table 3.8). However, for each vignette, Asian SSAs were less likely to view their roles as important in comparison to non-Asians ($\beta = -1.412, p < .05$). This finding upholds rejection of null hypothesis six ($H_6$), which suggests that being an Asian SSA does not influence perceptions of their roles (Table 3.8).

Model 2 examines whether personal and contextual characteristics of SSAs, and perceptions of their roles, influence the likelihood of identifying instances of physical bullying. All factors used in models 1 and 2, and identification of bullying, were included in model 3.
Regression results for models 2 and 3 revealed varying results throughout the eight analyses. However, for each vignette under model 3, identification of a bullying incident correlated with involvement, supporting rejection of null hypothesis nineteen (H₁₉), which suggests that SSAs’ identification of a bullying incident does not affect involvement during bullying.

**Regression Results for SSA Involvement in Physical Bullying: 1st Vignette**

Under model 2 in Table 5.1, regression results indicate that with respect to age, younger SSAs were more likely to identify physical bullying ($\beta = -0.049$, $p < .05$), supporting rejection of null hypothesis one (H₁), which indicates that SSAs’ ages do not influence identification of bullying (Table 3.8). In Table 5.1, model 3 indicates that male SSAs were less likely to interfere during physical bullying ($\beta = -2.895$, $p < .05$), supporting rejection of null hypothesis two (H₂), which indicates that SSAs’ genders do not affect involvement during bullying (see Table 3.8).

Perceptions of role is a significant predictor of SSA involvement, indicating that SSAs who view themselves as an important component in their schools’ anti-bullying efforts are approximately 14 times more likely to intervene in comparison to SSAs who do not view themselves as an important component ($\beta = 2.626$, $p < .01$). This finding upholds rejection of null hypothesis eighteen (H₁₈), which indicates that SSAs’ perceptions of their roles do not affect involvement during bullying (see Table 3.8). Under model 3, results also indicate that SSAs who identified this occurrence as an instance of bullying were approximately 20 times more likely to intervene ($\beta = 2.991$, $p < .01$). In comparison to models 1 and 2, the predictors in model 3 explained approximately 35% of the variance ($R^2 = .348$).
Table 5.1

Logistic Regression Coefficients Representing Three-Part Conceptual Model—1st Vignette

<table>
<thead>
<tr>
<th>Independent and Moderating Variables</th>
<th>Dependent Variables</th>
<th>Dependent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Perception of SSAs Role (SPR)</td>
<td>B(SE) Exp(B)</td>
<td>B(SE) Exp(B)</td>
<td>B(SE) Exp(B)</td>
</tr>
<tr>
<td>Age (1)</td>
<td>-0.049 (.024)*</td>
<td>0.952</td>
<td>-2.895 (1.183)*</td>
</tr>
<tr>
<td>Gender (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td></td>
</tr>
<tr>
<td>Perception of SSAs Role (1)</td>
<td></td>
<td></td>
<td>2.626 (.989)**</td>
</tr>
<tr>
<td>Identification of Bullying (1)</td>
<td></td>
<td></td>
<td>2.991 (1.064)**</td>
</tr>
<tr>
<td>Constant</td>
<td>2.105 (.160)***</td>
<td>5.392 (1.116)***</td>
<td>1.527 (1.322)</td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>.015</td>
<td>.033</td>
<td>.348</td>
</tr>
<tr>
<td>N</td>
<td>882</td>
<td>882</td>
<td>882</td>
</tr>
</tbody>
</table>

*p < .05.  **p < .01.  ***p < .001.

Regression Results for SSA Involvement in Verbal Bullying: 2nd Vignette

Under model 2 in Table 5.2, regression results indicate that with respect to race, White SSAs were less likely to identify physical bullying than non-White SSAs ($\beta = -1.621$, $p < .05$), supporting rejection of null hypothesis five ($H_0.5$), which suggests that being a White SSA does not affect identification of bullying (Table 3.8). Results also indicate that SSAs assigned to Brooklyn ($\beta = .944$, $p < .05$), Manhattan ($\beta = 1.296$, $p < .01$), and Bronx ($\beta = 1.104$, $p < .01$) schools were 2 to 3 times more likely to identify the occurrence as verbal bullying, in comparison to SSAs in other boroughs. This finding supports rejection of null hypothesis seventeen ($H_{0.17}$), which suggests that SSAs’ geographical boroughs of assignment do not affect identification of bullying (Table 3.8).

In Table 5.2, model 3 indicates that Asian SSAs were less likely to interfere during an instance of verbal bullying, in comparison to non-Asian SSAs ($\beta = -2.815$, $p < .05$). This finding upholds rejection of null hypothesis six ($H_0.6$), which suggests that being an Asian SSA does not affect involvement during bullying (Table 3.8). SSAs who identified the occurrence as bullying were approximately 47 times more likely to intervene ($\beta = 3.852$, $p < .01$).
model 1 and 2, the predictors in model 3 explained approximately 38% of the variance ($R^2 = .384$).

Table 5.2

*Logistic Regression Coefficients Representing Three-Part Conceptual Model—2nd Vignette*

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B(SE)</td>
<td>Exp(B)</td>
<td>B(SE)</td>
</tr>
<tr>
<td>Perception of SSAs Role (SPR)</td>
<td>-1.621 (.686)*</td>
<td>0.198</td>
<td></td>
</tr>
<tr>
<td>Identification of Bullying (IB)</td>
<td></td>
<td></td>
<td>-2.819 (1.222)*</td>
</tr>
<tr>
<td>Involvement (I)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td></td>
</tr>
<tr>
<td>Geographical Borough (1) Brooklyn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical Borough (2) Manhattan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical Borough (3) Bronx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of Bullying (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.105 (.160)***</td>
<td>.015</td>
<td>1.695 (.223)***</td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>882</td>
<td>882</td>
<td>882</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001.

**Regression Results for SSA Involvement in Cyber Bullying: 3rd Vignette**

Under model 2 in table 5.3, regression results indicate that Asian SSAs were less likely to identify cyber bullying than non-Asian SSAs were ($\beta = -2.077, p < .05$). This finding upholds rejection of null hypothesis six ($H_0$6), which suggests that being Asian SSA does not affect identification of bullying (Table 3.8). In Table 5.3, model 3 shows that SSAs who identified the occurrence as bullying were nearly 30 times more likely to intervene ($\beta = 3.391, p < .001$). In comparison to model 1 and 2, the predictors in model 3 explained approximately 21% of the variance ($R^2 = .211$).
Table 5.3

**Logistic Regression Coefficients Representing Three-Part Conceptual Model—3rd Vignette**

<table>
<thead>
<tr>
<th>Independent and Moderating Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perception of SSAs Role</td>
<td>Identification of Bullying (IB)</td>
<td>Involvement (I)</td>
</tr>
<tr>
<td></td>
<td>(SPR)</td>
<td>B(SE)</td>
<td>Exp(B)</td>
</tr>
<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td>0.2077 (.874)*</td>
</tr>
<tr>
<td>Identification of Bullying (1)</td>
<td>2.105 (.160)***</td>
<td>3.330 (.272)***</td>
<td>3.391 (.678)***</td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>.015</td>
<td>.036</td>
<td>.788 (.539)</td>
</tr>
<tr>
<td>N</td>
<td>882</td>
<td>882</td>
<td>882</td>
</tr>
</tbody>
</table>

*p < .05, ***p < .001.

**Regression Results for SSA Involvement in Physical Bullying: 4th Vignette**

Under model 2 in Table 5.4, SSAs who reported that their children had been victims of bullying were 1.7 times more likely to identify the instance as physical bullying ($\beta = .545, p < .05$). This finding supports rejection of null hypothesis thirteen ($H_{0.13}$), which suggests that being an SSA with children who were victims of bullying does not affect identification of bullying (Table 3.8). Regarding geographical boroughs, SSAs in Brooklyn ($\beta = .419, p < .05$) and Manhattan ($\beta = .816, p < .01$) were 1.5 to 3.6 times more likely to identify the occurrence as physical bullying, in comparison to SSAs in other boroughs. This finding upholds rejection of null hypothesis seventeen ($H_{0.17}$), which suggests that SSAs’ geographical borough of assignment does not affect identification of bullying (Table 3.8).

In Table 5.4, model 3 shows that SSAs who viewed themselves as an important component in their schools’ anti-bullying efforts were 4.5 times more likely to intervene, in comparison to SSAs who did not view themselves as an important component ($\beta = 1.152, p < .01$). This finding supports rejection of the null hypothesis ($H_{0.18}$), which suggests that SSAs’ perceptions of their roles do not affect involvement in bullying. Results for model 3 also indicate that SSAs who identified the occurrence as bullying were nearly 8 times more likely to
intervene ($\beta = 2.064, p < .001$). In comparison to models 1 and 2, predictors in model 3 explained 21% of the variance ($R^2 = .212$).

