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Kentucky SRO Programs: An Examination of Impact on Reported Criminal Violations and Board Violations

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DEDICATION

This dissertation is dedicated to my wife Sandy and children Erin and Patrick. Without their love, support, and patience, its completion would not have been possible. I would also like to thank my parents, Greg and Orita for providing me with a strong moral foundation, a sense of confidence, and the determination to succeed.

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ABSTRACT

School violence has become a focal point throughout the United States, sparked by violent mass killings at schools throughout the nation. In response to these horrific attacks, school officials, law enforcement, parents, and others have taken measures to improve school safety. One of the most substantial efforts includes the utilization of specially trained police officers (SROs) in our schools. Currently, there are approximately 230 SROs assigned to Kentucky schools (KASRO, 2013) and an estimated 20,000 SROs nationally (Myrstol, 2010). Regardless of the importance of maintaining safe schools and an environment that is conducive to learning, relatively little research has been conducted examining the effectiveness of these programs and the variables that may influence those findings (Raymond, 2010). This research focuses on the impact SROs have on reported criminal and board violation rates at predominantly rural Kentucky high schools. The research uses two studies to evaluate this impact. One study involves a pre-post examination comparing high school violation rates prior the implementation of a full-time SRO and then after their implementation. The second study is a comparative examination of violation rates from high schools without SROs to violation rates from high schools with full-time SROs. The findings in both studies indicate no change in reported criminal violation rates between school populations without SROs and those with SROs; however, results indicate lower board violation rates at schools with full-time SROs when compared to schools without SROs. Variables rarely discussed but potentially impacting reported violations such as law enforcement presence are discussed, and variables commonly thought to impact violation rates such as

percentages of minority and low income students are examined. Potential implications are debated.

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CHAPTER I

INTRODUCTION

"Those who do not learn from the mistakes of history are doomed to repeat them" (Santayana, 1905, p. 82). There has not been a single fire related death in U.S. schools since the tragic fire that took place at Our Lady of the Angels school in Chicago on December 1, 1958. The fire resulted in sweeping changes in school fire safety regulations and programs that are still enforced to this date (University of Texas, 2009). In the past decade alone, nearly 300 violence related deaths have occurred in U.S. schools (National School Safety and Security Services, 2011).

In response to these attacks, school and law enforcement officials have implemented policies, procedures, and programs designed to prevent further incidents. These include measures such as: conducting school safety assessments; monitoring of entrance points; visitors; parking lots; common areas; establishing acceptable disciplinary protocols; anti-bullying campaigns; obtaining parent and community support; encouraging students to accept responsibilities in school safety; and enhancing student's emotional stability. It also includes the use of electronic equipment, such as metal detectors and surveillance cameras to enhance security measures (Garcia, 2003; Jennings, Khey, Maskaly & Donner, 2011).

One of the most significant measures implemented to enhance school safety and reduce violence is the implementation of school resource officers (SROs). Bernard (2012) states that court decisions and statutes have made SROs a critical element in creating and maintaining safe school campuses. These programs appear to have grown in popularity and currently there are approximately 230 SROs in Kentucky (KASRO, 2013).

Estimates further indicate there are as many as 20,000 SROs assigned to schools throughout the United States (Myrstol, 2010).

SROs and SRO Programs

According to the North Carolina Center for the Prevention of School Violence (CPSV, 2011) a school resource officer is defined as:

> A certified law enforcement officer who is permanently assigned to provide coverage to a school or a set of schools. SROs are intended to function as a comprehensive resource for their school or schools and not merely serve in a typical law enforcement role. Ideally the SRO is trained to perform three roles: law enforcement officer, law related counselor, and law related education teacher (para.1).

This three pronged focus is commonly referred to as the "Triad" approach. In addition to the Triad concept, many law enforcement officials believe SROs should focus on developing relationships with the students, parents, staff, and community members. Many believe this focus on relationship building is the primary key to SRO program success in schools (Atkinson, 2000; Finn & McDevitt, 2005). SROs are predominantly located on middle and high school campuses, and although many of these officers serve in urban communities, they can frequently be found in rural settings as well (CPSV, 2011). Approximately three-fourths of Kentucky's counties have active SRO programs (KASRO, 2013).

Program Effectiveness

Many school and law enforcement officials believe SRO programs are effective, and multiple studies back these assumptions (CPSV, 2011; Eisert, 2005; May, Fessel, &

Means, 2004; SSID, 2004). This positive perception is supported by sporadic survey data that has found teachers and students perceive their schools to be safer following the assignment of SROs (SSID, 2004). The North Carolina Center for the Prevention of School Violence (2011) reported that 62% of school administrators rated hiring SROs as the most effective strategy for safe schools, and an additional 26% of respondents rated SROs as the second best safety approach.

The majority of these studies examine the perceptions of SROs, school officials, parents, or students in determining the effectiveness of SRO programs (CPSV, 2011; Eisert, 2005; May et al., 2004; SSID, 2004). Although many feel that SRO programs should be viewed as effective, there are those who believe they potentially have a negative impact on the students the programs claim to serve and protect (NYCLU, 2009; Dohrn, 2002).

Individuals skeptical of a positive impact from SRO programs often express concern about zero tolerance policies, associating SROs with these policies, and concerns about the creation of a prison pipeline where increases in disciplinary actions, especially criminal charges against minor offenses by students, place these youthful offenders into the criminal justice system. Opponents additionally claim that these actions create a prisonlike environment in schools along with other negative effects (NYCLU, 2009; Dohrn, 2002). These skeptics and others engage in a great deal of debate about whether SROs should be assigned to schools and if so, how they should be utilized. In some cases, this debate exists between SROs and the school administrators they serve (Lambert & McGinty, 2002).

Purpose Statement

The purpose of this study is to examine student populations from predominantly rural Kentucky schools with and without school resource officers and determine if the SROs involvement had any impact on school safety. This was accomplished through two analyses that examined student populations from schools with full-time SRO programs comparing results to student populations from schools without any routine SRO presence. The SROs in these selected schools were assigned to primarily serve one particular high school, and the officer spent 75% or more of their time and efforts at that school. Both analyses focused on school generated reports of criminal violations and board violations occurring at the school. The first analysis utilized a comparative study that focused on the populations of Kentucky High Schools with full-time SROs to Schools without SROs during a one school year period. A second analysis utilized a pre-post program analysis of violations from a second group of Kentucky High Schools during a one year period prior to the implementation of an SRO and during the third year following implementation of the SRO.

This research recognizes violations of school safety to include any behavior that violates a school's mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions, and disorder. This definition mirrors the definition of school violence by the North Carolina Center for Prevention of School Violence (2011). This broad definition allows the inclusion of violent and non-violent criminal acts, board violations, and other acts or behaviors that are in violation of school policies and are not conducive to a positive learning environment.

The secondary data focuses on criminal activity and board violations as identified in the Kentucky Department of Education and Kentucky Center for Safe School's annual reports

Research Questions

1. Does the implementation of full-time SROs impact the frequency of criminal violation rates reported by predominantly rural Kentucky high schools?
2. Does the implementation of full-time SROs impact the frequency of board violation rates reported by predominantly rural Kentucky high schools?

Significance of the Study

In the past, schools were considered a safe haven where students could come to learn and grow into productive citizens. Since the tragic school shootings at locations such as: Columbine, Colorado; Paducah, Kentucky; Jonesboro, Arkansas; Red Lake Minnesota, and New Town, Connecticut, mass media has focused a great deal of attention on school safety. This focus has led efforts such as SRO programs to become the attention of individuals and entities concerned about the safety of our youth. At times, this concern has been accompanied by a growth in governmental funding, allowing the numbers of SROs to substantially rise.

In 2000, the Department of Justice committed to spend 68 million dollars to hire 599 SROs in 289 communities (Girouard, 2001). This price tag excludes additional expenditures for SRO programs by school systems and law enforcement agencies throughout the nation. Regardless of these efforts and expenditures, little research has been done to identify the impact, if any, these programs have on student misconduct, criminal behavior, or other school related disciplinary offenses following program

implementation. This sudden increase in programs without sufficient examination of impact could result in concerns of law enforcement succumbing to a means over ends syndrome, where more emphasis is placed on improvement efforts than on the substantive outcome of the work (Goldstein, 1979). Multiple research projects have, however, examined the impact on perceptions of safety in schools, which is undoubtedly an important part of school safety, but the research concerning the impact on student behavior is lacking.

Regardless of this absence of research, some believe it is foolish to attempt to examine pre and post SRO implementation studies comparing frequencies of violations and similar data (Schuiteman, 2005); however, if this type of research can be successfully accomplished, it will prove beneficial and provide insight through an examination of relatively uncharted areas. The resulting knowledge would aid school and law enforcement officials in achieving effective utilization of their limited resources, result in improvements in existing and future SRO programs, and serve as a conduit to spark further research.

CHAPTER II

LITERATURE REVIEW

School Safety

School safety is an important criteria for the establishment of a quality learning environment; however, it is a relatively new area of study that has been brought to the forefront by repeated cases of violence, including active shooter situations (Borum, Cornell, Modzeleski, & Jimerson, 2010; Cornell & Mayer, 2010). The ensuing rise in media coverage and public concern have resulted in significant changes in school discipline and school safety measures throughout the nation (Borum et al., 2010). In reality the percentages of violence related deaths occurring at schools is extremely small; however, the frequency in victimizations of students and staff at schools is considerable.

During the 2009 to 2010 school year, there were 33 students, staff, and non-student, school associated violent deaths (Bureau of Justice Statistics, 2012). However, in 2010, 828,000 students ages 12-18 were victims of non-fatal crimes. This included 470,000 thefts and 359,000 acts of violence, with 91,000 being considered serious violent incidents (Bureau of Justice Statistics, 2010). Additionally, from the five year period between 1998 and 2002, teachers were the victims of approximately 234,000 non-fatal crimes at schools. This included 144,000 thefts and 90,000 violent crimes (U.S. Departments of Education and Justice, 2004). Further research shows that nationally over 29% of students had their property stolen or deliberately damaged on school property one or more times during a previous 12 month period (Center for Disease Control, 2006). Between seven and nine percent of students reported that they had been threatened or injured with a weapon between 1993 and 2005 (Dinkes, Cataldi, Kena, &

Baum, 2006). In 2009, approximately 31% of students in grades 9 through 12 reported that they had been in one or more physical fights on school property during the previous 12 months (Bureau of Justice Statistics, 2010).

School Safety Assessments and Common Concerns Identified

In an effort to improve safety, many schools are utilizing school safety assessments to identify areas that need improvement. The National School Safety Center (2011) defines a school safety assessment as "a strategic evaluation and facilities audit that is used to identify emerging and potential school safety problems. This includes an examination of practices and places that are often overlooked due a lack of understanding or an assumption that locations are safe and trouble free" (p. 1). Key factors are examined to determine potential impact on school issues such as educational mission, student and staff safety, school climate, school attendance, and the overall campus security. Those key factors examined include:

- Existing school safety plans
- Crisis response and disaster mitigation plans
- Anti-terrorist measures
- The condition and safety of the facilities
- The use of environmental design to prevent crime and disruption
- School safety policies, procedures and practices
- School discipline practices
- Employee recruiting, selection, supervision and training practices
- The presence of gangs, weapons, drug and alcohol abuse

- The prevalence of bullying, hazing, hate-motivated behaviors and other forms of harassment
- Social climate (staff, student and parents)
- School/law enforcement partnerships and other safety-promoting partnerships
- Emerging school safety trends, issues and concerns

Gateskill (2004) and the Kentucky Center for School Safety conducted 255 multi-faceted assessments in 109 different school districts throughout Kentucky. Although these assessments examined multiple areas, they largely focused on school security and crime prevention efforts, including reducing school violence. The process examined the perceptions of students, staff, and parents, as well as physical site assessments of the facilities themselves in an attempt to identify issues that warranted improvement. Although these locations varied in size, demographic makeup, and geographic location, there were several common safety and security issues that prevailed. These issues were found to be more consistent when comparing similar schools. Gateskill (2004) took this information and identified key areas of concern as well as the most common strategies for addressing them. Each of these issues differed significantly; however, each was also considered a priority for enhancing the school's climate and culture (Gateskill, 2004). Common concerns and tactics to address them identified by Gateskill's research included those noted in the following sections

Lack of teacher/staff connectivity with the students. Students frequently had feelings of disconnection with the adults in the building which included an absence of a staff member they believed they could turn to if the need arose. This issue was identified as resulting from inconsistencies in the actions of the staff and a perceived lack of caring.

Research and accepted strategies recognize the importance of creating a bond between students and at least one staff member. It is imperative that these relationships are created and maintained as they are considered one of the most critical steps for establishing an environment conducive to open communications. Without open communication, it is unlikely that school officials will learn about potential problems with students before incidents occur**.** To resolve this issue, efforts should be made to ensure that at least one staff member has established a quality relationship with and serves as an advocate for each student in the school (Gateskill, 2004).

Inadequate active supervision of students when in transition. Gateskill (2004) found that most schools do a good job of monitoring students in the classroom; however, deficiencies were prevalent during the non-classroom modes of the day. Criminal Law of Kentucky (Supervision of Pupils' Conduct, 2007) addresses the requirement for school officials to adequately supervise students in school.

> KRS 161.180 (1990, July 13). Supervision of Pupils' Conduct.
>
> (1) Each teacher and administrator in the public schools shall in accordance with the rules, regulations, and bylaws of the board of education made and adopted pursuant to KRS 160.290 for the conduct of pupils, hold pupils to a strict account for their conduct on school premises, on the way to and from school, and on school sponsored trips and activities.
>
> (2) The various boards of education of the Commonwealth of Kentucky, and the principals of the public schools, may use teacher's aides in supervisory capacities, such as playground supervision, hallway supervision, lunchroom and cafeteria supervision, and other like duties, including, but not limited to, recreational

> activities and athletic events, relating to the supervision and control of the conduct of the pupils; and while so engaged, such teacher's aides shall have the same authority and responsibility as is granted to and imposed by law on teachers in the performance of the same or similar duties (Supervision of Pupils' Conduct, 2007).

Administrators must make it clear that the active supervision of students during these non-classroom modes is a legal requirement as well as a necessity for maintaining a safe school environment. School administrators must also ensure that teachers are effectively performing these duties and hold teachers accountable when they do not perform these tasks (Gateskill, 2004).

Drug and alcohol abuse. The majority of high-schools and some middle schools assessed reported having students who were abusing alcohol and drugs. The prevalent drugs included alcohol, marijuana and prescription drugs; however, there were differences in the locations these drugs were consumed. Marijuana was reported to be typically used off campus with students then coming to the campus under the influence. Alcohol and prescription medications were reported to be commonly consumed while on campus. Furthermore, alcohol was also said to be typically disguised in soda and water containers.

Gateskill (2004) discussed that in order to combat this problem school administrators must first recognize they have a problem and then develop a plan that utilizes all available resources. These resources would include mental health and substance abuse counselors, law enforcement officers, parents, students, and others that could offer invaluable insight into the problem. Procedural changes should be implemented such as not permitting open containers or allowing outside beverages into

the school, not permitting students to leave for lunch, and supervising and restricting break locations. Professional development and education for staff members should also be provided which discusses drug abuse and other relevant problems (Gateskill, 2004).

Bullying/harassment. Bullying and harassment were common in many of the schools assessed in Kentucky (Gateskill, 2004). The schools had detailed policies and procedures addressing the issue of bullying; however, the offenses still persisted and in some cases were growing. The frequency of electronic communications was believed to exacerbate the problem**.** Gateskill (2004) reported that female students appeared to be extremely skilled in using electronic media to demean, ostracize, or embarrass one another, and, in some cases, males utilized electronic communications to sexually harass females.

Kentucky's safe school assessments, as well as other programs throughout the nation, have recognized the importance of educating staff and students concerning bullying and harassment. They have also recommended that these actions be taken seriously and addressed appropriately on a consistent basis. This would include the development of policies to ensure that the problem is addressed at every school. Studies indicate that bullying affects one in three American school children from grades 6 to 10. Harassment is reported to affect 83% of female students and 79% of the male students, while research indicates that 6 out of 10 American teenagers witness bullying in school once a day (NEA, 2012). Students reportedly experience extreme fear and stress including: fear of going to school, fear of using the bathroom, fear of taking the bus, physical symptoms of illness, and a diminished ability to learn (NEA, 2012).

There is no doubt that bullying has been identified by many experts as a significant problem that must be addressed by school officials when developing plans to create a safe school environment. Even the behavior of being a bully itself can escalate into serious problems in adulthood, as 40% of boys identified as bullies in grades 6 through 9 had three or more arrests by age 30 (NEA, 2012).

Consistency in rule enforcement. Many of the surveys received by the Kentucky Center for Safe Schools reported that rules were not consistently enforced and many teachers had given up on enforcing rules due to the lack of participation by other teachers. Experts seem to agree that rules need to be equally and consistently enforced.

Some claim that officials have gone overboard with the utilization of heavy handed and aggressive tactics to maintain security in schools; yet, zero tolerance policies have been used in schools throughout the United States. Schools are reported to have implemented safety measures including the practice of frisking students as they arrive on campus, and in some cases, utilizing metal detectors in conjunction with these policies. Additionally some argue that these strict school discipline policies are often biased and make matters worse by actually contributing to school violence (Casella, 2003) and that zero tolerance only punishes those that need the most help: the poor, underachieving, socially isolated students who come from violent homes and neighborhoods (Nelson, 2008).

Building access control. Gateskill (2004) and the Kentucky Center for School Safety discovered that many of Kentucky's schools were built without safety and security in mind. Often these schools, especially the older buildings, had multiple entry points

that could not be observed or controlled by school officials, resulting in significant security concerns.

Other schools had taken the initiative to establish procedures requiring visitors to utilize sign in and a single entry point that was monitored and controlled by school staff. Some locations had even re-designed the primary entry points enabling visitors to be admitted into the school from a secure holding room after properly registering with officials. Yet, problems still existed, as many schools had not properly educated or trained their students and staff on procedures including being alert for potentially unauthorized visitors and even when these procedures were in place. Therefore, many individuals were complacent about enforcing the rules and denying access to those visitors (Gateskill, 2004).

Additionally, a former Kentucky school security site assessor reported that many entry points that were espoused to be restricted routinely failed to maintain a secure status. Typical problem areas included exterior kitchen entrances and teacher exit points leading to break areas. These doors were often kept propped open with door wedges or even rocks for ease of re-entry (P. Root, personal communication, December 6, 2011). The implementation of SROs in schools is one of the measures that many schools have taken in an attempt to identify and address many of these shortcomings.

Police in Schools

One of the most substantial measures utilized in an attempt to enhance school safety and reduce violence has been the implementation of school resource officers. SROs are recognized by many as a critical element in creating and maintaining a safe school campus (Bernard, 2012). There are approximately 230 SROs in Kentucky

(KASRO, 2013), and there are as many as 20,000 SROs in schools throughout the nation (Myrstol, 2010).

History of SROs

Prior to the 1950s, the concept of school resource officers was foreign to the United States. The first recognized SRO program was started in 1953 in Flint, Michigan. According to the National Association of School Resource Officers (NASRO, 2010), this initial program's overall goal was to improve the relationship between the police and youth. The program placed officers in the schools who served as teachers and counselors on a full-time basis. It was deemed a success and became a model program that developed throughout the United States.

In 1966, Saginaw, Michigan began an SRO program that varied in approach. This program did not assign the SRO to one school; it had them cover all of the schools in the city. The program was deemed to be not as effective in improving the relationship between police and youth, and officials quickly realized the problem was because they had spread their SROs too thin (Sherling, 1998).

Cincinnati, Ohio also developed one of the earlier programs which followed the now accepted Triad approach to SRO policing. Typical law enforcement activities were minimized, and the program was considered a success and resulted in improving the attitudes towards police.

SRO programs quickly spread throughout Florida in the 70s and continued to gradually spread across the United States; however, their numbers were still relatively small. In the 1990s, increasing fear about school violence coupled with an interest in community policing and the availability of federal funding made the implementation of

SRO officers in schools a viable option. This created a rapid rise of SRO officers in schools and a resurgence of interest in SRO programs throughout the United States (NASRO, 2010).

