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A Quantitative Analysis of Crime Rates in American Colleges and Universities With and Without Residential College Systems.

Mavis Winona Fleenor
East Tennessee State University

A Quantitative Analysis of Crime Rates in American Colleges and Universities With and Without Residential College Systems

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by

Mavis Winona Fleenor

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Dr. Terry Tollefson, Chair

Dr. Eric Glover, Committee Member

Dr. Catherine Glasscock, Committee Member

Dr. Paul Kamolnick, Committee Member

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ABSTRACT

A Quantitative Analysis of Crime Rates in American Colleges and Universities With and Without Residential College Systems

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The purpose of this quantitative study was to examine the residential college system to determine if there was any association between campus crime and the residential house system. The specific problem of this study was to determine the effectiveness of the residential college system in mitigating campus violence. The intent of this study was to analyze the statistical relationship between crime reports from colleges and universities where on-campus housing was structured into residential colleges or house systems and crime reports from comparable colleges and universities without the residential design. Data collection consisted of a Web-based nationwide survey conducted annually by the U.S. Department of Education. Data collected for this study were for 2006. The 2 groups of institutions that made up the population for this study were 27 colleges that incorporated some variation of the residential college system or house system matched with 27 comparable institutions without the residential system.

The results indicated there were significant differences between institutions with residential college systems and those without such systems for the on-campus aggravated assault offenses and the on campus residence halls aggravated assault offenses. Findings showed fewer aggravated assaults in the group of institutions with residential college systems. A 3rd statistically significant difference was found in the category of arrests for the on-campus residence halls liquor law violations, with the group of nonresidential institutions showing fewer arrests than those without the residential college housing design.

DEDICATION

This study is dedicated to the people who have crossed my life throughout my professional career and continued academic pursuits. As Lois Cheney wrote, "I believe in God's master plan in lives. He moves people in and out of each other's lives, and each leaves his mark on the other. You find you are made up of bits and pieces of all who ever touched your life, and you are more because of it and you would be less if they had not touched it."

I am especially grateful and indebted to my parents for their love and sacrifice as they cared for my siblings and me and gave of themselves unconditionally. My father would be proud to know that his efforts in teaching me to read before I started school gave me much confidence and joy in learning that would serve me well in years to come. My mother gave me the opportunity to continue achieving, both professionally and academically, by caring for my children during my absences throughout their young years, always overseeing their studies, and loving them wholeheartedly. I am forever mindful of your influence in my life as you both always modeled hard work, high standards, and moral character in craft and deed.

I further dedicate this work to my husband, Gary Aday, for his support and patience throughout my writing. He has always been an inspiration to me with his calm and humble demeanor, and I consider him to be a true scholar, one of the wisest and most intelligent persons I know. I find conversations with him to be even more enlightening and interesting now than I did when we first met 30 years ago.

This work is also dedicated to my two adult children, Aaron and Ariel Aday, both of whom I greatly respect. You were privileged to have a loving extended family that shared the joy and pride of your many accomplishments. I am privileged to have had the opportunity to be a part of your lives and to watch you grow into responsible and caring adults. You have both become scholars and have worked hard to accomplish your goals. May this work serve to remind you that learning is a lifelong pursuit and that such goals cannot be achieved without support from family; may you always love, cherish, and support each other in your personal and professional lives.

Finally, I dedicate this dissertation to my fellow ELPA cohort whose laughter, camaraderie, and friendship made this journey one of the most rewarding of my life. Your support and sharing made this challenging process enjoyable and entertaining, and I will be forever grateful for your presence and honored to have come to know you.

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Dr. Susan Twaddle assisted in preparing the statistical analyses and her insight, expertise, and suggestions were, indeed, an asset that contributed greatly to the final product. More importantly, it was all done with a touch of humor.

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CHAPTER 1

INTRODUCTION

Colleges and universities have long been considered state and community enhancements, noted sometimes as historical landmarks, or revered as home to noted scientists, writers, civic leaders, and inventors. The landscaped grounds and impressive architecture served as learning environments for students, venues for cultural and civic events, and sanctuaries for their surrounding communities (Gumprecht, 2007). Consequently, any breach of campus security elicits national interest and becomes the focus of intense concern and public appeals for accountability. The epic shooting that took place on the Virginia Tech campus in April 2007 sent tidal waves of horror and shock to every corner of the world and placed the entire infrastructure of the University under scrutiny. As a result, other institutions of higher education were pressured by their constituents to examine campus emergency response measures and to position themselves as safe havens for students. Due to this pivotal event, the entire nation and the world were summoned to examine the breadth and depth of the problem for direction in preventing such catastrophes. Law professor Lake (2007) noted that because of the Virginia Tech tragedy, students had "won a college Magna Carta that establishes … civil and contract rights, access rights, and safety rights – in a long cycle of martyrdom and change" (p. 6-7).

In Thomas Hardy's poem *In Tenebris II* (1901) he observed, "If way to the Better there be, it exacts a full look at the Worst" (Hardy, 1994, p. 00). The Virginia Tech shooting was reportedly the worst shooting massacre in United States history. Following the disaster, Virginia Governor Tim Kaine commissioned a review panel, independent of the Commonwealth's efforts, to study the incident and prepare a report of the April 16 shooting. Clarke (2005), in his work *Worst Cases,* asserted that when a disaster occurred that eclipsed all others of its kind, we were

given an opportunity to gather from it something about society and human nature. Comfort, he claimed, came from "knowing the enemy, or the scary thing, which proffers a way forward, toward greater safety. There is horror in disaster. But there is much more, for we can use calamity to glean wisdom, find hope" (Clarke, p. ix). The media began announcing the much anticipated document from the panel weeks in advance of its publication.

The Virginia Tech Review Panel presented its report, *Mass Shootings at Virginia Tech April 16, 2007: Report of the Review Panel, to* Governor Kaine in August of 2007. The review panel of eight consisted of Colonel Gerald Massengill, a retired Virginia State Police Superintendent; Dr.Marcus L. Martin, Professor of Emergency Medicine at The University of Virginia; Gordon Davies, former Director of the State Council of Higher Education for Virginia; Dr. Roger L. Depue, former FBI agent and founder of a forensic behavioral sciences company; Carroll Ann Ellis, Director of the Fairfax County Police Department's Victim Services Division; The Honorable Tom Ridge, former Governor of Pennsylvania; Dr. Aradhana A. "Bela" Sood, Professor of Psychiatry and Pediatrics at VCU Medical Center; and The Honorable Diane Strickland, a former judge in Roanoke County. The panel's report (Virginia Tech Review Panel, 2007) stated, "We must challenge ourselves to study this report carefully and make changes that will reduce the risk of future violence on our campuses (p. viii)." A substantial part of the report was devoted to the life and mental health history of Seung Hui Cho, the Virginia Tech shooter, providing details from early childhood until the weeks prior to the shooting. One of the key findings presented by the panel was

> during Cho's junior year at Virginia Tech, numerous incidents occurred that were clear warnings of mental instability. Although various individuals and departments within the university knew about each of these incidents, the university did not intervene effectively. No one knew all the information and no one connected all the dots. (p. 2)

The panel also investigated the Cook Counseling Center and Care Team and found that both had

> failed to provide needed support and services to Cho during a period in late 2005 and early 2006 … for lack of resources, incorrect interpretation of privacy laws, and passivity. [Perhaps the school's passivity was evident from the panel's finding that] records of Cho's minimal treatment at Virginia Tech's Cook Counseling Center are missing. (p. 2)

The panel issued more than 70 recommendations for improving the Commonwealth's laws, policies, procedures, systems, and public institutions with the intent that the recommendations would likewise benefit public officials elsewhere.

The panel's report (2007) included a compilation of fatal school shootings in colleges and universities in the United States from 1966 to 2007. First on the list was Charles Whitman at the University of Texas who killed 16 people and wounded 31 others on August 1, 1966, during a 96-minute rampage. A custodian at California State University, Fullerton killed seven follow employees and wounded two others in 1976, known as the "Fullerton Library Massacre." In 1991, Gang Lu, a physics graduate student from China shot and killed five University of Iowa employees, wounded two others, and then killed himself. He was reportedly upset because he was denied an academic honor. Wayne Lo, a student at Simon's Rock College of Bard in Massachusetts, killed one student and one professor in 1992. Others perceived this student's extreme conservative views as racist, homophobic, and anti-Semitic; consequently, he was ostracized. A graduate student in engineering at San Diego State University, while defending a thesis, shot and killed three professors in 1996. After being dismissed from the school, another graduate student, Peter Odighizuwa, of the Appalachian School of Law, murdered a dean, one professor, and another student in 2002. In the same year, Gulf War veteran, Robert Flores, a failing student at the University of Arizona Nursing College, killed three of his instructors and then himself. Another campus shooting took place in September 2006, when Douglas Pennington killed his two sons while visiting Shepherd University. Two weeks later, five Duquesne

University basketball players were shot and wounded on campus following a school dance. At Virginia Tech, Cho killed 32 people, wounded 25 others, and killed himself on April 16, 2007. The report included descriptions of numerous other shootings in both primary and secondary schools across the country. Other high-profile violent campus deaths not in the panel's report included the 1966 Chicago Massacre involving the deaths of eight nursing students; the 1970 Kent State killings of four students by the National Guard; serial killer Ted Bundy's killing spree of two sorority sisters in Florida in 1978; and the Lehigh University brutal death of Jeanne Clery for which the *Clery Act* was named.

In a report prepared for the United States Department of Justice, *Crime in Schools and Colleges* (2007), Noonan and Vavra offered a rationale and context for the report by stating that colleges and schools provided the backdrop for the growth and stability of our youth and their future. It was critical to frame the issue of crime in our schools and to identify measures to reduce the incidence of occurrence. In an analysis of data about crime in schools and colleges submitted to the Federal Bureau of Investigation (FBI), the use of knives and cutting instruments was three times more common than the use of a gun (Noonan & Vavra). Statistics gathered by the Centers for Disease Control and Prevention (CDCP, 2007) in partnership with the U.S. Departments of Education and Justice indicated that nearly 50% of the perpetrators of school homicides had given warning signals prior to the violent event. The National Center for Education Statistics (NCES) indicated that for each of the 3 years used in its survey, which included 1992, 1993, and 1994, institutions reported that approximately 10,000 violent crimes occurred (NCES, 1997). For 1994, the breakdown of crime types included 20 murders, 1,300 forcible sex offenses, 3,100 robberies, and 5,100 incidences of aggravated assault. Property crime statistics for 1994 included 28,800 burglaries and 9,000 motor vehicle thefts. When this

was translated into crime rates per 1,000 students, the violent crime rate for 1994 was 0.65. The breakdown into individual categories showed a rate of 0.001 for murder, 0.09 for forcible sex offenses, 0.21 for robbery, 0.35 for aggravated assault, and 2.57 for property crimes per 1,000 students (NCES).

Baum and Klaus (2005) compiled statistics for the U. S. Department of Justice and found that between 1995 and 2002 college students were victims of violence at a rate of 61 per 1,000 students. This was a slight drop from the 1994 statistics reported by the NCES (1997), with 58% of violent victimizations of college students being committed by strangers, 93% occurring off campus, and 72% of the off-campus crimes committed at night. During the years between 1995 and 2002, it was estimated that the annual average number of students between the ages of 18 and 24 who were enrolled either full- or part-time in college was 7.9 million. These students were victims of an annual average of 479,150 violent crimes, of which 30,110 were rapes or sexual assaults; 39,280 were robberies; and 409,760 were assaults (Baum & Klaus). Similarly, between 1995 and 2000 there were an estimated 7.7 million students, part-time or full-time, between the ages of 18 and 24 who were enrolled in a college or university. Collectively, they experienced an average of 526,000 crimes per year. A weapon was present or there was a serious injury in 128,120 of those crimes (Hart, 2003). The U. S. Department of Education (ED) estimated in 2002 that there were approximately 16 million students enrolled in the nation's 4,200 colleges and universities (Carr, 2005). Simple assault was the most common crime against members of this population, accounting for 63% of all violent crime against college students (Baum & Klaus). Daytime crimes were most likely to occur when students were at work; 7% were victimized while en route to or from school, and the most common night activity for

college student victimization was a consequence of engaging in leisure activities (Baum & Klaus).

The public's demand for clarity and understanding about crime in schools and colleges was transformed into law with the passage of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, commonly known as the *Clery Act* (Noonan & Vavra, 2007), which mandated that universities and colleges must report crime statistics to the U.S. Department of Education using the Uniform Crime Reporting (UCR) terms and definitions. It was signed into law in 1990 and has been amended several times. Compliance with the mandate was inconsistent, leaving the problem of translating and interpreting school crime statistics an inexact science. Additionally, the history of school and college crime rates, victimization patterns, and changing trends could not be determined with accuracy due to the short time during which reporting occurred as well as the high rate of underreporting of crimes by victims.

According to the National Crime Victimization Survey (NCVS), representing the years from 1995 to 2002, "police were informed in about 35% of violent victimizations against college students" (Baum & Klaus, 2005, p. 6). In another study of 3,400 randomly selected students from 12 colleges and universities, "only 25% of campus crimes were reported to *any* authority across all offenses. Only 22% of rapes and 18% of sexual assaults were reported, 0% of robberies, 50% of aggravated assaults, and 25% of burglaries" (Carr, 2005, p. 2-3). During the 3 years used for the NCES (1997) survey, violent crimes were reported by about one fourth of postsecondary institutions for each year of the survey. We have entered into a new era of accountability in higher education. According to law professor Lake, the pivotal event at Virginia Tech "will change higher-education law significantly and permanently … and will most likely accelerate a continuing trend: the application of general business-liability law to colleges"

(Lake, 2007, p. 1). The act of concealing crime statistics in order to enhance recruitment could have serious consequences for institutions of higher education in the future.

Since the Virginia Tech shootings, schools across the country made efforts to revise their emergency response systems and to examine their plans for handling emergencies. Recommendations for mental health reform were included at the state and federal levels as well as technological improvements for on-campus emergency alert systems. However, as previously mentioned, 93% of campus crime takes place off campus (Baum & Klaus, 2005). With more students living off campus than on campus, one overlooked and less sensational change that could reduce the risk of violence aimed at the college population was the provision of more on-campus student housing. The NCES (1997) survey taken in the spring of 1996 disclosed the first national estimates of campus crime and security and reported that about 80% of 4-year colleges offered campus housing. Even when the option was available, an average of only 26% of students lived in on-campus residences at the 4-year public institutions offering campus housing (NCES, 1997). By contrast, private colleges with campus housing had an average of 52% of students taking advantage of on-campus living (NCES, 1997). The most recent figures available from the NCES (2008) indicated that, overall, only 13.8% of all undergraduate students resided on campus in student housing. Wilkins, a 1st year student in the College of Arts and Sciences at The University of Virginia, wrote in the school's newspaper, *Cavalier Daily*, on March 16, 2007, exactly 1 month before the Virginia Tech massacre:

> Safety is important as students hear about incidents on the edges of Grounds and in Charlottesville … If upper-class housing were closer to Grounds and self-contained, students would feel safer … One successful model from other universities is the residential college system, which has undergraduates divided randomly into residential colleges … By creating inclusive and quality residence areas, more students will want to live on Grounds. Other schools with residential-college systems are successful. Rice has 81 percent of undergraduates living on campus, Yale has 88 percent, and Harvard has 97 percent … Other aspects of a

> residential college system keep students on campus at other schools [such as] the closeness to the center of campus and the general sense of community (Wilkins, 2007, p. 1-2).

The residential college system or house system mentioned by Wilkins was one tangible change that might enhance a student's academic life while providing a landscape of safety that constituents traditionally expected from college campuses.

Concern about campus crime has been increasing for decades and reached its zenith shortly after the Virginia Tech shootings. However, prior to the pivotal event in Virginia, there was minimal genuine interest in understanding campus crime and implementing programs to curb campus crime rates. Stanford University historian Friedman (1993) wrote in *Crime and Punishment in American History*:

> American violence must come from somewhere deep in the American personality … [it] cannot be accidental; nor can it be genetic. The specific facts of American life made it what it is … crime has been perhaps part of the price of liberty … [but] American violence is still a historical puzzle. (p. 174-175)

The purpose of the current study was to provide one piece of the puzzle of campus violence by examining the relationship between the residential college system, or house system, and the rate of occurrence of campus crime.

Statement of the Problem

It is expected there will be increased calls for accountability regarding the problem of campus crime rates and a paradigm shift in how colleges view and attempt to prevent violence. There are a bevy of statistics and several magisterial studies to indicate that campus violence was a valid issue of concern for all constituencies. Rates of various types of campus crime and college student victimization were well documented in the research literature (Baum & Klaus, 2005; Carr, 2005; CDCP, 2007; NCES, 1997; *Report of the Virginia Tech Review Panel*, 2007). The intent of this study was to analyze the statistical relationship between the reported criminal

offenses, arrests, and disciplinary actions of colleges and universities whose on-campus housing is structured as residential colleges or house systems in comparison to the reported offenses of comparable colleges and universities without such a residential design. The purpose was to single out one variable, the existence of residential colleges, and examine how it might be considered a factor in more effectively managing campus crime or offered as a partial solution to mitigate campus violence. It was assumed that instituting residential colleges would not be a complete panacea for the problem of campus crime or violence.

Because most campus crime took place off campus (NCES, 1997) and 50% of the perpetrators of school homicides gave prior warning (CPCP, 2007), it seemed worthwhile to gather statistical data about potential safety benefits from the provision of on-campus housing, in particular the residential college system. Colleges and universities might consider this data in their reform efforts to remedy campus crime and violence. Lake (2007) reported that in 1983, one court case was a turning point for student rights concerning safety:

> *Mullins v. Pine Manor College* established for the first time that campuses also have duties to use reasonable care to protect not only property but also students and other people from foreseeable danger … and that the college owed the student[s] a legal duty to use reasonable care to prevent foreseeable dangers on the campus. (p. 2)

The courts had historically protected colleges from responsibility for campus safety, but the trend could be reversed in favor of college and university liability. Lake, in his reflections on the changing trend, predicted that:

> Colleges today will no longer find sanctuary in … failing to reconsider the design and location of facilities despite recurring problems … [and] … courts will require colleges to provide reasonably safe campus environments for students and other people by attending to foreseeable dangers. It might be foolish to put an entire college on lockdown because one highly dangerous person lives on an otherwise crime-free campus; perhaps the university should instead focus on that one student. (p. 3)

This legal advice was especially pertinent in the aftermath of the Virginia Tech shootings.

Residential colleges create smaller units within the larger campus community, housing a finite number of students and, in some cases, the same students for their entire undergraduate education. Faculty members reside in the facilities, manage student residents, and monitor aspects of their on-campus academic and social lives, making the identification of and attention to a troubled student more likely than when institutions have the majority of students living off campus or involved in the yearly dormitory shuffle. "Colleges must recognize that managing an educational environment is a team effort, calling for collaboration and multilateral solutions" (Lake, 2007, p. 4). The goal of this study was to provide insight from a comparative study between crime statistics from residential and non-residential schools into possible safety benefits a residential college system might offer students and the academic community. The specific problem of this study was to determine the effectiveness of the residential college system in serendipitously reducing the incidence of campus violence.

Research Questions

The research questions explored in this study were developed to provide a blueprint for the research data. In an attempt to ascertain the possible effects of the residential college system on campus crime rates, the following overarching research question guided the study:

> Are there differences in the mean number of crime statistics between colleges and universities with the residential college system and those without the system based on the crime categories as reported to the U.S. Department of Education for 2006?