Table 5.4

Logistic Regression Coefficients Representing Three-Part Conceptual Model—4th Vignette

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<thead>
<tr>
<th>Independent and Moderating Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent Variables</td>
<td>Perception of SSAs Role (SPR)</td>
<td>Identification of Bullying (IB)</td>
</tr>
<tr>
<td></td>
<td>B(SE)</td>
<td>Exp(B)</td>
<td>B(SE)</td>
</tr>
<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td>1.724</td>
</tr>
<tr>
<td>Victimization of Child (1)</td>
<td>0.545 (.224)*</td>
<td>1.724</td>
<td>1.433 (.761)</td>
</tr>
<tr>
<td>Geographical Borough (1)</td>
<td>0.419 (.273)*</td>
<td>1.521</td>
<td>3.656</td>
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<tr>
<td>Geographical Borough (2)</td>
<td>0.816 (.263)**</td>
<td>3.656</td>
<td></td>
</tr>
<tr>
<td>Geographical Borough (3)</td>
<td>0.015 (.348)</td>
<td>1.015</td>
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<tr>
<td>Geographical Borough (4)</td>
<td>-0.353 (.787)</td>
<td>0.703</td>
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<tr>
<td>Perception of SSAs Role (1)</td>
<td>1.512 (.989)**</td>
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<tr>
<td>Identification of Bullying (1)</td>
<td>2.064 (.576)**</td>
<td>7.879</td>
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<tr>
<td>Constant</td>
<td>2.105 (.160)**</td>
<td>-0.093 (.178)</td>
<td>0.544 (.483)</td>
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<tr>
<td>Nagelkerke $R^2$</td>
<td>.015</td>
<td>.063</td>
<td>.212</td>
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<tr>
<td>N</td>
<td>882</td>
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</table>

*p < .05. **p < .01. ***p < .001.

Regression Results for SSA Involvement in Social Bullying: 5th Vignette

Under model 2 in Table 5.5, SSAs who reported that their children had been victims of bullying were 2 times more likely to identify the instance as social bullying ($\beta = .729, p < .01$). This finding supports rejection of null hypothesis thirteen ($H_{o13}$), which suggests that being an SSA with children who had been victims of bullying does not affect identification of bullying (Table 3.8). In Table 5.5, model 3 indicates a positive correlation between SSAs’ ages and intervening during social bullying ($\beta = .054, p < .05$); as age increased, so did the likelihood that the SSAs intervened during social bullying. This finding upholds rejection of null hypothesis one ($H_o1$), which suggests that SSAs’ ages do not affect involvement with bullying (Table 3.8). Results for model 3 also show that SSAs who identified the occurrence as bullying were nearly 18 times more likely to intervene ($\beta = 2.620, p < .001$). In comparison to models 1 and 2, the predictors in model 3 explained roughly 34% of the variance ($R^2 = .335$).
Table 5.5

Logistic Regression Coefficients Representing Three-Part Conceptual Model—5th Vignette

<table>
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<th>Independent and Moderating Variables</th>
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<td>Dependent Variables</td>
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<td>Identification of Bullying (IB)</td>
</tr>
<tr>
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<td>B(SE)</td>
<td>Exp(B)</td>
<td>B(SE)</td>
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<td>Age</td>
<td>0.054 (.025)*</td>
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<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
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</tr>
<tr>
<td>Family Status(1)</td>
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<td></td>
<td>2.627 (1.487)</td>
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<tr>
<td>Victimization of Child (1)</td>
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<td></td>
<td>0.729 (.279)**</td>
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<tr>
<td>Geographical Borough (1)</td>
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<td>0.394 (.483)</td>
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<td>Geographical Borough (4)</td>
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<tr>
<td>Identification of Bullying (1)</td>
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<td></td>
<td>2.620 (0.409)**</td>
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<tr>
<td>Constant</td>
<td>2.105 (.160)**</td>
<td>1.079 (.139)**</td>
<td>-4.441 (1.945)</td>
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<td>Nagelkerke $R^2$</td>
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<td>.027</td>
<td>.335</td>
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</table>

*p < .05, **p < .01, ***p < .001.

Regression Results for SSA Involvement in Verbal Bullying: 6th Vignette

Under model 2 in Table 5.6, SSAs assigned to schools in Brooklyn ($\beta = 1.014.$, $p < .05$) and the Bronx ($\beta = .775$, $p < .01$) were 0.3 to 1.2 times more likely to identify the occurrence as verbal bullying, in comparison to SSAs in the remaining boroughs. This finding upholds rejection of null hypothesis seventeen ($H_{17}$), which suggests that geographical borough of assignment does not affect identification of bullying (Table 3.8). In Table 5.5, model 3 indicates that SSAs who reported being single were roughly 2.3 times more likely to intervene during verbal bullying, in comparison to SSAs who were not single. This finding supports rejection of null hypothesis ten ($H_{10}$), which suggests that marital status does not affect identification of bullying. Results under model 3 also show that SSAs who identified the occurrence as bullying were approximately 23 times more likely to intervene ($\beta = 3.120$, $p < .001$). In comparison to models 1 and 2, the predictors in model 3 explained 30% of the variance ($R^2 = .303$).
Table 5.6

Logistic Regression Coefficients Representing Three-Part Conceptual Model—6th Vignette

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<th>Independent and Moderating Variables</th>
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<th>Identification of Bullying (IB)</th>
<th>Involvement (I)</th>
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<td>B(SE)</td>
<td>Exp(B)</td>
<td>B(SE)</td>
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<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
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<td>Marital Status (1)</td>
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<td>Marital Status (3)</td>
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<td>Marital Status (4)</td>
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<td>Rank(1)</td>
<td>-1.014 (.431)*</td>
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<td>0.216 (.269)</td>
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<td>Geographical Borough (2)</td>
<td>0.775 (.251)**</td>
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<td>Identification of Bullying (1)</td>
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<td>Constant</td>
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<td>Nagelkerke R²</td>
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*p < .05. **p < .01. ***p < .001.

Regression Results for SSA Involvement in Cyber Bullying: 7th Vignette

Under model 2 in Table 5.7, White SSAs were less likely to identify the instance as a case of cyber bullying, in comparison to non-White SSAs (β = -1.920, p < .01). This finding supports rejection of null hypothesis five (H₅), which suggests that being a White SSA does not affect identification of bullying (Table 3.8). In Table 5.7, model 3 indicates that SSAs who identified the occurrence as bullying were more likely to intervene (β = 4.757, p < .001). In comparison to models 1 and 2, the predictors in model 3 explained 50% of the variance (R² = .500).
Table 5.7

Logistic Regression Coefficients Representing Three-Part Conceptual Model—7th Vignette

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<th>Independent and Moderating Variables</th>
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<td>Exp(B)</td>
<td>B(SE)</td>
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<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of Bullying (1)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
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<td></td>
<td>2.901 (.224)***</td>
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<tr>
<td>Nagelkerke R²</td>
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<td>.036</td>
<td>.500</td>
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*p < .05. **p < .01. ***p < .001.

Regression Results for SSA Involvement in Social Bullying: 8th Vignette

Under model 2 in Table 5.8, SSAs who did not operate in a supervisor capacity were less likely to identify the instance as social bullying ($\beta = -1.208$, p < .05), suggesting that supervisors are more inclined to identify the case as bullying. This finding upholds rejection of null hypothesis fourteen (H₁₄), which suggests that SSA rank does not affect identification of bullying (Table 3.8). In Table 5.8, model 3 shows that SSAs who identified the occurrence as bullying were more likely to intervene ($\beta = 3.599$, p < .001). In comparison to models 1 and 2, the predictors in model 3 explained roughly 36% of the variance ($R^2 = .358$).

Table 5.8

Logistic Regression Coefficients Representing Three-Part Conceptual Model—8th Vignette

<table>
<thead>
<tr>
<th>Independent and Moderating Variables</th>
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<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perception of SSAs Role (SPR)</td>
<td>B(SE)</td>
<td>Exp(B)</td>
<td>B(SE)</td>
</tr>
<tr>
<td>Asian (1)</td>
<td>-1.412 (.725)*</td>
<td>0.244</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank (1)</td>
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<td>0.299</td>
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<td></td>
</tr>
<tr>
<td>Identification of Bullying (1)</td>
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<td></td>
</tr>
<tr>
<td>Constant</td>
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<td>2.398 (.185)***</td>
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<tr>
<td>Nagelkerke R²</td>
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<td>.358</td>
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</tr>
</tbody>
</table>

*p < .05. ***p < .001.
SUMMARY

A review of results from the regression analyses is presented in this chapter. The constructs and associated relationships as conceptualized using a three-part model were tested for statistical significance as they relate to the research questions and hypotheses. Overall, results suggest a positive relationship between SSA identification of bullying and their inclination to intervene. Although results for each vignette varied and supported some hypotheses inconsistently, hypothesis nineteen ($H_{19}$), which suggests that identification of bullying correlates positively with involvement during bullying, was identified in model 3 for each vignette (Table 3.8). Specifically, SSAs who identified each case as an instance of bullying were more likely to intervene, in comparison to SSAs who did not identify each example as bullying. These outcomes suggest that recognizing bullying is a strong indicator of SSA intervention.
CHAPTER 6: PATH ANALYSIS RESULTS

INTRODUCTION

In chapter 5, regression results suggest that SSAs who identified each vignette as an instance of bullying were more likely to intervene, in comparison to SSAs who did not identify the examples as bullying. Although these results illustrate the likelihood of SSA intervention in the cases of bullying presented in the survey, the conceptual model for this study analyzes SSA involvement in instances of bullying that includes more than one dependent variable (i.e., mediating variables), which might contain underlying relationship between predictors and dependent variables. Using path analysis offers the capability of identifying causal effects (direct or indirect) between predictor and outcome variables, and thus might identify underlying relationships that are indiscernible from multiple regression analysis (Klem, 2010). This chapter discusses path diagrams for each vignette, and uses the standardized coefficients ($B = \text{Beta}$) resulting from regression analyses as path coefficients. The path coefficients were used to provide estimates of the extent, or direction and significance, of causal relationships between variables in the model (McClendon, 2002). This chapter also summarizes direct and indirect effects of independent and mediating variables on SSA involvement during bullying for each vignette.