During this period, data from the Bureau of Justice Statistics (2012) demonstrated a significant increase in the number of local police agencies employing full-time SROs. By the late 1990s approximately one-third of local police and sheriff's departments employed SROs, and by 2003, an estimated 43% of local police departments and 47% of sheriff's departments in the United States employed full time SROs (Myrstol, 2010).

SRO Duties and Responsibilities

According to the North Carolina Center for Prevention of School Violence, there are three primary roles described as the 'Triad' approach that define a SROs role in schools (CPSV, 2011). These include the role of law enforcement officer, law-related counselor, and law-related education teacher. In conjunction with these roles, SROs perform other services to support the teachers and staff, as well as being an 'active listener,' and serve as an approachable source for students to discuss concerns they have regarding various issues (CPSV, 2012).

Law Enforcement Officer. SROs are law enforcement officers whose primary purpose is to keep the peace and maintain a productive learning environment. This includes protecting the lives and property of the students, staff, and community. These actions involve identifying and deterring potential threats or acts of school violence and enforcing violations of criminal laws. They also perform security functions such as monitoring hallways and common areas and providing security at school functions.

Additionally, SROs serve as a conduit with other law enforcement for information and intelligence regarding potential criminal activity.

Law Related Counselors. SROs are law-related counselors who provide guidance on issues to students inside and outside of the school environment. This includes providing information to students and staff regarding legal and criminal matters, such as what actually constitutes illegal behavior and students and staff rights regarding criminal matters. SROs also provide guidance on other matters and information on programs, support groups, and other available services.

Law Related Teachers. SROs are law related teachers who provide schools with an additional educational resource by sharing their expertise in the classroom. This includes assisting teachers with classroom projects or lessons, or even personally providing instruction on topics within their area of expertise.

Other Roles. SROs assist teachers to educate students about responsibility and other life skills. SROs also provide additional avenues for reaching students, including supplementing counselors' efforts to help students by not only providing advice, but also through the establishment of quality relationships with students, their guardians, and other members in the community. Many SROs maintain open door policies offering students someone they can approach about issues or concerns they have, or just being someone to whom they can simply talk (CPSV, 2012). This approachable posture is intended to allow SROs the ability establish positive relationships with students which many believe is critical for program success.

Community Oriented Policing

Effective SRO programs are purported to be a form of community oriented policing at its finest. The Community Oriented Policing Services defines community policing as "a philosophy that promotes organizational strategies which are designed to support the systematic use of partnerships and problem solving techniques to proactively address immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime" (COPS, 2011a, p.1). They further describe community policing as being comprised of three key components: community partnerships, organizational transformation, and problem solving (COPS, 2011a, p.1).

Walters (1993) states that the establishment of creditability in law enforcement is necessary to set the stage for instituting the two police strategies embodied in community oriented policing: response to incidents and problem oriented policing**.** Neither strategy is said to take precedence over the other; they are actually reported to be interdependent with each other for achieving program success.

Research on Community Oriented and Problem Based Policing

Community oriented policing is a broad concept with which many in law enforcement are familiar. Trojanowicz, Kappeler, Gaines, and Bucqueroux (1998) describe community policing as an approach "based on police officers and private citizens working together in creative ways that can help solve contemporary community problems related to crime, fear of crime, social and physical disorder, and neighborhood conditions" (p. 3). This strategy is not a new one, and its focus on establishing relationships is reported to improve the image of law enforcement, increase dialog

between police and the community, and improve civilian participation in efforts to reduce crime and other problems (Trojanowicz, Kappeler, Gaines, & Bucqueroux, 1998).

Existing research has evaluated the effectiveness of community and problem oriented policing programs with varying results. Connell, Miggans, and McGloin (2008) examined an officer-initiated community policing program in a suburban police department. The agency utilized officers assigned to the program to aid in the design and implementation of the agencies' community policing model. Researchers examined interviews and crime data for the location impacted by the program for an eight year period, along with data from two comparable areas that had not implemented the program. The control locations had similar demographics and were located in the same county. Results of the study indicated significant reductions in violent and property crimes in the targeted area, but no reduction in the areas where the program had not been implemented.

Weisburd, Telep, Hinkle, and Eck (2010) conducted a Campbell systematic review to examine the effectiveness of problem oriented policing in reducing crime and disorder. They examined 5,500 articles and reports during their search and located only ten methodologically rigorous evaluations that met their standards. These ten were analyzed using meta-analytic techniques, and the researchers found a modest yet significant impact on crime and disorder. They also evaluated pre/post comparison studies which indicated an overwhelmingly positive impact.

Research conducted by Mazerolle, Soole, and Rombouts (2007) indicated that proactive interventions involving partnerships between the police and third parties such

as community entities appear to be more effective at reducing drug and nondrug problems than reactive/directed approaches.

Although the majority of the law enforcement community and scholars have traditionally believed that homicide is largely immune from police suppression efforts, White, Fyfe, Campbell, and Goldkamp (2003) conducted research examining data from 75 California cities which indicated reductions in violence, including homicides, could potentially be accomplished by employing problem oriented strategies and garnering citizen involvement.

An examination of Operation Ceasefire, a problem oriented policing program designed to reduce youth homicide and firearms violence in Boston, was conducted by researchers to determine its effectiveness. Operation Ceasefire's deterrence strategy focused on a small number of chronically offending gang youth that were believed to be responsible for much of Boston's youth homicide problem. Researchers discovered significant reductions in homicides, assaults with guns, and shots fired complaints (Braga, Kennedy, Waring, & Piehl, 2001).

When examining community oriented policing and the effectiveness of these programs, researchers must recognize that communities have different problems, and therefore, community oriented policing programs implemented by local law enforcement will often vary to meet these individual community needs. Community oriented policing was never intended to be a one-size-fits-all type of policing (Eck & Rosenbaum, 1994; Trojanowicz & Bucqueroux, 1988; Rosenbaum, 1994); therefore, the effectiveness of individual programs can be expected to vary, and some community oriented policing programs are not going to be successful. Research also shows that effective program

implementation can be difficult as well. Stephens (1996) discusses the difficulty of implementing community oriented and problem oriented policing and the necessity for traditional law enforcement activities to accompany the new ideas being proposed. Stephens (1996) also discusses the importance of police placing a greater deal of emphasis on the outcomes than has been done in the past.

In a study by MacDonald (2002), the FBI's Uniform Crime Reports and city level census data were used to examine economic and political determinants of robbery and homicides in 164 American cities. The research found that community oriented policing had little effect on the control or decline of violent crime rates. Proactive policing tactics related to arrest however, had an inverse effect on violent crime.

Researchers must also recognize that their method of evaluation can have a significant impact on their research findings. Research conducted by Rutgers, Harvard, George Mason, and Hebrew University Law School examined focused deterrence strategies targeting gang and group involved violence, drug markets, and individual repeat offenders. The studies utilized meta-analysis that demonstrated statistically significant improvements; however, the strongest program effect sizes correlated with the weakest research designs. This leads to the conclusion that although the focused deterrence strategies showed promise, a more rigorous evaluation method needs to be used (Braga & Weisburd, 2012).

The Importance of Building Relationships in Law Enforcement

Through the examination of existing research, articles, training programs, and recommended practices, researchers may come to the conclusion that these programs are successful due to the relationships developed between the SROs and the students they

strive to protect. This interaction is purported to result in increased feelings of trust between students and police officers and have other advantages within and outside of the school setting that can endure throughout the student's lives.

McDevitt and Panniello (2005) examined data from 907 students and found a statistically significant relationship between the number of student conversations with an SRO and the student's positive opinions of the SRO, as well as their feelings of comfort in reporting crime and the student's perceptions of being safe while at school. Furthermore, McDevitt and Panniello (2005) testified that SRO programs should concentrate on building positive images of SROs with the students they serve.

The Building Communities of Trust initiative, supported by the U.S. Department of Justice, discussed the importance of law enforcement building and maintaining trusting relationships with immigrant and minority communities to prevent acts of crime and terrorism. They described community policing and the establishment of relationships as successful strategies by law enforcement to collaborate and partner with local communities, especially immigrant and minority populations (Wasserman, 2010). Bringle, Games, Ludlum, Osgood, and Osborne (2000) discussed the need to obtain community engagement by focusing available resources on pressing youth problems.

Longacre (2007), whose primary area of research includes university/school/ community collaborations, youth-at-risk programs, and student development programs, discussed methods to reach youth that are on the verge of delinquency. Longacre (2007) reported that in many situations the success of getting young people involved in programs is heavily dependent on the relationship between the young people and police officers. Longacre (2007) stated that police officers can be a tremendous help to at-risk youth by

becoming involved in after school programs and informal efforts to establish relationships. Longacre (2007) additionally predicted that relationships would likely be dependent on the officers reaching out to at-risk youth and then taking steps to alleviate any fears, suspicion, or hostility that might exist. Longacre (2007) purported that as a result of these initial communications the developing personal relationships could create substantial benefits to at-risk youth.

Regardless of the belief many have concerning the positive results from developing relationships between police and the community they serve, others have a less favorable view of the effectiveness of this approach and law enforcement's ability to develop these bonds. Lane (2009) found that law related counseling and monitoring/role modeling did not result in any significant impact on incidents of student violence above and beyond socioeconomic status. Furthermore, Lane (2009) suggested that large percentages of time should not be invested in building rapport between police and students while teaching about the law. Torres and Schaffer (2000) warn that building relationships is one of the most challenging aspects of any alliance.

Multiple School Assignments

Concerns with program effectiveness are noted in a study conducted by National Association of School Resource Officers (NASRO, 2001). This study examined 717 surveys from various SRO programs throughout the country. The research found that 49% of the SROs were responsible for two or more schools, and 19% were responsible for five or more schools.

Recalling law enforcement had previously discovered that spreading SROs too thin was a problem as early as 1966 in Saginaw, Michigan (NASRO, 2010) this finding

gives rise to questions about the true commitment of some law enforcement agencies to these programs. However, researchers must also take into account the reality that law enforcement agencies are currently operating on budgets that have been significantly cut (COPS, 2011b), and since salaries are the largest expenditure for law enforcement agencies (Wexler, 2010), departments often reduce their numbers in an attempt to operate within their allotted budgets (COPS, 2011b).

SRO Program Effectiveness

Multiple studies indicate that SRO programs are successful. The Center for the Prevention of School Violence (CPSV, 2011) found that 62% of school administrators rated hiring SROs as the most effective strategy for safe schools, and an additional 26% rated SROs as the second best safety approach. A two-year longitudinal study by Justiceworks (2001) of SROs in nine New Hampshire schools found that two-thirds of students and teachers who felt unsafe before the arrival of SROs reported feeling safer following their deployment. The same study discovered that the majority of students and teachers who originally held unfavorable or neutral attitudes towards SROs prior to their utilization had favorable attitudes after SROs were introduced into their schools. The Safe Schools Initiative Division (SSID, 2004) reported additional findings including: surveyed students self-reported weapons possession declined by 97%, marijuana use at school decreased by 80%, fighting dropped by 71%, and bullying fell by 67%. Teachers reported significantly lower levels of classroom disruptions, drug use, and gang activity. Overall, 86% of teachers believed their school's learning environment had improved as a result of SROs.

In another study, NASRO (2001) polled SRO officers and reported that 99% of the SROs claimed that their program had improved school safety and prevented crime and violence; 84% believed that crimes on school campuses are underreported to police, while 86% said that the presence of a police officer on campus improves the accuracy of reporting school crimes. Over 94% of SROs stated that students have reported to them violent acts or similar safety threats which the students believed were going to occur. Officers estimated an average of 17 such reports per officer, and 92% of the officers reported preventing from 1 to 25 violent acts in an average school year, with 28% of these officers preventing an average of over 25 acts per year. Sixty-seven percent of the officers reported they had prevented one or more school faculty or staff member from being assaulted on campus (NASRO, 2001). Over 78% of school-based police officers reported they had taken a weapon from a student on school property within the past year (NASRO, 2004).

Further reports of successful SRO programs dealing with weapons and assaults on campus were reported in a research article by Magdalena Denham (2009). Denham cited that over 70% of school officials surveyed believed that the use of handguns had decreased since the inception of the SRO program. A study by Johnson (1999) resulted in similar findings amongst school officials' perceptions regarding declines in possession of knives and other dangerous instruments capable of inflicting serious injuries. This report also found decreases in incidents involving fighting. School officials surveyed in the study by Denham (2009) stated that students were very supportive of their SROs, and 70% of the officials themselves believed the SROs were doing an excellent job.

A Kentucky based study conducted by May, Fessel, and Means (2004) reported that 87% of Kentucky principals surveyed considered their SROs to be effective overall. Regardless of reported approvals of SROs by school officials, a 2001 survey conducted on SRO officers attending the National Association of School Resource Officers convention found that 44% of the SROs reported that school officials did not clearly understand the role of the SRO officers in their schools. Communication between school and police administrators was also reported to be lacking as Mays' study reported that 47% of school principals had never met with their SROs law enforcement supervisors (May et al., 2004). Additionally, only 1 in 10 SROs had met with their law enforcement supervisor monthly.

Improving Programs

Even if SRO programs are considered effective, there are many unanswered questions warranting additional research that could identify strategies to enhance current programs. Researchers, law enforcement, and school administrators must continually remain vigilant for indicators regarding the effectiveness of SRO duties and behaviors and adjust their school safety efforts accordingly. If effective and ineffective strategies are identified, programs can utilize this information to become more efficient and effective and in so doing enhance program performance streamlining efforts and resources.

With diminishing budgets and numbers of officers decreasing in some agencies, limited resources have resulted in some SRO programs folding and others reducing their numbers of SROs. Montgomery County, Maryland is a location that significantly decreased its SRO program. Montgomery County made the decision to reduce its

number of SROs from 33 officers in 2009 to nine officers in 2010. This decision was made regardless of reported successes in the program, including the prevention of a bombing plot in 2009 where an SRO uncovered a plot by multiple students to utilize the school's gas lines to carry out an explosive attack (Ujifusa, 2010). Despite such success stories, there are those that feel SRO efforts are wasted and ineffective.

Concerns about Programs

Zero tolerance policies began their popularity in the 1980s; however, the implementation of these strategies in schools increased following the passing of the Gun Free Schools Act (Skiba, Michael, Nardo, & Peterson, 2002). Zero tolerance policies are known to encourage strict punishment for all violations; however, the focus was initially on weapon possession and drug violation. Schools later began shifting the policies toward less severe and even minor infractions (Keleher, 2000; Skiba ,2004; Skiba & Peterson, 2000; Vavrus & Cole, 2002) Furthermore, zero tolerance was not intended to work in isolation; it was designed to be part of a comprehensive prevention program. Many schools, however, focused only on the punitive aspect and failed to implement prevention programs.

Several studies have reported finding significant increases in the numbers of students recommended for suspension (Brown, 2007; Skiba & Peterson, 2000). Additionally, the majority of research in the area has suggested that zero tolerance policies contain bias and actually reduce professional autonomy (Fries & DeMitchell, 2007; Keleher, 2000; Morrison, 1997; Skiba & Peterson, 2000; Vavrus & Cole, 2002).

Some proclaim that the utilization of SRO programs, especially when used in conjunction with zero tolerance policies, may actually contribute to misconduct;

maintaining that these policies, which mandate that schools severely punish disruptive students regardless of the infraction or its rationale, can actually increase bad behavior and lead to higher dropout rates (APA, 2006). Brown (2007) concluded that these policies, which were established to improve the learning environment, actually result in compounding barriers to student learning. Brown (2007) further suggests that suspension is an ineffective form of intervention and discipline.

Casella (2003) examined the effectiveness of zero tolerance policies among urban students and found a correlation between zero tolerance and decreases in the rates of violence in schools; however, Casella (2003) also reported that zero tolerance only punishes the poor, underachieving and isolated who come from violent homes and neighborhoods. Casella (2003) argued that the violence rates were decreasing because troubled students were now out on the streets and not in school.

In a study conducted by the New York Civil Liberties Union (NYCLU, 2009), Executive Director Donna Lieberman stated that there are alternatives to making schools feel like jails. The study examined the successes of six New York City public high schools in maintaining safe, nurturing, educational environments without using metal detectors, aggressive policing, and harsh disciplinary policies, which are widely employed in other city schools utilizing the broken mirrors or zero tolerance strategies. Lieberman proclaimed that the schools profiled in this report prove that there are alternatives to making schools feel like jails and the report showed that treating students with dignity and respect is the best approach to producing good, safe schools (NYCLU, 2009). The difference rests with the schools discipline policies, which were not based on zero tolerance practices. None of these schools used metal detectors at the time of the

report, even though some had used the devices previously. These programs additionally reported employing alternative strategies to intervene with troubled students and claimed the students generally enjoyed long term, positive relationships with the school safety agents.

The NYCLU (2009) survey cited an increase in officer presence in New York City schools by 62% since 1998, claiming that this made the New York Schools Police force the fifth largest in the country. In reality, the large police force discussed did not primarily consist of police officers but were actually civilian safety agents (J. Swartz, personal communication, January, 2012). It should additionally be pointed out that the negative cases referred to in the NYCLU report were primarily utilizing the civilian security officers who were not trained police officers or SROs. The NYCLU report also discussed the police force using harsh zero tolerance policies and disciplinary actions including criminal prosecution of minor offences, which they believed increased the percentages of students becoming criminals through the creation of a prison pipeline (NYCLU, 2009).

Fenning and Rose (2007) reported that students who experience excessive suspensions and expulsions have a greater chance of becoming part of the school to prison pipeline. Numerous researchers have examined the school to prison pipeline in an attempt to identify how students that are pushed out or drop out of high school appear to be more likely to enter the prison system (Fine, 1991). Pushed out is a term used to describe students who drop out of school because of actions or barriers that schools have placed on them making it more difficult for them to succeed and graduate. This can

involve the creation of stressors or feelings that lead students to believe they did not belong or were not smart enough to succeed (Fine, 1991).

Concerns Surrounding Disciplinary Practices

Marxists and critical theorists have discussed how school environments and biased systems can contribute to incidents of violence (Casella, 2003). These theorists have contended that views of violence are shaped by class experiences and the environment in which individuals live, and levels of violence are associated with income levels, especially in the case of the poor. Duncan and Brooks-Gunn (2000) reported that poor children are 2.2 times more likely to experience violent crime than those who are not poor. These findings imply that those growing up in poor neighborhoods are exposed to more violence, and as a result, when these children enter into their local schools, the culture of the school is affected creating a climate which is more susceptible to violence occurring.

Studies also indicate that ethnic minority students are suspended more than Caucasian students (Raffaele-Mendez & Knoff, 2003; Richart, Brooks, & Soler, 2003). Additionally there is a disproportionate percentage of African Americans disciplined compared to other races (Engec, 2006; Raffaele-Mendez & Knoff, 2003; Skiba et al., 2002; Skiba & Peterson, 2000). This disparity has remained consistent when controlling for socioeconomic status (Skiba & Peterson, 2000).

The Kentucky Center for School Safety points to a disproportionate number of minority students affected by zero tolerance policies in Kentucky. Zero tolerance polices refer to the elimination of discretion when considering if criminal charges should be filed. Although only 10% of students in the state are African American, their population

accounted for over 22% of students suspended during the 2000-2001 school year (Richart et al., 2003).

Mendez and Knoff (2003) investigated categories of out of school student suspensions in the second largest public school district in Florida and the twelfth largest in the United States. The district was comprised of both inner-city and rural schools with large minority migrant populations who were eligible for free or reduced lunches. The researchers found 15 types of infractions that accounted for 90% of the out of school suspensions. These included disobedience/insubordination (20%), disruptiveness (13%), fighting (13%), inappropriate behavior (11%), noncompliance with assigned discipline (7%), profanity (7%), disrespect (6%), tobacco possession (4%), battery (3%); which would be considered assault in Kentucky, threat/intimidation (3%), leaving class/campus without permission (2%), weapons possession (0.7%), narcotics possession (0.6%), sexual harassment (0.6%), and alcohol possession (0.3%).

Richart et al. (2003) conducted a mixed methods study on school discipline data and juvenile crime data in Kentucky. The study examined the 2000-2001 suspension data for all of Kentucky's public schools, which is housed at the Kentucky Center for School Safety. Of the more than 68,000 suspensions issued, the majority were related to behaviors such as defiance of authority (37%), fighting (25%) disturbing class (12%), failure to attend detention (10%), and the use of profanity (9%).