The following specific research questions were used in the statistical analyses:

> Research Question 1: Are there differences in the mean number of *criminal offenses* in each of the four categories between colleges and universities with the residential college system and those without the system for 2006?

Research Question 2: Are there differences in the mean number of *hate offenses* in each of the four categories between colleges and universities with the residential college system and those without the system for 2006?

Research Question 3: Are there differences in the mean number of *arrests* in each of the three categories between colleges and universities with the residential college system and those without the system for 2006?

Research Question 4: Are there differences in the mean number of *disciplinary actions* and *judicial referrals* in each of the three categories between colleges and universities with the residential college system and those without the system for 2006?

Significance of the Study

There was ample scholarly research on the benefits of residential colleges, but the existing research focused on academic, emotional, and social benefits based on student satisfaction surveys of campus life, retention rates, GPAs, and student involvement rates. No published statistical studies that compared reported campus crime in colleges with residential colleges versus nonresidential colleges were found. Consumers of higher education had an increased consciousness of campus crime, especially following the Virginia Tech shootings, and these concerns are likely to continue to impact institutional policy guidelines. Colleges were becoming increasingly aware of their role in protecting students (Lake, 2007) and in creating safe havens for students to enjoy the college experience. Data provided from the current study would help institutions determine which strategic interventions might be more effective in creating a safer campus climate on college campuses.

This endeavor was intended to contribute to higher education theory and practice by assessing the possible safety benefits of the residential college system and helping colleges meet

the growing demands for accountability by creating safe learning environments for students. In particular, it examined the relation of the residential college system to the reported occurrence of campus crime. The results of this study could provide overseers of higher education with information from which to generate intellectual dialogue and creative solutions concerning campus safety. In a report prepared for President George W. Bush following the Virginia Tech massacre (Leavitt, Spellings, & Gonzales, 2007), one of the key findings and recommendations from the team that composed the report was the need to "develop cultures within … institutions of higher education that promote safety, trust, respect, and open communication" (p. 12). At the federal level, the authors of the report (Leavitt et al.) recommended "that the U.S. Department of Health and Human Services should include a focus on college students in its mental health public education campaign to encourage young people to support their friends who are experiencing mental health problems" (p. 13). Information gleaned from the current study might provide practitioners at colleges and universities with justification for launching innovative solutions to promote safe and healthy college environments. Additionally, the American College Health Association Campus Violence Committee (Carr, 2005) recommended that colleges "build a sense of community" and "advocated that it is essential to reduce anonymity and strengthen relationships among students, faculty, and staff, and the community" (p. 8). As Lake (2007) commented:

> At Virginia Tech, a new generation of martyrs has arrived to illustrate the need for wellness in higher education … It is impossible for students to learn and thrive in an environment filled with substance abuse, sexual violence, and untreated mental- and physical-health issues … A college is a unitary organism, and it cannot afford to have any student who is seriously withdrawn and isolated or a total loner. (p. 6)

The sentiment expressed by Lake and the aftermath of the Virginia Tech incident strengthened this study's relevance and significance. A survey conducted by the National Science Foundation

of 1,500 Americans showed an increasing number of people who said they did not have intimate personal ties, confidants, or friends with whom to share personal troubles (Vedantam, 2006). The residential college system would allow students to have close relationships with faculty and peers and to reap the benefits of a sense of community. This study augments the body of research dealing with campus crime and could be helpful to those seeking justified measures for eliminating social isolation and alienation on campuses.

Definitions of Terms

In order to clarify terms used throughout this study, the following definitions were adopted.

Aggravated assault – "Aggravated assault is an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm" (U.S. Department of Education [ED], 2005, p. 31). The *Clery Act* mandates reporting this offense.

Arson – The Federal Bureau of Investigation's (FBI) *Uniform Crime Reporting Handbook* (UCR) defines arson as "any willful or malicious burning or attempt to burn, with our without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another"(ED, 2005, p. 38). This is the only *Clery Act* offense that institutions are required to investigate before it can be reported in its crime statistics.

Bias crime – This term has been defined by the Federal Hate Crime Statistics Act (1990) as crime "motivated, in whole or in part, by hatred against a victim based on his or her race, religion, sexual orientation, ethnicity, national origin or disability" (Wessler, & Moss, 2001, p. 17).

Bureau of Justice Statistics – This is the statistical agency of the U.S. Department of Justice (Baum, & Klaus, 2005).

Burglary – The *Uniform Crime Reporting Handbook* (UCR) defines burglary as "the unlawful entry of a structure to commit a felony or a theft" (ED, 2005, p. 34). Individual rooms in residence halls are considered by the UCR to be separate dwellings, but the individual rooms in academic buildings are under the control of a single firm, namely the university or college. Therefore, the burglary of an academic building would be considered a single offense, regardless of how many rooms it contained.

College student – College students are judged to be "persons ages 18 to 24 who reported being enrolled full or part-time in a college or university" in the National Crime Victimization Survey (NCVS) data, which were collected by the Bureau of Justice Statistics (Baum & Klaus, 2005, p. 1).

Crime Awareness and Campus Security Act (Title II of Public Law 101-542) – This act amended the *Higher Education Act of 1965* (HEA). It requires all postsecondary institutions that receive Title IV student financial aid programs to disclose security policies and campus crime statistics for the most recent 3 years. The act was amended in 1992, 1998, and 2000. The law was renamed the *Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act* following the 1998 amendments (ED, 2005).

Criminal homicide – This is defined by the *Clery Act* to include *murder and nonnegligent manslaughter* as one category and *negligent manslaughter* as the second category of homicide. The *Clery Act* regulations mandate that institutions use the Federal Bureau of Investigation's (FBI's) *Uniform Crime Reporting Handbook* (UCR) for defining and classifying crimes when preparing its report and statistics.

Forcible rape – The *UCR* defines this term as "the carnal knowledge of a person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity (or because of his/her youth)" (ED, 2005, p. 27). The *Clery Act* mandates reporting this offense.

Forcible sodomy – The *UCR* (ED, 2005) defines this as

> oral or anal sexual intercourse with another person, forcibly and/or against that person's will; or not forcibly or against the person's will where the person is not capable of giving consent because of his/her youth or because of his/her temporary or permanent mental or physical incapacity. (p. 27)

The *Clery Act* mandates reporting this offense.

Forcible fondling - The *UCR* (ED, 2005) defines this as

> the touching of the private body parts of another person for the purpose of sexual gratification, forcibly and/or against that person's will; or not forcibly or against the person's will where the person is not capable of giving consent because of his/her youth or because of his/her temporary or permanent mental or physical incapacity. (p. 27)

The *Clery Act* mandates the reporting of this offense.

Forcible sex offenses – The *UCR* defines forcible sex offenses as "any sexual act directed against another person, forcibly and/or against that person's will; or not forcible or against the person's will where the victim is incapable of giving consent" (ED, 2005, p. 27). There are four types of forcible sex offenses that must be considered in college and university crime reports: forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling.

House system – This term is used by Harvard University and is synonymous with "residential college," which is the term used by Yale. At Harvard, sophomores are assigned to a house with which they will be affiliated during their entire undergraduate stay. At Yale, freshmen are assigned to residential colleges for the 4-year undergraduate degree. Variations exist for this

system, with some houses or colleges offering their own courses for credit and separate curricula and degrees. Some exist only for living and socializing together but students attend classes outside its perimeters (Weber, 2007).

Incest - The *UCR* defines this as "non-forcible sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law" (ED, 2005, p. 29). The *Clery Act* requires the reporting of this offense.

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (1998) – Originally known as the *Student Right-To-Know and Campus Security Act*, it requires colleges to publish annual crime statistics for their campuses (American College Health Association, 2005). "All institutions of higher education participating in the federal student aid programs must disclose to students, faculty, staff, and upon request, prospective students, information regarding the incidence of crimes on campus as part of their campus security report" (ED, 2005, p. 135). It is the result of the 1998 amendment of the *Crime Awareness and Campus Security Act of 1990.*

Motor vehicle theft – The UCR defines this offense as "the theft or attempted theft of a motor vehicle"(ED, 2005, p.36). The *Clery Act* does not consider theft from a motor vehicle a crime; it considers only the theft of the vehicle itself.

Murder and nonnegligent manslaughter – According to the *UCR*, these terms are defined as the willful (nonnegligent) killing of one human being by another. The *Clery Act* requires colleges to report this in their annual report and in the statistics reported to ED.

National Crime Victimization Survey (NCVS) – This survey, conducted by the federal government, gives information on the frequency, characteristics, and consequences of criminal victimization of both college students and nonstudents, who are defined as students in the same age category as college students but are not currently attending school. The NCVS includes

statistics about crimes that are both reported and not reported to the police (Baum & Klaus, 2005).

Negligent manslaughter – The *UCR* defines this term as "the killing of another person through gross negligence" (ED, 2005, p. 26). The *Clery Act* mandates the reporting of this offense.

Noncampus building or property – This term is defined by the U.S. Department of Education (ED, 2005) as

> any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution. (pp. 13-14)

Noncampus crimes must be reported as per the *Clery Act*.

Nonforcible sex offenses – The *UCR* defines this category as "unlawful, non-forcible sexual intercourse"(ED, 2005, p. 29). The only two offenses in this category are incest and statutory rape, both of which must be reported in campus crime reports.

On-campus – The U.S. Department of Education (ED, 2005) defines this term for the purpose of *Clery Act* reporting regulations as

> any building or property owned or controlled by an institution within the same reasonably contiguous geographic area and used by the institution in direct support of, or in a manner related to, the institution's educational purposes, including residence halls; and any building or property that is within or reasonably contiguous to paragraph (1) of this definition, that is owned by the institution but controlled by another person, is frequently used by students, and supports institutional purposes (such as a food or other retail vendor). (p. 12)

This includes residence halls, fraternity and sorority houses owned and controlled by the institution, student activity centers, health clinics, storage facilities, and buildings that house classrooms, labs, and administrative offices. It also includes food vendors and bookstores owned by the school. On-campus crimes must be reported as per the *Clery Act*.

Public property – The U.S. Department of Education defines this term as "all public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus" (ED, 2005, p. 17). Colleges are required to report offenses that occur on public property that is within the campus, next to or bordering the campus, or that is easily accessible from the campus. The *Clery Act* does not require colleges to disclose crime statistics for public property that surrounds noncampus buildings or property.

Residential college system – The organizational structure in a standard *residential college system*, also known as a *house system*, includes a master and a dean, a body of fellows (senior members), and a body of a few hundred students (junior members) for each *house* or *college.* A residential college may have a professor who serves as headmaster and resides in the residence hall with students. This definition and explanation is offered by O'Hara, higher education and consultant who created the Website http://www.collegiateway.org, which offers advice and information for schools that want to adopt this approach. A *residential college* or *house* is also defined as "permanent, cross-sectional, faculty-led societies that provide the advantages of a small college in the environment of a large university" (Weber, 2007, p.19).

Robbery – "Robbery is the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear" (ED, 2005, p. 30).

Sex offense – The *Clery Act* regulations require the use of the FBI's National Incident-Based Reporting System (NIBRS) Edition of the *UCR* for definitions of sex offenses, and the category includes *forcible* and *nonforcible* offenses (ED, 2005).

Sexual harassment – This is characterized as

> unwelcome sexual conduct which is related to any condition of employment or evaluation of student performance. It includes unwarranted sex-related comments, sexually explicit comments or graphics, unwelcome touching, etc. This harassment can take the form of making derogatory jokes based on sex, speaking crude or offensive language, spreading rumors about a person's sexuality, placing a compromising photo on the web, or ogling. (Carr, 2005, p. 3)

Sexual violence – This is a campus violence category that includes sexual harassment, sexual assault, stalking, and campus dating violence (Carr, 2005).

Stalking – This is defined as "the willful, repeated, and malicious following, harassing, or threatening of another person" (Melton, 2007, p. 4).

Statutory rape – The *UCR* defines this as "non-forcible sexual intercourse with a person who is under the statutory age of consent" (ED, 2005, p. 29). The *Clery Act* requires the reporting of this offense.

Student Right-to-Know and Campus Security Act (Public Law 101-542) – This act was

> signed into law by President Bush in 1990 and went into effect on September 1, 1991. Title II of this act is known as the *Crime Awareness and Campus Security Act of 1990*. This act amends the *Higher Education Act of 1965* (HEA) by adding campus crime statistics and reporting provisions for postsecondary institutions. (ED, 2007, p. 135)

Title IV – According to the glossary found on the Website of the U. S. Department of Education, it is defined as

> the section of the Higher Education Act of 1965, as amended, that pertains to Federal student financial aid programs. A Title IV applicant's data may be used to determine eligibility for programs other than the Pell Grant Program. In addition to the Pell Grant Program, the main Title IV programs are: Federal Family Education Loan Program, William D. Ford Federal Direct Loan Program, Federal Perkins Loan Program, Federal Work-Study Program, and Federal Supplemental Educational Opportunity Grant Program. (ED, 2006, p. 3)

Title IV institutions – These institutions have signed Program Participation Agreements, such as Pell Grants, Federal Supplemental Educational Opportunity Grants, the Federal Work Study

Program, Federal Plus Loans, the Federal Family Education Loan Program, the Direct Loan Program and the Leveraging Educational Assistance Partnership with the Department of Education (ED, 2005).

Violence – "The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (World Health Organization [WHO], p. 4).

Delimitations

The following delimitations affect the way in which the findings and results of this study may be generalized:

1. Statistics of attacks on campus faculty and staff members are not available (Carr, 2005) and are not reflected in this study. The findings provided in this study cannot be generalized to that population of the campus community.
2. Crime statistics reported to the U.S. Department of Education, the source of crime data for this study, do not include schools that are not Title IV institutions. Because all schools included in this study are Title IV schools, the results of this study do not necessarily offer insight into campus crime trends for schools without Title IV contracts. These data cannot be compared to schools that have not collected and reported crime data.
3. The colleges and universities selected for this study are not nationally representative.

Due to these delimitations, the findings in this study cannot be generalized to all colleges and universities in the nation. Readers should exercise cautious judgment in interpreting and

applying the results of this study as a remedy for campus violence. However, it can be helpful in generating questions and further research in the area of campus violence and crime and social isolation on campus.

Limitations

Some of the limiting conditions of the study are as follows:

1. One of the serious limitations of this and similar studies on campus crime statistics is they "have been found to be flawed due to a significant underreporting among victims" (Carr, 2005, p. 20). According to the U.S. Department of Justice, only "about 35% of violent victimizations against college students" (Baum & Klaus, 2005, p. 6) are reported to police. In the same report (Baum & Klaus), 8.5% of college student victims indicated they had reported violent victimization to another official. One inherent limitation in using data reported by colleges to the U.S. Department of Education is that when the data show an increase or decrease in crime, it may simply mean an increase or decrease in the number of *reported* incidents rather than the *actual* incidents. Colleges are required by the *Clery Act* to disclose only *reported* crimes. Pastoral counselors and professional counselors are exempt from disclosing reported offenses. They must be acting in the role of pastoral or professional counselors in order to be exempt from the disclosure requirement (ED, 2005).

2. The *Clery Act* defines reported crimes to mean crimes that have been "brought to the attention of a campus security authority or the local police by a victim, witness, other third party, or even the offender. An institution must disclose crime reports regardless of whether any of the individuals involved in

either the crime itself, or in the reporting of the crime, are associated with the institution" (ED, 2005, p. 23).

This limits the usefulness of the *Clery Act* report, because it does not give the reader or consumer information about who was victimized during the offenses or crimes, nor does it give a clear profile of the offender. The U.S. Department of Education statistics can be misleading because they offer more information about the geographic location of the crimes and offenses and the categorical types but do not differentiate among the victims or the perpetrators. It cannot be determined from the ED data set if campus crimes were committed by students or by outsiders.

3. The Clery Act requires colleges to make reasonable and good faith efforts to obtain relevant crime statistics from local police agencies but it "does not require local police agencies to provide crime statistics to institutions" (ED, 2005, p. 54).

4. Although the *Clery Act* requires colleges and universities to publish their crime statistics, disclosure of *all* crimes or offenses is not required. Some offenses that are exempt include larceny, theft, threats, harassment, and vandalism (Carr, 2005).

5. The publication of data on campus crime has a brief history because the federal government only required that colleges and universities report their crime statistics to the U.S. Department of Education since 1999, making it difficult to track patterns or trends with the limited amount of data (Pearce, 2003).

6. This study involves a statistical comparison of crime statistics from postsecondary schools that have instituted residential college systems with a

matched group of colleges that have typical dormitories as their on-campus housing, combined with students living off campus. Comparative studies such as this cannot establish cause-and-effect relationships between variables; thus, it cannot be established that the residential college system or house system is a causative factor in reducing or increasing campus crime rates, even when supportive statistics exist. Likewise, it cannot be established that other living arrangements are causative of campus crime. It can only be said that the two factors are correlated.

Overview of the Study

Chapter 1 included the introduction, which described the relevance of the current study, purpose of the study, the statement of the problem, research questions, definitions of terms, hypotheses, delimitations and limitations of the study, and a brief overview of the study. Chapter 2 provides a review of the related literature concerning campus crime and the residential college system. Chapter 3 is comprised of a description of the study design, including the population, data collection methodology, and data analysis procedures. Chapter 4 offers an analysis of the data for each research question and information on the research procedures and findings. Chapter 5 contains a summary of the study and offers recommendations and implications for practitioners in higher education and for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

Colleges and their campuses were iconic, giving communities and cities distinct identities while serving as learning centers and providing cultural and social settings. As geography professor Gumprecht noted in *The Campus as a Public Space in the American College Town* (2007):

> [Campuses are part of Americana] and are largely an American invention [where the] tradition of placing buildings far apart in an open landscape originated at Harvard [whose] founders believed in the Puritan ideal of community and felt the college should be an integral part of the town that surrounded it. (p. 73)

Colleges contributed to the diversity of a population and added economic and cultural value to their surrounding communities. They were centers of information, provided wellness opportunities, afforded health care to a geographic region, and attracted other enterprises. The presence of a college denoted opportunities for the masses rather than a favored few and colleges were sanctioned as an investment in human capital. College and university campuses served as surrogate homes for youth as they embarked on the rites of passage into adulthood. We expected these homes to provide tranquil asylum from the ills of society while students immersed themselves in folly and learning, a quiet sanctuary for the coming of age. The voluminous literature and research devoted to campus crime and safety issues was a testament to the intensity of society's interests and concern in preserving the ambiance of an endearing and enduring American tradition. It was understandable, then, that when crime occurred within the boundaries of these sacred fortresses and began to parallel that of the larger society, nationwide efforts would be launched to study the etiology of this disturbing phenomenon. In a study of parents' goals for their students' college experience, *health and safety* was the highest response, ranking above *preparation for citizenship*, *improving social skills*, and *developing faith* and

values (Turrentine, Schnure, Ostroth, & Ward, 2000). Clearly, regardless of previous trends and paradigm shifts in the contractual relationship between the student and the institution, the current Zeitgeist would certainly shape a new societal vision for and reinterpretation of *in loco parentis*.