Path Analysis Results for SSA Involvement in Physical Bullying: 1st Vignette

Figure 6.1 illustrates that gender (i.e., being male) had a negative, direct effect on SSA involvement ($\beta_G = -2.895$, $p < .05$), whereas perceptions of roles had a positive effect on involvement ($\beta_{SPR} = 2.626$, $p < .01$). Identifying this case as bullying also had a positive, direct effect on SSA involvement ($\beta_{IB} = 2.91$, $p < .01$). Figure 6.1 shows a negative, indirect effect of age and identification of bullying ($-0.146 = \beta_A = -0.049 \times \beta_{IB} = 2.991$), suggesting that younger
SSAs who identified physical bullying indicated lower involvement. Asian SSAs and perceptions of SSA roles also had a negative, indirect effect on involvement during physical bullying ($-3.708 = \beta_{AS} = -1.412 \times \beta_{SPR} = 2.626$), suggesting that Asian SSAs who identified the importance of their roles had lower involvement.

![Diagram showing the relationship between gender, age, Asian status, perception of SSA roles, identification of bullying, and involvement.]

**Figure 6.1.** Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 1

**Path Analysis Results for SSA Involvement in Verbal Bullying: 2nd Vignette**

In Figure 6.2, Asian SSAs had a negative, direct effect on SSA involvement ($\beta_G = -2.819$, $p < .05$), whereas identifying the case as bullying had a positive, direct effect on involvement ($\beta_{IB} = 3.852$, $p < .01$). Figure 6.2 shows a positive, indirect effect among three geographical boroughs—Brooklyn, Manhattan and the Bronx—and identifying the case as bullying ($3.636 = \beta_{GB1} = 0.944 \times \beta_{IB} = 3.852; 4.992 = \beta_{GB2} = 1.296 \times \beta_{IB} = 3.852; 4.252 = \beta_{GB3} = 1.104 \times \beta_{IB} = 3.852$), suggesting SSAs assigned to these locations had higher involvement. However, both Asian and White SSAs and identification of bullying had a negative, indirect effect on involvement ($-5.439 = \beta_{AS} = -1.412 \times \beta_{IB} = 3.852; -6.244 = \beta_{W} = -1.621 \times \beta_{IB} = 3.852$), suggesting that Asian and White SSAs who identified the case as bullying had lower involvement.
Figure 6.2. Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 2

Path Analysis Results for SSA Involvement in Cyber Bullying: 3rd Vignette

Figure 6.3 shows that identifying this case as bullying had a positive, direct effect on involvement ($\beta_{IB} = 3.391$, $p < .001$). Asian SSAs and identifying the case as bullying had a negative, indirect effect on involvement ($-7.043 = \beta_{AS} = -2.077 \times \beta_{IB} = 3.391$), suggesting that Asian SSAs who identified the case as bullying had lower involvement.

Figure 6.3. Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 3

Path Analysis Results for SSA Involvement in Physical Bullying: 4th Vignette

In Figure 6.4, victimization of SSAs’ children ($\beta_{VC} = 0.054$, $p < .05$) had a positive, direct effect on involvement during instances of physically bullying. Figure 6 also shows that perceptions of SSAs’ roles ($\beta_{PR} = 1.512$, $p < .01$) and identifying the case as bullying ($\beta_{IB} =$
2.064, p < .001) had a positive, direct effect on involvement. Victimization of SSAs’ children and identification of bullying had a positive, indirect effect on involvement (0.111 = $\beta_{VC} = -0.054 \times \beta_{IB} = 2.064$), suggesting that SSAs who reported that their children were victims of bullying and identified the case as bullying had higher involvement. However, Asian SSAs and perceptions of SSAs’ roles had a negative, indirect effect on involvement ($-2.134 = \beta_{AS} = -1.412 \times \beta_{PR} = 1.512$), suggesting that Asian SSAs who identified the instance as a case of bullying had lower involvement. A positive, indirect effect was found between two geographical boroughs—Brooklyn and Manhattan—and identifying the case as bullying ($0.865 = \beta_{GB1} = 0.419 \times \beta_{IB} = 2.064$; $1.684 = \beta_{GB2} = 0.816 \times \beta_{IB} = 2.064$), suggesting SSAs assigned to these locations had higher involvement.

![Diagram](https://via.placeholder.com/150)

**Figure 6.4.** Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 4

**Path Analysis Results for SSA Involvement in Social Bullying: 5th Vignette**

Figure 6.5 shows that age ($\beta_{A} = 0.054$, p < .05) and identifying the case as bullying ($\beta_{IB} = 2.620$, p < .001) had a positive, direct effect on involvement. Victimization of SSAs’ children and identification of bullying had a positive, indirect effect on involvement ($1.910 = \beta_{VC} = -1.412 \times \beta_{PR} = 1.512$, $0.865 = \beta_{GB1} = 0.419 \times \beta_{IB} = 2.064$).
0.729 ≫ β_{IB} = 2.620), suggesting that SSAs who reported that their children were victims of bullying and identified the case as bullying had higher involvement.

*Figure 6.5. Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 5*

**Path Analysis Results for SSA Involvement in Verbal Bullying: 6th Vignette**

In Figure 6.6, marital status (i.e., single) had a positive, direct effect on involvement (β_{MR} = 0.0838, p < .01), and identifying the case as bullying (β_{IB} = 2.064, p < .001) had a positive, direct effect on involvement. Figure 6.6 also shows a positive, indirect effect between geographic location (i.e., Manhattan) and identifying the case as bullying (2.418 = β_{GB2} = 0.775 × β_{IB} = 3.120), suggesting that SSAs assigned to this location had higher involvement. However, rank and identifying the case as bullying had a negative, indirect effect on involvement (-3.163 = β_{R1} = -1.014 ≫ β_{IB} = 3.120), suggesting that SSAs who did not operate in a supervisor capacity and identified the case as bullying had low involvement.
Figure 6.6. Casual model for perception of SSAs role, identification of bullying, and involvement—Vignette 6

Path Analysis Results for SSA Involvement in Cyber Bullying: 7th Vignette

Figure 6.7 shows that identifying the case as bullying had a positive, direct effect on involvement ($\beta_{IB} = 4.757, p < .001$). Being a White SSA and identification of bullying had a negative, indirect effect on involvement (-9.133 = $\beta_w = -1.920 \times \beta_{IB} = 4.757$), suggesting that White SSAs who identified the case as bullying had lower involvement.

Path Analysis Results for SSA Involvement in Social Bullying: 8th Vignette

In Figure 6.8, identifying the case as bullying had a positive, direct effect on involvement ($\beta_{IB} = 3.599, p < .001$). Figure 6.8 also illustrates that rank and identification of bullying had a negative, indirect effect on involvement (-4.347 = $\beta_{R1} = -1.208 \times \beta_{IB} = 3.599$), suggesting that SSAs who did not operate in a supervisor capacity and identified the case as bullying had low involvement. This outcome might result from non-supervisory agents who feel less compelled to act in such instances, in comparison to supervisors who are expected to act or notify others based on their roles within the NYPD’s SSD.
SUMMARY

A review of results from path analyses is presented in this chapter. The constructs and associated relationships as conceptualized using the model were examined to identify direct and indirect effects of SSAs’ personal and contextual factors on involvement during bullying. For each vignette on the survey, identifying cases of bullying had a positive, direct effect on involvement. This outcome supports results from logistic regression analyses that identify a positive relationship between identification of bullying and inclination to intervene. Similar to outcomes from logistic regression analyses, these outcomes suggest that SSAs who recognize bullying are more prone to prevent it. Results from logistic regression and path analyses make it evident that SSAs who recognize bullying are more likely to intervene. SSAs who identified cyber bullying were just as likely to intervene, in comparison to other types of bullying (Table 4.11). Regarding cyber bullying, SSAs might be less likely to encounter these occurrences. Cyber bullying occurs through electronic devices and platforms that SSAs do not have access to, limiting their ability to prevent its occurrence. Cyber bullying does not occur in physical spaces, in comparison to other types of bullying, and might limit the reach of SSAs to prevent its occurrence. To address this issue, SSAs should be made aware of the ways cyber bullying can occur, and be available to students who are victims of its occurrence.
CHAPTER 7: QUALITATIVE ANALYSIS RESULTS

INTRODUCTION

The survey instrument captured a large amount of data, and included several qualitative variables. Question 15 asked SSAs to define bullying (Appendix C). Although this qualitative variable was not incorporated in the final model, identification of bullying, or involvement with bullying, there was value in capturing this information. Of all respondents (n = 882), 376 provided definitions of bullying, which were entered into NVivo to conduct word frequency analysis. Using this technique offered the capability of identifying and ranking common words and themes in the SSAs’ definitions of bullying. Analysis excludes terms that NVivo referred to as “stopwords” (i.e., the, it, or, and, etc.) and focuses on significant terms that might associate with the definition of bullying found in the literature (Table 7.1).