When evaluating various school suspension patterns, it becomes obvious that although students are suspended for multiple reasons, there are identifiable behaviors that become dominate. These include: disobedience/insubordination, disruptive behavior, and fighting. Other categories such as possession of weapons, drugs, alcohol and narcotics

constitute less than three percent of school suspensions (Costenbader & Markson, 1998; Mendez & Knoff, 2003; Morrison, Storino, & Dillon, 2001; Rausch & Skiba, 2004; Wu, Pink, Crain, & Moles, 1982).

Some discrepancies in categories of infractions leading to suspensions do exist; however, each school system and researcher varies on how they identify each offense category. Although the Mendez and Knoff (2003) study identified the three most common suspension infractions their study involved elementary schools, middle schools, and high schools. These different types of schools often vary significantly in their frequency of violations. It is common to have different percentages of violation types between the varying age ranges of students from each of these different levels of schools. For example, the number of suspensions for disobedience per 100 students was highest in middle schools. When comparing the three types of schools in the study with each other, notable differences emerged including a suspension rate of 3.62 for elementary schools, 35.73 for middle schools, and 26.74 for high schools. Suspensions for violations such as substance possession occur at a significantly higher level in high schools than middle or elementary schools (Mendez & Knoff, 2003).

Strategies for Success

School safety is a multifaceted phenomenon without an easy solution. Even when examining a single area such as school violence, one begins to understand how complex issues and solutions can be. Additionally, the opinions of professionals regarding which tactics are successful for combating the issues at hand vary significantly. The debate regarding the implementation of school resource officers is a key example. Yet, after incidents such as Columbine High School in Colorado and Heath High School in

Kentucky, these programs have increased in popularity as a tactic designed to combat school safety problems. As researchers and proponents of school safety, it is imperative that we examine the effectiveness of SRO programs and identify ways to improve them or establish effective alternative strategies to take their place.

The Need for Additional Research on SRO Programs

A report by the Department of Justice, Community Oriented Policing Services explains the need for law enforcement to focus its resources towards their most effective use and the utilization of new data collection methods as a tool to successfully achieve the efficient resource allocation (COPS, 2011b). Despite the popularity of SRO programs, there are relatively few studies that have attempted to reliably evaluate their effectiveness (Raymond, 2010) and even less research that examines the reported violations or criminal activity following program implementation.

Stevenson (2012) conducted a pre-post analysis evaluating the impact that SROs had on 18 middle schools and high schools in Alabama. Stevenson found that SROs did not have any significant impact on school incidents. Theriot (2009) conducted research examining arrest rates at 13 schools with SROs and 15 without, hypothesizing that arrest rates for offenses such as disorderly conduct and assaults would rise. The research yielded mixed results with decreases for assaults occurring at schools with SROs and increases in disorderly conduct charges resulting at these same schools. Theriot (2009) hypothesized that research results may signify that SROs had a positive impact on schools.

Mayer (2008) reports that there is a strong need for rigorous causal research demonstrating the impact of SRO programs in schools. He discusses that almost all

research supporting the use of SROs are based on opinion surveys which cannot provide solid evidence of the impact SROs have on schools. Even though teachers, students, and community perceptions of safety are critical for a quality learning environment, examinations of additional types of data are warranted to determine if any measurable impact on school violence and other violations have occurred after program implementation. Addressing the need to scientifically and objectively evaluate the effectiveness of SROs is critical so that we can enlighten existing and future SRO programs, while improving our understanding on how to maximize program effectiveness with limited resources (Raymond, 2010).

Finn, Shively, McDevitt, Lassiter, and Rich (2005) stated that ideally research should attempt to match the goals of a specific program with its outcomes, in order to determine if the program is achieving its desired results, and if it is, through what mechanisms. Finn et al. report that the types of benefits that school administrators seek from having police officers working in their schools include:

- Increased safety in and around the schools,
- Increased perceptions of safety,
- Improved police call response times,
- Reductions in truancy, and
- Fewer distractions from their teachers' teaching and class preparation duties.

The majority of existing research does not objectively evaluate the desired reductions in crime and other violations resulting from SRO programs. Existing research tends to be descriptive and discusses duties and traits, the perceptions of people involved and impacted, and their satisfaction with the programs. Perceptions of effectiveness and

safety are certainly important, but given the financial investment that communities and the federal government have made, further justification is warranted for conducting research that augments the knowledge gained from perceptions based research. This can be accomplished with reliable impact evaluations that further evaluate SRO program effectiveness (Raymond, 2010).

CHAPTER III

METHODS

Purpose

The purpose of this study was to explore the impact full-time school resource officers have on school safety in predominantly rural Kentucky high schools and to supplement existing research based primarily on perceptions of SRO effectiveness. This was accomplished by focusing on the frequency and associated factors of criminal violations and board violations as identified by the Kentucky Department of Education and reported by the Kentucky Center for School Safety. These violation rates were identified and examined prior to and after the implementation of full-time SROs and through an examination of schools without SROs in comparison to schools with full-time SROs.

Research Questions

1. Does the implementation of full-time SROs impact the frequency of criminal violation rates reported by predominantly rural Kentucky high schools?
2. Does the implementation of full-time SROs impact the frequency of board violation rates reported by predominantly rural Kentucky high schools?

Context of the Study

Community. This study focused on the predominantly rural state of Kentucky located in the southeastern region of the United States. According to the United States Census Bureau (2012), Kentucky's estimated 2011 population was 4,369,356. Kentucky's population was reported to be comprised of 88.9% White, 8.0% Black, 3.2%

Hispanic or Latino, 1.6% two or more races, 1.2% Asian, 0.3% American Indian or Alaska Natives, and 0.1% Native Hawaiian or other Pacific Islanders. The percentage of the state's population speaking a language other than English at home was 4.6%. Eighty-one percent of the population over 25 were high school graduates and 20.3% had a bachelor's degree or higher.

During the period between 2006 and 2010, there was an average of 2.48 persons per household, and the median household income was $41,576, which is more than $10,000 less than the national average. There were 17.7% of Kentucky residents who lived below poverty level, which is 4.1% greater than the National average of 13.6% (U.S. Census Bureau, 2012).

School demographics. According to the Kentucky Department of Education (2012), there are 202 public high schools and 20 combined high school/middle schools in Kentucky. These numbers exclude the dependent districts of Ft. Knox and Ft. Campbell, as well as alternate schools, the Kentucky School for the Deaf, and Kentucky School for the Blind.

Kentucky public schools have a total population of 675,530 students: 81.4% of whom are White, 10.7% are Black, 4.2% are Hispanic, 1.4% are Asian, less than one percent are Hawaiian or Pacific Islanders, less than one percent are Native American, and 1.3% are other races. Approximately 56% of the students in Kentucky's public school system are eligible for free or reduced lunches (Kentucky Department of Education, 2012).

Sample

The locations whose populations were used for analysis of data included 21 predominantly rural Kentucky pre-post SRO high schools, in addition to the comparative examination of 24 predominantly rural high schools with full-time SROs assigned and 42 predominantly rural high schools without SROs assigned. Criminal and board violations were examined in both studies. These locations represented all Kentucky public high schools identified during the research that met the existing criteria and possessed the necessary comparative data for analysis with the exception of schools in Fayette and Jefferson Counties. Fayette and Jefferson Counties have the largest population bases in Kentucky, and by excluding these counties the research focused on predominantly rural populations within the state. This exclusion further aided to ensure that the high school's student populations were demographically comparable.

Each of the selected programs were required to have met these criteria for the duration of the period examined. Schools were additionally required to have been established for a minimum of one year prior to the SRO implementation and three years after implementation to be utilized in the pre-post analysis. This provided the research the necessary pre-SRO sample and post-SRO sample used in the analysis. By examining the year prior to the implementation of an SRO it provided a baseline for the post-SRO comparison. The third year following the implementation of a full-time SRO was chosen because it provided the SRO a reasonable amount of time for developing relationships with students in the school, which is believed to be critical to the success of SRO programs. Those schools that did not meet the criteria for pre-post analysis but met the remaining existing criteria were used in the comparative analysis sample.

To be considered as an SRO school population utilized in the research, a full-time SRO had to be assigned to the school and the SRO had to spend 75% or more their time and efforts focused on supporting that particular school and its population. The benchmark level of 75% or higher for a full-time SRO's involvement in their assigned schools was set after identifying and considering the presence of SRO's collateral duties including: attending the required 40 hours of annual in-service training; maintaining certifications and attending additional training; tending to administrative duties; court appearances; agency meetings, and other functions in support of their law enforcement agency. The focus on full-time SROs was chosen because in order to truly measure a SROs impact it is critical that the officer has a sufficient opportunity to develop relationships and perform the additional duties involved in the position. Evaluating SROs that routinely serve multiple schools does not provide a sufficient opportunity for impacting school populations or a full measure of impact on school safety. The school's population was additionally required to be comprised of students from grades 9 through 12, with other non-qualifying students being physically separated from the student population examined. The sole focus upon grades 9 through 12 was utilized because the majority of SROs are assigned to high schools, and the frequency and types of violations differ significantly between grade school, middle school, and high school population groups (Mendez & Knoff, 2003). Additionally, the school must have retained a full-time SRO throughout the applicable periods examined.

Research Design and Analyses

A quantitative, quasi-experimental research design was utilized that focused on archival, pre-post and comparative frequencies of board and criminal violation rates

uniformly collected during the periods targeted by the research. These violation rates were examined, and the results provided were standardized as violations per 100 students, recognizing the limitation that repeat violator data were not identifiable for some of the periods and therefore not incorporated into the data.

The analyses included a pre-post longitudinal time study examining board and criminal violations from qualifying high school populations prior to and after the implementation of a full-time SRO. The violation rates from the pre and post periods where compared to determine if any identifiable patterns or changes in the means had occurred after the implementation of the SRO. This was accomplished through independent samples t-tests.

The second analyses utilized a comparative examination of board and criminal violation rates from a different set of high schools. Violation rates from predominantly rural high schools without an SRO were compared to violation rates from predominantly rural high schools with a full-time SRO. The resulting rates of violations were compared to determine if any identifiable patterns or differences in the means were present when comparing schools without SROs to schools with SROs. This was accomplished through independent samples t-tests and ANCOVAs. The population from this comparative set of schools was not utilized in the pre-post analyses if the violation data were either not available in the needed pre SRO period or post SRO period for a school**.**

An examination of significant mitigating factors that could reasonably skew or impact the results and was additionally conducted. Disqualifying factors examined included:

- Significant changes in school demographics, exceeding two and one-half percent of the total population, between the pre-SRO implementation period and the post-SRO implementation period.
- Significant changes in community crime rates during the corresponding time frame which were reasonably believed to have impacted the school's crime rates.
- The implementation of programs or initiatives independent of SRO's activities which were implemented, designed, or reasonably believed to have affected frequencies of violations during the specified time frames.
- Significant changes in reporting or policy procedures by the Kentucky Department of Education, individual schools or districts, law enforcement entities involved, or Kentucky uniform crime reporting protocols.
- Statutes enacted or legal changes affecting criminal classifications or elements of crimes which could reasonably impact the numbers or category types examined during the specified time frames.
- Other reasonably problematic variables.

Potentially problematic issues were explored through discussions with school administrators and law enforcement officials from the schools being utilized, in addition to the examination of crime, demographic, and other documentation. The researcher examined data bases, documents, historical records, and additional information believed to contain beneficial material for identifying or evaluating reasonable concerns.

Due to the relatively stable demographics of the areas, the moderate time frames involved, individual schools and law enforcement's consistency in legal and operational philosophies within predominantly rural Kentucky schools, the problems identified were

limited and necessary exclusions made. The resulting sample consisted of 21 predominantly rural high schools with full-time SROs in the pre-post study, and 66 predominantly rural high schools in the comparative study. The comparative study included 42 high schools without SROs and 24 high schools with full-time SROs. Both the pre-post and comparative school's reported violation rates were used to explore each of the research questions.

Data Analyses

When selecting the best approach for analysis of the pre-post data, the following factors were taken into account: the need for groups to be examined from two points in time, the absence of significantly problematic covariates, and the limitations in pre-post data regarding the availability of demographic information at the student and school level. Given these factors an independent samples t-test was chosen for the pre-post study. The availability of additional demographic information for the comparative data permitted the utilization of independent samples t-test and ANCOVA analysis for the comparative (SRO/no SRO) study. By examining violation rates prior to and after the implementation of a full-time SRO and conducting a separate examination of violation rates at schools with full-time SROs in comparison to schools without SROs, the resulting multidimensional approach enhances the ability for effective evaluations of student populations and their corresponding criminal and board violation rates.

Data Collection

The Kentucky Department of Education began collecting data on criminal and board violations occurring in Kentucky schools during the 2001-2002 school year and at the time of this research data files existed through the 2011-2012 school year. Each

school's information was historically compiled and shared with the Kentucky Center for School Safety until 2010; it is currently collected and stored by the Kentucky Department of Education.

All violation data analyzed during this research were obtained from the Kentucky Department of Education (2012) with support from the Kentucky Center for School Safety. The categorical areas examined in the research mirrored those collected by the Kentucky Department of Education with the exclusion of omissions in excessive spikes found in reports of tardiness. The 2003-2004 school year data were also excluded because of coding irregularities discovered during the research. The remaining data from the Kentucky Department of Education and the Kentucky Center for School Safety were utilized to create two sets of data.

The first data set consisted of pre-SRO and post-SRO violation rates in addition to supporting information necessary for the analyses. Reported criminal and board violations were collected for each Kentucky high school population meeting the research criteria. This included the requirement that necessary data were available the year prior to the implementation of the full-time SRO (pre SRO) and the third year following the implementation of the full-time SRO (post SRO). There were two occasions where the data for the school years examined was adjusted by one year. In one case, the data for the year prior to implementation were not available; therefore, the data for two years prior to implementation were used. In the second case the data for the third year following implementation of a full-time SRO were not usable; therefore, the data for the fourth year following implementation were examined.

Twenty one pre-post predominantly rural Kentucky high schools meeting the research criteria were identified, and their violation and supporting data were collected. Due to the limited number of pre-post high schools identified, the determination was made to conduct the analysis at the student level. The pre SRO population resulted in a total of (*N* = 19,807) students comprised of 47.81% white males, 44.07% white females, 3.03% black males, 2.23% black females, <1.0% American native/pacific islander males, <1.0% American native/pacific islander females, <1.0% Asian males, <1.0% Asian females, <1.0% Hispanic males, <1.0% Hispanic females, <1.0% two or more race males, and <1.0% two or more race females.

The post SRO population consisted of a total of (*N* =19,692) students comprised of 45.71% white males, 44.57% white females, 3.27% black males, 3.14% black females, <1.0% American native/pacific islander males, <1.0% American native/pacific islander females, <1.0% Asian males, <1.0% Asian females, <1.0% Hispanic males, <1.0% Hispanic females, <1.0% two or more race males, <1.0% two or more race females.

The second set of data supported the comparison of violation rates from schools with a full-time SRO to schools without an SRO assigned. These comparative analyses examined the 2011-2012 school year's violation data from 42 predominantly rural Kentucky high schools without SROs and compared those violation rates to the rates in 24 predominantly rural Kentucky high schools with full-time SROs. The total population for high schools without SROs was (*N* = 22,644), and the total population of student in high schools with SROs was (*N* = 25,922). These schools and their respective population's violation rates were used for the comparative analysis but not for the pre-post analysis, because the necessary violation data were not available either for the pre

SRO or for the post SRO period. The full-time SRO had been implemented prior to the 2002-2003 school year or after the 2008-2009 school year. This prevented the collection of either the necessary pre-implementation or post-implementation data required for the pre-post analysis.

All Kentucky high schools identified during the research were used in the comparative analysis except for those previously used in the pre-post research, the schools located in Jefferson or Fayette County and the schools that failed to meet the comparative studies requirements.

Dependent Variables

The dependent variables consist of the reported criminal and board violation rates required by the Kentucky Department of Education. These are outlined in the following sections.

Criminal Violations

Criminal violation categories identified in the Kentucky Department of Education and Kentucky Center for School Safety report include: criminal homicide, forcible rape, robbery, burglary, larceny/theft, motor vehicle theft, arson, forgery, fraud, embezzlement, stolen property, vandalism, weapon-handgun, weapon-rifle, weapon-other firearm, weapon-other, prostitution, indecent exposure, statutory rape, sexual assault/unwanted touching in a sexual manner, other drug possession and use, other drug distribution, alcohol possession and use, alcohol distribution, marijuana/hashish possession and use, marijuana distribution, hallucinogenic possession and use, hallucinogenic distribution, amphetamines possession and use, amphetamines distribution, barbiturates possession and use, barbiturates distribution, heroin possession and use, heroin distribution,

cocaine/crack possession and use, cocaine/crack distribution, prescription drugs possession and use, prescription drugs distribution, inhalant possession and use, inhalant distribution, gambling, DUI, under influence, disorderly conduct, other, loitering, 1st degree assault, 2nd degree assault, 3rd degree assault, 4th degree assault, terroristic threat, terroristic bomb, and terroristic chemical/biological/nuclear.

Merged criminal violations. Merged criminal violation categories utilized in the research include: disorderly conduct, assault 4th, felony assault, criminal homicide, other violent dangerous felonies, weapon offenses, threatening, vandalism/criminal mischief, theft related violations, drug violations, alcohol violations, other sexual related offences, and other violations.

School Board Violations

School board violation categories identified in the Kentucky Department of Education and Kentucky Center for School Safety include: cheating, dress code violation, leaving campus, skipping class, skipping school, tardy to class, truancy, signing parent/staff note, stealing, failure to follow staff instructions, disturbing class, disruptive behavior, bus disturbance, and failure to attend detention. Fighting is also included such as: fighting student to student, fighting student to staff, and fighting student to other. Inappropriate sexual behavior, profanity or vulgarity, threat/intimidation including, bullying, harassment, threatening staff, and verbal abuse are included as well as tobacco violations such as: smoking, chewing, and tobacco-other. Dangerous instruments and other violations make up the last two categories.

Merged board violations. Merged board violation categories utilized in the research include: fighting/physical aggression, verbal aggression, failure to follow staff

instructions, creating a disturbance, dangerous instruments, theft, sexual misconduct, rule violations, tobacco violations, and other violations.

Collective and Individual Variable Categories

The criminal and board violation categories identified by the Kentucky Department of Education were examined, and analyses were conducted identifying total criminal violation rates and total board violation rates for the populations representing the selected high schools. Additionally, the means for each specific criminal and board violation were identified and recorded. This approach was used to collectively identify discernible pre-SRO post-SRO changes in violation frequencies and the differences in violation rates between high school populations with SROs and high school populations without SROs. This further aided in providing clarity and reduced the probability that fluctuations in data caused by cultural, community or reporting changes would confound the findings. For the pre-post study, the pre SRO group was coded as ones and the post SRO group was coded as two. All predominantly rural high schools meeting the studies decision rules were included. For the study comparing violation rates in high schools with SROs to high schools without SROs, the first group was coded as one and the latter were coded as two.

Covariate. Given previous found relationships with school suspensions, minority (0 = No, 1 = Yes) and low income (0 = No, 1 = Yes) were used as covariates. All racial/ethnic minority groups were combined into one group. Low income was defined by eligibility for free/reduced lunch. There were 10.8% minority and 51.1% low income students. These covariates are correlated with the dependent and independent variables and were therefore used to control for differences between the groups assessed.

Independent Variables

The independent variables consist of the predominantly rural high schools meeting the research criteria and their respective populations.

Limitations of the Study

Limitations of the study, excluding those already discussed and addressed in the analyses, include the potential of school or law enforcement officials failing to report occurrences of violations or other reporting inconsistencies. Brown (2006) addressed the issue of inaccurate crime reporting by law enforcement in schools to serve their own interests and reported that there is no substantive evidence to indicate that any misrepresentation of crime data involving school grounds has occurred. By collecting data from the same schools and law enforcement entities and then comparing those data in a pre-post method focused on the same dependent and independent variables in addition to inquiring about procedural and other changes, these potential limitations were significantly reduced. Furthermore, the additional analyses of the same set of variables examining high schools with full-time SROs to high schools without SROs during the same school year and with relative comparable time frames in the pre-post analyses further minimized concerns.