In the aftermath of the Virginia Tech shooting, dubbed by the media as the largest civilian gun massacre in United States history, the entire country was jolted, and it blatantly reminded us of our vulnerability. Colleges and universities across the Nation began to scrutinize their emergency response and security systems, campus safety policies were reportedly analyzed and crisis plans revised, gun laws were called into question, and issues surrounding mental health treatment were brought into focus. Information sharing became a prime issue of debate, legal issues of accountability began to creep into the spotlight, and the interpretation or misinterpretation of laws and policies was discussed in academic circles. As the frenzy to address the problem of campus safety began to take shape in earnest, two directions of focus emerged: preventing such incidents and improving reactions to such incidents. Some colleges intensified efforts to boost security, while others argued that the focus should be on implementing preventive measures such as "outreach and helping students identify early signs of trouble" (Paulson & Scherer, 2007, p. 1). Technological security improvements to campus safety measures for various institutions were reported in the media following the Virginia Tech shooting, and as Viollis, CEO of Risk Control Strategies, pointed out, "the security architecture of college campuses needs to be improved, but for the most part, that will assist in reacting. The preventative part is really the key" (as cited in Paulson & Scherer, p. 2). Prevention of crime is a complex matter that will likely involve a multiplicity of innovative remedies.

Clarke (2006) wrote in *Worst Cases*, "Disaster is an opportunity [which can] drive new ideas (p. 144). Worst cases can lead to *imagination stretch* [that] can lead to social betterment"

(p. 149). Clarke discussed how to deal with disaster from a leadership standpoint and posited that destructuring or devolving in response to disaster and departing from the traditional organizational strangleholds on disaster response could lead to more effective strategies. Clark asserted that we needed to "make the places where we live – communities, places of work, schools, faith-based organizations – more resilient" (Clarke, p.167) and suggested that the social infrastructure of society could function to ameliorate disaster more effectively than high-technology systems. The American College Health Association (ACHA, 2007) developed a Web-based survey to assess students' mental and health status as well as crime victimization experiences. Their rationale for collecting this information was that "understanding the health needs and capacities of college students is paramount to creating healthy campus communities" (p. 195). It was a widely held belief that the college years could be challenging for students. O'Hara (2003), higher education consultant and professor, explained the benefits of solidarity among students with an analogy between the college experience and combat. He used an excerpt from Jonathan Shay's book, *Odysseus in America: Combat Trauma and the Trials of Homecoming* (2002), which offered a rationale for the importance of social cohesion among college students. "The military strengthening and psychologically protective effect of stable, socially cohesive units is neither scientifically speculative, ambiguous, nor uncertain" (as cited in O'Hara, p. 1). O'Hara made the claim that creating stable communities is one of the "most fundamental obligations of a university" (O'Hara, p. 2). This theme influenced the focus of this study and shaped the review of the literature.

This chapter includes literature related to the topic of campus crime and safety. The residential college system is defined and examined from an historical and contemporary viewpoint and is introduced as a possible campus crime reduction measure. A survey of

pertinent literature regarding campus crime is subsequently explored, including the incidence, prevalence, correlates, and current trends. Brief reference is made to student mental health statistics. Legal trends in the student-institutional relationship are chronicled through the literature, including case law and policy trends concerning institutional responsibilities to students. Legislative influences on crime reporting are presented, including detailed attention to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, known as the *Clery Act*, because it was the primary data collection instrument used in this study.

Residential College System

The residential college system or house system had European roots and was introduced to university life in the United States in the first part of the 20th century. There were 31 colleges at Cambridge in England and 39 at Oxford; all were "self-governing units responsible for admitting, housing and feeding students and, to a significant degree, teaching them – the university is a unifying administrator that determines course offerings and degrees" (Weber, 2007, p. 19). When this system was imported to the United States, it was first adopted by Yale and Harvard in the 1930s but with some modifications. At Harvard students were not assigned to a house until their sophomore year, whereas at Yale all incoming freshmen were assigned to a residential college on arrival, but in both cases all students remained affiliated with their college or house for the duration of their stay (Weber).

Originally, the collegiate way "embodied a 'residential scheme of things' in which students became a family and did all things together under one roof … under the guidance of faculty" (Goodchild, 1999, p. 14). Eventually, campus residences became more than merely a place for students to live. Rather, they were integrated with the college's curriculum and became residential learning communities. "The residential way became a mainstay of American

collegiate life … symbolizing the timeless heritage of liberal learning" (Goodchild, p. 15). Rudolph (1990) referred to the collegiate way as a way of life, "the notion that a curriculum, a library, a faculty, and students are not enough to make a college…. It is dependent on dormitories … [and] permeated by paternalism" (p. 87). O'Hara emphasized that residential colleges are not buildings; rather, they are societies whose membership represented a cross-section of the whole population of a university (O'Hara, 2002).

Johnson (2007) claimed that the alternative to traditional dormitories, residential colleges, had become more popular during the past 2 decades and accommodated 15% to 30% of all college students. One distinction could be made between two national collegiate housing trends. Residential colleges incorporated a cross-section of incoming students and integrated them, without regard to their academic majors or interests, into a living environment with live-in faculty (Johnson). Students were blended with other students with the assignments to various colleges done randomly. Another alternative is often referred to as special-interest or themed housing, where students are assigned to live together and grouped according to common interests (Johnson).

Because the establishment of residential colleges appeared to be a growing trend in higher education, albeit a slowly growing movement, it was important to note that there was no standard language for clarifying the many variations on the original classical model of the residential college. According to the *Education Encyclopedia* (2007), the primary distinguishing factor for the classic model from other variations of residential education was the extent to which faculty was involved and the quality of their involvement. In the Ivy League colleges, faculty and students lived and worked in residential colleges alongside each other. The academic program for each residential college was staffed and managed by the resident faculty who were

responsible for the academic life of students outside the classroom. The earliest American universities to use the residential college system included Yale University, Harvard University, Princeton University, and Rice University. For each of those universities, the concept of residential colleges was a decentralized academic society with faculty and students as members. The senior membership consisted of faculty, community members, and selected staff whereas the junior membership included students, both undergraduates and graduates ("Residential College," 2007). The faculty-in-residence concept had academic, social, and psychological benefits for students. "Concerned … about student drinking …college administrators are looking to their professors to … add oversight and stability to dorms … Colleges have turned to old models in the quest for new ways to satisfy students and keep them save" (Russell, 2002, A1).

The benefits of the collegiate ideal, or campus culture, included greater student satisfaction with the institution and student life, more student involvement in cultural activities, and improved retention (Ortiz, 1999). Living in residence halls resulted in higher graduation rates, more student satisfaction with faculty, and improved academic performance. It also facilitated the resolution of the identity crisis for students (Ortiz). It would appear that living on campus with peers and faculty members was crucial for students as they adapted and made the transition to college. One report from the Higher Education Research Institute (HERI) stated "greater numbers of students are coming to college campuses more troubled than ever before, not only from … familial problems (26% are from divorced families) but … personal problems such as substance abuse…. [and are] less academically prepared than previous generations" (Wolf-Wendel & Ruel, 1999, p. 40). Cheng's (2005) focus group approach to understanding students' perceptions and needs indicated they "yearned for an active residential life that involves students of different backgrounds on campus" (p. 6). A survey of students' sense of campus community

showed some correlates of a sense of campus community were "being cared about, treated in a caring way, valued as an individual, and accepted as a part of community contributed directly to their sense of belonging" (Cheng, 227). Siegel and Raymond (1992), observed an

> absence of meaningful student interaction with campus adults [was] a significant aspect of today's campus ethos…. Students live, work and play at a great distance from the faculty and staff with little interaction…. Alcohol abuse is just one of many negative behaviors that may be related to this separation from significant adults. (p. 24)

The residential college system has various benefits and applications for college students and administrators.

Campus Crime

In order to appreciate the foundation of this study, it was necessary to provide an overview of campus crime. Crime on college campuses had a long history but there were differences across time in the nature of the crimes, the types of crimes, and their frequency. Statistics highlighting some of the key findings from surveys and crime reports are given. Additionally, crime correlates are reported but are not presented as causal factors. Student mental health issues are included to give a broad view of the nature and scope of campus crime.

Campus Crime Statistics

Several problems impeded the study and interpretation of campus crime statistics (Low, Williamson, & Cottingham, 2004); the majority of studies focused on sexual offenses and on crimes committed on campus but not on crimes committed exclusively by students. In general, though, most campus crimes were property crimes, primarily theft and burglary (Sloan, 1994), and 93% of crimes occurred off campus (Baum & Klaus, 2005). It was estimated that 85% of college students resided off campus (Carr, 2005), making the majority of the college student population vulnerable to crime due to residential geography. However, crimes committed on and off campus differed in number and type. The rate of violent crime off campus was 1.2 times

higher than the on-campus rate; however, theft rates were 2.1 times higher on campus than off campus (Fisher, Sloan, Cullen, & Lu, 1998). Students living off campus were more vulnerable to violent crime but not to crimes of theft. When considering violent crimes, Volkwein, Szelest, and Lizotte (1995) found that college students were 6 to 10 times safer on campus than off campus. However, those researchers also found that assault was the most common type of violent crime for college students both on campus and off campus. A further breakdown of violent crimes showed that the sexual assault rate was 1.4 times higher on campus than off campus, whereas the aggravated assault rate was 4.5 times higher off campus than on campus. Simple assaults were 1.5 times higher on campus (Fisher et al.). Another finding that illustrated an obstruction to obtaining an accurate portrait of campus crime was a report from college safety officials "that 75% of the crime committed on campus is larceny (theft), vandalism, and fire arms" (Hoffman, Summers, & Schoenwald, 1998, p. 92), none of which required reporting under the *Clery Act* guidelines. Statistics accounting for these crimes were not included in reports submitted to the Department of Education; unless other sources of crime data were used, these crimes were not included in the overall crime statistics.

In a comparison between students and nonstudents, students experienced lower rates of crime for each type of violent crime except rape and sexual assault, but simple assault accounted for 63% of student crime, while rape and sexual assault accounted for 6% (Baum & Klaus, 2005). Firearms were present during 34% of all violent acts against college students during a 7-year period between 1995 and 2002 (Carr, 2005). According to a survey conducted in 1997 of 26,000 college students representing 61 colleges, 7% reported having been in possession of a gun or knife within the previous month, whereas 11% male and 4% female students indicated they had carried guns or knives ("*Nearly 1 Million*," 1997). An estimated 8% of males and 1% of

females are in possession of firearms at college (Miller, Hemenway, & Wechsler, 2002). Weapons presented special circumstances for the college age population. According to the U.S. Department of Justice (1994), "16-to-19 year olds were 17 times more likely to be victims of a crime involving a handgun than persons 65 and older" (Fenske & Hood, 1998, p. 35). Age has continued to be a risk factor for victimization. The population of 16 to 19 year olds had higher rates of robbery than any other age group, except the 20 to 24 year olds, as reported in a recent National Crime Victimization Survey (NCVS) (Catalano, 2005). The survey showed that weapons were present in 3% of rapes or sexual assaults, 7% of assaults, and 26% of robberies. Overall, "24% of all violent crimes incidents were committed by an armed offender" (Catalano, 2006, p. 10), which included "9% by an offender with a firearm" (Catalano, 2006, p. 1). Most off-campus crime occurred at night; of the 93% of all reported college crimes occurring off campus, 72% of these crimes occurred at night (Baum & Klaus, 2005), between 6 pm and 6 am (Carr). Forty-nine percent of the students who were victimized at night were involved in a leisure activity away from home at the time of the crime (Baum & Klaus, 2005). Over half of the on campus crime, or 56%, occurred during the day between 6 am to 6 pm (Carr). Student victims of violent crimes were more likely to be working when daytime crimes were committed and 7% were going to or from school when the crimes occurred (Baum & Klaus).

In a computer-assisted telephone survey of 3,472 students (Sloan, Fisher, & Cullen, 1997), reported on-campus crime was made up of 45% personal offenses, 8% violence, and 37% theft. Thirty-seven percent of the respondents indicated that they had been victimized at least once during the 1993-1994 reference period; 23.7% had been victimized at least once on campus during the same academic year; and 19% had been victimized at least once off campus during the same period (Fisher et al., 1998). Property crimes of student residences made up 30% of all

crime, whereas threats and harassments constituted 20% of reported crime (Sloan et al.). Personal larceny without contact was the most common type of victimization and burglary was the most common residential victimization (Fisher et al.). Assault was the most common crime of violence and sexual assaults were prevalent (Fisher et al.). According to the *Clery Act,* larceny, theft, threats, harassment, and vandalism were not in the categories of offenses that colleges were required to report (Carr, 2005), and the crimes for which reports were mandated made up only a small proportion of the on-campus crimes (Sloan et al.). Vandalism rates and harassment incidences, both face-to-face and by telephone, were reportedly high. Vandalism rates were 1.1 times higher off campus than on campus and the threat rate was 1.7 times higher off campus than on campus (Fisher et al.). Rape and sexual assault accounted for 5% of on-campus crime, and robberies, aggravated assaults, and motor vehicle thefts each accounted for 1% of on-campus crime (Sloan et al.), all of which are required statistics to be reported. Burglaries comprised around 11% of total on-campus crime; personal larceny, both with and without consent, accounted for over 35% of on-campus crime; and vandalism, threats, and harassments, none of which must be reported as per the *Clery Act*, created almost 42% of on-campus crime (Sloan et al.). Thus, the only way to glean an accurate statistical overview was by directly surveying or interviewing students. Interview results complemented the statistics from the *Clery Act* that were part of the public domain.

Campus crime data reported to the U.S. Department of Education (ED) for 2002 included 23 murders or nonnegligent manslaughters on campus, 2,953 assaults, and 1,098 cases of campus arson (Carr, 2005). In 2003, the ED reported 1,295 forcible sex offenses, 20 nonforcible sex offenses, 798 robberies, 1,327 aggravated assaults, 12,506 burglaries, 3,156 motor vehicle thefts, 563 cases of arson, and 9 murders on college campuses (Low et al., 2004). For the years 1992

through 1994, the National Center for Education Statistics (NCES, 1997) reported an aggregate of 10,000 violent crimes and 40,000 property crimes. In 1994, there were 20 murders, 1,300 forcible sex offenses, 3,100 robberies, 5,100 cases of aggravated assault, 28,800 burglaries, and 9,000 motor vehicle thefts reported (NCES, 1997).

Sloan (1994) offered crime data collected by Ordovensky (1990) for a report published in *USA Today*. The data were collected from a survey sent to 546 colleges in the United States with a minimum enrollment of 3,000 students and on campus housing for the 1989-1990 academic school year. The survey participants were college law enforcement and security personnel representing 494 colleges. Of approximately 195,000 reported campus offenses, 64% involved burglary or theft; vandalism was involved in 19%; drinking and drug-related offenses occurred in approximately 11%; serious violence made up less than 2%; and the total violent crime was 5.9% of all reported incidents of campus crime. When these percentages were converted to rates per 1,000 population, the results were less than 1 per 1,000 for violent crimes; drinking and drug offenses were 4 per 1,000; vandalism was 7 per 1,000; and there was an overall total of 33 offenses per 1,000 students (Sloan).

In a national survey in the spring of 2006 administered to 94,806 students representing 117 public and private institutions of higher education by the American College Health Association (ACHA, 2007), the following retrospective statistics were obtained from students who were asked what they had experienced within the previous year: 6.2% were in physical fights; 3.5% were assaulted; 3.4% received verbal threats of sex against their will; 8.4% were victims of sexual touching against their will; 2.7% were victims of attempted rape; and 1.4% were raped. In the same study (ACHA), 12.1% of the students surveyed reported having been in emotionally abusive relationships, 1.9% indicated they had been in physically abusive

relationships, and 1.5% revealed they had been victims of sexually abusive relationships. Students were asked to indicate whether they had experienced a number of health problems and, when ranked, depression was the fourth highest ranking health problem with a reported 16,423 students suffering from depression, which was 17.8% of the total number of participants (ACHA). Anxiety disorder ranked sixth in the 10 most frequently reported health problems with 11,418, or 12.4%, of the student participants reporting this as a health issue (ACHA). In a 2006 report based on the National College Health Assessment (NCHA), 43.8% of the 94,806 student survey participants "reported they felt so depressed it was difficult to function during the past year" and 9.3% reported they had "seriously considered suicide during the year" (Bazelon, 2007, p. 1).

It was difficult to ferret out the victims and offenders because "an institution must disclose crime reports regardless of whether any of the individuals involved in either the crime itself, or in the reporting of the crime, are associated with the institution" (ED, 2005, p. 23). Strangers committed 58% of student crime, but student victims of rape or sexual assault were four times more likely to have been victimized by nonstrangers (Baum & Klaus, 2005) with nonstrangers committing 79% of all rapes and sexual assaults against students (Carr, 2005). Male college students were twice as likely to be victims of violent crimes as were female students (Carr). The ACHA (2004) reported that during 2004 among female college students 11.9% reported unwanted sexual touching and 5.8% were victims of rape or attempted rape, most of which occurred in living quarters (Fisher, Cullen, & Turner, 2000). When rape statistics were merged (Fisher et al., 2000), 15%-20% of female college students reported having been raped. Similarly, 5%-15% of male college students report having been victims of forced intercourse (Koss, Gidycz, & Wisniewski, 1987). Stalking was reported primarily by female

college students. In a national survey (Fisher et al., 2000) of female students in both 2- and 4-year United States colleges, 13.1% had been stalked and four of five victims knew their stalkers, most of whom were former boyfriends, followed by classmates, acquaintances, and coworkers. In a review of the literature on stalking within the context of intimate relationships, "intimate partner stalkers are much more likely than stranger stalkers to act out violently (Melton, 2007, p. 524). Violence within intimate relationships was a widespread form of violence. "Intimate relationships increase emotional vulnerability … by bringing with them increased emotional intensity and verbal arguments, which in turn increase the risk for physical violence" (Marcus & Swett, 2003, p. 553). A survey of students' victimization experiences indicated that "predatory crimes such as robbery, assaults, and threats were more likely to occur off campus …[but] the risk of rapes and sexual assaults, thefts, and harassments were more pronounced on campus" (Fisher et al., 1998, p. 699). Campus crime reporting procedures, under the guidelines of the *Clery Act*, do not require colleges to report stalking behavior, but these findings have important implications for college administrators and safety policies.

Campus Crime Correlates

In a study of personal crime victimization conducted by Wooldredge, Cullen, and Latessa (1995), female students who spent more evenings and weekends on campus rather than elsewhere were significantly less likely to be victimized in the category of personal crime than any other group studied. A survey of 3,472 college students found that the more nights students of both genders spent on campus, the more likely they were to experience theft; full-time students were also at greater risk of theft than were part-time students. However, the same survey showed that individual property victimization was "lower for those at schools where a larger percentage of students lived on campus" (Fisher et al., 1998, p. 700). One possible reason

for the decrease in theft was that when students lived on campus, as opposed to commuting, they had a secure place to store valuables during the day, leaving them out of sight and unavailable to would-be offenders.

Another correlate of campus crime was the presence of campus housing, which made students potential targets of on campus crime 24 hours a day and created a different risk pattern than existed for those who resided off campus (NCES, 1997). A review of the literature and various studies showed the size of the dormitory population was significantly and positively related to campus crime (Henson & Stone, 1999). A survey was conducted by the National Center for Education Statistics (NCES) using a nationally representative sample of postsecondary institutions and including information gleaned from annual security reports, campus crime statistics, and security procedures for 1992, 1993, and 1994. The statistical results represented crimes that occurred on campus, regardless of whether the victims were students or nonstudents, and did not include statistics for crimes committed against students that occurred off campus. In all cases, the crime statistics included only reported crimes (NCES). On campus housing, campus size, and institutional type were found to be three variables related to campus crime. The NCES reported that "public 4-year institutions, those with campus housing, and larger institutions were more likely to report occurrences of both violent and property crimes than were other types of institutions, those without campus housing, and smaller institutions" (p. 3). Alcohol, drug abuse, and weapons possession violations and arrests were also correlated with institute size, type, and on-campus living. And the NCES found that "public 4-year institutions, those with campus housing, and larger institutions were more likely to report arrests for all three crimes than were other types of institutions, those without campus housing, and smaller institutions" (p. 3). Alcohol violations were the most common of these three violations. This

did not necessarily mean that more crimes occurred in these scenarios; rather, it could be due to possible reporting flaws and data collection irregularities.