Table 7.1

*Most Common Words SSAs Used to Define Bullying*

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<th>Count</th>
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<td>advantage</td>
<td>23</td>
<td>continuous</td>
<td>7</td>
</tr>
<tr>
<td>harassing</td>
<td>23</td>
<td>force</td>
<td>7</td>
</tr>
<tr>
<td>intimidating</td>
<td>23</td>
<td>harm</td>
<td>7</td>
</tr>
<tr>
<td>verbal</td>
<td>23</td>
<td>mentally</td>
<td>7</td>
</tr>
<tr>
<td>abuse</td>
<td>22</td>
<td>repeatedly</td>
<td>7</td>
</tr>
<tr>
<td>constantly</td>
<td>20</td>
<td>actions</td>
<td>6</td>
</tr>
<tr>
<td>intimidation</td>
<td>18</td>
<td>daily</td>
<td>6</td>
</tr>
<tr>
<td>fear</td>
<td>17</td>
<td>made</td>
<td>6</td>
</tr>
<tr>
<td>teasing</td>
<td>17</td>
<td>mean</td>
<td>6</td>
</tr>
<tr>
<td>constant</td>
<td>16</td>
<td>names</td>
<td>6</td>
</tr>
<tr>
<td>hitting</td>
<td>16</td>
<td>pushing</td>
<td>6</td>
</tr>
</tbody>
</table>
Word frequency analysis identified 284 terms from the subset \((n = 376)\) of statements provided by respondents. Common terms included harassment, intimidating, abuse, teasing, hitting, threatening, harmful, harming, harm, constantly, constant, weaker, weak, and weakness (Table 6.1). These terms are analogous to the common definition of bullying, which is (1) intentional harmful behavior that (2) usually occurs with some repetitiveness and is (3) aimed at an individual who has difficulty defending against such harm (Barton, 2006; Farrington & Ttofi, 2009a, 2009b; Hutzell & Payne, 2012; Limber, 2011; Olweus, 1978; Peguero, 2008; Popp, 2012b; Ttofi & Farrington, 2012, 2011). A word cloud that includes all terms from the 376 responses offered a visual representation of the frequency of common terms in the SSAs’ definitions of bullying, and supplemented the word frequency analysis (Figure 6.9).
Figure 7.1. Word cloud of words SSAs used to define bullying

In Chapters 5 and 6, logistic regression and path analyses illustrated that SSAs who recognize bullying are more likely to intervene and prevent its occurrence. In addition, results from the survey show the capacity of SSAs to recognize bullying. However, few respondents (43%) provided a basic definition of bullying, highlighted in Chapter 3 (Table 3.4). Factors such as fatigue, disinterest, and fear of criticism are possible explanations for why many of the respondents did not offer a definition. It is also plausible that SSAs who did not offer a definition lack awareness of the characteristics of bullying or the capacity to explain it to others. The inability to define bullying can have implications on SSAs’ involvement in bullying prevention.

Not understanding the components and types of bullying (i.e., physical, verbal, social, and cyber) might influence how SSAs handle bullying. Lack of awareness might hinder SSAs’ capacities to intervene and prevent bullying if they are unable to identify types of bullying.
leading to unimpeded bullying. The inability to define bullying can also cause implications for SSAs when engaging in preventive measures. For example, if an SSA gets involved in an instance that he/she deems bullying between students and is unable to articulate the reason for involvement, or whether the instance represents bullying, this might lead to falsely identifying a student as a bully and stigmatizing the student. Being incorrectly identified as a bully might negatively affect a student’s view and trust of SSAs to prevent bullying. This example might also cause concern for the New York City Department of Education (DOE), which handles the instance differently and affects the relationship between DOE staff members and SSAs.

On completion of the surveys, a few respondents participated in informal interviews or discussions on bullying and their roles in New York City public schools. Although the pilot test of the survey was not designed to collect qualitative data, some SSAs discussed their views on bullying and their roles in their respective schools. Due to logistical reasons, follow-up field observations were not conducted, but the discussions that occurred with SSAs during administration of the survey and the pilot provided important findings. The dominant narrative from these discussions was lack of communication between the New York City DOE and the NYPD’s SSD. Most SSAs who participated in the discussions reported that most DOE employees viewed them simply as security guards, called on to address serious issues rather that viewing them as part of a larger safety net that protects children from harmful behaviors, including bullying. SSAs can be part of New York City public schools’ bullying prevention measures. Some SSAs perceived that they are more commonly called on for disciplinary interventions for harmful behaviors, but some perceived that disciplinary measures are not always the solution to addressing bullying, and instead suggested non-disciplinary measures such as guidance interventions or mental health referrals. Although both the New York City DOE and
the NYPD’s SSD share a relationship regarding protection of children in New York City public schools, some SSAs perceived a gap between agents and school staff members. Some SSAs mentioned that this gap might be due to lack of communication or collaboration between entities concerning bullying prevention. Although these discussions present anecdotal evidence, some sentiments were supported with data collected from the survey. For example, approximately 32% of respondents (284 of 882) indicated that their assigned schools had anti-bullying programs (Table 6.2), and roughly 19% (56 of 284) of those who did also noted that they were asked to participate (Table 6.3).

Table 7.2

<table>
<thead>
<tr>
<th>Presence of Anti-Bullying Program</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaware</td>
<td>379</td>
<td>43.0</td>
</tr>
<tr>
<td>Yes</td>
<td>284</td>
<td>32.2</td>
</tr>
<tr>
<td>No</td>
<td>210</td>
<td>23.8</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7.3

<table>
<thead>
<tr>
<th>Participation in Anti-Bullying Programs</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>228</td>
<td>80.3</td>
</tr>
<tr>
<td>Yes</td>
<td>56</td>
<td>19.7</td>
</tr>
<tr>
<td>Total</td>
<td>284</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Nearly 25% of the SSAs (219 of 882) indicated that their assigned schools offered workshops for students on bullying (Table 6.4), and 32% of them (71 of 219) indicated being invited to these workshops (Table 6.5). These figures support the sentiments of some SSAs who perceived that they are not being incorporated in or informed of their schools’ anti-bullying efforts.
Table 7.4

Presence of Anti-Bullying Workshops (n=882)

<table>
<thead>
<tr>
<th>Presence of Anti-Bullying Workshops</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaware</td>
<td>436</td>
<td>49.4</td>
</tr>
<tr>
<td>No</td>
<td>220</td>
<td>24.9</td>
</tr>
<tr>
<td>Yes</td>
<td>219</td>
<td>24.8</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>882</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7.5

Participation in Anti-Bullying Workshops (n=219)

<table>
<thead>
<tr>
<th>Participation in Anti-Bullying Workshops</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>148</td>
<td>67.6</td>
</tr>
<tr>
<td>Yes</td>
<td>71</td>
<td>32.4</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data from the survey indicate SSAs’ lack of knowledge on NYC DOE anti-bullying programs. These outcomes suggest that a communication gap exists between the NYC DOE and NYPD SSDs. SSAs who are unaware of their assigned schools’ anti-bullying initiatives lack the ability to assist the DOE with bullying prevention, hindering their ability to sustain contemporary strategies against bullying.

SUMMARY

Findings from qualitative analysis suggest that some SSAs are aware of the terms that characterize bullying behaviors. This finding is significant since statistical findings from this study show a strong correlation between identification of bullying and the inclination to intervene. SSAs’ definitions of bullying that are analogous with the academic definition might increase likelihood of involvement and intervention. Quantitative and qualitative findings are discussed, along with policy recommendations, considerations for future research, and the utility of law enforcement in preventing bullying.
CHAPTER 8: DISCUSSION OF RESULTS

INTRODUCTION

Central to the discussion on SSAs’ perceptions of their roles, extant research suggests that social behavior is affected by how an individual views his/her role, or the meaning he/she assigns to it (Biddle, 1986). Based on role theory, SSAs were asked how they perceive their roles in their schools’ anti-bullying efforts. Results indicate lack of gradation or variation in responses regarding SSAs’ identification of and involvement in bullying, suggesting that SSAs are highly aware of and likely to intervene during bullying.

BULLYING SURVEY RESULTS

Two research questions guided this study: (1) How do School Safety Agents in NYC public schools perceive their roles in their schools’ anti-bullying efforts?, and (2) How do perceptions of SSAs regarding bullying affect their responses to reported incidents of bullying? The first question examined the ways SSAs perceived their roles regarding bullying prevention. In Chapter 4, Table 4.10 illustrates that the majority of SSAs (89.2%) indicated that they play an important role in preventing bullying in their assigned schools. This finding suggests that SSAs are aware of bullying and view themselves as holding a significant position in the prevention of bullying. However, this outcome might have been influenced by several factors. First, this outcome might be the result of efforts made by the NYPD’s School Safety Division (SSD) to train and inform SSAs on various aspects of bullying and its negative consequences on children. The Life Space Crisis Intervention (LSCI) training provided by SSD might have reinforced the expectations of SSAs to protect the safety of children, outlined in regulations set by the NYPD and the New York City Department of Education (DOE). LSPC training might have also
informed SSAs of the significance of their roles and reach in protecting adolescents since they are in constant contact with students outside of the classroom where bullying often occurs.

Another factor that may have influenced SSA’s awareness of bullying and their high degree of perceived importance with respect to bullying prevention is the increased social awareness of bullying in various areas. Adolescent bullying continues to receive media attention due to reports of victims who commit suicide as a result of bullying. Attention on bullying and its consequences continue to reach various media such as films and newspapers. The increase in social awareness on bullying might have influenced how SSAs perceived their roles in preventing bullying since their occupation places them in constant contact with children and provides them with the ability to prevent its occurrence.