Pre-existing inaccurate reporting of violations coupled with increases in percentages of violations reported, especially for less serious crimes that occurred after the implementation of SROs, was an additional concern (Brown, 2006; Na & Gottfredson, 2011). The concern of increases in reported criminal violations occurring is a valid one considering that a rise in violations being observed by law enforcement officers assigned to the schools was likely to occur. This was exacerbated because the

majority of minor offenses such as disorderly conduct, simple assaults, and other minor infractions are either misdemeanor crimes or criminal violations that must occur in the presence of a Kentucky police officer before that officer can arrest or cite the offender (Arrest by Peace Officers; by Private Persons, 2006; Disorderly Conduct in the Second Degree, 2006). A Kentucky police officer would not be able to charge the offender with a violation of these laws unless they actually witnessed the offense. Since these programs result in significant increases in man hours spent by police officers on campus, it is a logical assumption that the officers are more likely to observe misdemeanor offenses and violations occurring. This increase in observations would likely result in higher numbers of charges being filed without necessarily correlating with a higher crime rate. An exception to the officer having to witness a misdemeanor offence in order to criminally charge a student would be if the officer was serving a warrant or summons where a complaining party, such as a school official, had formally filed a charge, under oath, with an appropriate court representative accusing the student of having committed acts fulfilling the required elements of the crime. Collecting pre-post statistics from the same schools and law enforcement entities involved, comparing that data in a pre-post method as well as comparing violations in schools without SROs to those with full-time SROs, limiting the time frames involved, and conducting further checks for procedural and other changes reduced but did not eliminate concerns of increases in reported criminal violations.

CHAPTER IV

FINDINGS

The purpose of this quantitative research was to determine if the presence of full-time school resource officers in predominantly rural Kentucky high schools impacts the frequency of criminal and board violation rates among student populations. These reported violations were considered to be representative of existing levels of school safety. Prior to the presentation of the findings this chapter begins with a review of the studies research design and analyses.

Research Data

The Kentucky Department of Education began collecting data on criminal and board violations occurring in Kentucky schools during the 2001-2002 school year and at the time of this research data files existed through the 2011-2012 school year. Each school's information was historically compiled and shared with the Kentucky Center for School Safety until 2010; it is currently collected and stored by the Kentucky Department of Education.

All violation data analyzed during this research were obtained from the Kentucky Department of Education (2012) with support from the Kentucky Center for School Safety. The categorical areas examined in the research mirrored those collected by the Kentucky Department of Education with the exclusion of omissions in excessive spikes found in reports of tardiness. The 2003-2004 school year data were also excluded because of coding irregularities discovered during the research. The remaining data from the Kentucky Department of Education and the Kentucky Center for School Safety were utilized to create two sets of data.

The first data set consisted of pre-SRO and post-SRO violation rates in addition to supporting information necessary for the analyses. Reported criminal and board violations were collected for each Kentucky high school population meeting the research criteria. This included the requirement that necessary data were available the year prior to the implementation of the full-time SRO (pre SRO) and the third year following the implementation of the full-time SRO (post SRO). There were two occasions where the data for the school years examined was adjusted by one year. In one case, the data for the year prior to implementation were not available; therefore, the data for two years prior to implementation were used. In the second case the data for the third year following implementation of a full-time SRO were not usable; therefore, the data for the fourth year following implementation were examined.

Twenty one pre-post predominantly rural Kentucky high schools meeting the research criteria were identified, and their violation and supporting data were collected. Due to the limited number of pre-post high schools identified, the determination was made to conduct the analyses at the student level. The pre SRO population resulted in a total of (N = 19,807) students comprised of 47.81% white males, 44.07% white females, 3.03% black males, 2.23% black females, <1.0% American native/pacific islander males, <1.0% American native/pacific islander females, <1.0% Asian males, <1.0% Asian females, <1.0% Hispanic males, <1.0% Hispanic females, <1.0% two or more race males, and <1.0% two or more race females.

The post SRO population consisted of a total of (N =19,692) students comprised of 45.71% white males, 44.57% white females, 3.27% black males, 3.14% black females, <1.0% American native/pacific islander males, <1.0% American native/pacific islander

females, <1.0% Asian males, <1.0% Asian females, <1.0% Hispanic males, <1.0% Hispanic females, <1.0% two or more race males, <1.0% two or more race females.

The second set of data supported the comparison of violation rates from schools with a full-time SRO to schools without an SRO assigned. These comparative analyses examined the 2011-2012 school years' violation data from 42 predominantly rural Kentucky high schools without SROs and compared those violation rates to the rates in 24 predominantly rural Kentucky high schools with full-time SROs. The total population for high schools without SROs was (N = 22,644), and the total population of student in high schools with SROs was (N = 25,922). These schools and their respective population's violation rates were used for the comparative analyses but not for the pre-post analyses, because the necessary violation data were not available either for the pre SRO or for the post SRO period. The full-time SRO had been implemented prior to the 2002-2003 school year or after the 2008-2009 school year. This prevented the collection of either the necessary pre-implementation or post-implementation data required for the pre-post analyses.

All Kentucky high schools identified during the research were used in the comparative analyses except for those previously used in the pre-post research, the schools located in Jefferson or Fayette County and the schools that failed to meet the comparative studies requirements.

Research Design and Analyses

This study employed a quantitative, quasi-experimental research design that focused on archival, pre-post and comparative rates of board and criminal violations uniformly collected during the periods targeted by the research. Independent samples t-

tests and ANCOVAs were used to compare the means for the comparative and pre-post research. Repeat offenders were not identifiable for a significant percentage of the analyses; therefore, the total number of unique violators could not be extrapolated from the data. All violation rates were examined, and means provided represent violations per 100 students. Analyses of data were conducted using IBM SPSS Statistics Version 21.0, and an alpha level of .05 was the determined threshold of significance for all analyses.

Pre-Post Design

The initial analysis utilized a pre-post longitudinal time study examining measurements of violations at the student level from qualifying high school populations prior to and after the implementation of a full-time SRO. The violation rates from the pre-SRO and post-SRO periods were compared to determine if any identifiable patterns or changes in the means had occurred after the implementation of a full time SRO. This was accomplished through the utilization of independent samples t-test after ensuring that the general assumptions of level of measurement, independence of observations, normal distribution, and homogeneity of variance were verified. All t-tests analyzed reported violation rates at the student level.

The assumption of random sampling was not met; however, all student offenders in the sample schools were included. In addition, all schools and their respective populations were chosen because of their primarily rural populations, the fact that they either had a full-time SRO or no SRO, and the availability of necessary violation data for the prescribed time periods. Other potentially troublesome factors were also investigated. No locations identified were selected or omitted for reasons other than their ability or failure to meet the research criteria. The independent samples t-test was the only

statistical test used for the pre-post analysis, partially because of the research design, but ultimately because of occasional limitations in demographic data necessary to conduct other analyses enabling the researcher to control for student characteristics.

Comparative Design

The subsequent analyses utilized a comparative examination of board and criminal violation frequencies from a different set of high schools. This research compared violation rates per 100 students at high schools without an SRO assigned (N = 42), to violation rates per 100 students at high schools with a full-time SRO (N = 24). The identified violations rates were compared to determine if any significant patterns or differences in means existed. This was accomplished utilizing two types of analyses; an independent samples t-test, comparing the violation rates at the student level inclusive of the total student population at schools without SROs (N = 22,644) to the violation rates from the total student population at schools with full-time SROs (N = 25,922).

The second analyses utilized an Analyses of Covariance (ANCOVA) to compare the high school violation rates per 100 students from schools without SROs assigned (N = 42) to the mean violation rates per 100 students from high schools with full-time SROs assigned (N = 24). ANCOVA analyses were done at the school level. The populations from the comparative set of schools were not utilized in the pre-post analyses because the violation data were either not available in the required pre SRO period or during the post SRO period.

ANCOVA tests used in the comparative analyses incorporated the use of covariates correlated with dependent and independent variables introduced before the start of the experiment to control or adjust results for differences in population groups.

The use of minority race and low income as covariates resulted in the calculation of adjusted means for each group. These covariates were chosen because previous research indicates the presence of disproportionately higher criminal charges being filed and higher violations rates being present for these groups. These covariates enable the confusion of adjusted means that minimized concerns about population demographics differently impacting the means for the criminal and board violation rates in schools with and without SROs.

Prior to analyses the statistical assumptions for ANCOVA were verified including the general assumptions of level of measurement, independence of observations, normal distribution, homogeneity of variance, measurement of the covariate, reliability of the covariate, correlations among covariates, linearity, and homogeneity of regression slopes. The assumption of random sampling was not met; however, all high schools and their respective populations were chosen because of their primarily rural populations and the fact that they either had a full-time SRO or no SRO assigned to the school. Other potentially troublesome factors were investigated. No locations identified were selected or omitted for reasons other than their ability or failure to meet the research criteria.

Criminal Violations Examined

During the pre-post and comparative analyses, the following reported criminal violations were individually examined: criminal homicide, forcible rape, robbery, burglary, larceny/theft, motor vehicle theft, arson, forgery, fraud, embezzlement, stolen property, vandalism, weapon-handgun, weapon-rifle, weapon-other firearm, weapon-other, prostitution, indecent exposure, statutory rape, sexual assault/unwanted touching in a sexual manner, other drug possession and use, other drug distribution, alcohol

possession and use, alcohol distribution, marijuana/hashish possession and use, marijuana distribution, hallucinogenic possession and use, hallucinogenic distribution, amphetamines possession and use, amphetamines distribution, barbiturates possession and use, barbiturates distribution, heroin possession and use, heroin distribution, cocaine/crack possession and use, cocaine/crack distribution, prescription drugs possession and use, prescription drugs distribution, inhalant possession and use, inhalant distribution, gambling, DUI, under influence, disorderly conduct, other, loitering, 1st degree assault, 2nd degree assault, 3rd degree assault, 4th degree assault, terroristic threat, terroristic bomb, and terroristic chemical/biological/radiological.

Pre-Post Individual Criminal Violation Means

Table 4.1 displays the pre and post means for each criminal violation. The five most frequently occurring criminal violations during the pre-SRO periods include: gambling (*M* = 0.39, *SD* = .06) declining by 0.39 to (*M* = 0.00, *SD* = .00) during the post-SRO periods; possession of marijuana/hashish (*M* = 0.26, *SD* = .05) increasing by 0.07 to (*M* = 0.33, *SD* = .07) during the post-SRO periods; distribution of amphetamines (*M* = 0.12, *SD* = .04) declining by 0.12 to (*M* = 0.00, *SD* = .00) during the post-SRO periods; and possession of alcohol (*M* = 0.12, *SD* = .08) declining by 0.06 to (*M* = 0.06, *SD* = .03) during the post-SRO periods. Drug possession other (*M* 0.09, *SD* <.01) and assault 4th (*M* = 0.09, *SD* = .05) tied for 4th with no change occurring in drug possession other during the post-SRO periods and an increase of 0.18 occurring in the assault 4th violation bringing the post SRO mean to (*M* = 0.27, *SD* <.01).

Results for other violations of interest identified during prior research include: possession of weapons, handgun and other weapon totals, (*M* = 0.10) declining by 0.04

during the post-SRO periods to (*M* = 0.06); alcohol intoxication (*M* = 0.07, *SD* = .03) remaining the same during the post-SRO periods (*M* = 0.07, *SD* = .03); and disorderly conduct (*M* = 0.05, *SD* = .02) declining by 0.04 during the post-SRO periods to (*M* = 0.01, *SD* = .01).

Table 4.1

Pre-Post Means of Individual Criminal Violations

Criminal Violation	*M* Pre SRO *N* = 19,807	Pre *SD*	*M* Post SRO *N* = 19,692	Post *SD*
Criminal homicide	0.00	.00	0.00	.00
Forcible rape	0.00	.00	0.00	.00
Robbery	0.00	.00	0.00	.00
Burglary	<0.01	.01	0.06	.02
Larceny/theft	0.02	.02	0.08	.03
Motor vehicle theft	0.00	.00	0.01	.01
Arson	0.03	.02	0.01	.01
Forgery	0.00	.00	0.00	.00
Fraud	0.01	.01	0.00	.00
Embezzlement	0.00	.00	0.00	.00
Stolen property (receiving)	0.04	.02	0.06	.02
Vandalism (criminal mischief)	0.03	.02	0.05	.02
Weapon-handgun (possession)	0.01	.01	0.00	.00
Weapon-rifle (possession)	0.00	.00	0.00	.00
Weapon-other firearm (possession)	0.00	.00	0.00	.00
Weapon-other (possession)	0.06	.03	0.06	.02
Prostitution	<0.01	.01	0.00	.00
Indecent exposure	0.00	.00	0.01	.01
Statutory rape	0.00	.00	0.00	.00
Sexual assault/unwanted touching	0.01	.01	0.02	.01
Gambling	0.39	.06	0.00	.00
DUI	0.00	.00	0.00	.00
Alcohol intoxication (public Intoxication)	0.07	.03	0.07	.03
Disorderly Conduct	0.05	.02	0.11	.03
Other	0.05	.02	0.04	.02

Table 4.1 (continued)

Criminal Violation	*M* Pre SRO *N* = 19,807	Pre *SD*	*M* Post SRO *N* = 19,692	Post *SD*
Loitering	0.00	.00	0.00	.00
Alcohol (possession)	0.10	.03	0.11	.03
Alcohol (distribution)	0.02	.02	0.00	.00
Marijuana/hashish (possession)	0.26	.05	0.34	.06
Marijuana/hashish (distribution)	0.04	.02	0.02	.01
Hallucinogenic (possession)	0.00	.00	0.00	.00
Hallucinogenic (distribution)	0.05	.02	0.00	.00
Amphetamines (possession)	0.00	.00	0.01	.01
Amphetamines (distribution)	0.12	.04	0.00	.00
Barbiturates (possession)	<0.01	.01	0.00	.00
Barbiturates (distribution)	0.00	.00	0.00	.00
Heroin (possession)	0.00	.00	0.00	.00
Heroin (distribution)	0.00	.00	0.00	.00
Cocaine/crack (possession)	0.00	.00	0.00	.00
Cocaine/crack (distribution)	0.00	.00	0.00	.00
Prescription drugs (possession)	0.04	.02	0.06	.03
Prescription drugs (distribution)	0.01	.01	0.06	.02
Inhalant (possession)	0.00	.00	0.00	.00
Inhalant (distribution)	0.00	.00	0.00	.00
Other drug (possession)	0.09	<.01	0.10	<.01
Other drug (distribution)	0.04	.02	0.02	.01
Other criminal activity	0.04	.02	0.04	.02
Assault 1st (felony/deadly weapon)	0.01	.01	0.03	.02
Assault 2nd (felony)	0.01	.01	0.01	.01
Assault 3rd (felony against police officer)	0.01	.01	0.01	.01
Assault 4th (misdemeanor/simple assault)	0.10	.05	0.27	<.01
Terroristic threatening (bomb/explosive)	0.01	<.01	0.01	<.01

Table 4.1 (continued)

Criminal Violation	*M* Pre SRO *N* = 19,807	Pre *SD*	*M* Post SRO *N* = 19,692	Post *SD*
Terroristic threatening (CBRN)	0.00	.00	0.00	.00

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Data for analyses were provided by the Kentucky Department of Education (2012). *(Statutory changes restricting the charge of terroristic threatening in Kentucky have been enacted which will likely result in marked decreases in violation rates; however, the data used in this analyses were prior to these changes).

Pre-Post Merged Criminal Violation Means

As observed in Table 4.1, the examination of numerous criminal violation categories can be difficult to assimilate and furthermore may result in varying degrees of uniformity by school personnel in the assignment of violations to specific categories. In an attempt to minimize these concerns and clarify the results of the study the individual criminal violation categories have been merged with similar violations to provide a manageable set of collapsed violation categories presented in Table 4.2. For example all assault categories reporting felony assaults such as; assault 1st, assault 2nd, and assault 3rd, are merged together into one category titled felony assault.

The merged criminal violation categories in Table 4.2 include: disorderly conduct, which remained its own category; assault 4th, which remained its own category; felony assaults including: assault 1st, assault 2nd, and assault 3rd; criminal homicide, which remained its own category; other violent dangerous felonies including: forcible rape, robbery, and arson; weapon offenses including handgun, rifle, other firearm, and other weapon possession; threatening including terroristic threatening, terroristic threatening/explosive device, and terroristic threatening/chemical, biological or nuclear;

vandalism/criminal mischief, which remained its own category; theft related violations including fraud, embezzlement, receiving stolen property, burglary, theft, and motor vehicle theft; drug violations including other drug possession and use, other drug distribution, marijuana/hashish possession and use, marijuana distribution, hallucinogenic possession and use, hallucinogenic distribution, amphetamines possession and use, amphetamines distribution, barbiturates possession and use, barbiturates distribution, heroin possession and use, heroin distribution, cocaine/crack possession and use, cocaine/crack distribution, prescription drugs possession and use, prescription drugs distribution, inhalant possession and use, and inhalant distribution; alcohol violations including alcohol possession, alcohol distribution, driving under the influence of alcohol, and alcohol intoxication; other sexual related offences including prostitution, statutory rape and sexual assault/unwanted touching; and other violations including gambling, other offenses, loitering, indecent exposure and other criminal activity.

Table 4.2

Pre-Post Means of Merged Criminal Violation Categories

Merged Criminal Violation Category	*M* Pre SRO (*N* =19,807)	*M* Post SRO (*N* = 19,692)	*M* Impact
Disorderly Conduct	0.05	0.01	-0.04
Assault 4th (misdemeanor/simple assault)	0.09	0.27	0.18
Felony Assault	0.02	0.02	0.00
Criminal homicide	0.00	0.00	0.00
Other Violent Dangerous Felonies	0.03	<0.01	-0.02
Weapon Offenses	0.10	0.06	-0.04
Threatening	0.03	0.11	0.08
Theft Related Violations	0.07	0.18	0.11
Vandalism (Criminal Mischief)	0.03	0.04	0.01
Total Drug Violations	0.65	0.56	-0.09
Total Alcohol Violations	0.19	0.12	-0.07
Other Sexual Related Offences	0.01	0.01	0.00
Other Violations	0.48	0.09	-0.39

Note. Results are provided as violations per 100 students. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative (SRO No-SRO) Individual Criminal Violation Means

Table 4.3 displays the pre SRO and post SRO mean for each criminal violation category examined in the comparative study which identified the reported criminal violation means from high schools without SROs and compared those means to the criminal violation means from high schools with full-time SROs. Table 4.3 is provided as an instrument for comparing individual criminal violation means from the pre-post study to the means from the comparative study. Both studies were utilized to explore the impact full-time SROs have on criminal violations in rural high schools. To ensure the

consistency between the means presented in the two tables the analyses of criminal violations in Table 4.3 was conducted at the student level and reflects the criminal violation means per 100 students. The categories presented in Table 4.3 are the same as those found in the pre-post study in Table 4.1.

The five most frequently occurring criminal violations identified from comparative high schools without SROs in Table 4.3 include possession of marijuana/hashish (*M* = 0.25) increasing by 0.17 to (*M* = 0.42) when compared to high schools with a full-time SRO; possession of alcohol (*M* = 0.23) decreasing by 0.11 to (*M* = 0.12) when compared to high schools with a full-time SRO; drug possession other (*M* = 0.13) decreasing by 0.05 to (*M* = 0.08) when compared to high schools with a full-time SRO; the other category (*M* = 0.11) decreasing by 0.10 to (*M* = 0.01) when compared to high schools with a full-time SRO; and possession of weapon other (*M* = 0.09) decreasing by 0.01 to (*M* = 0.08) when compared to high schools with a full-time SRO.

Results for other violations of interest discussed frequently in previous research include alcohol intoxication (*M* = 0.07) increasing by 0.03 to (*M* = 0.10) when compared to high schools with a full-time SRO; disorderly conduct (*M* = 0.02) increasing by 0.09 to (*M* = 0.11) when compared to high schools with a full-time SRO; and assault 4th (*M* = 0.06) increasing by 0.08 to (*M* = 0.14) when compared to high schools with a full-time SRO.