When the NCES (1997) converted its crime statistics into crime rates per 1,000 students, the overall crime rate for 1994 was 0.65. Other individual crime rates (NCES) for the same year were 0.001 for murder, 0.09 for forcible sex offenses, 0.21 for robbery, 0.35 for aggravated assault, 2.57 for property crime, 1.96 for burglary, and 0.61 for motor vehicle theft. There was a positive correlation between violent and property crimes and the amount of campus housing, and crime rates were also higher in smaller versus larger institutions (NCES), making size of the institution and the existence of on-campus residences crime correlates. According to Henson and Stone (1999), the size of the dormitory population was one of the strongest correlates of campus crime. Fisher et al. (1998) conducted interviews during the 1993-1994 school year with 3,472 randomly selected students from 12 colleges to determine the sources of student victimization. They found a higher level of violent victimization for on-campus student residents in multiunit housing, which supported the size correlate. The violent crime rate for 1994 was 0.29 for institutions without on-campus housing and 1.13 for institutions where 25% or more of the student body resided in on-campus housing (NCES). When campus size was taken into account, the violent crime rate was 2.37 for schools with fewer than 200 students versus 0.53 for schools with a student population of 10,000 or more students (NCES).

Siegel and Raymond (1992) offered an explanation of the relationship between size of dormitory population and crime that showed fellow students committed around 80% of crimes against students. Students ordinarily came into contact with a large number and variety of students while living in dormitories and were placed in close proximity to potential offenders. Multiunit dormitories created proximity for would-be offenders and allowed an abundance of

available property for theft (Fisher et al., 1998). The risk of violent victimization was higher for residents of multiunit dwellings, while the risk of property crime was significantly related to the type of housing, either single dwelling or apartment, and the number of stories in the residence (Fisher et al.). This living arrangement might be typical for students living in on-campus residences. Fisher et al. speculated that the victimization of students living in on-campus residences may become more likely due to an absence of reciprocity of interests with other students and their private property.

Based on the findings that male college students were twice as likely to be victims of violent crimes as female students (Carr, 2005), living in all-male dorms or coed dorms might pose greater risks for victimization than living in all-female dorms (Fisher et al., 1998). Indeed, students living in all-male or coed dorms were more likely to experience theft than students living in all-female dorms or off campus (Fisher et al.). Additionally, the percentage of male students on campus was positively correlated with crime rates (Fox & Hellman, 1985), which provided a higher number of motivated offenders. An alternative explanation of the correlation between dormitory population and crime offered by McPheters (1978) was that "institutions with large resident populations have more targets than commuter-oriented colleges and may have more resident offenders" (p.50). The issue of crime reporting might also be a factor in examining these findings because having a larger population of students living on campus rather than off campus meant that crimes were being reported to campus police rather than to public safety officers. Campus size was differentially associated with particular types of crimes, strongly and positively correlated with thefts, burglaries, and total crime rates but negatively correlated with drinking and drug-related offenses and vandalism (Sloan, 1994). Size and type of dormitory living arrangement were correlated; "males who lived in an all-male dormitory with

a large number of students were less likely to experience a theft than those who did not" (Fisher et al., p. 696).

Institutions reporting one or more violent crimes during a 3-year period (1992-1994) included 78% of the public 4-year institutions; about half of all institutions with campus housing; and 84% of the larger institutions with populations of at least 10,000 students (NCES, 1997). Only 3% of the less-than-2-year for-profit institutions, 12% of schools without on-campus housing, and 7% of schools with fewer than 200 students reported crime (NCES), indicating that size of student population and residential status were crime correlates. In another comparison of the two types of institutions, (4-year vs. for-profit less-than-2-year), property crimes were reported by 84% of the former, two thirds to three fourths of institutions with on campus housing and 96% of schools with more than 10,000 student population; whereas, only 14% of the latter, 30% of schools without housing, and 18% of institutions with fewer than 200 students, reported property crimes (NCES). These findings yielded limited application because they were a logical result of opportunity for crime and availability of potential victims highly concentrated within an area. In one comparison of public vs. private institutions, public colleges had 2,034 more property crimes per 100,000 students than private institutions (Volkwein et al., 1995).

Katyal (2002) wrote extensively on the correlations between crime and architecture in *Architecture as Crime Control*. He posited that solutions to crime control need not be restricted to criminal law and considered four possible methods of handling crime: "Increasing an area's natural surveillance (its visibility and susceptibility to monitoring by private citizens), introducing territoriality (by demarcating private and semiprivate spaces), reducing social isolation, and protecting potential targets" (p.1043). Further, "these mechanisms often work in subtle, often invisible, ways to deter criminal activity" (p. 1039).

The U.S. Department of Justice figures from the report, *National Crime Victimization Survey, 2005* (Catalano, 2006), showed that only 47% of all violent crimes and 40% of property crimes were reported, which was higher than the estimated 35% of campus crimes against college students that were reported by Carr (2005) and the 34% reported by Hart (2003). In Katyal's review of the literature, he found that campus crimes "are more likely to occur in places with poor visibility, large bushes, and no buildings across the street" (p. 1051). Results from McPheters's (1978) survey of 38 colleges on factors affecting campus crime showed than a commonly reported problem was poor building design and inadequate parking lot design. The psychological and symbolic aspects of architecture were worth considering because by using "certain forms of architecture, individuals will feel less isolated and less compelled to commit crimes, residents [can] distinguish strangers from others, and bystanders will be much more likely to prevent crimes or come to the assistance of a victim" (Katyal, 2002, p.1062). O'Hara (2003) addressed the issue of social cohesion on college campuses in connection with the psychological and academic benefits but also mentioned crime as a factor:

> When we destroy social cohesion – in a university setting, by repeatedly moving students from one building to the next… by depriving them of…domestic stability, by preventing them from getting to know their neighbors well – we destroy the ability to face difficult challenges and to accomplish extraordinary things. The academic consequences are dropouts, poor performance, vandalism, and disaffection. (p. 1)

Campuses are often architecturally designed to resemble parks and are groomed to look appealing to visitors, but "the open, park-like nature of many campuses gives offenders easy access, and the diverse populations reduce the risk that offenders will be noticed" (Nasar, Fisher, & Grannis, 1993, p. 162). College populations can be segmented into smaller groupings in various ways to increase familiarity and cohesion with other members.

A study at Sarah Lawrence College (Katyal, 2002) confirmed the assertion made by O'Hara (2003) about the significance of social cohesion and its relationship to campus crime. On the campus there were two sets of dormitories, each housing about the same number of students. The newer dormitory was a single structure whereas the older one was a group of three small buildings. The newer building had one large entrance but the trio of smaller buildings each had two entrances and a corridor. Students were interviewed and responded that there was a "'strong communal sense in each of the old buildings'" (Katyal, p. 1063) but not in the new dorm. It was further noted that the students living in the newer dormitory became loners and did not respond to counselors' attempts to establish social groups. The study also showed that the "incidence of vandalism and drug abuse was high in the new building and rare at the older buildings" (Katyal, 2002, p. 1063). This corroborated the previous mention of dormitory size as a crime correlate (Henson & Stone, 1999; Fisher et al., 1998; NCES, 1997).

In research that examined the possible correlations between victimization, student demographic characteristics, and lifestyle-routine activities, Fisher et al. (1998) noted youthfulness as the hallmark demographic characteristic of campus crime victims. In a review of national level crime statistics, Fisher et al. found that the younger members of the general population experienced the highest rates of personal victimization, including violence and theft. In the same analysis, unmarried and low-income members, as a general category, were at higher risk of violent victimization than were married and middle- to high-income individuals. Additionally, being single and female, as opposed to married and male, put people at greater risk for theft (Fisher et al.). Involvement in deviant or violent behavior directly increased the risk of personal victimization even when the offense was minor (Sampson & Lauritsen, 1990). Generalizing this information to the college population, students had demographic characteristics

that predisposed them to be victims of crime. College students generally were youthful; in 1993, for example, 62% of the undergraduate college student population was between 18 and 24 years old, while 46% of graduate students were between 25 and 34 years old. Nearly 75% were unmarried or separated (Fisher et al.). The most recent data available from the National Center of Education Statistics (2008) for 2003-2004 showed the following: 56.8% of undergraduate students were between 15 and 23 years old; 17.3% were 24 to 29 years old; and 25.9% were 30 years or older. For graduate students, 11.2% were 15 to 23 years old; 39.6% were 24 to 29 years old; and 49.2% were 30 years or older. In the same compilation of data, 49.7% of undergraduate students were classified as dependent; 15.2% were independent and unmarried; 7.9% were independent and married; and 27.1% were independent with dependents. There were no graduate students listed as dependent; 47.5% were classified as independent and unmarried; 18.8% were independent and married; and 33.7% were independent with dependents (NCES). These data were similar to the earlier data reported by Fisher et al., but the more recent figures provided by the NCES showed 10% fewer undergraduate students listed as married. Fox and Hellman (1985) revealed an inverse relationship between an older student body and campus crime. Males and students in the 17 to 20 year age range were at greater risk of theft than older students and female students (Fisher et al.). It was possible that younger or male students were not as conscientious in guarding their belongings as their female counterparts.

Fisher et al. (1998) offered four main explanations of victimization among the general populace based on a review of related studies:

> Proximity to crime – physical closeness to a large number of offenders; exposure to crime – one's visibility and accessibility to crime; target attractiveness – having symbolic or economic value to the offender; and lack of capable guardianship – ability of persons or objects to prevent the occurrence of crime. (pp. 675-676)

This set of factors was used as a template for understanding the vulnerabilities and risk factors for college students as crime victims. The routine activity theory constructed by Cohen and Felson "explains crime as the convergence in time and space of three factors: motivated offenders, suitable targets, and the absence of capable guardians against a violation" (1979, p. 589). Strangers committed 58% of crimes against students (Baum & Klaus, 2005), and 85% of college students resided off campus (Carr, 2005). Students living off campus were at risk for victimization because "physical proximity to crime is maximized [when] people [are] coming into routine contact with relatively unknown persons or living in buildings or complexes where there are many unknown residents" (Fisher et al., 1998, p. 676). This same principle of contact with unknown persons could be applied to students who lived in large-scale dormitories on campus, and as already noted (Henson & Stone, 1999), the size of the dormitory population was highly and positively correlated with campus crime. Additionally, the large number of unknown residents combined with the absence of guardianship and oversight fit within the framework of the routine activities explanation of crime. A review of the literature suggested that the only significant correlation between guardianship and crime was student attendance at nonmandatory crime prevention and awareness meeting that decreased the risk of victimization (Fisher et al.). However, Fisher and associates found in their interviews with 3,472 students that asking a fellow student to guard unattended personal property significantly reduced the likelihood of on campus theft.

College student populations might also provide a large and concentrated sample of motivated offenders because it was estimated that students committed 80% of crimes against other students on campus (Siegel & Raymond, 1992). Fox and Hellman (1985) also noted a positive correlation between the percentage of male college students and campus crime. As

stated earlier, youthfulness (Fisher et al., 1998) was a known crime correlate and the constitution of college student populations tended to be "young, highly diverse, and of a transient nature … and communities with these characteristics tend to remain anonymous and lack guardianship capabilities" (Nasar et al., p. 162). College students were both the targets and potential victims of crime as well as being the potential motivated offenders; these two factors converged in time and space on college campuses, creating access points for crime as described in Cohen's and Felson's (1979) routine activity theory of crime. There was also a relationship between wealth (Fox & Hellman, 1985; Morriss, 1993) and campus crime. Fisher and associates found that "students who spent large sums of money per week on nonessential items had a higher risk of being an on campus theft victim than those who did not" (p.696). Fox and Hellman indicated a correlation between quality of education and higher crime rates. The apparent association between higher quality education and cost could serve as an implicit indicator of the students' economic assets and property values. A large student body with a high volume of property and a new supply of targets rotating in each fall sustained the interest of potential offenders. Thus, the ongoing presence of students' portable property and suitable targets, high-density dormitories with exposure and proximity to many unknown residents and potential offenders, and the lack of guardianship and detection of crime combined to produce a vulnerable climate of probable crime on college campuses (Fisher et al.; Nasar et al.). Property crime was a strong correlate to per student revenue; a $1000 increase per student correlated with an increase of 39.7 property crimes per 100,000 students (Volkwein et al., 1995). In McPheters' 1978 survey of 38 colleges, 66% of the respondents indicated that nonstudent intruders were a major factor in on campus crime. Students at 2-year institutions had the lowest rates of violent and property crimes, while the highest rates of crime, in particular property crime, were found at medical schools (Volkwein et

al.). This corroborated the tenets of the routine activity theory because 2-year schools tended not to be residential and medical schools had abundant wealth in campus resources and medical equipment.

Cohen, Kluegel, and Land (1981) argued that there was too much emphasis on exposure and guardianship, referred to as *lifestyle*, in resolving the impact of social inequality on the risk of victimization. They proposed five factors that increase the risk of criminal victimization: exposure, proximity, guardianship, target attractiveness, and definitional properties of specific crimes. Their study confirmed that there was a positive relationship between wealth and risk of victimization for each crime studied. An extension of the routine activity theory of crime was offered by Miethe and Meier (1994), which stated that people were at greater risk of victimization when their routine activities when combined with lifestyles created a situation where vulnerability increased at particular times and places with particular types of people. Sloan (1994) posited that "setting was significantly related to violent crime, drinking/drug-related offenses, and to total crime" (p.58). After examining the research on the risks of victimization, Fisher et al. (1998) concluded that being involved in such nighttime activities as frequenting bars; going to movies; minor forms of illegal behavior such as marijuana use, DUI, or theft; social activities and memberships such as sororities and fraternities; athletic team membership; and alcohol consumption, were significant lifestyle factors and contexts within which college students increased their risks for criminal victimization. A survey of 3,472 students who indicated in interviews that they "spent several nights on campus partying and … were quite likely to take recreational drugs regularly during the year faced an increased risk of experiencing an act of violence while on campus" (Fisher et al., p. 693). This corroborated the earlier research cited by Fisher and associates. Sloan reported that both setting and percentage of

minorities were positively correlated with rates of campus violence. Similarly, Fox and Hellman (1985) found the percentage of minority students was positively correlated with campus crime, and Sloan found the correlation to be significantly related, in particular, to the rates of violent crimes. Likewise, Volkwein et al. (1995) reported that colleges with the highest rates of violent crime were those with the highest percentages of African-American offenders, as well as those having a higher than average number of resources for students. Similarly, Baum and Klaus (2005) determined that white college students had higher rates of violent victimization than blacks and students of other races. The rate of crime against white students was 65 per 1,000; against black students it was 52 per 1,000; and against students of other races, it was 37 per 1,000 students. Other crime correlates reported by Sloan were total number of students enrolled, the number of nationally recognized sororities and fraternities on campus, and the number of students and faculty members on campus. There was a positive association between these factors and campus theft rates. However, Fisher and associates observed that membership in sororities and fraternities decreased the risk of experiencing theft but membership on an athletic team increased the risk of on campus theft. Volkwein et al. found that larceny comprised the bulk of campus crimes, accounting for over 80% of all campus crimes while accounting for only 55% of overall crimes committed throughout the nation. Burglary and motor vehicle theft were generally higher in the nation than on campuses. When student characteristics were studied, two factors significantly contributed to violent crime rates. “Campuses with the highest rates of violent crime tend to be those with higher than average percentages of African American students and higher than average resources in terms of per student revenues and library holdings” (Volkwein et al., p. 661). As a contributing factor, with each one percent increase in the number

of African American students, there was a corresponding increase of 5.1 violent crimes per 100,000 students.

Another campus crime correlate was binge drinking. Principal investigator Wechsler (2008) is directing the Harvard School of Public Health College Alcohol Study (CAS), an important and comprehensive ongoing study. He conducted four national surveys of over 50,000 students from 120 four-year colleges and universities representing 40 states and the District of Columbia. Two thirds of the total number of institutions was public and the remaining one third was private. Random samples of students at the same institutions were surveyed in 1993, 1997, 1999, and 2001. According to Wechsler's findings, frequent bingers were ten times more likely to vandalize property and eight times more likely to be injured as a result of their drinking. Findings also showed that nonbingeing students were adversely affected by other students' binge drinking. The surveys indicated that binge drinking might have more serious outcomes for females than males and put women at risk for sexual assault. According to Wechsler's findings, 10% of the female students surveyed who described themselves as frequent binge drinkers reported they had been raped or subjected to nonconsensual sex, while only 3% of the nonbinge females reported the same experiences. Findings on the second-hand effects of binge drinking on nonbingeing students were reported for low- and high-binge schools on various dimensions with the following results: insulted or humiliated (21% low, 36% high); unwanted sexual advance (15% low, 23% high); serious argument or quarrel (14% low, 23% high); pushed, hit, or assaulted (6% low, 11% high); had property damaged (7% low, 16% high); had studying or sleeping interrupted (43% low, 71% high); or had been a victim of sexual assault or date rape (.6% low, 1% high). The statistics were almost doubled for the high-binge schools compared to low-binge colleges for each of these dimensions. Additionally, Rickgarn's (1989) work on

courtship violence in residence halls showed that 82% of violent acts were alcohol related. These were largely unreported incidences that mirrored the general trend of underreporting of domestic violence off campus (Rickgarn). Sloan (1994) found that alcohol and drugs were a factor in more than 95% of all campus offenses.

Campus Crime Trends

The U.S. Bureau of the Census reported that the rate of arrests for adolescents 17 years old and younger in 1950 was 4.1 per 1,000 youths; 21.2 per 1,000 for 1955, increasing five times in 5 years; 47 per 1,000 in 1960, doubling in ten years; and doubling again during the next decade to 104.3 in 1970 (Fenske & Hood, 1998). This indicated the changing composition of the population that made up incoming college freshmen. Low et al. (2004) reported that the results from two studies of university students who self-reported criminal behavior showed that being male, having a history of high school lawbreaking behavior, and coming from a high income family were predictive of lawbreaking activity during college. When combined with the findings from the Bureau of Census, some factors emerged that helped explain the evolution of campus crime.

Translating statistics into trends revealed a reduction in crime between 1995 and 2002 from 88 to 41 crimes per 1,000 students (Carr, 2005). Consistent with these figures, the *Chronicle of Higher Education (CHE)* reported in 1997 that campus drug arrests increased 18% in 1995, arrests for liquor-law violations and drug law violations increased for the 1994-1995 timeframe, but other crimes decreased, including weapons violations, robbery, aggravated assault, burglary, and vehicle theft. Reported sex offenses, both forcible and nonforcible, increased in the 2-year period (Lively, 1997a). Volkwein et al. (1995) noted that, in general, campus crime rates were declining with the exception of automobile theft. Baum and Klaus

(2005) similarly found that college students between the ages of 18 and 24 for the 1995-2002 time period experienced lower violence rates than their nonstudent counterparts. The comparison was 61 per 1,000 college students and 75 per 1,000 nonstudents. In the same study, for all categories of violence including robbery, aggravated assault, and simple assault students had lower average annual rates of crime than nonstudents. However, college students experienced higher rates of rape and sexual assault, which is one of the violent crime categories, but the difference was not statistically significant. Rates of both overall crime and serious crime declined for both groups of participants, students and nonstudents, for the referenced time period of 1995-2002 (Baum & Klaus).