The second research question concerned the association between SSAs perceptions of their roles in terms of importance in bullying prevention and their degree of response to bullying. In Chapter 4, Table 4.11 shows a high rate of involvement from SSAs from most of the vignettes. Results in Table 4.11 parallel those in Table 4.10, which suggest a high percentage of SSAs who view themselves as playing a significant role in preventing bullying. Outcomes illustrated in Tables 4.10 and 4.11 indicate an association between SSA perceptions of their roles and their influence on their degree of responses to reports of bullying. However, these results lacked statistical significance to confirm an association, and therefore required logistic regression and path analyses.

LOGISTIC REGRESSION RESULTS

Secondary research questions were also incorporated into this study. These questions were aggregated in this section since various personal and contextual characteristics of SSAs were examined concurrently in each regression and path analysis. These questions were: What
personal and contextual characteristics of SSAs influence perceptions of their roles in their schools’ anti-bullying efforts? What personal and contextual characteristics of SSAs influence their identification of reported instances of bullying? and What personal and contextual characteristics of SSAs influence their involvement in reported instances of bullying?

The first set of questions examined the relationship between various characteristics of SSAs and their influence on perceptions of their roles regarding bullying prevention. Logistic regression results from Chapter 5 suggest a negative relationship between Asian SSAs and their perceptions, which were significant across all eight vignettes. This finding suggests that Asian SSAs perceive low importance or value concerning their part in preventing bullying. This outcome might influence their degree of involvement in reported instances of bullying. However, statistical significance for this finding does not necessarily merit changes to current NYPD School Safety Division (SSD) anti-bullying efforts, discussed during its Life Space Crisis Intervention (LSCI) training for SSAs. Asian SSAs should be not highlighted as having low perceived importance in comparison to non-Asians, or viewed as needing different or specialized training to reinforce their importance during bullying prevent. Responses from Asian SSAs highlight considerable normal effects of statistical significance, which might be due to the small number of Asian SSAs in the sample. Ensuring that statistical significance is verified requires more Asian SSAs to participate in this type of analysis, or necessitates use of other data not captured in this type of study. It is plausible that cultural norms or views influence how Asian SSAs perceive their degree of importance regarding preventing bullying, requiring comprehensive analysis of factors not captured on the survey used in this study.

The second set of questions examined the association between various personal and contextual factors of SSAs and their identification of bullying. Results from Chapter 5 suggest
that various factors influenced identification of bullying in each vignette including race, rank, geographical area, and bullying victimization of their child. Although various factors were found to be significant with identification of bullying, SSAs’ perceptions of their roles had no association with identification. This finding suggests that an SSA’s level of perceived importance regarding preventing bullying does not influence identification. Although SSAs’ level of perceived importance regarding bullying prevention was found not to be statistically significant, this outcome is significant to the NYPD SSD’s policy on bullying prevention. In chapter 4, Table 4.11 illustrates high levels of identification of instances of bullying from SSAs. These data indicate that SSD’s LPCI training raises awareness and knowledge of bullying in SSAs. It is plausible that other social sources such as media coverage and education materials posted in NYC public schools as required by New York’s Dignity for All Students Act contribute to high levels of awareness and identification of bullying in SSAs (Table 4.11).

This study also examines the relationship between various personal and contextual factors of SSAs and their influence on level of involvement with reported instances of bullying. Results from Chapter 5 suggest that various factors influenced SSAs’ identification of instances of bullying in each vignette, including age, gender, race, family status, marital status, geographical area, and bullying victimization of their child. Although various factors were found to be statistically significant with SSAs’ level of involvement in reported instances of bullying, identification had a consistent association with level of involvement. This finding suggests that SSAs who identify an instance of bullying are likely to intervene. This outcome might be the result of SSDs LPCI training, which educates SSAs on various aspects of adolescent bullying. An overwhelming number of SSAs identified the vignettes as instances of bullying (Table 4.11). These data demonstrate the positive influence that LPCI training has on
SSAs and their identification of bullying. Educating SSAs on various aspects of adolescent bullying raises the level of involvement from SSAs, which is supported from findings during logistic regression analyses.

**PATH ANALYSIS RESULTS**

Using path analysis offers examination of underlying causes of observed relationships during regression analysis. Although various direct and indirect effects were observed for each vignette, a constant outcome was a positive, direct effect between identification of bullying and involvement. A distinction between identification and intervention must be discussed. Identifying an interaction between adolescents as bullying means viewing the exchange as an intentionally harmful behavior. Intervention requires that an individual act to improve a situation and mitigate negative consequences associated with bullying. For example, interactions between adolescents might not be identified as bullying by an SSA. Recognition or lack of it might be due to various individual and contextual factors. An SSA might not identify an interaction between adolescents as bullying but still decide to intervene, and the decision to intervene might be based on employment requirements established by the NYPD’s SSD or the NYC DOE, not personal identification of bullying.

**SUMMARY**

Regardless of the possibilities regarding identification and intervention outcomes among SSAs, results from this study are promising in that a relationship between identification and intervention seems likely. Although the logistic regression and path analyses produced varying results, analyses consistently produced significant results concerning SSAs’ identification and intervention among various instances of bullying. Thus, ensuring that SSAs identify instances of adolescent bullying is vital to maintaining and enhancing a school’s anti-bullying efforts.
This study did not necessarily prove the primary assumption that SSAs’ level of perceived importance affect their decisions to address incidents of bullying. Instead, identification among various instances of bullying proved more insightful into SSAs’ involvement and intervention. Regardless of the possibilities regarding identification and intervention outcomes among SSAs, results from this study are promising in that a relationship between identification and intervention seems likely. Although the logistic regression and path analyses produced varying results, analyses consistently produced significant results concerning SSAs’ identification and intervention among various instances of bullying. Thus, ensuring that SSAs identify instances of adolescent bullying is vital to maintaining and enhancing a school’s anti-bullying efforts.

Exploring and assessing the roles of SSAs is a project in itself. For example, measuring SSAs’ level of perceived importance is difficult since an individual’s perception may be influenced by their unique views of reality and the meanings they assign to things such as bullying. Individual perceptions are also difficult to assess since a measurement of how an individual perceives themselves is a construct that may not be observed directly or easily through a survey instrument due the existence of biases. In addition, SSAs exercise their authority on schools grounds by enforcing rules set by the NYPD and the New York City DOE. This dichotomy may influence SSAs’ perceived level of importance with respect to bullying prevention. Although the primary assumption of this study was not demonstrated in all of the regression and path analyses, the outcomes concerning SSA’s identification and intervention among various instances of bullying remains pertinent.
CHAPTER 9: CONCLUSION

INTRODUCTION

Assigning SROs in schools has become more common over the past two decades (James & McCallion, 2013), a trend that coincided with research that suggests that placing SROs in schools is an effective deterrent to crime and aggressive behaviors such as fighting and bullying (Brown, 2006; James & McCallion, 2013; Na & Gottfredson, 2011; Raymond, 2010; Sampson, 2012). Data from the New York City Mayor’s Management Report (2015) highlight how the presence of SSAs in NYC public schools has helped reduce major crimes and non-criminal incidents from Fiscal Year 2011 to 2015. The decrease in crime and violence in New York City public schools supports the presence of SSAs and their utility in deterring crime, violence, and behaviors associated with bullying. Analyses conducted in the present study produced significant results with respect to the relationship between identification of bullying and intervention, illustrating the influence and important role SSAs play in preventing bullying.

Included in this chapter are limitations of the study and associated results, ethical considerations, policy implications of results, recommendations for increasing bullying awareness for SSAs, and suggested improvements for the NYC Department of Education (DOE).

LIMITATIONS

The results of this study are specific to NYPD SSAs, who are distinct law enforcement officials responsible for the personal safety of all students, visitors, and school staff members in New York City public schools. Although these agents are distinct in their setting and capacity, they share many similarities to law enforcement officials assigned to schools in other jurisdictions, also known as School Resource Officers (SROs). Findings can be generalized to
SROs in various jurisdictions, but limitations and biases in this study exist. However, the existence of biases does not necessarily invalidate the results.

First, a possible limitation of this study is the use the self-reported measures for all the constructs in the survey instrument. SSAs who participated in this study overwhelmingly identified the cases in each vignette as instances of bullying (see Appendix C). The lack of gradation or variation in the responses that focus on SSA involvement in an instance of bullying has merit. The results in Chapter 4 demonstrate that the preponderance of respondents identified the vignettes as cases of bullying. The cause for this lack of variation in the responses may be due to the tendency of individuals to respond to questions in a socially acceptable manner or a product of the NYPD’s SSD commitment to preventing bullying in New York City public schools. It is plausible that the sensitive nature of bullying led to social desirability biases, which denote that respondents identified the vignettes as instances of bullying due to current trends of anti-bullying efforts and heightened media attention that highlights its influence on victims. For example, the NYPD’s SSD has been active in informing and training SSAs on how to protect victims and report bullying. The NYPD’s SSD efforts to prevent bullying might also have influenced the manner in which participants identified the vignettes.