Table 4.3

Comparative Means of Individual Criminal Violations

Criminal Violation	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)
Criminal homicide	0.00	0.00
Forcible rape	0.00	0.00
Robbery	0.00	0.00
Burglary	0.00	0.00
Larceny/theft	<0.01	0.04
Motor vehicle theft	0.00	0.00
Arson	<0.01	<0.01
Forgery	0.00	0.00
Fraud	0.00	0.00
Embezzlement	0.00	0.00
Stolen property (receiving)	0.02	0.02
Vandalism (criminal mischief)	<0.01	0.05
Weapon-handgun (possession)	0.01	<0.01
Weapon-rifle (possession)	0.00	0.00
Weapon-other firearm (possession)	0.00	0.00
Weapon-other (possession)	0.09	0.08
Prostitution	0.00	0.00
Indecent exposure	0.02	<0.01
Statutory rape	0.00	0.00
Sexual assault/unwanted touching	<0.01	<0.01
Gambling	0.00	0.00
DUI	0.00	0.00
Alcohol intoxication (public Intoxication)	0.07	0.10
Disorderly conduct	0.02	0.11
Other	0.11	0.01
Loitering	<0.01	0.00

Table 4.3 (continued)

Criminal Violation	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)
Alcohol (possession)	0.23	0.12
Alcohol (distribution)	<0.01	0.00
Marijuana/hashish (possession)	0.25	0.42
Marijuana/hashish (distribution)	0.01	0.04
Hallucinogenic (possession)	0.00	0.00
Hallucinogenic (distribution)	0.00	0.00
Amphetamines (possession)	0.01	0.00
Amphetamines (distribution)	0.00	0.00
Barbiturates (possession)	0.00	<0.01
Barbiturates (distribution)	0.00	0.00
Heroin (possession)	0.00	0.00
Heroin (distribution)	0.00	0.00
Cocaine/crack (possession)	<0.01	0.00
Cocaine/crack (distribution)	0.00	0.00
Prescription drugs (possession)	0.08	0.12
Prescription drugs (distribution)	0.04	0.04
Inhalant (possession)	0.02	0.00
Inhalant (distribution)	0.01	0.00
Other drug (possession)	0.13	0.08
Other drug (distribution)	0.06	<0.01
Other criminal activity	0.00	0.01
Assault 1st (felony/deadly weapon)	<0.01	0.02
Assault 2nd (felony)	<0.01	<0.01
Assault 3rd (felony against police officer)	0.00	<0.01
Assault 4th (misdemeanor/simple assault)	0.06	0.14
Terroristic threatening (misdemeanor)*	0.04	0.07

Table 4.3 (continued)

Criminal Violation	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)
Terroristic threatening (bomb/explosive)	<0.01	<0.01
Terroristic threatening (CBRN)	0.00	0.00
Unknown criminal 305	0.00	0.01

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Unknown category not identified in listed criminal violation codes. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative (SRO No-SRO) Merged Criminal Violation Means

The merged criminal violation categories from the comparative study presented in Table 4.4 mirror the merged criminal violation categories created in the pre-post criminal violation study. These violations include disorderly conduct, which remained its own category; assault 4th, which remained its own category; felony assaults including; assault 1st, assault 2nd, and assault 3rd; criminal homicide, which remained its own category; other violent dangerous felonies including forcible rape, robbery, and arson; weapon offenses including; handgun, rifle, other firearm, and other weapon possession; threatening including; terroristic threatening, terroristic threatening/explosive device, and terroristic threatening/chemical, biological, or nuclear; vandalism/criminal mischief, which remained its own category; theft related violations including fraud, embezzlement, receiving stolen property, burglary, theft, and motor vehicle theft; drug violations including other drug possession and use, other drug distribution, marijuana/hashish possession and use, marijuana distribution, hallucinogenic possession and use, hallucinogenic distribution, amphetamines possession and use, amphetamines distribution, barbiturates possession and use, barbiturates distribution, heroin possession

and use, heroin distribution, cocaine/crack possession and use, cocaine/crack distribution, prescription drugs possession and use, prescription drugs distribution, inhalant possession and use, and inhalant distribution; alcohol violations including alcohol possession, alcohol distribution, driving under the influence of alcohol, and alcohol intoxication; other sexual related offences including prostitution, statutory rape, sexual assault/unwanted touching; other violations including gambling, other offenses, loitering, indecent exposure and other criminal activity.

Table 4.4

Comparative Means of Merged Criminal Violations

Merged Criminal Violation Category	No SRO (N = 22,644)	Full-Time SRO (N = 25,922)	M Impact
Disorderly Conduct	0.02	0.11	0.09
Assault 4th (misdemeanor/simple assault)	0.06	0.14	0.08
Felony Assault	<0.01	0.02	-0.01
Criminal homicide	0.00	0.00	0.00
Other Violent Dangerous Felonies	<0.01	<0.01	0.00
Weapon Offenses	0.10	0.08	-0.02
Threatening	0.04	0.07	0.03
Theft Related Violations	0.02	0.06	0.04
Vandalism (Criminal Mischief)	0.01	0.05	0.04
Total Drug Violations	0.61	0.70	0.09
Total Alcohol Violations	0.30	0.22	-0.08
Other Sexual Related Offences	<0.01	<0.01	0.00
Other Violations	0.13	0.02	-0.09

Note. Results are provided as violations per 100 students. Data for analyses was provided by the Kentucky Department of Education (2012).

Results for Question One

Question one states: does the implementation of full-time SROs impact the frequency of criminal violation rates reported by predominantly rural Kentucky high schools? The results are presented below.

Results from two independent samples t-tests and one ANCOVA conducted in the accompanying research collectively revealed that there are no significant differences in reported criminal violation rates between predominantly rural Kentucky high school populations in schools without SROs and those schools with full-time SROs. The insignificant results hold at the school and student levels.

Pre-Post Criminal Violations Independent Samples t-test

An independent samples t-test was conducted to compare the pre-post criminal violation means between high school populations prior to having an SRO with populations from the same high schools after a full-time SRO was present. There was no significant difference between the means of the total pre SRO populations criminal violation rates (M = 1.75, SD = .13) and the mean of the total post-SRO populations criminal violation rates (M = 1.77, D .13); t (39497) = -.19, p = .848, two-tailed, d = 0.15). Levene's test for Equality of Variances was non-significant, and homogeneity of variance was assumed (F = .15, df = 39497, p = .701); (Table 4.5).

Table 4.5

Pre-Post Criminal Violations Independent Samples t-test

Group Statistics										
	Pre-Post	*N*	*M*	*SD*	*SEM*					
Criminal Violations	Pre-SRO	19,807	1.75	.13	<.01					
	Post-SRO	19,692	1.77	.13	<.01					
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	*Sig.*	*T*	*df*	*Sig.* (2-tailed)	*MD*	*Std. Error Difference*	95% CI *LL*	*UL*
Total Criminal Violations	Equal variances assumed	.15	.701	-.19	39497	.848	<-0.01	<.01	<-.01	<.01

Note. Results are provided as violations per 100 students. Data for analyses was provided by the Kentucky Department of Education (2012).

Comparative Criminal Violations Independent Samples t-test

An independent-samples t-test was conducted to examine the criminal violation means between high schools with and without SROs. There was no significant difference between the mean of the total SRO not assigned population's criminal violation rates (*M* = 1.32, *SD* .11) and the mean of the total SRO assigned population's criminal violation rates (*M* = 1.50, *SD* = .12); *t* (48564) = -1.60, *p* = .108, two-tailed, *d* = 1.56). Levene's test for Equality of Variances was significant and homogeneity of variance cannot be assumed (*F* = 10.24, *df* = 48564, *p* = .001); (Table 4.6).

Table 4.6

Comparative Criminal Violations Independent Samples t-test

Group Statistics									
	Comparative	*N*	*M*	*SD*	*SEM*				
Criminal Violations	No SRO	22,644	1.32	.11	<.01				
	Full-time SRO	25,922	1.50	.12	<.01				
Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	*Sig.*	*T*	*Df*	Sig. (2-tailed)	*MD*	Std. Error Difference	95% CI
									LL *UL*
	Equal variances not assumed					.108	<-0.01	0.10	<.01 <.01

Note. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative Criminal Violations ANCOVA

A one-way between groups Analyses of Covariance was conducted to compare criminal violation means between schools with full-time SROs and those without SROs. The analysis was conducted at the school as opposed to the student level. The dependent variable was the reported criminal violation rate per 100 students. The school's percentage of racial ethnic minority students and percentage of low income students were used as the covariates. Preliminary checks were conducted to ensure that there were no violations to the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariates.

Results of the analyses depicted in Table 4.7 and Table 4.8 reveal that there was no significant difference between the adjusted mean for the SRO not assigned population's criminal violation rates (*M* = 1.37) and the adjusted mean for the full-time SRO assigned populations criminal violation rates (*M* =1.40), (*F* =.01, *p* = .936, *df*[1]). Minority (*p* = .532) and low income (*p* = .617) were not significant covariates. Collectively, the variables accounted for 3.8% of the variance in criminal violation rates.

Table 4.7

Comparative Criminal Violations ANCOVA Unadjusted and Adjusted Means

Comparative	*N*	*Un-Adj. M*	*SD*	*Adj. M*	*SE*	95% CI	
						LL	*UL*
No SRO	42	1.36	1.21	1.37	0.20	0.95	1.76
Full-Time SRO	24	1.41	1.33	1.40	0.28	0.92	2.05

Table 4.8

Comparative Criminal Violations ANCOVA Percent Minority and Percent Low Income

Source	*SS*	*Df*	*MS*	*F*	*P*	ηρ²
Percent of Minority	0.64	1	0.64	0.21	.532	.006
Percent of Low Income	0.41	1	0.85	0.41	.617	.004
Group	0.01	1	0.22	0.01	.936	.000
Error	100.09	62	1.61			
Total	226.43	66				

a. R Squared = .010 (Adjusted R Squared = -.038)

Board Violations Examined

During the pre-post and comparative analyses the following reported board violations were individually examined: disturbing class, failure to attend detention, fighting, fighting student to student, fighting student to staff, fighting student to other, sexual misconduct, profanity/vulgarity, threat/intimidation, tobacco violations, dangerous instrument, other, cheating, dress code violations, leaving campus, skipping class, skipping school, truancy, signing parent/staff note, theft, failure to follow staff instructions, disruptive behavior, bus disturbance, bullying, harassment, threatening staff, verbal abuse, smoking, chewing tobacco, and tobacco other.

Pre-Post Individual Board Violations Means

Table 4.9 displays the pre and post means for each board violation. The five most frequently occurring board violations identified during the pre-SRO periods include: failure to follow staff instructions (M = 4.01, SD = .20) declining by 2.97 to (M = 1.04, SD = .10) during the post SRO periods; failure to attend detention (M = 3.00, SD = .17) declining by 1.34 to (M = 1.66, SD <.01) during the post SRO periods; fighting student to student (M = 2.86, SD = .17) slightly increasing by 0.01 to (M = 2.87, SD = .17) during the post SRO periods; (It is important to note, however, multiple board violation categories exist for fighting with a combined pre-SRO means (M = 4.31) declining by 1.29 to (M = 3.02) during the post SRO periods); disruptive behavior (M = 2.46, SD = .16) increasing by 1.15 to (M = 3.61, SD = .19) during the post SRO periods; and profanity/vulgarity (M = 1.69, SD = .13) decreasing by 0.61 to (M = 1.08, SD = .10) during the post SRO periods.

Results for other violations of interest identified during previous research include: disturbing class (*M* = 0.32, *SD* = .06) decreasing by 0.32 to (*M* = 0.00, *SD* = .00) during the post SRO periods, bullying (*M* = 0.04, *SD* = .02) increasing by 0.11 to (*M* = 0.15, *SD* = .04) during the post SRO periods, and threat/intimidation (*M* = 0.43, *SD* = .07) declining by 0.43 to (*M* = 0.00, *SD* = .00) during the post SRO period. Additional comparisons become clearer when examining the merged board violation information in Table 4.9.

Table 4.9

Pre-Post Means of Individual Board Violations

Board Violation	*M* Pre SRO *N* = 19,807	Pre *SD*	*M* Post SRO *N* = 19,692	Post *SD*
Disturbing class	0.32	.06	0.00	.00
Failure to attend detention	3.00	.17	1.66	<.01
Fighting	1.38	.12	0.09	.03
Sexual misconduct	0.14	.04	0.08	.03
Profanity/vulgarity	1.69	.13	1.08	.10
Threat/intimidation	0.43	.07	0.00	.00
Tobacco violations	1.00	.10	0.00	.00
Dangerous instrument	0.58	.08	0.07	.03
Other	1.83	.13	1.62	.13
Cheating	0.00	.00	0.01	.01
Dress code violations	0.11	.03	0.04	.02
Leaving campus	0.35	.06	0.36	.06
Skipping class	0.82	.09	0.50	.07
Skipping school	0.20	.05	0.10	.03
Truancy	<0.01	.01	0.01	.03
Signing parent/staff note	0.01	.01	<0.01	.01
Theft (stealing)	0.08	.03	0.17	.04
Failure to follow staff instructions	4.01	.20	1.04	.10
Disruptive behavior	2.46	.16	3.61	.19
Bus disturbance	0.05	.02	0.06	.03
Fighting student to student	2.86	.17	2.87	.17
Fighting student to staff	0.02	.01	0.01	.01
Fighting student to other	0.05	.02	0.05	.02
Bullying	0.04	.02	0.15	.04
Harassment	0.26	.05	0.51	.07
Threatening staff	0.15	.04	0.21	.05
Verbal abuse	0.13	.04	0.49	.07

Table 4.9 (continued)

Board Violation	*M* Pre SRO *N* = 19,807	Pre *SD*	*M* Post SRO *N* = 19,692	Post *SD*
Profanity vulgarity	0.00	.00	0.02	.16
Smoking	0.72	.09	0.29	.06
Chewing	0.14	.04	0.05	.02
Tobacco other	0.34	.06	0.25	.05

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Data for analyses were provided by the Kentucky Department of Education (2012).

Pre-Post Merged Board Violation Means

As observed in Table 4.9, the examination of numerous board violation categories can be difficult to assimilate and furthermore may result in varying degrees of uniformity in the assignment of violations to specific categories by school personnel. In an attempt to minimize these concerns and clarify the results of the study, the individual board violation categories have been merged with similar violations to provide a manageable set of violation categories presented in Table 4.10.

The merged board violations categories presented in Table 4.10 include: verbal aggression comprised of threat/intimidation, threatening staff, harassment, bullying, verbal abuse, and profanity/vulgarity; failure to follow staff instructions remained its own category; creating a disturbance including: disruptive behavior, bus disturbance and disturbing class; dangerous instruments remained its own category; theft remained its own category; sexual misconduct remained its own category; rule violations including cheating, dress code violations, and signing parent/staff note; attendance violations including: failure to attend detention, leaving campus, skipping class, skipping school and

truancy; tobacco violations including tobacco violations, smoking, chewing tobacco, and tobacco other; and other remained its own category.

Table 4.10

Pre-Post Means of Merged Board Violations

Merged Board Violation Category	*M* Pre SRO (*N* = 19,807)	*M* Post SRO (*N* = 19,692)	*M* Impact
Fighting / physical aggression	4.31	3.02	-1.29
Verbal aggression	2.70	2.44	-0.26
Failure to follow staff instructions	4.01	1.04	-2.97
Creating a disturbance	2.83	3.67	0.84
Dangerous instruments	0.58	0.07	-0.51
Theft	0.08	0.17	0.09
Sexual misconduct	0.14	0.08	-0.06
Rule violations	0.12	0.05	-0.07
Attendance violations	4.37	2.63	-1.74
Tobacco Violations	2.20	0.59	-1.61
Other Violations	1.83	1.62	-0.21

Note. Results are provided as violations per 100 students. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative (SRO No-SRO) Board Violation Means

Table 4.11 displays the means for each board violation contained in the comparative study examining high schools without SROs to high schools with full-time SROs. The table is provided as an instrument for comparing the individual board violation means between the pre-post study and the comparative study. To ensure consistency between the means presented in the two tables, the analysis of board

violations for Table 4.11 was conducted at the student level and is reflected as the criminal violation means per 100 students.

The five most frequently occurring board violations identified at the high schools without SROs include: fighting student to student (*M* = 4.06) decreasing by 1.64 to (*M* = 2.42) when compared to high schools with a full-time SRO; it is important to note, however, multiple board violation categories exist for fighting with a combined pre-SRO means (*M* = 4.10) declining by 1.62 to (*M* = 2.48); disruptive behavior (*M* = 1.70) decreasing by 0.32 to (*M* = 1.38) when compared to high schools with a full-time SRO; other (*M* = 1.55) decreasing by 0.95 to (*M* = 0.60) when compared to high schools with a full-time SRO; profanity/vulgarity (*M* = 0.97) increasing by 0.20 to (*M* = 1.17) when compared to high schools with a full-time SRO; and failure to follow staff instructions (*M* = 0.96) increasing by 0.26 to (*M* = 1.22) when compared to high schools with a full-time SRO.

Results for other violations of interest identified during previous research include: disturbing class (*M* = <0.01) decreasing by <0.01 to (*M* = 0.00) during the post SRO periods, bullying (*M* = 0.08) decreasing by 0.03 to (*M* = 0.05) during the post SRO periods, and threat/intimidation (*M* = 0.00) increasing by 0.02 to (*M* = 0.02) during the post SRO period. Additional comparisons are facilitated when examining the merged board violation information in Table 4.12.

Table 4.11

Comparative Means of Individual Board Violations

Board Violation	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)
Disturbing class	<0.01	0.00
Failure to attend detention	0.09	0.07
Fighting	<0.01	0.03
Sexual misconduct	0.11	0.12
Profanity/vulgarity	0.97	1.17
Threat/intimidation	0.00	0.02
Tobacco violations	0.00	0.00
Dangerous instrument	0.21	0.12
Other	1.55	0.60
Cheating	<0.01	<0.01
Dress code violations	0.03	0.02
Leaving campus	0.26	0.25
Skipping class	0.25	0.25
Skipping school	0.10	0.08
Truancy	0.01	0.00
Signing parent/staff note	0.00	0.00
Theft (stealing)	0.07	0.17
Failure to follow staff instructions	0.96	1.22
Disruptive behavior	1.70	1.38
Bus disturbance	0.12	0.08
Fighting student to student	4.06	2.42
Fighting student to staff	0.04	<0.01
Fighting student to other	<0.01	0.06
Bullying	0.08	0.05
Harassment	0.21	0.27
Threatening staff	0.14	0.12

Table 4.11 (continued)

Board Violation	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)
Verbal abuse	0.38	0.13
Profanity vulgarity	0.06	0.07
Smoking	0.16	0.13
Chewing	0.22	0.11
Tobacco other	0.20	0.08

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative Merged Board Violation Categories

The merged board violations categories presented in Table 4.12 include the following: verbal aggression which is comprised of threat/intimidation, threatening staff, harassment, bullying, verbal abuse, and profanity/vulgarity; failure to follow staff instructions remained its own category; creating a disturbance including disruptive behavior, bus disturbance, and disturbing class; dangerous instruments remained its own category; theft remained its own category; sexual misconduct remained its own category; rule violations included cheating, dress code violations, and signing parent/staff note; attendance violations included; failure to attend detention, leaving campus, skipping class, skipping school, and truancy; tobacco violations included tobacco violations, smoking, chewing tobacco, and tobacco other and other remaining its own category.

Table 4.12

Comparative Means of Merged Board Violations

Merged Board Violation Category	*M* No SRO (*N* = 22,644)	*M* Full-Time SRO (*N* = 25,922)	*M* Impact
Fighting / physical aggression	4.10	2.51	-1.59
Verbal aggression	1.84	1.83	-0.01
Failure to follow staff instructions	0.91	1.22	0.31
Creating a disturbance	1.82	1.46	-0.36
Dangerous instruments	0.21	0.12	-0.09
Theft	0.07	0.17	0.10
Sexual misconduct	0.11	0.12	0.01
Rule violations	0.03	0.02	-0.01
Attendance violations	0.80	0.65	-0.15
Tobacco Violations	0.58	0.32	-0.26
Other Violations	1.55	0.60	-0.95

Note. Results are provided as violations per 100 students. Data for analyses were provided by the Kentucky Department of Education (2012).