It was reported in a recent survey that seven percent or about one million students on college campuses carried weapons (Summers & Hoffman, 1998). This trend might reflect the growing fear of victimization by college students. As the authors explained, murder was rare on college campuses. During 1997, there were only 15 murders on 489 college campuses, but none of the murders occurred on campuses that had the highest rates of weapons violations and arrests. Likewise, armed robberies were rare, but aggravated assaults were quite common compared to other types of campus crimes. Therefore, Summers and Hoffman concluded that, perhaps, students carried guns for self-defense, not for the purpose of committing crimes.

Another report by Fernandez and Lizotte (1995) concerning the rate of violent crime on campus reported to police for the 1974 to 1991 time frame showed a 27% decrease. There was no correlation between campus rates and community crime rates, and community characteristics and community crime rates had minimal effect on campus crime rates (Fernandez & Lizotte, 1995). Statistics showed that larceny and theft was the most prevalent type of crime on campus (Sloan, 1994). Age was a consistent vulnerability for college students with the younger

population of 16 to 19 year olds being four times more likely to be victimized than their older counterparts of 35 to 49 years old (Summers & Hoffman, 1998).

The FBI's crime analysis unit (Noonan & Vavra, 2007) published a report of crime in schools and colleges by merging findings from different sources that also included characteristics of the offenders. Although readers were cautioned that the study dataset was not nationally representative, the information was based on incident reports covering crimes at colleges and schools from 2000 to 2004 that were submitted to the FBI's UCR program and not restricted by the *Clery Act* reporting guidelines. During the period studied, 3.3% of all crime incidents reported occurred at school locations, including all educational institutions. Offense records indicated that personal weapons such as hands, feet, and fists were more commonly found in the reports of school crimes than other weapons, and the use of knives and cutting instruments was more than three times more common than guns (Noonan & Vavra). Males outnumbered female offenders and were 3.6 times more likely to be arrested for crime in schools and colleges than were females (Noonan & Vavra). The numbers showed a steady increase in crimes reported but there were other variables that must be factored in before an accurate judgment could be made concerning a trend analysis of crimes in schools and colleges.

An article published in *The Chronicle of Higher Education* authored by Lively (1998) indicated that most campus crimes had diminished. However, murder rates had increased by 27%; Lively explained that this increase was not significant due to the small numerical base from which the statistics were derived. In the same report, the 61% increase in nonforcible sex offenses was believed to be due to issues with the term's definition and the greater likelihood of victims to report the offense rather than to a real increase. Additionally, readers were cautioned about making generalizations from statistics derived from changes occurring during only 1 year.

Readers were also reminded of the variations in reporting practices among colleges and universities, which might account for comparatively high rates being reported for a particular institution, giving a false appearance of less safety (Lively). Another article published in *The Tufts Daily* cited a study released by the Federal Bureau of Investigation (FBI) and the U.S. Department of Education, indicating that campus crime rates declined during the 10-year period of the study, which covered the 1994-1995 to 2004-2005 academic school years. The study reported that, during that time, overall crime rates declined by 9% and theft rates decreased by 30%. The rationale offered for the decline was the change to hiring municipal status police officers rather than security guards as campus police (Pesch, 2008).

Fox and Hellman (1985) in their study of campus crime correlates found that the location of college campuses, i.e., urban, suburban, and rural, had no differential impact on the rate of crime. In fact, a Federal Bureau of Investigation (FBI) report showed that from 1992 to 1993, there was a decrease in violent crime of 1.5% and a decrease in property crime of 3.4% in the general population. During the same period, there was an increase in campus crime rates (Hoffman et al., 1998). Volkwein and associates (1995) reported that campuses were actually safer than their surrounding communities. Lederman (1995) compared crimes committed in the same 2 years, 1992 and 1993, and found that drug law violations had increased by 34.3% and weapon violations had increased by 11.2%. To a lesser degree, forcible sex offenses, aggravated assaults, and robberies increased. However, the same comparative report showed a decrease in murders of 17.6%, a decrease in rape of 19.9%, a decrease in nonforcible sex of 7.8%, a 4.5% decrease in burglaries, and a 3.3% decrease in automobile theft.

Some findings indicated that campus crime statistics mirrored the Zeitgeist of society. According to FBI figures, the 1968-1969 academic year was the most violent to date. During

1968, “for the first time in American history, mass felony indictments were returned against students as a result of campus unrest” (Smith, 1989, p. 8). Twenty-three students were indicted and convicted for kidnapping and false imprisonment after occupying the administration building at San Fernando Valley State College, holding the college president and other staff captive for hours (Smith). According to a survey of 382 colleges and universities during the referenced academic year (1968-1969), 6.2% of college students experienced violent protests and 16.2% had experienced some form of nonviolent disruption (Hoffman et al., 1998). A 1970 article published in *U. S. News and World Report* revealed that during the 1968-1969 period, there were 61 reports of arson and bombing; 200 reports of sit-ins and building seizures; 100 other, less violent demonstrations; and 4,000 arrests. In the same article, the Federal Bureau of Investigation and the Senate Investigations Subcommittee speculated that the 1969-1970 school year would be less violent and from the beginning of the school year through December 31, 1969, there were 18 arson or bombing incidents; 24 reports of sit-ins and building seizures; 170 other, less violent demonstrations; and 350 arrests (“Campus Revolts,” 1970). During this time colleges were threatened by terrorist bombings from such groups as the Weathermen. Two social movements of the 1960s, the civil rights movement and the anti-Vietnam War movement, precipitated widespread campus violence and lawbreaking (Smith). By the early 1970s, thousands of students and demonstrators had “criminal charges growing from campus marches, sit-ins, draft-card burnings, and even riots in support of political ideology and social change” (Smith, p. 8).

In a comparison of campus crime rates to their corresponding communities, property crimes were the most commonly committed crime, both on campus and in the host community, (Bromley, 1995), but violent crimes were far more common in the surrounding communities than on college campuses (Henson & Stone, 1995). Property crimes comprised 98% of reported

campus offenses but made up 82% of the reported crimes in cities. Only 2% of reported campus offenses were violent crimes, while 18% of crimes reported in cities were classified as violent crimes (Bromley). Likewise, Volkwein and associates (1995) reported that property crime rates for 2-year schools was 1,495 per 100,000 students but for medical schools, it was 10,705 per 100,000 students, which were higher than the rates of their host cities. In general, Bromley noted that, in most cases, colleges and universities had lower crime rates than their environmental settings.

According to the *Report of the President's Commission of Campus Unrest* (1970), campus violence reached a zenith in 1970 when the National Guard fired into a crowd of students at Kent State killing four and wounding nine. The report also included details of an incident occurring only days after the Kent State killing when police officers fired into a dorm at Jackson State College in Jackson, Mississippi killing 2 students and wounding 12 (Smith, 1989). One study of crimes occurring on campus showed that from 1971 to 1980, the number of crimes in a population of 18 universities increased by 89% (Lunden, 1983). A report of campus crime during 1989-1990 showed most of the crime reported to campus security personnel did not involve violence (Sloan, 1994). In the study of 494 campuses, violent crimes had the lowest rates for all categories of campus crimes, while theft and burglary showed the highest rates. Violent crimes comprised only 5.9% of the total crimes known to campus police; vandalism (18.8%), drinking and drug violations (11.3%), and burglary and theft (64%) made up the remaining campus crimes. Based on the FBI's *Uniform Crime Report*, prepared and published annually during the 1970s and 1980s, campus crime rates continued to increase throughout the 1970s and early 1980s, and reached a plateau that remained steady throughout the 1980s (Smith, 1989). It should be noted that the figures underestimated crime rates since less than one fifth of the

colleges and universities voluntarily reported crime statistics and the figures did not represent crimes involving students that occurred off campus (Smith). Additionally, colleges were not yet required by law to disclose crime statistics.

During the 1980s student protests declined, but sexual assaults on college campuses became an issue in the form of coercive sex from acquaintances, commonly referred to as date rape (Hoffman et al., 1998). One of the findings from a survey of 3,472 randomly selected college students (Fisher et al., 1998) showed that rates of sexual victimization for female college students was higher than for female peers of the same age in the general populace. The researchers predicted that female college students were at greater risk of sexual victimization than a same aged cohort group from the general population. Additionally, it was found that for female students the rate of on-campus sexual victimization was higher than the off-campus rate for students (Fisher et al.). According to the 2004 crime statistics, the number of reported forcible sex offenses increased 1.5% from 2003, but the reported nonforcible sex offenses decreased by 60%. The number of nonforcible sex offenses continued to decline (Porter, 2006).

In an extensive study with longitudinal and cross-sectional databases of campus crime trends and correlates for 416 institutions, Volkwein et al. (1995) merged and analyzed data from national databases of federal crime statistics and community demographics, the Integrated Post-Secondary Education Database System, and the College Board Survey data on campus characteristics. Additionally, they used the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR) campus crime data combined with a cross-section database from the Consortium for Higher Education Campus Crime Research (CHECCR). Their study showed that college campuses were more than 10 times safer than the nation as a whole. In 1991, the violent crime rate for the nation was 750 violent crimes per 100,000 people but only 64 per 100,000

students on campus (Volkwein et al.). This study also indicated that campuses continued to become safer in comparison to the nation. From 1974 to 1992, there was a 27% decrease in violent crime on campus; this translates to a decrease from 88 to 64 per 100,000 students. During the same time, there was a 41% increase in national crime rates. When translated into rates, the increase was from 460 to 758 per 100,000 members of the general population. Fox (2007) corroborated this trend noting that between 2001 and 2005 there were 76 homicides reported on college campuses. When this figure was adjusted to eliminate faculty, staff, and nonstudents homicides, there were 43 undergraduate and graduate students murdered on campus during a 5-year period. Fox pointed out that students' are at a lower risk of homicide on campus than in almost any metropolitan area in the country. Of the reported on campus homicides, most were committed by acquaintances or were the result of drug deals gone awry (Fox, 2007).

Alcohol consumption was correlated with campus crime. Lenihan and Rawlins (1994) referred to a study of 60,000 college students that noted those who consumed alcohol and belonged to a fraternity were three times more likely to commit violence, while athletes who consumed alcohol were five times more likely to engage in violence than their nondrinking peers. Likewise, Sanday (1990) reported that females with membership in sororities were more likely to be victims of sexual assault than were their nonsorority peers. In the College Alcohol Study, researchers noted that "each year, students die in alcohol-related tragedies: acute alcohol poisonings, car accidents, drownings, falls, and fights (Wechsler, 2005, p. 5). Fraternity and sorority membership was addressed in the alcohol study, indicating "four of five students who live in fraternities and sororities are binge drinkers" (Wechsler, 2005, p. 5). Corroborating Sanday's findings, Wechsler reported that females who are heavy drinkers and inexperienced drinkers are at greater risk for sexual assault. The Harvard study revealed that 10% of the

frequent female bingers report being raped. Crime data from 487 of the largest colleges in the United States for the 1996-1997 school year showed that drug arrests increased for 5 consecutive years and there was the largest increase in alcohol arrests in 5 years during the referenced year (Fact File, 1998). More recently, *The Chronicle* (Porter, 2006) reported that alcohol arrests on campus were on the rise, citing statistics from the U.S. Department of Education. In 2004, the number of arrests was 10% higher than for 2003, arrests for possession of illegal weapons were up 12.9%, and drug-related offenses were up 3%. The increase in alcohol arrests in 2004 was more than three times the increase in 2003. Between 2002 and 2003, there was a 2.7% increase in the number of alcohol arrests (Porter).

A study of 3,472 students in 1993-1994 showed that 37% had been victimized at least once during the academic year (Fisher et al., 1998). Another survey involving 10,000 undergraduate students in 1990 indicated that about 40% reported being victimized during their college years (Bausell & Maloy, 1990). Based on these two surveys, the incidence of victimization remained fairly steady during the 1990s.

In summary, based on this review of the literature, theft of property made up the majority of campus crime. There was a continued increase in alcohol and drug violations and related arrests. Two of the most significant correlations to campus crime were the size of the dormitory population and student wealth. There was a strong correlation between violent crime on college campuses and the percentage of minority students enrolled. The location of the college campus was not significantly related to the overall rate of campus crime. Crime rates for all areas except motor vehicle theft were diminishing and campuses were generally safer than their host communities. Community crime rates did not correlate with campus safety.

Legal Trends in the Student-Institutional Relationship

Colleges and universities acquired a position of legal independence from the traditions of their European roots, which primarily allowed them to function without secular involvement. Students and faculty had the right to be tried by university courts rather than by town courts, out of which came the view that college campuses were sanctuaries (Smith, 1989). Institutions of higher learning functioned rather independently of legal requirements until the 1960s, especially in regard to the "common-law principle of *in loco parentis,* in which educational authorities acted in place of and with all the authority of a student's parents" (Smith, p.6). This view originated in an 1866 case, *People v. Wheaton College,* in which "the court upheld a postsecondary institution's prohibition of student membership in secret societies" (Fisher, 1995, p. 87). Thus, the doctrine of *in loco parentis*, or "in place of the parent" (Fisher, p. 87), evolved from this court case. The common-law principle of *in loco parentis* gave universities a measure of self-governance and they came "to think of [themselves] as removed from and perhaps above the world of law and lawyers" (Kaplin, 1985, p. 3). This independence from the judiciary that was granted to universities through their special legal status allowed them to manage misconduct without external constraints or legal interference. "In matters concerning students, courts found refuge in the *in loco parentis* doctrine…In placing the educational institution in the parents' shoes, the doctrine permitted the institution to exert almost untrammeled authority over students' lives" (Kaplin, p. 4). As a result of this tradition, the literature on college crime of the 18th, 19th, and 20th centuries was scant and only the most notorious and heinous crimes were documented in college histories. The legal premise that colleges and universities assumed *in loco parentis* status was the dominant view until the social movements of the mid-1960s to early 1970s. The courts also began to indicate their acceptance of college students as adults and of

student independence from institutional and parental authority in such court cases as *Healy v. James* (1972), *Bradshaw v. Rawlings* (1979), *and Baldwin v. Zoradi* (1981) (Fisher). Without *in loco parentis* as the guiding principle for managing student behavior, the relationship between students and the institution became detached. As the courts defined students as adults, institutions of higher learning adopted a bystander role. They assumed minimal responsibility for the protection of students. The "emerging legal notion concerning the student-university relationship generally emphasizes shared responsibility for the student's safety and a balance of institutional authority and student freedom" (Sells, 2002, pp. 26-27).

Following World War II and the implementation of the GI Bill, the number of students attending college expanded significantly, resulting in more diverse student bodies. As reported earlier about trends of campus crime, the 1960s marked the beginning of the movement of widespread campus violence. As a result, the courts addressed this issue through tort law to protect student victims of crime. Courts previously refused to impose liability on universities for student victimization on college property by using the "doctrine that the owner of real estate had a duty to warn only of physical dangers in the real estate itself and than an owner was not liable for crimes committed on the property by third persons (*Hayes v. State,* 1974)" (Smith, 1989, p. 9). As the number of students winning negligence lawsuits against universities increased throughout the late 1970s and early 1980s, courts began to shift their views toward the notion that colleges had some degree of duty. "The courts ruled that a duty is created under three situations: by the 'special relationship' of student and college, by the relationship of landlord to business invitee, and by the relationship of landlord to tenant" (Fisher, 1995, p. 88). A new legal principle emerged that replaced the old doctrine that university campuses were real estate and students were tenants. Courts began to hold universities liable through monetary damages if it

were established that a history of crime made the victimization foreseeable and if the college failed to protect or warn students (Smith). Thus, courts imposed "a duty to warn students about known risks and a duty to provide them with adequate security protection" (Fisher, p. 88). Additionally, the legal duty to "screen student applicants for dangerous persons" (Smith, p. 10) was also the result of several important court cases.

One such case involving the duty to warn, *Peterson v. San Francisco Community College District* (1984), permitted a student, Kathleen Peterson, to continue a damage suit against the college. She received injuries from an attempted rape that occurred as she climbed a stairway from the school parking lot and asserted that the college was aware of previous assaults against students in the same area (Smith, 1989). The court decided that because the college was aware of previous incidents in the same area, students should have been warned. Additionally, because the college had not trimmed the foliage in and around the area to make the space safer, it was liable for "failure to protect students from reasonably foreseeable assaults on campus" (Fisher, 1995, p. 89). This case established the premises of the notion that failure to warn and failure to protect were duties for which institutions would be responsible.

Another case, which also occurred in California, was *Duarte v. State* (1979) in which the court maintained that college administrators had a duty to disclose campus safety issues accurately and honestly when asked. A California State University San Diego coed was sexually assaulted and then murdered by an outside intruder, a sailor, who broke into her dorm room. Prior to enrolling in the school, the mother alleged that she and the victim, Tanya, had inquired about campus crime to school officials and also visited the dormitory. They were not told of previous known crimes that occurred in the dorms or of known assaults, rapes, and attacks on female students elsewhere on campus. In court, the mother testified that she had relied on

administrative representation of the dorm's safety by college personnel and its appearance of safety. The court ruled that this could support suits for fraud and deceit and that the duty of care was owed because the relationship between Tanya and the university went beyond the special landlord-tenant relationship (Fisher, 1995; Smith, 1989).

The case of *Eiseman v. State of New York* (1987) upheld the university's duty to screen college applicants for dangerous persons. This case involved an exconvict who enrolled in September of 1975 in a program at the State University of New York College at Buffalo, which was designed to rehabilitate exprisoners. The student's application indicated that he was a paroled felon. In June of the following year, he was invited to an off-campus party held at a fellow student's apartment. There he raped and murdered two students and stabbed another nonstudent attendee. Family representing one of the murder victims sued the state of New York claiming the perpetrator should not have been admitted to the university without an investigation into his background, which involved stabbing, shooting, armed robbery, heroin abuse, and violent psychotic episodes. The court concurred that the prison physician should have informed the college of the student's medical history and also showed the college negligent in admitting him by making no effort to inquire about his personal history. This decision was overturned by New York's highest court and it was determined that the college did not have a duty to inform students of the exconvict's behavioral or medical history and that the school should not be held to a higher duty than society in general (Fenske & Hood, 1998; Smith, 1989). Clearly, this case showed that the *in loco parentis* doctrine did not have contemporary application and that colleges had no legal duty to protect students from other dangerous students, even those with criminal backgrounds.

Traditionally, the primary mission of campus security was the protection of campus property, protecting "campus buildings from intruders, burglars, and vandals, and eject[ing] vagrants and trespassers" (Lake, 2007, p.1). This trend continued until the early 1980s, when several court cases illustrated that the law ascribed to institutions the duty to use appropriate security measures to protect students against known risks once they had become foreseeable. In *Miller v. State of New York* (1984) a 19-year-old female junior was taken from the laundry room in her residence hall by an intruder armed with a butcher knife. He blindfolded her, led her at knifepoint to the third floor of the dorm, and raped her twice, threatening to do more harm if she made a sound. She was then escorted to the parking lot, where her assailant fled, unnoticed and unidentified. Because she had been led through unlocked outer doors during the ordeal, the court held the university liable for failure to protect its tenants from foreseeable dangers. Additionally, this student had complained of intruders loitering in dormitory hallways and there were numerous published accounts in the school newspaper and in campus security reports of various other campus crimes, including rape (Fisher, 1995; Smith, 1989).