Another potential limitation is the vignettes did not include non-bullying cases that could have influenced variation in responses. However, each vignette asked respondents to identify whether each case was, from their perspective, an instance of bullying, providing respondents the opportunity to respond in a way that was not socially desirable. Irrespective of biases, the greater extent that SSAs can identify an instance of bullying resulted in the higher likelihood that they would intervene in such instances, which is observable in the results of the regression and path analyses.
Given the literature’s suggestion that school characteristics influence SSAs’ perceptions of the roles they play in bullying prevention and the level of involvement during bullying, a measure of the school itself should have been included in this study. Instead, contextual factors used to describe the schools included grade type (i.e., elementary, middle, and high school) and geographic location. The type of school and its location are too broad to characterize a school. Instead, applying the socioeconomic status of a neighborhood might have provided more information about a school. Specifically, census tract data could have been used to illustrate variations in socioeconomic levels in which public schools throughout New York City operate. Examining the socioeconomic level in which each school functioned might have provided more information about its relationship with bullying, and accounted for some variation in SSAs’ perceptions.

POLICY IMPLICATIONS AND RECOMMENDATIONS

Several policy implications for this study are evident as a result of the analyses. The recommendations presented include changes or enhancements to practices of the New York City Department of Education (DOE) and the NYPD School Safety Division (SSD).

NYC Department of Education

To expand on its current anti-bullying efforts, the NYC DOE should offer training and assistance to school officials and law enforcement on how to identify and respond to bullying. For example, the Anti-Defamation League (2015) suggests that the U.S. DOE work with the U.S. Department of Justice (DOJ) to provide training and technical assistance to school staff members on adolescent bullying. In a similar approach, NYC DOE should work with the NYPD SSD to provide training to school staff members and SSAs. This effort should include voluntary certification for school officials and school resource officers. The certification should require an
extensive and comprehensive curriculum on bullying, including definitions of the types of bullying (i.e., physical, verbal, social, and cyber) and clear reporting procedures for school officials and school resource officers. Training curriculum could be conducted online, and require that participants complete a brief quiz at the end of the training session to ensure competency of school-based bullying. The use of a quiz during training sessions provides an opportunity for the NYC DOE and NYPD SSD to assess participants’ awareness of several aspects of school-based bullying such as the definition of bullying, identifying and reporting of instances of bullying, negative effects of bullying, and methods to assist victims. Offering a certification course also informs school officials and law enforcement agencies of new aspects to bullying that surface from credible research and practices.

The U.S. DOE website provides information regarding bullying such as research, data, and press releases. The NYC DOE should take a similar approach and develop an online portal that provides links to state laws, current research, best practices, and data from other agencies or major organizations such as the DOJ, Center for Disease Control and Prevention (CDC), World Health Organization (WHO), and the Anti-Defamation League for NYC DOE employees and NYPD SSAs. For example, links to reports published by the Office of Juvenile Justice and Delinquency Prevention and the Office of Community Oriented Police Services can be posted. The NYC DOE can be the evidence-based hub for what works during anti-bullying efforts. A NYC DOE bullying portal should also be used as a platform to hold quarterly webinars for school officials and NYPD SSD executives, which should include presentations, roundtable discussions, and briefs on current research from varying academic disciplines (e.g., education, child psychology, public administration, and criminal justice) on bullying.
Results from this study suggest that the NYC Department of Education (DOE) should improve and enhance its relationship with NYPD’s SSD with respect to reporting incidents of bullying and forging a stronger partnership between both agencies. For example, results presented in Chapter 7 show that 43% of SSAs (379 of 882) were unaware of the presence of anti-bullying programs, and approximately 24% (210 of 882) were unaware that their assigned schools did not have an anti-bullying program. Results from Chapter 7 also show that 80% of SSAs who indicated the presence of anti-bullying programs in their schools were not asked to participate (228 of 284), and approximately 49% of SSAs (346 of 882) were unaware of the presence of anti-bullying workshops in their schools. These outcomes suggest that the NYC DOE should redesign its current policy on anti-bullying programs and training by including SSAs since they are part of the safety net of adults at schools that can prevent and address instances of bullying.

Raymond (2010) suggests establishing an operating protocol or memorandum of understanding (MOU) between a law enforcement agency and school is a vital element of an effective school-police partnership. The MOU should serve as a framework that clearly states the roles and responsibilities of the SSAs and schools staff members with respect to the reporting and prevention of bullying incidents. For example, the MOU should require SSAs to report bullying incidents to New York City DOE administrators to ensure that both agencies are aware of incidents in and around their schools. Awareness from both agencies will aid in expanding prevention of bullying incidents.

An MOU between the NYPD SSD and the New York City DOE should also support the collaboration between the agencies with respect to anti-bullying training. SSAs who are made aware of adolescent bullying and prevention through training from SSD, accompanied by
awareness of their assigned schools’ anti-bullying programs, are better equipped to combat bullying. The MOU should require SSAs’ to participate in their assigned school’s anti-bullying program. This requirement will forge a strong partnership between NYC DOE staff members and SSAs. NYC DOE staff members and SSAs are part of a greater safety net that cooperates to combat bullying. Requiring SSAs to participate in these programs raises awareness for students who might be uninformed about SSAs’ roles in preventing bullying. Since the NYC DOE offers workshops for their staff members regarding adolescent bullying and prevention, including SSAs in these workshops would increase their awareness of bullying, enhancing current anti-bullying efforts.

**New York City Police Department—School Safety Division**

Chancellor’s Regulation A-412 (Security in Schools) requires SSAs and the New York City DOE to notify the NYPD and then advise the principal/designee of instances of crimes or instances that might threaten student safety. However, the A-412 policy does not necessitate SSAs’ report instances of bullying to the New York City DOE. Therefore, SSAs continue to report instances of bullying directly to the NYPD. The current practice may contribute to the underreporting of bullying incidents and impede the development of partnering strategies to enhance the reporting and prevention of bullying incidents in New York City public schools. Therefore, SSAs should report instances of bullying to NYC DOE staff members to ensure that both agencies are aware of such instances and prevent future occurrences.

The NYPD School Safety Division (SSD) has also made significant efforts to inform SSAs of various aspects of bullying through training from Life Space Crisis Intervention (LSCI), with the purpose of preventing bullying from occurring in NYC public schools. Most SSAs receive a 3-day training course from LPCI. To maintain SSAs’ awareness of adolescent
bullying, the NYPD SSD should offer yearly retraining or recertification. To accomplish this, SSD can provide an online recertification in partnership with LPCI, and require that SSAs complete a brief quiz at the end of the training session to ensure competency of various aspects of school-based bullying. The use of a quiz during training sessions provides an opportunity for the NYPD SSD to assess SSAs’ awareness of several aspects of school-based bullying such as the definition of bullying, identifying and reporting of instances of bullying, negative effects of bullying, and methods to assist victims. This practice will also allow instructors to identify the programs’ strength and weakness for future training sessions.

The NYPD SSD can also send out important messages or bulletins at work sites and through e-mail. The objective of this approach is to increase bullying awareness with SSAs and reinforce training provided by the SSD. These messages should include summaries of evidence-based research and practices, and information on current New York State and local policies regarding adolescent bullying. To supplement ongoing training, the NYPD SSD should consider becoming a member of national organizations dedicated to school safety such as the School Safety Advocacy Council (SSAC). The SSAC offers information and services to school safety departments across the nation, and holds an annual, national conference on bullying and child victimization, which should provide additional information to SSD to inform SSAs. SSAs are required to generate a non-criminal incident report on incidents not normally categorized as crimes, but that is disturbed to school settings as the discretion of SSAs (NYCLU, 2007). Following procedures set by the New York State’s Dignity for All Students Act (DASA), which requires reporting of bullying incidents, SSD could develop a bullying form or report to maintain an electronic database of incidents. This database should mirror the NYC DOE’s reporting system of bullying incidents to track their occurrences. SSD should designate an SSA as a
bullying liaison to each school in the same way that the NYC anti-bullying policy (Chancellor’s Regulation A-832) requires each school to have a bullying liaison (called a Respect for All liaison) to apprise NYC DOE schools of acts of discrimination, harassment, intimidation, and bullying. Similarly, SSD should have a bullying liaison that cooperates with a school’s bullying liaison to inform SSD of bullying incidents.

Results from this study inform policies to enhance NYPD SSD anti-bullying efforts. However, statistical significance might not correspond with policy significance. In this study, individual and contextual factors were found to have a positive or negative affect on SSAs’ involvement with reported instances of bullying. Although some factors were statistically significant, focusing on individual and contextual factors might not necessarily require changes to current policy or practices. For example, focusing on an individual factor such as race that is a statistically significant factor in SSAs’ level of involvement should not be identified as being policy significant in that race should be a focus of policy changes. It is plausible that outside factors contributed to the results, not necessarily requiring a change to current policies of the NYPD SSD. Shifting policies based solely on statistical significance is insufficient, requiring research of various data types and techniques that when used in concert, inform policy.