Results for Question Two

Question two asked: does the implementation of full-time SROs impact the frequency of board violation rates reported by predominantly rural Kentucky high schools? The results are presented below.

Results from two independent samples t-tests and one ANCOVA conducted in the accompanying research revealed that there is a significant difference in reported board violation rates when comparing predominantly rural Kentucky high school populations without SROs to predominately rural Kentucky high school populations with full-time SROs. Predominantly rural

Kentucky high schools with full-time SROs have significantly lower reported board violation rates than predominantly rural Kentucky high schools without SROs.

Pre-Post Board Violations Independent Samples t-test

An independent samples t-test was conducted to compare the pre-post board violation means. There was a significant difference between the means of the total pre-SRO population's board violation rate (M = 22.95, SD = .42) and the means of the total post SRO population's board violation rate (M = 15.34, SD = .36); t (38656.16) = 19.33, p <.001, two-tailed, d = 19.46). Specifically, board violation rates decreased in schools after they employed a full-time SRO. Levene's test for Equality of Variances was significant and homogeneity of variance cannot be assumed (F = 1528.70, df = 38656.16, p <.001); (Table 4.13).

Table 4.13

Pre-Post Board Violations Independent Samples t-test

Group Statistics										
		Pre-Post	*N*	*M*	*SD*	*SEM*				
Board Violations		Pre-SRO	19,807	22.95	.42	<0.01				
		Post-SRO	19,692	15.34	.36	<0.01				
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	*Sig.*	*T*	*Df*	*Sig.* (2-tailed)	*MD*	Std. Error Difference	95% CI	
									LL	*UL*
	Equal variances not assumed			19.33	38656.16	<.001	0.08	<.01	.07	.08

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative Board Violations Independent Samples t-test

An independent-samples t-test was conducted to examine the comparative study board violation means. There was a significant difference found between the means of the SRO not assigned population's total board violation rates (M = 12.07, SD = .33) and the means of the SRO assigned populations total board violation rates (M = 9.07, SD = .29); t (48564) = 10.71, p <.001, two-tailed, d = 9.65). Specifically more board violations were reported in high schools without SROs than high schools with full-time SROs. Levene's test for Equality of Variances was significant, so homogeneity of variance cannot be assumed (F = 468.01, df = 48564, p = .001); (Table 4.14).

Table 4.14

Comparative Board Violations Independent Samples t-test

Group Statistics									
	Comparative	*N*	*M*	*SD*	*SEM*				
Board Violations	No SRO	22,644	12.07	.33	<.01				
	Full-time SRO	25,922	9.07	.29	<.01				
Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	*t*	*Df*	*Sig.* (2-tailed)	*MD*	Std. Error Difference	95% CI
									LL *UL*
	Equal variances not assumed					<.001	0.03	<0.01	.02 .04

Note. Results are provided as violations per 100 students. Results of 0.00 indicate that there were no violations reported. Data for analyses were provided by the Kentucky Department of Education (2012).

Comparative Board Violations ANCOVA

A one-way between groups Analyses of Covariance was conducted to examine the comparative study board violation means. The independent variables were predominantly rural high schools without SROs assigned and predominantly rural high schools with full-time SROs assigned. The dependent variable was the total reported board violation rates per 100 students. The school's percentage of racial/ethnic minority students and percentage of low income students were used as the covariates. Preliminary checks were conducted to ensure that there were no violations to the assumptions of

normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariates.

Results of the analyses depicted in Table 4.15 and Table 4.16 demonstrate there was a significant difference found between the adjusted means for the SRO not assigned population's board violation rates (M = 13.83) and the adjusted means for the full-time SRO assigned populations board violation rates (M = 8.07), (F = 5.44, p = .023, df [1]). Minority status (p = .004) was a significant covariate, while low income was not (p = .079). Collectively the variables accounted for 16.1% of the variance in total board violation rates.

Table 4.15

Comparative Board Violations ANCOVA Unadjusted and Adjusted Means

Comparative	*N*	*Un-Adj. M*	*SD*	*Adj. M*	*SE*	95% CI	
						LL	*UL*
No SRO	42	13.38	10.97	13.83	1.41	11.01	16.65
Full-Time SRO	24	8.85	5.93	8.07	1.91	4.25	11.89

Table 4.16

Comparative Board Violations ANCOVA Percent Minority and Percent Low Income

Source	*SS*	*Df*	*MS*	*F*	*P*	ηρ²
Percent of Minority	679.89	1	679.89	8.70	.004	.123
Percent of Low Income	249.96	1	249.96	3.20	.079	.049
Group	425.09	1	425.09	5.44	.023	.081
Error	4847.34	62	78.18			
Total	15141.60	66				

a. R Squared = .200 (Adjusted R Squared = .161)

CHAPTER V

RESULTS

The following chapter discusses the major statistical findings of this research and the implications that previous research and existing literature potentially have on these findings. Recommendations and implications for policy, practice and future research are also highlighted.

The Problem Addressed

School safety is an important criterion for the establishment of a quality learning environment; however, it is a relatively new area of study that has been brought to the forefront by repeated cases of violence, including active shooter situations (Borum et al., 2010; Cornell & Mayer, 2010). The ensuing rise in media coverage and public concern have resulted in significant changes in school discipline and school safety measures throughout the nation (Borum et al., 2010). One of the most popular measures implemented to improve school safety has been the utilization of police officers (SROs) in schools. Even though an estimated 20,000 SROs are assigned to schools located throughout the United States (Myrstol, 2010) and millions of dollars have been spent supporting these initiatives (Girouard, 2001), only a limited amount of research has been conducted that evaluates the effectiveness of utilizing SROs in schools.

The majority of previous research evaluating SRO effectiveness has focused on the opinions of teachers, students, parents, and even the SROs themselves. Only a few studies have focused on measurable impacts SROs have on school safety (Stevenson,

2011; Na & Gottfredson, 2011; Raymond, 2010; Theriot, 2009). This study adds to the emerging empirical evidence on the impact of SROs.

Associated Factors Impacting the Reporting of Violations

Prior research has fallen short of significantly recognizing or addressing the inherent associated factors likely impacting reported criminal violation rates. Na and Gottfredson (2011) and Theriot (2009) mentioned the potential for inconsistencies; however, previous research has provided little or no significant discussions addressing the various potential causes for these inconsistencies and the existence of discrepancies between reported criminal violation rates and actual crime rates, as well as the impact these discrepancies may have upon research findings. These include the inherent impact that the primary roles of SROs may have on the reporting of incidents.

The primary roles of an SRO include: being a law enforcement officer, law-related counselor, and law-related educational teacher (CPSV, 2011). SRO's roles additionally involve performing other services in support of the teachers, staff, and students, with one of the primary roles including being an active listener and building positive relationships with students while serving as an approachable source for students to discuss concerns they have (CPSV, 2012). Research shows that establishing relationships is a critical step for programs trying to impact youth in a positive manner (Longacre, 2007), even though building those relationships can be a difficult task (Lane, 2009).

Considering that building relationships is considered one of the primary goals of an SRO and many believe it is the key to success (Atkinson, 2000; Finn & McDevitt, 2005), it is understandable that quality SROs likely spend a significant amount of time

attempting to establish these relationships. Previous research discusses that building relationships requires time and repeated positive interactions (Lane, 2009). These repeated interactions with students, staff and even families of students likely result in exchanges of information regarding criminal or other dangerous behaviors.

Secondly, researchers often fail to consider that an increased police presence will likely result in increases in the numbers of criminal acts observed or encountered. Since most violations require officers to witness the incident before arresting or citing students, the increased time SROs spend at campuses will almost certainly result in increased numbers of violations observed and reported. The mere presence of a police officer will likely increase the percentages of criminal violations reported (Levitt, 1998); however, this increase does not necessarily correlate to the presence of a higher crime rate. Additionally, personal conversations with multiple SROs (2012) revealed that it is not uncommon for some school officials to place pressure on SROs to criminally charge student violators, even when SROs desired to handle situations without formal punitive actions. The SROs further advised that when a SROs salary was paid by school funds, the pressure to formally charge students was exacerbated. Consideration for the disparity between reported violations and actual violation rates, as well as the impact officers may have on the percentages of violations reported, must be considered when evaluating research findings. Several studies (McDevitt & Panniello, 2005; Na & Gottfredson, 2005; Stevenson, 2011 and Theriot, 2009) allude to factors potentially impacting percentages of violations reported; however, little reference or discussion is provided.

Research Focus

This research adds to the few attempts to evaluate the substantive impacts SROs have on school safety. This was accomplished by comparing board violation and criminal violation means from predominantly rural high schools in Kentucky prior to the implementation of SROs and after their implementation. Additionally, a second analysis was conducted comparing board violation and law violation means from schools without SROs to those means to violation means from schools with full-time SROs. The major findings are discussed in the following sections.

Major Findings

Research Question One Findings

Question two asked: does the implementation of full-time SROs impact the frequency of criminal violation rates reported by predominantly rural Kentucky high schools? Results from two independent samples t-tests and one ANCOVA examining two separate data sets indicate that the presence of full-time SROs does not significantly impact the reported criminal violation rates in predominantly rural Kentucky high schools.

Pre-Post Study Criminal Violations Findings

Examining the results of the independent samples t-test for the pre-SRO/post-SRO study reveals that there was no statistically significant difference found between the means of reported criminal violations from predominantly rural Kentucky high school populations following the implementation of full-time SROs. Prior to the implementation of SROs (N = 19,807), there were 1.75 criminal violations reported per 100 students, and

after the implementation of full-time SROs (*N* = 19,692), there were 1.77 criminal violations reported per 100 students in the same Kentucky high schools.

Although changes in reported total criminal violations rates were not statistically significant, slight changes can be noted when examining the merged categories of criminal violations including: total reported drug violations decreasing from 0.65 to 0.56 violations per 100 students, which is contrary to previous research (Na & Gottfredson, 2011). Furthermore, total reported alcohol violations decreased from 0.19 to 0.12 per 100 students, and total reported weapons violations decreased from 0.10 to 0.06 per 100 students, as predicted from previous research findings (Na & Gottfredson, 2011). The reported serious violent assaults remained the same; however, other violent dangerous felonies decreased from 0.03 to <0.01 violations per 100 students, contrary to previous research findings (Theriot, 2009). The reported disorderly conduct violations decreased from 0.05 to 0.01 violations per 100 students. The most significant decrease in the pre-SRO/post-SRO merged reported criminal violation categories occurred in the other violations category which declined from 0.48 to 0.09 reported violations per 100 students. On the contrary, reported misdemeanor assault charges increased from 0.09 to 0.27 violations per 100 students. Simultaneously, reported threats increased from 0.03 to 0.11 violations per 100 students, which is understandable as initiatives in schools have focused on encouraging students to report bullying and threats. Finally, as predicted from previous research (Na & Gottfredson, 2011) theft related violations increased from 0.07 to 0.18 violations per 100 students. An important finding here is that aggregating legal violations appears to masks differences by varying types of offenses.

Comparative Study Criminal Violation Findings

As was the case with the pre-post analysis of criminal violations, results of the independent samples t-test for the comparative, no-SRO/Full-time SRO study, show no statistically significant difference found in the means of the reported criminal violations from predominantly rural Kentucky high school populations without SROs when compared to predominantly rural Kentucky high schools with full-time SROs. Populations without SROs assigned (N = 22,644) had 1.32 criminal violations reported per 100 students and populations with full-time SROs (N = 25,922) had 1.50 reported criminal violations per 100 students. In both cases, the number of criminal violations was low.

Although rates in reported criminal violations were not significantly different, slight changes in reported violation rates can be noted when examining the merged categories including total reported drug violations increasing from 0.61 to 0.70 violations per 100 students, which is consistent with previous findings (Na & Gottfredson, 2011). The total reported alcohol violations decreased from 0.30 to 0.22 violations per 100 students, and total reported weapons violations decreased from 0.10 to 0.08 violations per 100 students, supporting previous findings by Theriot (2009) but, contradicting findings by Na & Gottfredson (2011). The most significant decrease in merged reported criminal violation categories occurred in the other violations category which decreased from 0.13 to 0.02 reported violations per 100 students. On the contrary, reported serious violent assaults slightly increased from <0.01 to 0.02 violations per 100 students; however, other violent dangerous felonies remained the same. The reported disorderly conduct violations increased from 0.02 to 0.11 violations per 100 students, consistent with

findings by Theriot (2009). Contrary to Theriot's (2009) findings, reported misdemeanor assault charges increased from 0.06 to 0.14 violations per 100 students. Reported threats also increased from 0.04 to 0.07 violations per 100 students; however, this is understandable as noted previously, initiatives in schools have focused on encouraging students to report bullying and threats. Finally, reported theft related violations increased from 0.02 to 0.06 violations per 100 students.

Examining the results of the ANCOVA reveals no statistically significant difference between the adjusted means of reported criminal violations when comparing predominantly rural Kentucky high schools without SROs (N = 42) to predominantly rural Kentucky high schools with full-time SROs (N = 24). Predominantly rural high schools without SROs assigned had 1.37 criminal violations reported per 100 students, while those with full-time SROs had 1.40 reported criminal violations per 100 students when controlling for the percentage of racial/ethnic minority students and low income students.

The minority and low income covariates did not significantly impact the reported criminal violation rates at the high schools examined in the study collectively accounting for only .01% of the variance in criminal violation rates. This finding was contrary to previous research (Theriot, 2009; Brown, 2006; Dohrn, 2001; Hirschfield, 2008: Laub, 2002: Sampson & Lauritsen, 1997). These findings dispute reports of bias existing when law enforcement investigates criminal acts in minority populations (Raffaele-Mendez & Knoff, 2003; Richart, Brooks, & Soler, 2003).

Changes in reported criminal violations were predominantly minor and the overall results of the analyses conducted via all three approaches indicate that the presence of

full-time SROs does not significantly impact the reported criminal violation rates in predominantly rural Kentucky high schools. Additional questions surface when comparing the differences in results between the pre-post and comparative studies.

Research Question Two Findings

Question two asked: does the implementation of full-time SROs impact the frequency of board violation rates reported by predominantly rural Kentucky high schools? Results from two independent samples t-tests and one ANCOVA examining two separate data sets indicate that the presence of full-time SROs significantly reduces the reported board violation rates in rural Kentucky high schools.

Pre-Post Study Board Violation Findings

The results of the independent samples t-test for the pre-SRO/ post-SRO study indicate there is a statistically significant decrease found between the means of the reported board violations in predominantly rural Kentucky high school populations following the implementation of full-time SROs. Prior to the implementation of SROs (N = 19,807), there were 22.95 board violations reported per 100 students and after the implementation of full-time SROs (N = 19,692), that rate declined to 15.34 board violations reported per 100 students.

Changes in the total reported board violations demonstrate a significantly lower violation rate for rural Kentucky high schools following the implementation of SROs. When examining the merged board violation categories, the following changes in means were noted. Contrary to increases in the reported misdemeanor criminal assault rates in this study, the board violation category for fighting reflected a decline from the pre-SRO student population's (N = 19,807) reported violation means of 4.31 per 100 students to

3.02 reported violations per 100 students during the post-SRO period. Similarly, verbal aggression violations decreased from 2.70 to 2.44 reported violations per 100 students. Attendance violations also decreased from 4.37 to 2.63 reported violations per 100 students, while tobacco violations decreased from 2.20 to 0.59 violations per 100 students, and the most significant decrease in merged reported board violation categories occurred in the failure to follow staff instructions category which declined from 4.01 to 1.04 reported violations per 100 students. Other violation rates increased. For example, the reported creating a disturbance violations category increased from 2.83 to 3.67 violations per 100 students. Finally, the reported theft violations increased from 0.08 to 0.17 violations per 100 students, which was almost identical to the rise in reported thefts found in the criminal violation data results in this research.

Comparative Study Board Violation Findings

Results of the independent samples t-test for the comparative, no-SRO/full-time SRO question revealed a statistically significant difference between the reported board violation means for predominantly rural Kentucky high schools population with a full-time SRO compared to the rural Kentucky high schools population without an SRO. Predominantly rural high school populations without SROs assigned (N = 22,644) had 12.07 board violations reported per 100 students and predominantly rural high school populations with full-time SROs (N = 25,922) had a significantly lower reported board violations rate of 9.07 per 100 students.

When examining the merged board violation categories, the following differences between means were noted. Contrary to reported increases in misdemeanor criminal assaults found in this study, the reported board violation category for fighting reflected a

higher mean of 4.10 reported violations per 100 students in the no-SRO high schools population to 2.51 reported violations per 100 students in the full-time SRO student population. Similarly, the mean for the creating a disturbance violations category was 1.46 violations per 100 students when SROs were assigned compared to 1.82 in schools without SROs. The mean rate for dangerous instruments was 0.21 in schools without SROs, but only 0.12 violations per 100 students in schools with full-time SROs. Attendance violations were lower (0.80 to 0.65) per 100 students in the full-time SRO high schools, as were tobacco violation rates (0.58 to 0.32) violations per 100 students. Consistent with the lower mean rates reported above the other violations category mean was 1.55 in schools without SROs and 0.60 violations per 100 students in schools with SROs. Reported theft violations was lower in schools without SROs, 0.07 compared to 0.17 reported violations per 100 students in the full-time SRO high school's population. This increase was almost identical to the rise in reported thefts found the criminal violation data for the pre-SRO/post-SRO study conducted in this research.

The ANCOVA results for the comparative, no-SRO/full-time SRO study demonstrated a statistically smaller reported board violation means for the predominantly rural Kentucky high schools with a full-time SRO than the predominantly rural Kentucky high schools without an SRO. Predominantly rural Kentucky high schools without SROs assigned had an adjusted mean of 13.83 reported board violations per 100 students, while predominantly rural high schools with a full-time SRO had a significantly lower reported board violations rate of 8.07 per 100 students, after controlling for the percentage of racial/ethnic minority students and low income students. The percent of low income students was not a significant covariate. Thus, it did not significantly impact the reported

criminal violation rates at the high schools examined in the study. The percent of racial/ethnic minorities was a significant covariate with the covariates collectively accounting for 12.3% of the variance in reported board violations.

Considering that SROs have little impact on the reporting of board violations and school teachers and administrators identify and then report these violations (J. Akers, personal communication, July 27, 2013), the minority covariate results may give rise to some concern regarding the disparity of board violations identified and reported by school personnel when racial/ethnic minority populations are involved. Low income approached but did not reach significance ($p = .079$); however, some individuals consider income status harder to discern than race. Race was not a significant covariate in legal violations, which tend to be better defined than board violations which can be subjective. Further, legal violations are more often reported by police officers who have been highly trained to reduce bias in reporting.

Differences in reported board violations were significant. The overall results of the analyses conducted via all three approaches indicate that the presence of full-time SROs corresponds with significantly lower rates of reported board violations in predominantly rural Kentucky high schools.

Conclusions

Previous research focusing on criminal violations has been found to be somewhat problematic since the increased presence of law enforcement officers in schools has been associated with increases in the percentages of crimes reported, especially those that are not considered to be serious violent crimes (Na & Gottfredson, 2011). Theriot (2009)

states that in addition to witnessing more crimes, having SROs on campus may facilitate the reporting of criminal acts.

When examining the increase in reports of criminal activity stakeholders must consider the roles of the SRO and the impact these roles potentially have on reported criminal violations. One of the primary roles of an SRO is that of law enforcement, including the investigation and reporting of crimes; however, increases in reports of criminal violations do not necessarily directly correspond with increases in actual crime rates.

Establishing positive relationships with students and staff is a primary goal of SROs (Atkinson, 2000; CPSV, 2012; Finn & McDevitt, 2005; McDevitt & Panniello, 2005), which likely contributes to increases in the percentage of crimes reported. These frequent positive interactions are suspected to result in greater exchanges of information regarding criminal activity at schools, including the victimization of students and staff. McDevitt and Panniello (2005) reported that there was a positive correlation between the number of SRO conversations with students and the students comfort in reporting crimes.

Research has also shown that crime has historically been underreported to police (Elliott, Hamburg, & Williams, 1998); however, increases in police officers result in increases in crimes being reported (Levitt, 1998). With significant percentages of crimes historically going un-reported, including an estimated 56% of simple assaults, 59% of sexual offenses, and 56% of thefts (Rand & Catalano, 2007), a large disparity between actual crime rates and reported crime rates obviously exists. This disparity provides significant opportunities for SROs to increase the reporting percentages of crimes that typically go unreported, thereby improving the accuracy of those that are reported.