Another case that changed the duties campus officials must assume for students was *Mullins v. Pine Manor College* (1983). In this watershed case, the U. S. Supreme Court ruled "for the first time that campuses also have duties to use reasonable care to protect not only property but also students and other people from foreseeable danger" (Lake, 2007, p.2). This particular case involved the rape of a student by an unidentified assailant. Lisa Mullins, a student at a women's college, was asleep in her dorm room when a male intruder awakened her; he covered her head with a pillowcase, led her across campus and into the refectory building where she was raped. He left unnoticed and unidentified (Fisher, 1995; Smith, 1989). The college and one of its senior administrators were sued; the court ruled against the college and

held that it had a legal duty to use *reasonable care* to prevent such foreseeable dangers on its campus (Lake, 2007) even though there was no record of prior violent crimes. However, the school had acknowledged in its orientation program for new students that there was a probability of crime due to the school's proximity to public transportation directly to Boston and its policy of allowing male guests to stay overnight in women's dorms (Fisher). In making their decision to award damages and in their verdict against the college, the court considered the inadequate dorm locking system, the ease with which dorm room locks could be opened without keys, fence gates that were not locked and could be scaled, and guards not necessarily patrolling at night (Smith). The ruling drove the decades long changes in campus security and ended an "era of legal insularity and protectionism based on academe's status" (Lake, p.2). It harkened back to some aspects of the *in loco parentis* principle but also indicated that it had not been revived. In a subsequent case, *Wilson v. Commonwealth of Virginia et al.* (1989), a Virginia lower court held that "a student living in a college dormitory should reasonably expect a greater degree of protection from the University than would a tenant who leases residential property from a landlord in the open market" (Sebok, 2007, p.2). At least in Virginia, universities must assume greater duties of protection than is the case for other landowners.

Adequate protection in the form of campus police was the subject of a case in Arizona, *Jesik v. Maricopa Community College District* (1980). Peter Jesik was registering for fall classes when an argument ensued with another student. The student told Jesik that he was leaving to retrieve a gun from his home, and Jesik promptly told the college security guard of the threat. He was assured that he would be protected; however, when the other student returned to campus, the guard approached him but did not search his briefcase. When the guard left, the student removed a gun from the briefcase and killed Jesik. Although the court did not address the issue

of foreseeability, it did state that because there had been a death threat, the college should have taken bolder measures of protection in its duty to exercise reasonable care (Smith, 1989).

The Florida Supreme Court recently ruled in *Nova Southeastern University, Inc. v. Gross* (2000) that "colleges will no longer be treated any differently from other businesses" (Lake, 2007, p. 2). Bethany Gross, a 23-year-old graduate student was robbed and sexually assaulted while leaving an off-campus internship site. She filed suit against Nova for being negligent in assigning her to work in an unreasonably dangerous place and the lower court was protective of the college. However, the state supreme court reversed that ruling and ruled that "the institution had a 'duty to use reasonable care' in assigning students to certain locations as part of their studies and training, and would be held liable if that duty was breached" (Lake, p. 3).

In *Tarasoff v. Regents of University of California* (1976) the California Supreme Court issued the ruling that a "mental health professional owes a duty of care to people whose safety is threatened by her patients. A professional must take steps to protect a potential victim if the professional either does, or should be able to, predict violence toward a victim" (Colb, 2007, p. 1). In *Tarasoff* a graduate student at the University of California, Prosenjit Podder, became enraged when a young female, Tatiana Tarasoff, kissed him but later told of her involvement with other males and of her disinterest in establishing an intimate relationship with him. He plotted a revenge killing of Tarasoff and, eventually, stabbed her to death. Prior to the killing, Podder had told his therapist at the University Health Service of his plans to kill Tarasoff, but no one was warned of his threat or given any information that might be construed as evidence of impending harm (Colb). Subsequently, most states endorsed the foreseeability doctrine as outlined in the court's ruling in the *Tarasoff* case (Smith, 1989). According to this decision, college mental health professionals might have a duty to warn people about their patients if there

were a risk of violence; however, it was usually limited to situations when the patient was in custodial care or had named a potential victim. As the case pointed out, "Privacy ends where safety begins" (Lake, 2007, p. 4). Lake, a law professor at Stetson University College of Law, predicted that following the Virginia Tech incident,

> higher education law [would move away from] the concept of colleges' special status and disengagement from students to avoid risk … The law is heading on a path to try to get us to internalize a sense of accountability, not develop a culture of avoidance of responsibility. (pp. 5-6)

Legal Influences on Crime Reporting

Crime reporting guidelines, historical mandates, and personal choices made by victims skewed the results of surveys, making an accurate portrayal of the incidence and prevalence of crime virtually impossible. Prior to the passage of federal and state legislation that required colleges to report crime statistics, reporting was irregular or did not occur at all. Between 1972 and 1993, some schools chose not to report any crimes to the Federal Bureau of Investigation's *Uniform Crime Reports* (UCR). Only a small percentage of campuses submitted reports regularly. In 1991, only 12% of postsecondary schools reported their crime numbers to the UCR (Fisher, 1995). Overall, less than one fifth of the institutions of higher education reported crime statistics to the UCR. Additionally, the numbers included in the UCR were much smaller than the actual number of occurrences due to the failure of colleges to report and not including crimes committed against students while off campus (Smith, 1989).

It was estimated that only around five percent of rapes, both attempted and completed, were reported to police (Fisher et al., 2000). In a survey covering 1995-2002, it was estimated that only 35% of violent acts committed against students were reported to police (Carr, 2005). Another study of 3,400 randomly selected college students representing 12 institutions indicated that only 25% of all campus crimes offenses were ever reported to any authority (Sloan et al.,

1997). A panel of faculty, staff, and students studied the matter of underreporting across a 2-year period and found that in one large university in the South, only 55% to 66% of on campus crime victims reported anything to campus police (Sloan et al.). Rapes and sexual assaults were underreported, with only 22% of rapes and 18% of sexual assaults reported, while 50% of aggravated assaults and 25% of burglaries were reported (Sloan et al.). In a 2005 study by Baum and Klaus, it was noted that 31% of college student crime victims indicated they had not reported crimes to police because they were too private or personal; another 25% did not report the crime because they felt it was either minor or did not result in loss. When campus crimes were reported, students showed a preference for reporting to campus officials over public law enforcement. The majority of on campus crimes, 83%, were reported to campus police; 86% of all personal crimes, 81/% of crimes in living quarters, 73% of the threats, and 90% of harassments were reported to on campus security personnel (Sloan et al.). When students reported rapes, they chose to report the incidents to campus authorities; 71% of sexual assaults, 67% of the aggravated assaults, 50% of motor vehicle thefts, and 90% of burglaries were reported to campus police rather than municipal officers (Sloan et al.). Crime statistics were computed by colleges and universities and then reported to the Federal Bureau of Investigation (FBI), but only since 1998 were these statistics also reported to the United States Department of Education (Low et al., 2004).

Crime reports and surveys offered a high volume of quantifiable information, but the challenge lay in interpreting the information amidst the claims that much of the crime that occurred on campuses was underreported. Additionally, much of the data from different sources were either undifferentiated, aggregated and cross-tabulated differently, were collected by various instruments or secondary sources, and aggregates and rates were comingled, making the

task of accurate interpretation more difficult. For example, the Campus Security Act required colleges to report the frequency of crimes known to campus authorities, not the crime rates per 1,000 students or per students, faculty, and staff (Fisher, 1995). Thus, an increase in the number of reported crimes did not necessarily mean that the colleges experienced increases in crime; actually, the reverse could be true. Fluctuations in reported crime could be an indication of improved enforcement or changes in the rigor of reporting. Unless the numbers were translated into crime rates, it was difficult to make accurate generalizations. Another problem with standards for reporting was the lack of consistent requirements for reporting of crimes by colleges and by other agencies. For example, college safety officials estimated that around 75% of campus crime was theft, vandalism, and fire alarms, but there was no requirement to report these incidences (Hoffman et al., 1998). Another problem with reporting and subsequently interpreting crime statistics was that, for the categories of liquor, drug, and weapon violations, the reports included only the number of people arrested, not the actual number of incidents reported to campus safety authorities because those that did not result in arrests were not included in the numbers. Rather, they were handled internally through the campus disciplinary process (Hoffman et al.).

Changes in campus crime paralleled national crime trends. For example, as Hoffman et al. (1998) pointed out, "the FBI reported that the rate of crimes per capita fell in 1995 to the lowest level since 1985 [while] there was an average of 1% decrease in property crimes including burglary and vehicle theft [on college campuses]" (p.55). Another important point is that violent crimes such as murder that are reported in campus crime statistics, unless they are high profile crimes, do not necessarily involve students or college staff. There were 15 murders reported by 12 colleges that occurred on college campuses in 1995. Of the 15 reported murders,

"seven cases involved students or employees, (including one case that police categorized as a murder even though the victim survived), and eight … just happened to occur on college property" (Lively, 1997b). This lends credence to the argument that campus crime reporting was flawed and the statistics alone did not accurately depict campus violence. As Noonan and Vavra (2007) discussed, the FBI's UCR Program counted offenses differently, where "the number of offenses for crimes against persons is determined by the number of victims, while the number of offenses for crimes against property and society is based on each distinct operation" (p. 4). This could deceive the reader and result in inflation of the number of offenders. The FBI suggested that if more agencies were to use the National Incident-Based Reporting System (NIBRS), accurate statistical comparisons and estimations could be made with other databases, such as those from the U. S. Department of Education (Noonan & Vavra). A national merging of studies would be helpful for both professional and lay consumers of information.

Clery Act

Compliance with the *Clery Act* involved more than submitting crime statistics into public domain or creating a campus publication revealing crime statistics for consumers. Rather, it entailed a cluster of mandates, including the development of a policy statement, collecting information from all required sources as they related to campus crime, and then sorting through and organizing the data, availing the data to prescribed areas of the public, and methodical record keeping (ED, 2005). The origins of the *Clery Act* could be traced to the 1990 congressional enactment of the *Crime Awareness and Campus Security Act* (Title II of Public Law 101-542), which was an amendment to the *Higher Education Act of 1965* (HEA) (Security On Campus, 2007). Following its passage, all postsecondary institutions with government contracts to participate in *Title IV* student financial aid programs were required to prepare documentation and

statistics on campus crime and campus security and to disclose such information publicly (ED). The act was amended in 1992 and again in 1998 from which the law was renamed the *Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act*, based on the murder of a Lehigh University student in 1986 that took place in her dorm room. The act was amended once more in 2000 and commonly referred to as the *Clery Act* (ED). The *Clery Act* (ED) stipulates that higher education institutions must:

> Give timely warnings of crimes that represent a threat to the safety of students or employees, and to make public their campus security policies. It also requires that crime data are collected, reported and disseminated to the campus community and are also submitted to ED. The act is intended to provide students and their families, as higher education consumers, with accurate, complete and timely information about safety on campus so that they can make informed decisions. (p.3)

Universities and colleges were required to report crime statistics based on the *Uniform Crime Reporting* (UCR) definitions to the Department of Education (ED). For those institutions that failed to comply or misreported crime statistics, financial penalties were imposed at the rate of $27,500 per incident. However, there was no requirement for colleges and universities to report their crime data to the UCR Program, only to the Department of Education (Noonan & Vavra).

The *Clery Act* was so named as the result of the tragic loss of Connie and Howard Clery's only daughter, Jeanne, a student at Lehigh University. In 1986, Jeanne was brutally raped and murdered on campus by another student she did not know. The Clerys discovered there was a history of violent crime on the Lehigh campus and a longstanding problem with dorm safety issues such as propped open doors, the exact method that Jeanne's assailant used to gain access to her room. Following the conviction of Jeanne's killer and a civil lawsuit against Lehigh University, the Clerys worked toward the passage of campus crime statistics reporting legislation in Pennsylvania. This eventually led to the federal level with the passage in 1991 of the *Campus*

Security Act, now known as the *Jeanne Clery Act*. Additionally, the Clerys founded a nonprofit organization, Security on Campus, Inc. ("Violence Goes," 2005).

Although the *Clery Act* resulted in widespread efforts to inform consumers about college safety procedures and crime statistics, there were inherent flaws in the data yielded. The literature substantiated that rapes were seldom reported, and it was estimated that only around 5% of completed and attempted rapes committed against college students were ever reported to police (Fisher et al., 2000). Even when student victims reported a rape to the college health center, the institutions were not required to report the rape in their crime report (Hoffman et al., 1998). In fact, a study by Miller and Marshall (1987) showed than roughly 40% to 50% of all rapes were ever reported to police (Hoffman et al., 1998). The response rape victims received when reporting the incident had an impact on the pattern of disclosure. Only 37.6% of institutions of higher education provide receive sexual training for their campus security officers, which might explain why two thirds of the rape victims confided in a close friend rather than reporting the crime to authorities (Karjane, Fisher, & Cullen, 2002). The National Crime Victimization of College Students Survey for 1995 to 2000 showed that only 34% of violent crimes committed against college students were reported, and only 12% of rapes were reported (Hart, 2003). Underreporting might skew the crime figures; Carr (2005) estimated that only 35% of violent crimes against college students were ever reported to police during the referenced time period of 1995-2002. A large proportion of college students did not report victimization to authorities, and this pattern "suggests that the crime statistics generated by the *Clery Act* underestimate the actual volume of on-campus crimes, especially those involving students" (Fisher, Hartman, Cullen, & Turner, 2002, p. 32). The *Clery Act* did not include a requirement to report larceny, theft, threats, harassment, or vandalism, some of the most common campus

crimes (Carr, 2005). Additionally, only crimes committed off campus "on public property within or immediately adjacent to and accessible from the campus" must be disclosed (ED, 2005, p. 11). The utility of the crime reports mandated by the *Clery Act* in making informed decisions about college application was questionable. About 27% of students surveyed were aware of the Act and only 8% reportedly used the information in making their college selection (Janosik & Gehring, 2003). Colleges and universities reported difficulties complying with the Act, citing the "constant changes in the reporting requirements" and that the "federal government has [not] defined how crime statistics are to be reported" as the reasons (Janosik, 2001b, p.358). Additionally, the most commonly used source of campus crime data is the Uniform Crime Report (UCR). This practice created inaccurate data because "few post-secondary institutions regularly report their crime statistics to the FBI…. Among those reporting, some do so irregularly, reporting in some years but not in others" (Seng, 1995, p. 42). The effectiveness of the *Clery Act* was not substantiated in the research literature. Janosik and Gregory (2003a) determined that the Act did little to decrease campus crime and had little bearing on student conduct.

Until recently, private colleges were exempt from Georgia laws requiring open-records. In a court case involving a former Mercer University college student, the Court ruled that the university must disclose its crime log mandated by the *Clery Act* that lists specific crimes and details such as time, place, location, date, and the nature of the crime. The court's justification for the ruling was the private university "serves public functions by employing sworn police officers who carry guns and have the power to make arrests just like municipal police officers (Hoover, 2004, p. 1).

Another issue posing problems for accurately reporting of crime data was the misinterpretation of the Family Educational Rights and Privacy Act of 1974 (FERPA). According to law professor Lake (2007), it was erroneously assumed

> [that this act] prevents the sharing of information about a possibly dangerous student. FERPA has always had broad disclosure rules for health and safety. [Its] main purpose is to give students access rights to their official records and to ensure that colleges…protect the integrity of those records. The law recognizes that safety outweighs privacy at times. (p.5)

Making such false assumptions and failing to share important information could have devastating results on the safety of a student body. Following two court cases, *Campus Communications v. Criser* (1989) and *Bauer v. Kincaid* (1991), the courts decided that campus crime data were not protected as educational records by FERPA. On the other hand, the *Clery Act* allowed that "certain individuals who have significant responsibility for student and campus activities are exempted from disclosing information: pastoral counselors and professional counselors" (ED, 2005, p. 51). This might be one example of the misapplication of FERPA. Further clarification of privacy information limits of FERPA was made with the passage of the *Campus Sex Crimes Prevention Act* of 2000, which amended it with the qualification that "nothing in [FERPA] may be construed to prohibit an educational institution from disclosing information provided to the institution concerning registered sex offenders; and requires the Secretary of Education to…notify educational institutions that disclosure of this information is permitted" (Security On Campus, 2007, p. 1). FERPA gave students privacy protection for student records but also gave parents certain rights regarding students' records, even after they turn 18, if "parents … claim their child as a dependent for federal tax purposes…. Parents have the right to request and inspect student records [and] institutions can also legally disclose student records to selected third parties without parental consent in certain cases" (Rasmussen & Johnson, 2008, p. 13).

President George H. W. Bush signed the *Clery Act* into law in November 1990 and it became effective on September 1, 1991. The first campus crime reports were due on September 1, 1992 (Fisher, 1995). Prior to the passage of the *Clery Act*, there were no requirements to make any crime reports to the Federal Bureau of Investigation's *Uniform Crime Reports* (UCR).

The procedure for complying with the *Clery Act* involved using the Campus Crime and Security at Postsecondary Education Institutions Survey conducted annually by the U.S. Department of Education's Office of Postsecondary Education. The survey was Web-based and the results were posted on a Website and made publicly accessible. Colleges were sent a letter and certificate from the U. S. Department of Education (ED) in late summer with their user ID and password for submitting data (ED, 2005).

There have been positive outcomes of the *Clery Act* reporting mandate on student behavior. Gregory and Janosik (2003) asserted that students were aware of the Act and the mandated crime reports. The *Clery Act* reporting guidelines facilitated communication between judicial officers and campus police. "Over 80% of the judicial officers reported that they are notified automatically when a student is charged with a crime … [These offenses were typically] dealt with on campus as a rule violation … [but as result of the Act will be handled] through criminal prosecution" (Gregory & Janosik, p. 773). Thus, students' cognizance of the fact that they may be criminally charged was a campus crime deterrent.

As of August 14, 2008, some of the shortcomings of the *Clery Act* were addressed when President George W. Bush signed into law an amendment to the *Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act*. Colleges must now include a statement on their *safety policy of their emergency response and evacuation procedures* in their annual report. Institutions are required to submit their crime report and their safety policy, which

now must include a statement explaining that the institution would *immediately notify the campus community upon the confirmation of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or staff* (Security On Campus, 2008). The words *without any delay* must also be added. Hate crimes were expanded to include larceny-theft, simple assault, intimidation, and vandalism. There were safeguards in place for *whistleblowers* to protect them from retaliation. More detailed information was available on the Security On Campus, Inc. Website, http://www.securityoncampus.org/.

Summary

This chapter provides a review of the related literature concerning campus crime and the residential college system. It contains information on the residential college system, campus crime statistics, campus crime correlates, campus crime trends, legal trends in the student-institutional relationship, legal influences on crime reporting, and the Clery Act. Chapter 3 offers a description of the study design, including the population, data collection methodology, and data analysis procedures.

CHAPTER 3

RESEARCH METHODS AND ANALYSIS OF DATA

The general intent of this study was to investigate the possibility that the residential college system or house system was a correlate of campus safety. The purpose of the study was to determine if the number of campus crimes differed significantly for institutions whose internal campus infrastructure included residential colleges or houses when compared with matched-pairs of peer institutions that did not have such housing arrangements. The objective of the study was to provide insight into the possible campus safety benefits of the residential college system. This chapter describes the methodology of the study, including the research design, the independent and dependent variables, research questions and hypotheses, population, data collection, and data analysis.

Research Design

This study was framed according to a quantitative nonexperimental research design using data collected by the survey method for the purpose of presenting comparative descriptive data on campus crime statistics from selected college participants. Based on Creswell's (2003) definition of a survey, it "provides a quantitative or numeric description of trends…or a population by studying a sample from that population" (p.153). This research study initially followed a survey design (Green, & Salkind, 2005) from which a matched-subjects design was developed, which involved pairing participating colleges on the basis of the presence of residential colleges versus nonresidential colleges as the on-campus living arrangements. An appropriate application of the correlated samples *t* test "for correlated samples is the two-group study in which subjects are matched" (Huck, Cormier, & Bounds, 1974, p. 53).