**SUMMARY**

Findings from this study support use of whole-school or school-wide approaches to preventing bullying, suggesting that the most effective efforts should include school principals, teachers, school staff members, law enforcement officers, students, parents, and communities. However, the inclusion of law enforcement officers should be used as a resource for school staff members and students, and as a deterrent, rather than introducing children to the criminal justice system. In this study, anecdotal evidence from follow-up interviews suggest that many SSAs
have children in the New York City public school system, and view the children they are assigned to protect as their own. Results also indicate that the NYC DOE should evaluate its current approach to preventing bullying, and should incorporate SSAs into practice. Research on the effectiveness of law enforcement officers in schools to deter and prevent bullying is sparse. More research is needed to examine perceptions of officers assigned to schools since results from this study suggest that officers who recognize instances of bullying are more likely to intervene. Research should especially explore how school-based law enforcement personnel perceive their roles in their schools’ anti-bullying efforts, and whether such views influence their decisions to get involved in instances of bullying.
APPENDICES

Appendix A: Bullying Survey Consent Form

City University of New York
John Jay College of Criminal Justice

Consent to Participate in a Research Project

Project Title: Bullying Prevention in New York City Schools: School Safety Agents Perception of their Role

Principal Investigator: Gabriel Paez
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New York, NY 10019
212-237-8850

Study Site: NYPD School Safety Division
28-11 Queens Plaza
Long Island City, NY 11101

Introduction:

Hello, my name is Gabriel Paez and I am a student in the Criminal Justice PhD program at The Graduate Center of the City University of New York (CUNY). I am the Principal Investigator of this research project, titled “Bullying Prevention in New York Schools: School Safety Agents’ Perceptions of their Roles”. You are invited to participate in a research study that will look at School Safety Agents’ perceptions of their role in preventing bullying. You were selected as a possible participant because you are currently a NYPD School Safety Agent.

Purpose of the Current Study:

The purpose of this study is to understand how School Safety Agents’ perceive their role in their assigned school’s anti-bullying initiative. In addition, this study will look at how these perceptions affect responses to bullying incidents. Therefore, a further understanding of these
views will help guide prevention and interventions efforts to make a safer environment for students and all staff members in schools.

**Procedures for the Study:**

If you choose to participate in this study, you will be asked to complete a survey that asks questions about how you view your role in preventing bullying in your assigned school. It will take approximately 30 minutes to complete. Your responses will be used to inform schools and police agencies about bullying.

**Confidentiality:**

Your participation in the study is completely **voluntary** and will not affect your employment with the NYPD. Your responses in this survey are confidential and will not be connected with you as an individual in any reporting of this data. You have the right to refuse to participate in the study at any time.

**Risks of Taking Part in the Study:**

There are no consequences for not participating in this study. In addition, if you choose to participate in this study, it is possible that while answering the questions in the survey that you may feel uncomfortable and/or find the situations related to your experiences as a child. If you feel uncomfortable at any point during the study, you have the option to skip any question you do not feel comfortable answering. Again, you have the right to refuse to participate in the study at any time.

**Benefits of Taking Part in the Study:**

There is no reward for participating. However, you may gain some perspective into how you view your role in preventing bullying, and think about how you respond to certain types of interactions that some children face while in school. Furthermore, you may become aware that you would benefit from further training to aid in the prevention of bullying to better prepare yourself to deal with such instances.

**Contacts for Questions or Problems:**

You can ask any questions that you have about the study now. Should you have any further questions you can call me at 646-644-5520 or email me at gpaez@jjay.cuny.edu. If you have questions about your rights as a research participant, or wish to obtain information, ask questions or discuss concerns about this study with someone other than the primary researcher, please contact John Jay College’s Human Research Protections Program (HRPP) coordinator at 212-237-8961 or jjay-irb@jjay.cuny.edu.

I may publish results from this study, but your name or any identifying characteristics will not be used in any publication. If you would like a copy of the results, I will make them available to you.
Statement of Consent:

I have read the above description of this study and I understand it. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions that I may have will also be answered by the principal investigator of the research study. I voluntary agree to participate in this study.

By signing this form I have not waived any of my legal rights to which I would otherwise be entitled.

________________________   ______________
Participant’s Initials        Date

________________________   ______________
Researcher’s Signature       Date

CUNY UI - Institutional Review Board

Approval Date:    July 16, 2013
Expiration Date:  July 15, 2016
Coordinator Initials:  CMC
Appendix B: Original Bullying Survey

Bullying Survey

Part I: General Questions

Please answer the following questions (Check or fill in blank as needed):

1. In what year were you born? 19____

2. What is your gender? □ Male □ Female

3. Which of the following best describes your ethnic background?
   □ African American □ Native American or American Indian □ Asian/Pacific Islander
   □ Hispanic or Latino □ White □ Other (Specify) ________________

4. What is your marital status?
   □ Single, never married □ Married or domestic partnership □ Widowed
   □ Divorced □ Separated

5. What is the highest degree or level of school you have completed?
   □ High school graduate or GED □ Some college credits, no degree
   □ Trade/technical/vocational training □ Associate degree □ Bachelor’s degree
   □ Master’s degree □ Professional degree □ Doctorate degree

6. Do you have school age children? □ Yes □ No

If you selected yes:
   a. Has your child ever complained about being bullied at school? □ Yes □ No
   b. Has your child ever been accused of bullying other students at school? □ Yes □ No

7. What is your current rank? ________________________________

8. How long have you been in your current rank?
   □ 1-5 years □ 5 -10 years □ 10-15years □ Over 15 years

9. How long have you worked for the School Safety Division?
   □ 1-5 years □ 5 -10 years □ 10-15years □ Over 15 years

10. Where did you work prior to your assignment to the School Safety Division?
    __________________________________________________________

11. What level of school are you currently assigned to?
☐ Elementary ☐ Middle School ☐ High School ☐ Other (Specify)_____________________

12. At your current school site, where do you patrol?
☐ Inside the school ☐ Outside the school ☐ Both ☐ Other (Specify)____________________

13. What borough are you currently assigned to?
☐ Bronx ☐ Brooklyn ☐ Manhattan ☐ Queens ☐ Staten Island

14. Based on your understanding of your job, what should be the primary role of a School Safety Agent? __________________________________________________________
________________________________________________________
__________________________________________________________

15. Based on your experience, how do you define bullying?: __________________________
________________________________________________________
__________________________________________________________

16. In the past 12 months, has a student reported a bullying incident to you?
☐ Yes ☐ No

17. In the past 12 months, have you in your current assignment witnessed a bullying incident?
☐ Yes ☐ No

18. Based on your experience, where in the school building do you think most cases of bullying occur? ________________________________

19. When do you think most bullying occurs: (Please mark only one choice.)
_____Before School _____During School _____After School _____ Outside of School

20. In your experience, are most cases of bullying occurring amongst?
☐ Males ☐ Females

21. In your experience, are most victims of bullying?
☐ Males ☐ Females

22. In your experience, are most offenders of bullying?
☐ Males ☐ Females

23. In your experience, do most cases of bullying involve children of the same age?
☐ Yes ☐ No

24. In your experience, do most cases of bullying involve children of the same gender?
☐ Yes ☐ No
25. In your experience, do most cases of bullying involve children of the same race/ethnicity?  
☐ Yes  ☐ No

26. Does the school you are currently assigned to have anti-bullying literature (e.g., flyers or posters) around the school?  ☐ Yes  ☐ No

If you selected yes, where are the flyers or posters placed? ______________________________

27. Does the school you are currently assigned to have anti-bullying programs?  
☐ Yes  ☐ No  ☐ Unaware

If you selected yes, have you participated in any of the programs?  ☐ Yes  ☐ No

28. Does the school you are currently assigned to offer workshops for students on bullying?  
☐ Yes  ☐ No  ☐ Unaware

If you selected yes, are you invited to attend these workshops?  ☐ Yes  ☐ No

29. Is bullying a serious problem at the school you are assigned to?  ☐ Yes  ☐ No

If you selected yes, has the number of bullying incidents increased in the past 12 months?  
☐ Yes  ☐ No

30. Do you think you play an important role in preventing bullying in your school building?  
☐ Yes  ☐ No

Part II: Please read each vignette and respond (Check one response):

1. You are approached by a student who claims to have been punched and kicked by another student. The student says that he/she is attacked every day behind the school building during dismissal time. The student tells you that he/she is afraid to leave the building.

Is this an incident of bullying?  
☐ Yes  ☐ No

If this is a case of bullying, how serious is this incident?  
☐ Very Serious  ☐ Serious  ☐ Somewhat Serious  ☐ Not Serious

Based on your primary role as an SSA, would you get involved?  ☐ Yes  ☐ No

If you selected yes, what action would you take to address the incident? ______________________________
2. It is dismissal time and you walk outside to patrol the area surrounding the school building. During your patrol you notice a small group of students form a circle around one student. As you approach these children you hear the group yell “gay” at the student who is surrounded.

Is this an incident of bullying?
☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? __________________________
_____________________________________________________________________________________

3. In the hallway you overhear a female student crying. You approach the student and she tells you that a group of students continue to send hurtful text messages to her cell phone calling her a “slut and whore”. The student says that this has been going on for three weeks.

Is this an incident of bullying?
☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? __________________________
_____________________________________________________________________________________

4. You are walking down a hallway and you see one student spit on another student. As you approach the students, you hear the child who spit on the other student say, “give me your iphone or I’m going to punch you”. This is not the first time you hear this student threaten another child.

Is this an incident of bullying?
☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? __________________________
_____________________________________________________________________________________

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5. It is lunchtime and you witness a group of children at a table tell another student “you can’t sit here, the freaks sit over there”.

Is this an incident of bullying?  
☐ Yes  ☐ No

If this is a case of bullying, how serious is this incident?  
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved?  ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? _________________

6. You are conducting a directed patrol of the stairways and you hear a male student call another male student a “bitch”.