The potential for discrepancies likely existing in the reported criminal violations included in this study is likely greater since school officials were tasked with categorizing reported incidents with students into the appropriate violation categories, including the criminal violation categories. Since school officials are not typically trained on the specifics of criminal law and criminal law violations and therefore likely to make mistakes when attempting to classify student behaviors into criminal categories, it is likely that inaccuracies exist in the criminal violations reported by Kentucky schools to the Kentucky Department of Education. This disparity provides significant opportunities for SROs to increase the reporting percentages for crimes that typically go unreported and to increase the accuracy of the categorization of criminal violations reported by school officials.

When examining criminal violation rates, one must consider the classifications of crimes and the parameters involved in their enforcement by police officers. Each criminal violation has a set of elements that must be present before a criminal act has occurred and before law enforcement can charge an individual with the offense. Major crimes are typically classified as felonies, and minor crimes are classified as misdemeanors or violations. In Kentucky, major crimes such as felonies do not require that a police officer be present or witness a criminal act to legally charge someone with the crime. To legally charge an individual with a felony offense, Kentucky police officers must meet a standard of probable cause by identifying evidence that would lead a reasonable person to believe that the individual being charged with an offense likely committed the criminal act of which they are being accused of (Arrest by Peace Officers; by Private Persons, 2013). Probable cause is defined as “facts and circumstance

sufficient to convince a person of reasonable caution that an offense has been committed and that the defendant committed it; mere suspicion or belief, unsupported by facts or circumstances, is insufficient" (Jefferson County Kentucky Commonwealth Attorney's Office, 2013). This level of probable cause can be established through investigative means or by police officers witnessing criminal acts and then investigating those crimes to gather additional details.

The vast majority of misdemeanor crimes and violations in Kentucky require that a police officer witness the criminal activity before the officer can charge an individual with the offense. An exception to this requirement would be if the officer was serving a legal document such as an arrest warrant or summons that was issued by a court of law, and charges had been filed under oath against an individual (Arrest by Peace Officers; by Private Persons, 2013).

Simple assaults, titled assault 4th, must occur in the presence of a police officer before the officer can charge an individual with the crime, excluding cases involving assaults between family members and unmarried couples, and assaults that have occurred in hospital emergency rooms (Assault in the Fourth Degree, 2013; Arrest by Peace Officers; by Private Persons, 2013). As demonstrated in Tables 4.3 and 4.4, the vast majority of reported criminal activity at schools involves misdemeanor offenses or violations. Therefore, it is obvious that a high school with a full-time SRO who spends 75% or more of his or her time serving that one particular high school will witness more criminal activity than officers who are occasionally called to a high school to answer complaints.

Considering all of the factors likely to impact the reported criminal activity rates at high schools following the implementation of an SRO, it is logical to predict a rise in the percentages of crimes being reported, even if the actual crime rates remained the same. This increase in reported criminal violation rates may even be present when the actual crime rates have decreased. This increase in reported violations caused by the presence of an SRO would lead to an increase in the reported criminal violation rates but not necessarily an increase in the actual crime rate. Previous research has fallen short of adequately recognizing the potential difference between actual crime rates and reported crime rates, as well as the many factors that can cause these rates to substantially differ. These potential discrepancies concerning the percentages of reported criminal violations may bring the importance of the examination of reported board violations conducted in this research to the forefront.

The executive director for the Kentucky Center for School Safety advised that SROs typically have input regarding the identification, classification, and reporting of criminal violations at schools to which they are assigned (J. Akers, personal communication, July 27, 2013), which likely impacts the percentage of reported criminal violations; however, this is not the case in board violations. Akers (2013) stated that SROs are not likely to have a significant input on reported board violations; therefore, SROs are not directly impacting the percentages of board violations reported to the Kentucky Department of Education.

Considering the nature of board violations and the procedures for reporting them, it is reasonable to conclude that the reported percentages of board violations remains more stable following the implementation of SROs than the percentages of criminal

violations. This would additionally suggest that the difference between the reported board violation rates and the actual board violation rates would remain more constant than when examining criminal violation rates. Given these findings, board violations are predicted to have a higher degree of creditability, and therefore be better suited to use as variables for identifying changes in violation rates in Kentucky schools. Based on this reasoning, board violations rates are more credible for measuring historical levels of school safety in Kentucky schools than criminal violations.

Research Findings of SROs Impact on School Safety

Criminal violations. Both the pre-SRO/post-post SRO and the comparative no SRO/fulltime SRO analyses yielded the same conclusion. Both analyses indicated that there was no significant difference between the reported criminal violation means at predominantly rural Kentucky high schools without SROs and predominantly rural Kentucky high schools with a full-time SRO. However, given the likelihood of increased percentages of criminal violations being reported by schools with full-time SROs, it is reasonable to recognize that a decrease in actual crime rates may have occurred. Improved accuracy in the classifications of criminal violations may have also occurred following the implementation of the SRO.

Board violations. When examining reported board violation means, both the pre-SRO/post-post SRO and the comparative no SRO/fulltime SRO analysis also yielded the same conclusion. These results indicate that predominantly rural Kentucky high schools with full-time SROs had significantly lower reported board violation rates than predominantly rural Kentucky high schools without SROs.

Overall research findings. Considering the overall results of the analyses conducted and other factors uncovered during this research the conclusion is made that full-time SROs assigned to predominantly rural Kentucky high schools improved the overall levels of school safety.

Recommendations for Policy, Practice, and Future Research

Schools and law enforcement agencies should work closely together to ensure uniformity in the reporting of criminal and board violations. Individual violation categories should be clearly defined to ensure accurate reporting and training of appropriate school personnel and SROs should be mandatory. Violation categories should be condensed, and repetitive categories should be eliminated. Reporting procedures should be streamlined to eliminate confusion and maintain accuracy. The resulting uniformity and improved accuracy in reporting would significantly aid in the ability to evaluate program effectiveness and conduct other related research endeavors.

The findings of this research and previous research are congruent in some areas but differ in others. It was not unexpected that differences arise in research findings across studies especially when different sources of data are being utilized and different populations and programs are being examined. It would also be illogical to assume that all SRO programs are either effective or ineffective in improving school safety. Many variables likely come into play that impact the ability of SROs to reduce violation rates and impact school safety; it is believed that the selection of SROs and the coordination and cooperation between these officers and school officials are one of the major keys to achieving success.

Given the diversity and complex nature of these programs, additional research is warranted that compares substantive measures of school safety. If these measures involve reported violation rates, researchers should consider the accuracy of those reports and the inherent discrepancies between the reported criminal activity rates and the actual crime rates. This includes taking into account the impact SRO roles may have on the percentage of violations reported, as well as the impact legal parameters and policy guidelines may have on violations. Consideration should be given to the utilization of violations or other data whose percentages of reported occurrences would not be significantly impacted by the mere presence of an SRO or other reporting inconsistencies.

In addition to the overall need for future analyses utilizing the identification and utilization of measurable impacts on violations or other outcomes, research that additionally examines the overall SRO program and school itself would be instrumental. Beneficial research could include examinations of information such as existing policies, primary goals, activities, and duties performed by the SRO. A study examining the knowledge, skills, dispositions and leadership behaviors of effective SROs should be considered. The SROs experience level and their exposure to training specifically focused on SRO related duties, along with measurements of the SROs perceived effectiveness and their desire to perform duties required by the position could be taken into account as well. Evaluations of the existing relationships between the SRO and their respective law enforcement agency and the relationship between the police agency, the SRO, and the school staff, including the administrative personnel, would prove beneficial as well. Although some of these variables have been researched in a univariate

manner, combining the variable into one systemic research study could provide beneficial results.

Another effective research strategy would be the utilization of mixed methods design. Combining the qualitative evaluation of the SRO, the program in its entirety, and the statistical analyses measuring substantive impacts could produce research findings that aid in identifying not only which programs are effective but why they are effective. It could additionally provide answers regarding the potential impact that SROs may have on the percentage of criminal violations reported.

Research specifically focusing upon SRO programs that are reported to be effective would be an additional research endeavor that would be beneficial. By identifying and comparing strategies and tactics used in successful programs, guidelines for model programs could be developed that would provide a beneficial format for new programs to emulate and then adapt as their needs dictate. In addition to broad examinations of SROs and their programs, benefits would be gained by research narrowly focusing on areas such as attendance levels and academic success rates at schools with SROs. Although this research revealed a decline in both the pre-post and comparative study attendance violation rates and Link (2010) found that schools with SROs had higher cumulative ACT Scores. Future research is warranted in these areas.

Concluding Remarks

Given the high stakes of the outcomes involved, it is clear that additional research is warranted on all areas involving the utilization of SROs and their attempts to improve school safety. The ultimate question is not if SROs are beneficial; it should be how are they beneficial, and how they can improve their performance and better serve the schools

and communities to which they are assigned? There should be little doubt that the presence of quality SROs provides increased perceptions of safety and security for the majority of staff and students they serve. If these programs can aid in providing an environment that is more conducive to learning, a major accomplishment has already been achieved and a worthwhile endeavor undertaken. SROs are additionally a potentially effective tool for the development of community and problem oriented policing initiatives. Through SRO's efforts in building relationships with students, staff, parents and the community at large, they have the potential to impact their agency and the community well beyond the existing school communities. Additional research and the subsequent identification of effective approaches can assist SROs in becoming more effective at making schools a safer environment while simultaneously improving the communities they serve.

REFERENCES

American Psychological Association (2006). *Zero tolerance policies are not as effective as thought in reducing violence and promoting learning in school*. Retrieved from http://www.apa.org/news/press/releases/2006/08/zero-tolerance.aspx

Arrest by Peace Officers, by Private Persons, 431 KRS § 005 (2013).

Assault in the Fourth Degree, 508 KRS § 030 (2013).

Atkinson, A. J. (2000) *The successful school resource officer program: Building effective school and law enforcement partnerships.* Richmond, VA: Greystone Publishers, Inc.

Bernard, J. (2012). *Safe schools and effective collaboration: 2012 legal update.* Malibu, CA: Pepperdine University School of Law.

Borum, R., Cornell, D., Modzeleski, W., & Jimerson, S. R. (2010). What can be done about school shootings: A review of the evidence. *Educational Researcher*, *39*, 27-37.

Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's operation ceasefire. *Journal of Research in Crime and Delinquency*, *38*(3), 195-225. doi: 10.1177/0022427801038003001

Braga, A. A., & Weisburd, D. L. (2012). A systematic review and meta-analyses of the empirical evidence. *Journal of Research in Crime and Delinquency*, *49*(3), 323-358. doi: 10.1177/0022427811419368

Bringle, R. G., Games, R., Ludlum, C., Osgood, R., & Osborne, R. (2000). Faculty fellows program: Enhancing integrated professional development through community service. *American Behavioral Scientist, 43*, 882-894.

Brown, B. (2006). Understanding and assessing school police officers: A conceptual and methodological comment. *Journal of Criminal Justice, 34*, 596.

Brown, T. (2007). Lost and turned out. *Urban Education, 42* (5), 432-455.

Bureau of Justice Statistics and National Center for Education Statistics. (2012). *Indicators of school crime and safety, 2011* (Report No. 236021). Retrieved from Bureau of Justice Statistics and National Center for Education Statistics website: http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2295

Casella, R. (2003). Zero tolerance policy in schools: Rationale, consequences, and alternatives. *Teachers College Record, 105*, 872–892.

Center for Disease Control (2006). *2005 Youth risk behavior survey results.* Retrieved from http://www.cdc.gov/HealthyYouth/yrbs/

Community Oriented Policing Services (COPS). (2011a). *Community policing defined*. Retrieved from: http://www.cops.usdoj.gov/Publications/e051229476_CP-Defined-TEXT_v8_092712.pdf

Community Oriented Policing Services (COPS). (2011b). *The impact of economic downturn on American police agencies*. Retrieved from http://www.cops.usdoj.gov/files/ric/publications/e101113406_economic%20impact.pdf

Connell, N. M., Miggans, K., & McGloin, J. (2008). Can a community policing initiative reduce serious crime? *Police Quarterly, 11*(2), 127-150. ISSN: 10986111

Cornell, D., & Mayer, M. (2010). Why do school order and safety matter? *Educational Researcher, 39,* 7-15.

Costenbader, V., & Markson, S. (1998). School suspension: A study with secondary school students. *Journal of School Psychology, 36,* 59-82.

Denham, M. (2009). *Effectiveness of school resource officer programs.* Huntsville, TX: Sam Houston State University.

Dinkes, R., Cataldi, E. F., Kena, G., & Baum, K. (2006). *Indicators of school crime and safety: 2006*. (Report No. NCJ 214262). Washington, DC: Government Printing Office. Retrieved from National Center for Education Statistics website: http://www.nces.ed.gov/pubs2007/2007003.pdf

Disorderly Conduct in the Second Degree, 525 KRS § 060 (2007).

Dohrn, B. (2002). The school, the child, and the court. In M. K. Rosenheim, F. E. Zimring, D.S. Tanenhaus, & B. Dohrn (Eds.), *A century of juvenile justice* (pp. 267-309). Chicago, IL. University of Chicago Press.

Duncan, G. J., & Brooks-Gunn, J. (2000). Family poverty, welfare reform, and child development. *Child Development, 71,* 188–196.

Eck, J., & Rosenbaum, D. P. (1994). *The new police order: Effectiveness, equality, and efficiency in community policing.* Thousand Oaks, CA: Sage Publishing.

Eisert, A. (2005). *School resource officer evaluation*. Retrieved from Center for Schools and Communities, Pennsylvania Commission on Crime and Delinquency. website: http://www.portal.state.pa.us/portal/server.pt/ document/350400/ srophaseonereport_final_pdf

Elliott, D. S., Hamburg, B. A., & Williams, K. R. (1998). *Violence in American schools: A new perspective.* New York: Cambridge University Press.

Engec, N. (2006). Relationship between mobility and student performance and behavior. *The Journal of Educational Research, 99*(3), 167-178.

Fenning, P., & Rose, J. (2007). Overrepresentation of African American students in exclusionary discipline: The role of school policy. *Urban Education, 42,* 536–559.

Fine, M. (1991). *Framing dropouts: Notes on the politics of an urban public high school*. New York: State University of New York Press.

Finn, P., & McDevitt, J. (2005, March). *National assessment of school resource officer programs final project report* (Report No. 209273). Rockville, MD. Retrieved from National Criminal Justice Reference Service website: https://www.ncjrs.gov/pdffiles1/nij/grants/209273.pdf

Finn, P., Shively, M., McDevitt, J., Lassiter, W., & Rich, T. (2005, March). *Case studies of 19 school resource officer (SRO) programs* (Report No. 209271). Rockville, MD. Retrieved from National Criminal Justice Reference Service website: https://www.ncjrs.gov/pdffiles1/nij/grants/209271.pdf

Fries, K., & DeMitchell, T. A. (2007). Zero tolerance and the paradox of fairness: viewpoints form the classroom. *Journal of Law & Education, 36*(2), 211-229.

Garcia, C. A. (2003, March). School safety technology in America: Current use and perceived effectiveness. *Criminal Justice Policy Review, 14*(1) 30-40. doi: 10.1177/0887403402250716

Gateskill, B. (2004). *Common issues found in safe schools assessments.* Retrieved from http://Safe%20School%20Assessmentscommonissuesfound

Girouard, C. (2001) *School resource officer training program.* Washington, DC. Retrieved from U.S. Department of Justice Programs, Office of Juvenile Justice and Delinquency Prevention website https://www.ncjrs.gov/pdffiles1/ojjdp/fs200105.pdf

Goldstein, H. (1979, April). Improving policing: A problem oriented approach. *Crime & Delinquency, 25*(2), 236-258. doi: 10.1177/001112877902500207

Hirschfield, P. J. (2008). Preparing for prison? The criminalization of school discipline in the USA. *Theoretical Criminology, 12*(1), 79-101.

Jefferson County Kentucky Commonwealth Attorney's Office. (2013). *Definitions.* Retrieved from http://www.louisvilleprosecutor.com/definitions.htm

Jennings, W. G., Khey, D. N., Maskaly, J., & Donner, C. M. (2011, September). Evaluating the relationship between law enforcement and school security measures and violent crime in schools. *Journal of Police Crisis Negotiations, 11*(2). 109-124. doi: 10.1080/15332586.2011.581511

Johnson, I. M. (1999). School violence: The effectiveness of a school resource officer program in a southern city. *Journal of Criminal Justice, 27*(2), 173-192.

Justiceworks. (2001). *School resource officer evaluation: Executive summary.* Retrieved from http://www.justiceworks.unh.edu/Research/SRO_Eval/sro_eval.html

Keleher, T. (2000). *Racial disparities related to the school zero tolerance policies: Testimony to the U.S. commission on civil rights* (Policy Research Report, UD 034244) Oakland, CA: Applied Research Center, USCCR Testimony.

Kentucky Association of School Resource Officers (KASRO). (2013). *Homepage*. Retrieved from http://www.kyasro.com/

Kentucky Department of Education. (2012, October 26). *Kentucky education facts*. Retrieved from http://education.ky.gov/comm/edfacts/Pages/default.aspx

Kentucky Department of Education. (2012). *Annual reported criminal violations and board violations*. (Data File and Code Book, 2003-2012). Frankfort, KY: Kentucky Center for School Safety and Kentucky Department of Education.

Lambert, R., & McGinty, D. (2002). Law enforcement officers in schools: Setting priorities. *Journal of Educational Administration 40*(3), 257-273. doi: 10.1108/09578230210427172

Lane, J. F. (2009). *The frequency of school resource officer tasks and incidents of school violence* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 305010268)

Laub, J. H. (2002). A century of delinquency research and delinquency theory. In M. K. Rosenheim, F. E. Zimring, D.S. Tanenhaus, & B. Dohrn (Eds.), *A century of juvenile justice* (pp. 179-205). Chicago, IL: University of Chicago Press.

Levitt, S. D. (1998). The relationship between crime reporting and police. *Journal of Quantitative Criminology, 14*(1), 68-81.

Link, J. W. (2010). *School Resource Officers in Missouri Public Schools: School Safety and Academic Success* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3440207)

Longacre, R, (2007). *Building positive police youth relations via after school programs at the school site.* Retrieved from http://www.orcpi.com/journal/June07.pdf

MacDonald, J. M. (2002, October). The effectiveness of community policing in reducing urban violence. *Crime and Delinquency 48*(4), 592-618.

May, D. C., Fessel, S. D., & Means, S., (2004). Predictors of principals' perceptions of school resource officer effectiveness in Kentucky. *American Journal of Criminal Justice, 29*(1) 75-93. doi: 10.1007/NF02885705

Mayer, M. J. (2008, November). *School resource officers.* (CPSV Fact Sheet #5) Retrieved from Consortium to Prevent School Violence website: http://www.preventschoolviolence.org/resources_assets/CPSV%20Fact%20Sheet-5-School%20Resource%20Officers.pdf

Mazerolle, L., Soole, D., & Rombouts, S. (2007, June). A review of the evaluation literature. *Police Quarterly, 10*(2), 115-153.

McDevitt, J., & Panniello, J. (2005). *National assessment of school resource officers programs: Survey of students in three large new SRO programs* (Document No. 209270). Retrieved from U.S. Department of Justice website: https://www.ncjrs.gov/pdffiles1/nij/grants/209270.pdf

Mendez, L. M. R., & Knoff, H. M. (2003). Who gets suspended from school and why: A demographic analyses of schools and disciplinary infractions in a large school District. *Education and Treatment of Children, 26*(1), 30-51.

Mendez, L. M., Knoff, H. M., & Ferron, J. M. (2002). School demographic variables and out-of-school suspension rates: A quantitative and qualitative analyses of a large, ethnically diverse school district. *Psychology in the Schools, 39,* 259-277. doi: 10.1002/pits.10020

Morrison, G. (1997). The web of zero-tolerance: Characteristics of students who are recommended for expulsion from school. *Education & Treatment of Children, 20*(3), 316-336.

Morrison, G., Storino, M., & Dillon, C. (2001). An examination of the disciplinary histories and the individual and educational characteristics of students who participate in an in-school suspension program. *Education and Treatment of Children, 24*, 276-293.