The primary descriptive data were collected from a nationwide study of colleges and universities.

> The Campus Crime and Security at Postsecondary Education Institutions Survey is conducted annually by the U.S. Department of Education's Office of Postsecondary Education (OPE). This Web-based survey is used to collect data on alleged criminal incidents reported by over 6,700 colleges, universities and institutions of higher education in the United States. (ED, 2005, p. 115)

The information was accessible on the Web and the statistics made available to consumers spanned the 3 most recent years of reporting. College presidents or CEOs were contacted annually by the U.S. Department of Education at the end of each summer with a letter explaining the *Clery Act* regulations and offering detailed instructions for submitting data and information on compliance rules. Forms were provided for uniform reporting and the submission process was done online, making this survey a cost-efficient method of data entry and access. As Creswell (2003) pointed out, a major advantage of survey questionnaires was the rapid acquisition of data, allowing the recency of the data to strengthen the currency of the study. Additionally, the economy of the design method allowed data collection to be more efficient with large amounts of data available from a large sample within a short period of time (Creswell, 2003). Moreover, the shortcoming of getting a representative sample was overcome in this survey because all institutions of higher education, except those not receiving *Title IV* funds, were required to participate by submitting crime statistics for the Web-based survey. Another advantage of Web-based surveying, along with the mandates of the *Clery Act*, was the ability to monitor response rates, which in this case was favorable. The survey was cross-sectional in that the data were submitted and collected once yearly but the crime statistics were logged and collected throughout the year; thus, the final aggregate descriptive data were actually derived longitudinally. In this particular study, the year for which data were compared was 2006; thus,

the data collected in making comparisons for the two groups of participant colleges were also retrospective (Creswell). Data collected for the purpose of creating matching pairs of participant colleges for the comparison group were derived from the United States Department of Education's Institute of Education Sciences National Center for Education Statistics Web source. Additionally, data from the Website of The Carnegie Foundation for the Advancement of Teaching were used in creating the set of matching peer institutions. All data used in the study were intact data. Comparative studies cannot establish cause-and-effect relationships because they are not experimental studies. Such studies, however, might be useful as additions to the body of research on campus crime and in evaluating possible contributors and correlates to campus crime.

The criterion variable in this study was the occurrence of campus crime at each institution included in the study. According to the *Clery Act*, crime statistics must be submitted in three primary categories: *criminal offenses; hate offenses*; and *arrests and referrals for disciplinary action* (ED, 2005). The category of *criminal offenses* included the subcategories: murder and nonnegligent manslaughter, negligent manslaughter, forcible sex offenses, nonforcible sex offenses, robbery, aggravated assault, burglary, motor vehicle theft, and arson. *Hate offenses* were subdivided along the same dimensions. *Arrests and referrals* were subdivided into illegal weapons possession, drug law violations, and liquor law violations. Offenses were divided again by geographic location of occurrence that included the following dimensions: on campus, on-campus residence halls, noncampus, and public property. Data were reported for each crime subset and for the current study, the total number of reported crimes for all offenses listed in the subcategories for 2006 was used to define the criterion variable.

The predictor variable was the type of on-campus living style in existence for college participants. Colleges and universities with some variation of the residential college system or house system were selected on that basis as one comparison group and another group of matched-subject colleges was selected on the basis that they did not use any variation of the residential college system for student residents. O'Hara (2007), consultant and author of the Website http://collegiateway.org/, provided the list of colleges and universities with residential colleges or houses in *Residential Colleges Worldwide*. In the process of establishing the matched pairs of institutions, data were extracted from the United States Department of Education Institute of Education Sciences National Center for Education Statistics to review the institutional and student characteristics of the group of schools with residential colleges or houses. The Carnegie Foundation for the Advancement of Teaching Website and database were used in an attempt to create a comparison group of peer colleges without the residential college system in an institution-by-institution comparison. Matched-pairs of institutions were developed and the two comparison groups were equated by controlling the following dimensions as defined by the Carnegie Foundation of the predictor variable*: level* (2-year, 4-year and above); *control* (public, private not-for-profit, private for-profit); *enrollment* (number of undergraduate and graduate students); *undergraduate instructional program* (based on the level of undergraduate degrees awarded – associate's or bachelor's, the proportion of bachelor's degree majors in the arts and sciences and in professional fields, and the extent to which an institution awards graduate degrees in the same fields in which it awards undergraduate degrees); *enrollment profile* (the mix of students enrolled at the undergraduate and graduate and professional levels); *undergraduate profile* (describes the undergraduate population with respect to three characteristics – the proportion who attend part- or full-time, achievement characteristics of 1st-

year students, and the proportion of entering students who transfer in from another institution); *size and setting* (describes both size and residential character of institution which is based on the proportion of degree-seeking undergraduates who attend full-time and the proportion living in institutionally-owned, institutionally-operated, or institutionally-affiliated housing); *basic classification* (Associate's colleges, Doctorate-granting Universities; Master's Colleges and Universities, Baccalaureate Colleges, and Special Focus Institutions).

Research Questions

A primary research question was devised to guide and provide focus for this study. To determine if the residential college system might be considered a campus crime deterrent or otherwise have some effects on campus crime rates, the following overarching research question was formulated:

> Are there differences in the mean numbers of crime statistics between colleges and universities with the residential college system and those without the system based on the crime categories as reported to the U.S. Department of Education for 2006?

The following specific research questions were used in the statistical analyses:

> Research Question 1: Are there differences in the mean number of *criminal offenses* in each of the four categories between colleges and universities with the residential college system and those without the system for 2006?
>
> Research Question 2: Are there differences in the mean number of *hate offenses* in each of the four categories between colleges and universities with the residential college system and those without the system for 2006?
>
> Research Question 3: Are there differences in the mean number of *arrests* in each of the

three categories between colleges and universities with the residential college system and those without the system for 2006?

Research Question 4: Are there differences in the mean number of *disciplinary actions* and *judicial referrals* in each of the three categories between colleges and universities with the residential college system and those without the system for 2006?

Population Selection and Variable Definition

One group of institutions included in this study was the entire population of 27 colleges and universities located in the United States that incorporated some variation of the residential college system or house system. Several other institutions were at various levels of the planning stages in implementing this collegiate design, but they were not included in this study. Surveying an entire population will be done if the size of the population is small; otherwise, samples are used with the accompanying risks of erroneous generalizations (Witte & Witte, 2004). A population could be defined as "any complete set of observations [and a] *real* population is one in which all potential observations are accessible at the time of sampling" (Witte & Witte, p.202). A group of 27 matched colleges comprised a related sample for this study; a sample was considered "any subset of observations from a population" (Witte & Witte, p.203). Participants in both groups were not randomly selected because randomization was concerned with selecting subjects who represented a population (Huck, Cormier, & Bounds, 1974). One of the comparison groups was not a sample; instead, it was the whole known population of schools with residential colleges, thus, random selection was not appropriate. In creating the matched-subject group, random selection and assignment were not feasible because the participant colleges needed to be matched-pairs and the predictor variable required some controls over extraneous variables. The matched-subject group consisted of 27 colleges and

universities similar to the other participants except that they did not use any variation of either the residential college system or house system. The group of schools using residential colleges was identified from a worldwide list of institutions compiled by O'Hara (2007), higher education consultant, found at http://collegiateway.org/colleges/. Matching participant colleges were selected on the basis of: *level* (2-year, 4-year and above); *control* (public, private not-for-profit, private for-profit); *enrollment*; *undergraduate instructional program* (level of undergraduate degrees awarded); *enrollment profile* (the mix of students enrolled at the undergraduate and graduate or professional levels); *undergraduate profile* (proportion who attended part- or full-time, achievement characteristics of 1st-year students, and the proportion of entering students who transferred in from other institutions); *size and setting* (describes both size and residential character of institution); *basic classification* (associate's colleges, doctorate-granting universities; master's colleges and universities, baccalaureate colleges, and special focus institutions). These categories were part of the design used by The Carnegie Foundation for the Advancement of Teaching from their Website under the Classifications search tool. Unlike random selection, this stratification of specific characteristics of the matched-subjects group was used to ensure that both groups of colleges had similar characteristics in the same proportions (Creswell, 2003). The participant schools were chosen by sorting information for matching purposes provided in the database from The Carnegie Foundation for the Advancement of Teaching using a single-stage sampling design (Creswell).

All participants in the group with residential colleges were 4-year institutions. Each group included both private and public institutions. In an effort to reduce extraneous variables, only 4-year institutions were participants in both groups. Additionally, only main campuses were used for comparisons. Graduate and professional schools and those that had not been

classified were not included in either group. However, the crime data provided by means of the *Clery Act* requirements were not stratified; therefore, it could not be determined who was victimized and the general identities of the offenders were not indicated in the report (ED, 2005). Crime statistics might have represented students, college staff, or outsiders as perpetrators or victims.

Volkwein et al. (1995) merged national crime statistics on community demographics with campus characteristics and found that students were safer on campus than in their surrounding communities. This result agreed with the Baum and Klaus (2005) finding that 93% of campus crime took place off campus, which was consistent for students who were living off campus and on campus. However, when studying demographics of communities surrounding colleges, there were no significant correlates such as community crime and poverty rates with campus crime (Volkwein et al., 1995). Further, the organizational structure of the campuses was more highly related to campus crime than were student demographics (Volkwein et al.). These findings strengthened the objective of this study because the focus was on the internal infrastructure of the campus and not on student characteristics or community demographics. In particular, this endeavor was intended to understand the association, if any, between the existence of residential colleges and reported campus crimes. Based on these findings, it was not necessary to extend the same controls on institutional variables and student characteristics to the communities surrounding the various institutions or their residents. It was not deemed necessary to add any further controls on student demographics than were provided by the search tools on the Carnegie Foundation Website and used in creating the matched-subject group of schools as previously described.

The only student characteristic that appears to have been related to campus crime was gender distribution (Fox & Hellman, 1985), but it was not included in the criteria previously discussed for the purpose of conducting institution-by-institution pairing of the comparison groups. According to data from a National Crime Victimization Survey (Baum & Klaus, 2005), "[M]ale college students were twice as likely to be victims of overall violence than female students (80 versus 43 per 1,000)" (p.1). This variable was not used by The Carnegie Foundation classification categories and was not one of the controls used in matching peer institutions. Thus, data on gender distribution were not part of the statistical scope of this study. Gender distribution in the undergraduate population was not controlled in this study. However, the data on the gender distributions for each participant college were available but were not used in analyzing the data of each participant after the statistical comparisons of crime statistics between schools with and without *residential college system* were conducted.

Control for campus size and residential character were considered when forming the matched-subjects group of participant colleges because it was found that these two factors were related to campus crime (Baum & Klaus, 2005; Fox & Hellman, 1985; NCES, 1997). Size labels and associated definitions used by The Carnegie Foundation were: *very small* (FTE fewer than 500 students), *small* (FTE of 500-1,999), *medium* (FTE of 2,000-4,999), *large* (FTE of 5,000-9,999), and *very large* (FTE of at least 10,000 students).

In a survey conducted by the National Center for Education Statistics on campus crime at postsecondary institutions (NCES, 1997) between 1992 and 1994, the findings indicated that "public four-year institutions, those with campus housing, and larger institutions were more likely to report occurrences of both violent and property crimes than were…those without campus housing, and smaller institutions" (p. 3). Large universities were those that enrolled

10,000 or more full-time equivalent students, made up of full-time students plus one third of part-time students (Carnegie Foundation, 2007). Fox and Hellman (1985) reported that campus crime rates were higher on large campuses compared to smaller campuses, while the NCES reported that violent and property crime rates were higher in smaller colleges compared to larger institutions. The residential or nonresidential character of institutions, which is a measure of the campus environment and student population, was used by the Carnegie Foundation to differentiate between students on the basis of two attributes. This measure was based on the proportion of degree-seeking undergraduates who attended full time and the proportion of undergraduates who lived on campus in institutionally-owned, -affiliated, or -controlled housing. *Residential* referred to on campus living and *nonresidential* referred to commuting students and distance education students. *Primarily* residential indicated that 25%-49% of degree-seeking undergraduates lived on campus and *primarily* nonresidential indicated that fewer than 25% of same lived on campus. *Highly* residential meant that at least one half of undergraduate degree-seeking students lived on campus. It was relevant to include these controls because boarding students were continuously vulnerable to on campus crime.

The criterion variable in this study was the occurrence of campus crimes as reported by institutions in their annual security report according to the guidelines imposed by the *Clery Act*. The required annual security reports are a compilation of reported crimes for 1 calendar year and must be reported to the United States Department of Education by the October 1 deadline. Crimes must be reported using the following template, as per the *Clery Act*: *criminal offenses*–on campus; *criminal offenses*–on-campus residence halls; *criminal offenses*–noncampus; *criminal offenses*–public property; *hate offenses*–on campus; *hate offenses*–on-campus residence halls; *hate offenses*–noncampus; *hate offenses*–public property; *arrests*–on campus; *arrests*–on-

campus residence halls; *disciplinary actions and judicial referrals*–on campus; *arrests*–noncampus; *disciplinary actions and judicial referrals*–noncampus; *arrests*–public property; *disciplinary actions and judicial referrals*–public property. Crime statistics included in this study encompassed some areas not completely contiguous with the main campus or specialized campuses but were included in the noncampus category or public property category. However, the crime statistics did not include crimes committed against students in such areas that existed outside the realm of these limits and were, therefore, not included within the scope of this study.

Instrumentation and Data Collection

Data on campus crime statistics for both comparison groups of institutions were extracted from a nationwide study of colleges and universities. The United States Department of Education's Office of Postsecondary Education conducted the Campus Crime and Security at Postsecondary Education Institutions Survey annually. The survey was an intact instrument designed by the department and Web-administered to more than 6,700 institutions of higher education in the United States. The results of the survey were accessible on the Web (2007) and the statistical results of the survey spanned the most recent 3 years of reporting, which were 2004, 2005, and 2006. The National Center for Education Statistics Website (2007) search tool, the College Navigator, provided detailed profiles on each participating college and the data on gender distribution were obtained from this source. A briefer campus crime report was also available on this Website including statistics for the years 2004, 2005, and 2006.

The list of colleges and universities with on-campus residential housing designed according to the residential college system or house system was drawn from the Website, http://collegiateway.org/colleges/ in 2007, posted by O'Hara who had 16 years of experience in residential college administration. This group of colleges with residential colleges or houses was

matched to an equal number of peer institutions without residential colleges or houses. The Carnegie Foundation for the Advancement of Teaching (2007) Website had a search function, found in the lookup and listings tool that allowed access to colleges and universities. From this site, detailed information for colleges and universities in the United States was organized along the following dimensions: *level*; *control*; *enrollment*; *undergraduate instructional program*; *enrollment profile*; *undergraduate profile*; *size and setting*; and *basic classification*. These terms are defined in the Population and Variable Definition section of this document. Comparable institutions could be found by selecting from among the eight dimensions of interest. The matched set of nonresidential college system schools was electronically generated by this search tool and Website.

Hypotheses and Data Analysis

The overarching research question that defined the parameters of this study was: Are there differences in the mean number of crime statistics between colleges and universities with the residential college system and those without the system based on the crime categories reported to the U.S. Department of Education for 2006? The following hypotheses structured the data analysis:

Hypothesis 1: There is no difference in the mean number of criminal offenses between colleges and universities with the residential college system and those without the system for 2006.

Hypothesis 2: There is no difference in the mean number of hate offenses between colleges and universities with the residential college system and those without the system for 2006.

Hypothesis 3: There is no difference in the mean number of arrests between colleges and universities with the residential college system and those without the system for 2006.

Hypothesis 4: There is no difference in the mean number of disciplinary actions and judicial referrals between colleges and universities with the residential college system and those without the system for 2006.

The differences in the mean number of crimes for each category of crime reported for all 27 schools in both comparison groups were analyzed using a paired-samples *t* test, which was appropriate for a matched-subjects design (Green & Salkind, 2005). After participant colleges were paired, mean scores for crime statistics were computed so that each pair of participants had scores on two variables, the score obtained by one participant college with a *residential college system* and the score obtained by the other participant college without the *residential college system.* The independent variable *residential college system* was a nominal classification (Witte & Witte, 2004) indicating differences in the type of on campus living and learning community in existence for participant colleges. The categories of the independent variable were *residential college system* and *nonresidential college system*. The dependent variable campus crime statistics was a ratio scale (Witte & Witte, 2004) and measured differences in the total amount of crime in each category of crime as defined by the *Clery Act* reporting guidelines. "The primary question for the matched-subject design is whether the mean difference in scores between the two conditions differs significantly from zero" (Green & Salkind, p. 161). Rejection of this null hypothesis indicated that the residential college system as the on campus living style and campus crime were related. The null hypothesis was rejected at $p < .05$ level, with a confidence level of 95%.

In addition to hypothesis testing, effect size was considered. Effect size could be defined as a group of indices that measured the magnitude of the treatment effect, or strength of relationship independent of sample size. Effect size measured practical significance, whereas tests of hypotheses measured statistical significance. Effect size was a method of estimating practical significance and could be based on means (such as Cohen's, Glass's, and Hedge's) or on relationships. Glass's effect size, the simplest and the most favored, was calculated by taking the difference between the means of the two groups and dividing by the standard deviation of one of the two groups, preferably the control group (McLean, personal communication, January 29, 2004).

McLean (2004) expressed the importance of including an estimate of effect size:

> Whereas statistical significance is expressed in terms of the probability that a relationship or difference is real, practical significance is a descriptive estimate of the meaningfulness of a relationship or difference. Research findings should include both statistical and practical significance estimates, particularly, if the findings are statistically significant. (p. 1)

In the findings in Chapter 4, effect size was indexed by using Cohen's *d*, where the subscript *d* was used to denote *obtained* effect size as opposed to *hypothesized* effect size. Obtained effect size was a measure of practical significance and used for constructing a confidence interval (Knapp, 1998). Effect size was interpreted by Cohen's standards for value: .2 was a "small effect;" .5 was a "moderate effect;" and .8 was a "large effect" (McLean). Additionally, McLean's (1995) standards of value were used: < .50 was a small effect size; .50-1.00 was a moderate effect size; and > 1.00 was a large effect size. Sample size was considered in the decision to emphasize effect size.

This study involved two groups of participants, each with a total of 27 colleges. It was noted that a large sample was more likely to generate a statistically significant result than a

smaller sample and that most tests of statistical significance would "yield larger values as sample size is increased, given a fixed effect size" (Daniel, 1998, p.25). This held true when the effect size was kept constant. When the sample size was relatively small, the importance of significance testing increased. It was a common misperception that "statistical significance measures the degree to which results of a given SST [Statistical Significance Test] occur by chance" (Daniel, p.27). According to McLean and Ernest (1998), statistical significance tests failed to "provide information about the meaningfulness (practical significance) of an event or if the result is replicable" (p.15). Thus, effect size was a measure of the magnitude of what was deemed statistically significant.

Confidence intervals were also considered in the analysis of data. The common assumption was "when the level of confidence equals 95% or more, we can be reasonably confident that the one observed confidence interval includes the true population mean" (Witte & Witte, 2004, p. 299). Confidence intervals were considered when hypothesis testing results in the rejection of the null hypothesis (Witte & Witte). Thus, confidence intervals were used to interpret the results.