Is this an incident of bullying?  
☐ Yes  ☐ No

If this is a case of bullying, how serious is this incident?  
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved?  ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? _________________

7. While standing in front of your school you notice a student crying. You approach the student to investigate. The student tells you that his/her classmates posted cruel messages calling the student fat, ugly, and stupid on their Facebook page.

Is this an incident of bullying?  
☐ Yes  ☐ No

If this is a case of bullying, how serious is this incident?  
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved?  ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? _________________
8. You are approached by student who tells you that other students have been spreading rumors about him/her. The student then shows you letters that have been left in his/her desk. The letters make fun of the way the student dresses and speaks.

Is this an incident of bullying?
☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?
☐ Very Serious ☐ Serious ☐ Somewhat Serious ☐ Not Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? ____________________________
________________________________________________________________________________________

Thank you for your participation in this study.
Appendix C: Revised Bullying Survey

Bullying Survey

Part I: General Questions

Please answer the following questions (Check or fill in blank as needed):

1. In what year were you born? 19____

2. What is your gender? □ Male □ Female

3. Which of the following best describes your ethnic background? (Please mark only one box)
□ African American □ Native American or American Indian □ Asian/Pacific Islander
□ Hispanic or Latino □ White □ Other (Specify) _____________

4. What is your marital status? (Please mark only one box)
□ Single, never married □ Married or domestic partnership □ Widowed
□ Divorced □ Separated

5. What is the highest degree or level of school you have completed? (Please mark only one box)
□ High school graduate or GED □ Some college credits, no degree
□ Trade/technical/vocational training □ Associate degree □ Bachelor’s degree
□ Master’s degree □ Doctorate degree

6. Do you have school age children? □ Yes □ No

If you selected yes: (Please mark only one box)
   c. Has your child ever complained about being bullied at school? □ Yes □ No
   d. Has your child ever been accused of bullying other students at school? □ Yes □ No

7. What is your current rank? □ Level 1 □ Level 3

8. How long have you been in your current rank? (Please mark only one choice)
□ 1- 5 years □ 5 - 10 years □ 10 - 15 years □ Over 15 years

9. How long have you worked for the NYPD-School Safety Division? (Please mark only one box)
□ 1 - 5 years □ 5 - 10 years □ 10 - 15 years □ Over 15 years
10. Have you worked in another division within the NYPD prior to joining the School Safety Division? □ Yes □ No
   If you selected yes, where did you work? __________________________________________

11. What level of school are you currently assigned to? (Please mark only one box)
   □ Elementary □ Middle School □ High School □ Other (Specify) ________________

12. At your current school site, where do you patrol? (Please mark only one box)
   □ Inside the school □ Outside the school □ Both □ Other (Specify) ________________

13. What borough are you currently assigned to? (Please mark only one box)
   □ Brooklyn South □ Brooklyn North □ Manhattan South □ Manhattan North
   □ Bronx West □ Bronx East □ Queens South □ Queens North □ Staten Island

14. Based on your understanding of your job, what should be the primary role of a School Safety Agent? (Please mark only one box)
   □ Safety Expert □ Law Enforcer □ Problem Solver □ Liaison to community resources
   □ Educator

15. Based on your experience, how do you define bullying?: __________________________
   ____________________________
   ____________________________

16. In the past 12 months, has a student reported a bullying incident to you?
   □ Yes □ No

17. In the past 12 months, have you in your current assignment witnessed a bullying incident?
   □ Yes □ No

18. Based on your experience, where at the school site do you think most cases of bullying occur? (Please mark only one box)
   □ Classroom □ Library □ Bathroom □ Gymnasium □ Locker Rooms
   □ Cafeteria or Lunch Room □ Hallways □ Playground

19. When do you think most bullying occurs? (Please mark only one box)
   □ Before School □ During School □ After School □ Non-School Hours
20. In your experience, are most cases of bullying occurring amongst?
   □ Males □ Females

21. In your experience, are most victims of bullying?
   □ Males □ Females

22. In your experience, are most offenders of bullying?
   □ Males □ Females

23. In your experience, do most cases of bullying involve children of the same age?
   □ Yes □ No

24. In your experience, do most cases of bullying involve children of the same gender?
   □ Yes □ No

25. In your experience, do most cases of bullying involve children of the same race/ethnicity?
   □ Yes □ No

26. Does the school you are currently assigned to have anti-bullying literature (e.g., flyers or posters) around the school? □ Yes □ No

If you selected yes, where are the flyers or posters placed? ________________________________

27. Does the school you are currently assigned to have anti-bullying programs?
   □ Yes □ No □ Unaware

If you selected yes, have you participated in any of the programs? □ Yes □ No

28. Does the school you are currently assigned to offer workshops for students on bullying?
   □ Yes □ No □ Unaware

If you selected yes, are you invited to attend these workshops? □ Yes □ No

29. Is bullying a serious problem at the school you are assigned to? □ Yes □ No

If you selected yes, has the number of bullying incidents increased in the past 12 months?
   □ Yes □ No

30. Do you think you play an important role in preventing bullying in your school building?
   □ Yes □ No
Part II: Please read each vignette and respond (Check one response):

1. You are approached by a student who claims to have been punched and kicked by another student. The student says that he/she is attacked every day behind the school building during dismissal time. The student tells you that he/she is afraid to leave the building.

Is this an incident of bullying? □ Yes □ No

If this is a case of bullying, how serious is this incident?
□ Not Serious  □ Somewhat Serious  □ Serious  □ Very Serious

Based on your primary role as an SSA, would you get involved? □ Yes □ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)
□ Do nothing □ Report the incident to the principal or designee

2. It is dismissal time and you walk outside to patrol the area surrounding the school building. During your patrol you notice a small group of students form a circle around one student. As you approach these children you hear the group yell “gay” at the student who is surrounded.

Is this an incident of bullying? □ Yes □ No

If this is a case of bullying, how serious is this incident?
□ Not Serious  □ Somewhat Serious  □ Serious  □ Very Serious

Based on your primary role as an SSA, would you get involved? □ Yes □ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)
□ Do nothing □ Report the incident to the principal or designee

3. In the hallway you overhear a female student crying. You approach the student and she tells you that a group of students continue to send hurtful text messages to her cell phone calling her a “slut and whore”. The student says that this has been going on for three weeks.

Is this an incident of bullying? □ Yes □ No

If this is a case of bullying, how serious is this incident?
□ Not Serious  □ Somewhat Serious  □ Serious  □ Very Serious
Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

☐ Do nothing  ☐ Report the incident to the principal or designee

4. You are walking down a hallway and you see one student spit on another student’s face.

Is this an incident of bullying? ☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?

☐ Not Serious  ☐ Somewhat Serious  ☐ Serious  ☐ Very Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

☐ Do nothing  ☐ Report the incident to the principal or designee

5. It is lunchtime and you witness a group of children at a table tell another student “you can’t sit here, the freaks sit over there”.

Is this an incident of bullying? ☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?

☐ Not Serious  ☐ Somewhat Serious  ☐ Serious  ☐ Very Serious

Based on your primary role as an SSA, would you get involved? ☐ Yes ☐ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

☐ Do nothing  ☐ Report the incident to the principal or designee

6. You are conducting a directed patrol of the stairways and you hear a male student call another male student a “bitch”.

Is this an incident of bullying? ☐ Yes ☐ No

If this is a case of bullying, how serious is this incident?

☐ Not Serious  ☐ Somewhat Serious  ☐ Serious  ☐ Very Serious
Based on your primary role as an SSA, would you get involved? □ Yes □ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

□ Do nothing □ Report the incident to the principal or designee

7. While standing in front of your school you notice a student crying. You approach the student to investigate. The student tells you that his/her classmates posted cruel messages calling the student fat, ugly, and stupid on their Facebook page.

Is this an incident of bullying? □ Yes □ No

If this is a case of bullying, how serious is this incident?

□ Not Serious □ Somewhat Serious □ Serious □ Very Serious

Based on your primary role as an SSA, would you get involved? □ Yes □ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

□ Do nothing □ Report the incident to the principal or designee

8. You are approached by a student who tells you that other students have been spreading rumors about him/her. The student then shows you letters that have been left in his/her desk. The letters make fun of the way the student dresses and speaks.

Is this an incident of bullying? □ Yes □ No

If this is a case of bullying, how serious is this incident?

□ Not Serious □ Somewhat Serious □ Serious □ Very Serious

Based on your primary role as an SSA, would you get involved? □ Yes □ No

If you selected yes, what action would you take to address the incident? (Please mark only one box)

□ Do nothing □ Report the incident to the principal or designee

Thank you for your participation in this study.
SECOND ENDORSEMENT

Deputy Commissioner, Strategic Initiatives to Police Commissioner. November 26th, 2013. Contents Noted. This research offers a unique opportunity to better understand how the Department’s school safety agents view their role in preventing bullying and whether these views affect their response to instances of bullying. Recommend PRELIMINARY APPROVAL of the request for access to school safety agents contingent upon inspection of the survey instrument and that P.O. Paez work with the Department’s School Safety Division to manage the logistics of conducting the survey. Forwarded for your approval.

APPROVED

Dec 04, 2013

Raymond W. Kelly
Police Commissioner

Michael J. Pellegrino
Deputy Commissioner
Appendix E: CITI Certification for research with human subjects

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For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

https://www.citiprogram.org/members/learnersII/crbystage.asp?strKeyId=F2AC35DE-30... 7/11/2013
REFERENCES


New York State Education Department. (2015).


Washington, DC.