Myrstol, B. A. (2010) Police in schools: Public perceptions. *Alaska Justice Forum, 27*(3), 5–8.

Na, C., & Gottfredson, D. C. (2011). Police officers in schools: Effects on school crime and the processing of offending behaviors. *Justice Quarterly*, 1-32. doi:10.1080/07418825.2011.615754

National Association of School Resource Officers (NASRO). (2001). *2001 National school resource officer survey.* Retrieved from https://naasro.memberclicks.net/

National Association of School Resource Officers (NASRO). (2004). *2004 National school resource officer survey.* Retrieved from https://naasro.memberclicks.net/

National Association of School Resource Officers (NASRO). (2010). *SRO basic course manual.* Hoover, AL: NASRO.

National School Safety Center. (2011). *School safety assessment services.* Retrieved from http://www.schoolsafety.us/services/school-safety-site-assessments

National School Safety and Security Services. (2011). *School violence.* Retrieved from: http://www.schoolsecurity.org/trends/school_violence.html

National Education Association (NEA). (2012). *Our position and actions on school safety, bullying and harassment*. Retrieved from http://www.nea.org/home/19535.htm

Nelson, A. (2008, December). The impact of zero tolerance school discipline policies: Issues of exclusionary discipline. *NASP Communiqué, 37*(4). Retrieved from http://www.nasponline.org/publications/cq/mocq374impact_zero_tolerance.aspx

New York Civil Liberties Union (NYCLU). (2009). *Safe New York city schools say no to aggressive police tactics.* Retrieved from http://www.nyclu.org/node/2501

North Carolina Center for the Prevention of School Violence (CPSV). (2011). *School resource officer.* Retrieved from North Carolina Department of Juvenile Justice and Delinquency Program website: http://www.ncdjjdp.org/cpsv/school_resource_officer.html

North Carolina Center for the Prevention of School Violence (CPSV). (2012). *School resource officer.* Retrieved from North Carolina Department of Juvenile Justice and Delinquency Program website: http://www.ncdjjdp.org/cpsv/sro/what_sro_do_lrc_lret.html

Raffaele Mendez, L. M., & Knoff, H.M. (2003). Who gets suspended from school and why: A demographic analyses of schools and disciplinary infractions in a large school district. *Education and Treatment of Children, 26*(1), 30-51. Retrieved from http://wvupressonline.com/journals/etc

Rand, M., & Catalano, S. (2007). *Bureau of Justice statistics bulletin: Criminal victimization, 2006*. Retrieved from Department of Justice website: http://www.ojp.usdoj.gov/bjs/pub/pdf/cv06.pdf

Rausch, K. M., & Skiba, R. (2004). *Unplanned outcomes: Suspensions and expulsions in Indiana* (Education policy brief Vol. 2, No. 2). Retrieved from Indiana Youth Services Association website: http://ceep.indiana.edu/projects/PDF/PB_V2N2_UnplannedOutcomes.pdf

Raymond, B. (2010). Problem-oriented guides for police: Response guides series. Guide No. 10. *Assigning police officers to schools.* ISBN: 978-1-935676-14-0. Retrieved from http://www.popcenter.org/Responses/pdfs/school_police.pdf

Richart, D., Brooks, K., & Soler, M. (2003). *Unintended consequences: The impact of "zero tolerance" and other exclusionary policies on Kentucky students*. Retrieved from http://www.buildingblocksforyouth.org/kentucky/kentucky.pdf

Rosenbaum, D. P. (1994). *The challenge of community policing: Testing the promises*, Thousand Oaks, CA: Sage Publishing. pp. 3-23.

Safe School Initiative Division (SSID). (2004). *School resource officers: Briefing paper.* Retrieved from University of Arkansas System, Criminal Justice Institute website: http://www.arsafeschools.com/BriefingPapers.htm

Sampson, R. J., & Lauritsen, J. L. (1997). Racial and ethnic disparities in crime and criminal justice in the United States. In M. Tonry (Ed.), *Ethnicity, crime, and immigration; Comparative and cross-national perspectives* (pp. 311-374). Chicago, IL: University of Chicago Press.

Santayana, G. (1905). *The life of reason*, Vol. 1. Retrieved from http://www.quotationspage.com/quote/2042.html

Schuiteman, J. G., (2005) *SRO program evaluation issues plus new commonsense findings.* Retrieved from the George Washington University, Hamilton Fish Institute website: http://gwired.gwu.edu/hamfish/AnnualConference/2005/

Sherling, K. (1998). *National Association of School Resource Officers: Basic course manual.* Miami, FL: NASRO, Inc.

Skiba, R. (2004). Zero tolerance: The assumptions and the facts. *Education Policy Briefs, 2*(1), 1–8

Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review, 34*(4), 317-342.

Skiba, R. J., & Peterson, R. L. (2000). School discipline: From zero tolerance to early response. *Exceptional Children, 66,* 335-347.

Stephens, D. W. (1996). *Community problem-oriented policing: Measuring impacts from quantifying quality in policing.* p. 95-129. Police Executive Research Forum. Washington, DC.

Stevenson, Q. A. (2011). *School resource officers and school incidents: A qualitative study*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3461388)

Supervision of Pupils' Conduct, 161 KRS § 180 (2007).

Theriot, M. T. (2009). School resource officers and the criminalization of student behavior. *Journal of Criminal Justice, 37*(3) 280-287. doi: 10.1016/ j.jcrimjus.2009.04.008

Torres, J., & Schaffer, J. (2000). *Benchmarks for campus/community partnerships*. Providence, RI: National Campus Compact.

Trojanowicz, R., & Bucqueroux, B. (1988). *Community policing: How to get started* (2nd ed.), Cincinnati, OH: Anderson Publishing.

Trojanowicz, R., Kappeler, V. E., Gaines, L. K., & Bucqueroux, B. (1998). *Community policing: A contemporary perspective* (2nd ed.). Cincinnati, OH: Anderson Publishing.

Ujifusa, A. (2010, December 8). Concerns grow about coming elimination of Montgomery school police officers. *Maryland Community News Online Gazette.* Retrieved from http://ww2.gazette.net/stories/12082010/montnew190919_32533.php

University of Texas Fire Prevention Services. (2009). *Our Lady of the Angels school fire.* Retrieved from http://www.utexas.edu/safety/fire/safety/historic_fires.html#lady

U.S. Census Bureau. (2012). *Department of Commerce*. Retrieved from http://quickfacts.census.gov/qfd/states/21000.html

U.S. Departments of Education and Justice. (2004). *Indicators of school crime and safety*. Retrieved from http://nces.ed.gov/pubs2005/2005002.pdf

Vavrus, F., & Cole, K. M. (2002). I didn't do nothin: The discursive construction of school suspension. *The Urban Review, 34*(2), 87-111.

Walters, P. M. (1993, November). Community-oriented policing: A blend of strategies. *FBI Law Enforcement Bulletin*, *62*(11), 20-23. Retrieved from https://www.ncjrs.gov/App/publications/Abstract.aspx?id=145803

Wasserman, R. (2010, July). *Building communities of trust.* Retrieved from U.S. Department of Justice, Office of Community Oriented Policing Services website: http://www.cops.usdoj.gov/files/RIC/Publications/e071021293_BuildingCommTrust.pdf

Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. (2010). Is problem oriented policing effective in reducing crime and disorder? *Campbell Systematic Reviews, 2008,*14: doi: 10.4073/csr.2008.14

Wexler, C . (2010, September 30) *Survey reveals extent of police budget cuts* (PERF press release). Retrieved from www.policeforum.org/dotAsset/36339.pdf

White, M. D., Fyfe, J. J., Campbell, S. P., & Goldkamp, J. S. (2003, May). The police role in preventing homicide: Considering the impact of problem oriented policing on the prevalence of murder. *Journal of Research in Crime & Delinquency, 40*(2), 194-225.

Wu, S., Pink, W., Crain, R., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review, 14*(4), 245-303.

CURRICULUM VITAE

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Education	2013 Eastern Kentucky University, College of Education Richmond, Kentucky **Ed.D., Educational Leadership and Policy Studies** 2007 Eastern Kentucky University, College of Justice and Safety Richmond, Kentucky **M.A., Safety, Security, and Emergency Management with Certificate in Homeland Security** 1984 Eastern Kentucky University, College of Justice and Safety Richmond, Kentucky **B.S., Police Administration** **Additional Homeland Security, Emergency Management and Security Related Seminars, Courses & Certifications** Homeland Security ACAMS Training (Automated Critical Assets Management Course/2007) Urban Critical Infrastructure Surveillance Detection Course/2007 JTTF Counter-Terrorism Training/2007 Homeland Security Agro-terrorism Conference/2007 UNLV/Protecting Soft Targets/2006 Israel Military Institute/Anti-Terror Training/2006 (Training In Israel) NIMS/(3 Courses/2006) Homeland Security-Train the Trainer/2006

	FLETC/Anti-Terrorism Awareness/2006 BJA/Criminal Intelligence Systems/2006 International Counter-Terrorism Officers Association Conference/2005 & 2006 Counter-Terrorism Investigators Course/2005 FAMS/Tactical Information Sharing/2005 BJA/State and Local Anti-Terrorism/2005 Buffer Zone Critical Infrastructure Assessment Training/2004 Homeland Security/Making Intelligence Relevant/2004 JINSA/LEEP Terrorism Symposium/2004 ADL/Advanced Training School-Extremist & Terrorist Threats/2004 CIA/Intelligence and Information Sharing/2004 NTOA/Tactical Commanders & Supervisors Training/2003 ODP/Weapons of Mass Destruction Tactical Operations-Operations Level/2003 US Army/Dignitary Protection/2003 Hazardous Materials First Responders. Operators, & Technician Courses/Certifications/2002 Completed over 75 specialized Homeland Security and L.E. training courses/in addition to routine Academy and In-Service Training. Copies of all Certificates are available on request.
Work experience	**Homeland Security and Emergency Management related accomplishments include but are not limited to the following:** Key player in the development of the Kentucky Fusion Center and Commander and Coordinator of all Intelligence and Counter-Terrorism personnel and initiatives in the Fusion Center and the Kentucky Office of Homeland Security (KOHS). Developed the Kentucky Electronic Field Information Report (KFIR) that is available, free of charge, to all KY law enforcement personnel providing an instantaneous electronic reporting format that is designed to allow officers to submit suspicious activity and

	intelligence reports from MDT systems located within their cruisers, laptops, or stationary agency computers. Provides information immediately to Intelligence Analysts and automated searching capabilities as well as a host of other benefits. Developed state of the art Kentucky Criminal Intelligence Database utilized by analysts at the Kentucky Fusion Center. The database is fully 28 CFR, Part 23 compliant and it provides a host of functions that greatly enhance the Analyst's ability to input, store, automatically search, and delete intelligence files. (On reaching their maximum retention period) It is designed to automatically search a host of data sources available on Kentucky's Open Porthole Solution database, creating substantial automatic data-mining capabilities. The intelligence database and the intelligence can be securely accessed from remote locations providing the Fusion Center the capability of having off-site partners involved in the mission of collecting, analyzing, and sharing intelligence information. Developed accredited courses and provided the training to Counter-Terrorism Investigators from various police agencies located throughout the state. This instruction was designed to aid the Commonwealth in the investigation of suspicious and criminal activities which potentially involve members or supporters of suspected international or domestic terrorists/extremist groups. Directly involved in the development of Emergency Management Response Plans for the Commonwealth of Kentucky and actively served at the Kentucky EOC during critical response incidents managing response entities. Extensively involved in conducting critical infrastructure assessments and safety and security procedures and protocol reviews. Developed the plan for implementing and securing the distribution of Kentucky's pandemic supplies to the various nodes throughout the state supporting our states medical response during crisis incidents. Managed the distribution of federal grant monies and equipment for various programs related to training and response **Successfully applied for multiple Homeland Security Grants and funding to support the following projects:** Critical infrastructure protection enhancements. Surveillance equipment, mobile command units, and Homeland Security related training.

	Development of the Kentucky Electronic Field Information Report Development of the automated Kentucky Criminal Intelligence Database *Additional grant writing experience obtained in previous positions 2009-Present **Eastern Kentucky University (DOCJT Instructor II)** Provide instruction to sworn police officers throughout the Commonwealth of Kentucky. Primarily instruct courses dealing with response to active shooter incidents, police training officer programs and homeland security related subjects. This instruction involves the utilization of lecture, scenario based training and problem based learning techniques. 2008-Present **RDPC / US Department of Homeland Security (Master Instructor)** Serve as a Master Instructor for the US Department of Homeland Security through Eastern Kentucky University's Rural Development Preparedness Consortium. This involves providing instruction to law enforcement and other emergency responders throughout the nation on pre-approved Homeland Security related topics. My current course of instruction involves Event Security Preparedness and Planning. 2008-Present **Eastern Kentucky University (Adjunct Professor)** **College of Safety, Security, and Emergency Management** Provide graduate level instruction for the College of Justice and Safety in various Safety, Security and Emergency Management courses. Duties include providing weekly classroom instruction as well as preparing and grading assignments and other various instructional related tasks.

	2008 (Retired) **Kentucky State Police, Frankfort, Kentucky** **East Operations Commander (Major)** Command the East Troop, Operational Division of the Kentucky State Police which consists of 8 of the total 16 KSP Posts with 500 plus sworn and civilian personnel. Duties include: executive level management functions and oversight of all operational, administrative, and related activities. Development of operational strategies, policies and addressing issues involving agency expenses. Management and oversight of grant and specialized funding. Conduct executive level review of the agencies all-hazards initiatives supporting Homeland Security efforts to enhance the Commonwealth's ability to prevent, deter, respond to, mitigate and recover from disasters and other significant events. Served on numerous high-level boards and committees including the JTTF Executive Board, Fusion Center Threat Assessment Committee and the Kentucky Critical Infrastructure Protection Board. Routinely develop and instruct courses for KSP and other law enforcement officers, various public groups, and serve as a guest instructor for college courses, seminars, and other forums. Brief high level officials and perform other duties as required. 2007 **Special Operations Commander (Captain)** Command all Special Operations Units including SRT/SWAT, K-9, Hazardous Devices/Bomb Technicians, Counter-Terrorism Investigators, and Civilian Support Personnel. Coordinate all Counter-Terrorism and Homeland Security related programs and initiatives for the State Police. Work closely with the Department of Homeland Security regarding initiatives such as critical infrastructure protection, threat and vulnerability assessments, investigations of potential terrorism and other extremist related activities. Coordinate the agencies all-hazards support of Homeland Security's mission through the development of plans and procedures designed to enhance the state’s ability to prevent, respond, mitigate and recover from disasters and other significant incidents. Routinely develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for college courses, seminars and other forums. Brief high level officials including the Governor, State Legislators, KSP Command Staff, KY Homeland Security Director on Homeland Security related issues. Serve on numerous high-level boards and committees including the JTTF Executive Board,

	Fusion Center Threat Assessment Committee, Kentucky Critical Infrastructure Protection Board, The GROUP, Public Health's Pandemic Working Group, Maritime Security Committee and a host of other Homeland Security related work groups and area associations. Work hand in hand with Emergency Management leadership and personnel as well as various other state, local, and federal entities. Develop policies, procedures, and strategies to enhance the capabilities of the Special Operations Branch. 2004-2007 **Intelligence/Counter-Terrorism Commander (Captain)** Coordinate all Counter-Terrorism and Homeland Security efforts for the agency. Coordinate Intelligence gathering and sharing programs throughout the state. Serve as a liaison for the Kentucky State Police with federal, state, local and private entities regarding Homeland Security and Intelligence related initiatives. Conduct and oversee physical security site assessments and procedures. Routinely develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for college courses, seminars and other forums. Supervise Detectives, support personnel and all Criminal Intelligence Analysts. Develop agency policy and standard operational procedures. Develop security and operational plans as needed. Submit, coordinate and review federal grant requests, initiatives and expenditures. Review and generate reports and conduct high level briefings for the Governor, State Representatives and other high-ranking officials as needed. Develop Homeland Security related projects and operational procedures and serve on a host of various Homeland Security boards, committees, and working groups. 2004 **Counter-Terrorism Coordinator (Lieutenant)** Coordinate all Counter-Terrorism and Homeland Security efforts for the agency. Supervise Detectives and Intelligence Analysts involved in Counter-Terrorism efforts. Coordinate investigative efforts with other agencies. Routinely develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for college courses, seminars and other forums. Develop agency policy and standard operational procedures. Develop security and operational plans. Coordinate and review federal grant initiatives and expenditures. Gather and distribute intelligence information as appropriate. Serve as a

	liaison for the Kentucky State Police with other entities. Review and generate reports as needed. Conduct personnel evaluations. 2000-2003 **Special Operations/SRT Commander (Lieutenant)** Respond to and coordinate efforts of the Special Response Team (SRT) in Critical Incidents and other high-risk situations. Effectively utilize the SRT to resolve incidents in coordination with the appropriate Post Commanders. Supervise the members of the SRT and serve as Assistant Commander of the Special Operations Section. Develop agency policy and standard operational procedures. Develop operational plans and coordinate training for the SRT. Routinely develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for college courses, seminars and other forums. Coordinate and review federal grant initiatives and expenditures. Generate activation report summaries and coordinate after action reviews. Review and generate reports as needed. Conduct personnel evaluations. 1999-2000 **Assistant Post Commander (Lieutenant)** Serve as Assistant Post Commander and supervise all uniformed officers and dispatchers assigned to the post. Review and coordinate schedules. Investigate officer complaints; enforce agency policy and disciplinary actions as needed. Coordinate enforcement strategies and efforts of uniformed personnel. Review and generate reports as needed. Conduct Personnel evaluations. 1997-1999 **Auto Theft Commander (Sergeant)** Coordinate all auto theft efforts. Supervise all sworn and civilian personnel assigned to the Auto Theft Section. Develop agency policy and standard operational procedures. Develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for other entities. Review and coordinate schedules. Coordinate enforcement and theft prevention strategies regarding auto theft. Investigate officer complaints; enforce agency policy and disciplinary actions as needed. Review and generate reports as needed. Conduct

	personnel evaluations. 1996-1997 **Uniformed Squad Sergeant (Sergeant)** Supervise uniformed Troopers. Direct and support law enforcement actions as needed. Develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for other entities. Schedule units and ensure adequate coverage. Investigate officer complaints, use of force investigations, officer involvement in traffic crashes, enforce agency policy and disciplinary actions as needed. 1990-1996 **Special Operations/Special Response Team (Sr. Trooper)** Respond to and participate in Critical Incidents and other high-risk situations. Coordinate and provide entry training, firearms training and other training to SRT members and other agencies as directed. I also routinely develop and instruct courses for KSP and other law enforcement officers, various public groups and serve as a guest instructor for college courses, seminars and other forums. Generate reports as needed. 1986-1990 **Uniformed Trooper (Trooper)** Respond to calls for service; investigate criminal cases, traffic crashes, and other incidents as needed. Perform all Law Enforcement duties including enforcing criminal and traffic statutes. Generate reports as needed. 1984-1986 **Corbin Police Department, Corbin, Kentucky** **Patrol Officer (Patrolman)** Respond to calls for service; investigate criminal cases, traffic crashes, and other incidents as needed. Perform all Law Enforcement duties including enforcing criminal and traffic statutes. Generate reports as needed.
Publications	"Projectile Fragmentation", A Study of Use of Force Issues and Potential Injury to Law Enforcement Officers and Bystanders

	when Utilizing Firearms to Disarm Suspects. The Tactical Edge. 1994
Accreditation's	Kentucky (KLEC) Certified Police Instructor
Professional memberships	Kentucky State Police Professional Association National Tactical Officers Association National Counter-Terrorism Investigators Association
Community activities	St. Mark School Board Member (5 Years) 4th Degree Member, Knights of Columbus Eucharistic Minister, St. Mark Church Home-bound Ministries
Security clearance	Top Secret Security Clearance, FBI 2004-2008
Awards and Recognitions	Governor's Medal of Valor Kentucky State Police Meritorious Service with Valor Two (2) Kentucky State Police Commissioner's Commendations Recognized by the Governor during the 2006 State of the Commonwealth Address Kentucky Colonel's Certificate