All data reflected in this study were input into the Statistical Package for the Social Sciences for Windows (SPSS 15.0). Descriptive statistics consisted of frequency distributions and means tabulated to develop crime profiles of participant colleges. The data set was from existing crime reports based on surveys conducted annually for colleges and universities and reported to the United States Department of Education and available to the public through various avenues. Crime data were comprised of incident reports and there was no differentiation among victims or perpetrators. Crime data reported under the Clery Act guidelines were not crime rates but were aggregates of various crimes as defined by specific categories. Participant

college characteristics and resulting comparisons made to peer institutions were extracted from existing data provided by The Carnegie Foundation for the Advancement of Teaching and is available to the public on their Website. All data for analysis in this study were collected from secondary sources.

Trustworthiness of the Data

The Carnegie Foundation for the Advancement of Teaching provided a cautionary statement about the reliability of the information on its Website. The classification categories used to disseminate information about colleges and universities on attributes and behavior were based on data from 2003 and 2004. Therefore, they advised consumers that the information was time-specific and might vary in another timeframe. The Carnegie Foundation, in a discussion of one of the basic classification subcategories, analysis of research activity, mentioned that measuring the research activity level of institutions should not be used in ranking schools or in making institution-by-institution comparisons.

The National Center for Education Statistics' college navigator search function provided a detailed profile of colleges and other pertinent information for consumers. A brief version of the mandated crime report according to *Clery Act* guidelines was also given, with the caveat that the crime data reported by the various schools were not independently verified by the United States Department of Education, leaving open the possibility that some of the information was not entirely valid.

The Office of Postsecondary Education Website offered the complete annual crime report for all institutions that received Title IV funds. Again, the caveat that the information was not verified by the Department of Education prefaced each section of all reports even though this office was part of the Department. Another threat to the validity of campus crime reports

involved procedural matters, as Low et al. (2004) explained:

> Because crimes committed on campus are reported in terms of incident reports and many of the incidents do not result in arrests or convictions, there are no public records of who is involved. Without knowing who is involved there is no way to study and predict individuals who are likely to commit these crimes. (p. 2)

Crime statistics were merely numbers without identities or profiles of the offender or victim, and the "focus of virtually all research on campus crime has been crimes committed on the campus rather than crimes committed by students" (Low et al., p. 2). The annual reports could not be interpreted to understand students as offenders because it was not clear who the offenders or victims were, but all reported crimes must be included in the crime statistics, "regardless of whether any of the individuals involved in either the crime itself, or in the reporting of the crime, are associated with the institution" (ED, 2005, p. 23). This blurred the distinction between campus crime and crime in the general population. Professional counselors and pastoral counselors were not required to disclose information about reported offenses (ED). Although colleges were required, as per the *Clery Act*, to gather crime statistics from local or state police agencies, police agencies were not required by the *Clery Act* guidelines to comply (ED). Institutions were not required to verify the accuracy of their reports (ED) and with only an estimated 25% of campus crimes being reported (Sloan et al., 1997), this rate of underreporting of incidents called into question the validity of campus crime reports. Another drawback of the annual campus crime report was that crime statistics were for incidences of crime on campus, not for rates of crime, and no distinctions were made among the perpetrators who might be students, staff, or outsiders (NCES, 1997). Additionally, offenses against students at off-campus locations were not part of the *Clery Act* crime report (NCES). The crime report did not require colleges to report larceny, theft, threats, harassment, and vandalism (Carr, 2005). These issues of validity limit the usefulness of this study.

Ethical Considerations

This research does not aim to disparage any institution of higher education. Rather, it was an attempt to look creatively at one possible correlate with campus crime, the existence of the residential college system. The concept of the residential infrastructure of the college campus, namely residential colleges, as a campus crime correlate was introduced.

Summary

This chapter describes the research methodology employed in this study, with a description of the population and sample, data collection and instrumentation, and an explanation of the data collection tools and analysis processes. Issues of validity and reliability of the data collection procedures and instrumentation are addressed in this chapter.

CHAPTER 4

FINDINGS OF THE STUDY

This chapter presents the results of the study for key variables and identifies the relationships among the variables in response to one overarching research question and four specific research questions that guided this study. Both descriptive data and outcomes of tests of statistical significance are presented. Data were analyzed using the Social Sciences for Windows (SPSS 15.0) computer program software using descriptive and inferential statistics.

The purpose of the study was to determine whether there was a difference in the mean number of campus crimes at institutions of higher education based on their types of on campus living quarters. The primary predictor (independent) variable was the existence or lack of the residential college system. The primary criterion (dependent) variable, the incidence of campus crime, which included (a) criminal offenses, (b) hate crimes, and (c) arrests and disciplinary actions, was further divided into 15 subcategories: *criminal offenses*–on campus; *criminal offenses*–on-campus residence halls; *criminal offenses*–noncampus; *criminal offenses*–public property; *hate offenses*–on campus; *hate offenses*–on-campus residence halls; *hate offenses*–noncampus; *hate offenses*–public property; *arrests*–on campus; *arrests*–on-campus residence halls; *disciplinary actions and judicial referrals*–on campus; *arrests*–noncampus; *disciplinary actions and judicial referrals*–noncampus; *arrests*–public property; *disciplinary actions and judicial referrals*–public property. The matched-pairs of participant colleges were compared on 57 different offenses (Appendix B). The predictor variable, the residential college system, was analyzed against the criterion variables, reported campus crimes, which was compiled for the calendar year 2006, using a paired-samples *t* test.

The data were based on reports prepared by the participant colleges and submitted to the U.S. Department of Education's Office of Postsecondary Education under the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. All known colleges with some variation of the residential colleges system that were fully operational during the time of this research were included in the comparison group that acted as the experimental group. The 27 participant colleges were derived from a Website authored by educational consultant O'Hara. The 27 matched-pairs of participants that served as the control group were compiled from The Carnegie Foundation for the Advancement of Teaching Website database.

Excluded Data

Once data collection was completed, adjustments were necessary for the analysis of the results. The following specific offenses within the crime categories were omitted from the analysis due to zero reported offenses or small numbers of colleges reporting offenses:

1) *Criminal offenses*–on campus: Deleted murder and nonnegligent manslaughter, negligent manslaughter, and sex offenses–nonforcible.

2) *Criminal offenses*–on-campus residence halls: Deleted murder and nonnegligent manslaughter, negligent manslaughter, sex offenses–nonforcible, robbery, and motor vehicle theft.

3) *Criminal offenses*–noncampus: Deleted murder and nonnegligent manslaughter, negligent manslaughter, sex offenses–nonforcible, robbery, and arson.

4) *Criminal offenses*–public property: Deleted murder and nonnegligent manslaughter, negligent manslaughter, sex offenses–nonforcible, burglary, and arson.

5) *Arrests*–on-campus residence halls: Deleted illegal weapons possession.

6) *Arrests*–noncampus: Deleted illegal weapons possession.

7) *Disciplinary actions*–noncampus: Deleted illegal weapons possession, and liquor law violations.

8) *Arrests*–public property: Deleted illegal weapons possession.

9) *Disciplinary actions*–public property: Deleted illegal weapons possession and drug law violations.

The campus crime reports provided by the U.S. Department of Education's Office of Postsecondary Education Website for Harvard University and Northwestern University did not include the following crime categories: *criminal offenses*–noncampus*; arrests*–noncampus**;** and *disciplinary actions*–noncampus**.** The *hate crimes* category of the criterion variable was not considered in this analysis because all 54 participant colleges reported zero occurrences for all offenses in each subcategory.

Findings Related to Research Questions

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on campus sex offenses–forcible for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 4.41, SD = 4.58) was lower than the mean for the nonresidential system schools (M = 6.37, SD = 4.76). However, there was no statistically significant difference between the mean number of on campus sex offenses–forcible, for the two groups of colleges. The null hypothesis that there would be no difference in the mean number of sex offenses–forcible for the two groups was tested at the .05 level of significance (t (26) = 1.719, p = .097). In comparing p-value with alpha, .097 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the

residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .42, which was small by both Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –4.31 and the upper bound of .38 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on campus robbery for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system ($M = 2.30$, $SD = 3.18$) was lower than the mean for the nonresidential system schools ($M = 2.37$, $SD = 4.89$). However, there was no statistically significant difference between the mean number of on campus robberies for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus robberies for the two groups was tested at the .05 level of significance ($t\ (26) = .067$, $p = .947$). In comparing *p*-value with alpha, $.947 > .05$; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .02, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –2.36 and the upper bound of 2.21 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus aggravated assault for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (*M* = 2.48, *SD* = 3.30) was lower than the mean for the nonresidential system schools (*M* = 5.67, *SD* = 6.13). There was a statistically significant difference between the mean number of on campus aggravated assaults for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on-campus aggravated assaults for the two groups was tested at the .05 level of significance and was rejected (*t* (26) = 2.341, *p* = .027). In comparing *p*-value with alpha, .027 < .05; thus, the null hypothesis was rejected with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was statistically significant. Effect size as measured by Cohen's *d* was .65, which was moderate by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was moderate. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –5.98 and the upper bound of -.39 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus burglary for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (*M* = 62.22, *SD* = 70.33) was higher than the mean for the nonresidential system schools (*M* = 49.59, *SD* = 39.58). However, there was no statistically significant difference between the mean number of on-campus

burglaries for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus burglaries for the two groups was tested at the .05 level of significance (t (26) = .958, p = .347). In comparing p-value with alpha, .347 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .22, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –14.47 and the upper bound of 39.73 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus motor vehicle theft for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 7.33, SD = 14.25) was higher than the mean for the nonresidential system schools (M = 5.93, SD = 9.39). However, there was no statistically significant difference between the mean number of on campus motor vehicle thefts for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus motor vehicle thefts for the two groups was tested at the .05 level of significance (t (26) = .458, p = .651). In comparing p-value with alpha, .651 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not

statistically significant. Effect size as measured by Cohen's *d* was .12, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –4.91 and the upper bound of 7.72 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus arson for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 1.30, SD = 2.13) was higher than the mean for the nonresidential system schools (M = .96, SD = 1.38). However, there was no statistically significant difference between the mean number of on campus arson for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus arson for the two groups was tested at the .05 level of significance (t (26) = .866, p = .394). In comparing p-value with alpha, .394 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .19, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of -.46 and the upper bound of 1.12 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus residence hall sex offenses–forcible for

colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 3.22, SD = 3.86) was lower than the mean for the nonresidential system schools (M = 4.52, SD = 3.36). However, there was no statistically significant difference between the mean number of on campus residence hall sex offenses – forcible for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus residence hall sex offenses – forcible, for the two groups was tested at the .05 level of significance (t (26) = -1.375, p = .181). In comparing p-value with alpha, .181 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .36, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –3.23 and the upper bound of .64 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus residence hall aggravated assault for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .78, SD = 1.31) was lower than the mean for the nonresidential system schools (M = 2, SD = 2.65). There was a statistically significant difference between the mean number of on-campus residence hall aggravated assaults for the two groups of colleges. The null hypothesis that there

would be no difference between the mean number of on-campus residence hall aggravated assaults for the two groups was tested at the .05 level of significance and was rejected (t (26) = -1.983, p = .058). In comparing p-value with alpha, .058 = .05; thus, the null hypothesis was rejected with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was statistically significant. Effect size as measured by Cohen's d was .58, which was moderate by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was moderate. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –2.49 and the upper bound of .04 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus residence hall burglary for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 21.85, SD = 17.79) was lower than the mean for the nonresidential system schools (M = 25.89, SD = 20.60). However, there was no statistically significant difference between the mean number of on campus residence hall burglaries for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus residence hall burglaries, for the two groups was tested at the .05 level of significance (t (26) = -.868, p = .394). In comparing p-value with alpha, .394 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d

was .21, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –13.60 and the upper bound of 5.53 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of on-campus residence hall arson for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .78, SD = 1.50) was higher than the mean for the nonresidential system schools (M = .63, SD = 1.04). However, there was no statistically significant difference between the mean number of on campus residence hall arson for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of on campus residence hall arson for the two groups was tested at the .05 level of significance (t (26) = -.478, p = .637). In comparing p-value with alpha, .637 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. An index of the practical significance reported as Cohen's d was .11, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of -.49 and the upper bound of .79 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of noncampus sex offenses–forcible for colleges with a

residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .56, SD = 1.12) was lower than the mean for the nonresidential system schools (M = 1.28, SD = 2.42). However, there was no statistically significant difference between the mean number of noncampus sex offenses – forcible, for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of noncampus sex offenses–forcible, for the two groups was tested at the .05 level of significance (t (24) = -1.283, p = .212). In comparing p-value with alpha, .212 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .38, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –1.88 and the upper bound of .44 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of noncampus aggravated assault for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .52, SD = .87) was lower than the mean for the nonresidential system schools (M = .76, SD = 1.67). However, there was no statistically significant difference between the mean number of noncampus aggravated assaults for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of noncampus aggravated assaults for the two

groups was tested at the .05 level of significance (t (24) = -.625, p = .538). In comparing p-value with alpha, .538 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .18, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –1.03 and the upper bound of .55 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of noncampus burglary for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 5.6, SD = 7.75) was lower than the mean for the nonresidential system schools (M = 9.88, SD = 17.8). However, there was no statistically significant difference between the mean number of noncampus burglaries for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of noncampus burglaries for the two groups was tested at the .05 level of significance (t (24) = -1.067, p = .297). In comparing p-value with alpha, .297 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .31, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two

means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –12.56 and the upper bound of 4.00 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of noncampus motor vehicle theft for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 2.12, SD = 5.78) was higher than the mean for the nonresidential system schools (M = 1.64, SD = 3.50). However, there was no statistically significant difference between the mean number of noncampus motor vehicle thefts for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of noncampus motor vehicle thefts, for the two groups was tested at the .05 level of significance (t (24) = .342, p = .735). In comparing p-value with alpha, .735 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .10, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –2.41 and the upper bound of 3.37 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of public property sex offenses–forcible for colleges with a residential college system and for colleges without a residential college system. The results

indicated that the mean number of offenses for schools with the residential college system (M = 1.15, SD = 3.49) was higher than the mean for the nonresidential system schools (M = .56, SD = 1.12). However, there was no statistically significant difference between the mean number of public property sex offenses–forcible for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of public property sex offenses–forcible for the two groups was tested at the .05 level of significance (t (26) = .843, p = .407). In comparing p-value with alpha, .407 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .23, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of -.85 and the upper bound of 2.04 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of public property robbery for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 4.74, SD = 11.44) was higher than the mean for the nonresidential system schools (M = 4.30, SD = 7.88). However, there was no statistically significant difference between the mean number of public property robberies for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of public property robberies for the two groups was tested at the .05 level of significance (t (26) = .210, p = .835). In comparing p-value with alpha, .835 >

.05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .05, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –3.91 and the upper bound of 4.80 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of public property aggravated assault for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 1.81, SD = 3.76) was lower than the mean for the nonresidential system schools (M = 2.70, SD = 3.90). However, there was no statistically significant difference between the mean number of public property aggravated assaults for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of public property aggravated assaults for the two groups was tested at the .05 level of significance (t (26) = -1.122, p = .272). In comparing *p*-value with alpha, .272 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .23, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that

the true population mean for the difference scores will occur between the lower bound of –2.52 and the upper bound of .74 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of criminal offenses in the category of public property motor vehicle theft for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 5.81, SD = 12.54) was higher than the mean for the nonresidential system schools (M = 2.85, SD = 5.65). However, there was no statistically significant difference between the mean number of public property motor vehicle thefts for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of public property motor vehicle thefts for the two groups was tested at the .05 level of significance (t (26) = -1.090, p = .286). In comparing p-value with alpha, .286 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported victimizations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .30, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –2.62 and the upper bound of 8.55 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of on campus illegal weapons possession for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 1.85, SD =

3.30) was higher than the mean for the nonresidential system schools (M = 1.52, SD = 2.16). However, there was no statistically significant difference between the mean number of arrests for on campus illegal weapons possession for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for on-campus illegal weapons possession for the two groups was tested at the .05 level of significance (t (26) = .37, p = .666). In comparing p-value with alpha, .666 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .12, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –1.23 and the upper bound of 1.90 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of arrests in the category of on-campus drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 18.93, SD = 23.53) was lower than the mean for the nonresidential system schools (M = 31.70, SD = 47.47). However, there was no statistically significant difference between the mean number of arrests for on-campus drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for on campus drug law violations for the two groups was tested at the .05 level of significance (t (26) = -1.544, p = .135). In comparing p-value with alpha, .135 > .05; thus, we fail to reject the null hypothesis with at least 95%

confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was -.34, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –29.79 and the upper bound of 4.24 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of on-campus liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 83.78, SD = 154.24) was higher than the mean for the nonresidential system schools (M = 53.93, SD = 92.65). However, there was no statistically significant difference between the mean number of arrests for on-campus liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for on campus liquor law violations, for the two groups was tested at the .05 level of significance (t (26) = 1.174, p = .251). In comparing *p*-value with alpha, .251 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was .23, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that

the true population mean for the difference scores will occur between the lower bound of –22.43 and the upper bound of 82.14 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of on-campus residence halls drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 8.70, SD = 12.75) was lower than the mean for the nonresidential system schools (M = 17.26, SD = 31.12). However, there was no statistically significant difference between the mean number of arrests for on-campus residence halls drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for on-campus residence halls drug law violations for the two groups was tested at the .05 level of significance (t (26) = -1.661, p = .109). In comparing p-value with alpha, .109 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was -.36, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –19.14 and the upper bound of 2.03 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of on-campus residence halls liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results

indicated that the mean number of offenses for schools with the residential college system (M = 34.15, SD = 63.56) was higher than the mean for the nonresidential system schools (M = 19.07, SD = 43.84). There was a statistically significant difference between the mean number of arrests for on-campus residence halls liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for on-campus residence halls liquor law violations for the two groups was tested at the .05 level of significance and was rejected (t (26) = 2.338, p = .027). In comparing p-value with alpha, .027 < .05; thus, the null hypothesis was rejected with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was statistically significant. Effect size as measured by Cohen's d was .28, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of 1.82 and the upper bound of 28.33 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of disciplinary actions in the category of on-campus illegal weapons possession for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 1.93, SD = 3.23) was higher than the mean for the nonresidential system schools (M = 1.48, SD = 3.45). However, there was no statistically significant difference between the mean number of disciplinary actions for on-campus illegal weapons possession for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of disciplinary

actions for on-campus illegal weapons possession, for the two groups was tested at the .05 level of significance (t (26) = .497, p = .623). In comparing p-value with alpha, .623 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .13, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –1.39 and the upper bound of 2.28 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of disciplinary actions in the category of on-campus drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 59.56, SD = 149.85) was higher than the mean for the nonresidential system schools (M = 52.93, SD = 88.10). However, there was no statistically significant difference between the mean number of disciplinary actions for on-campus drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of disciplinary actions for on-campus drug law violations for the two groups was tested at the .05 level of significance (t (26) = .225, p = .823). In comparing p-value with alpha, .823 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size

as measured by Cohen's *d* was .05, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –53.81 and the upper bound of 67.07 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of disciplinary actions in the category of on-campus liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (*M* = 291.85, *SD* = 427.01) was lower than the mean for the nonresidential system schools (*M* = 401.70, *SD* = 377.78). However, there was no statistically significant difference between the mean number of disciplinary actions for on-campus liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of disciplinary actions for on-campus liquor law violations, for the two groups was tested at the .05 level of significance (t (26) = -1.501, p = .145). In comparing p-value with alpha, .145 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was -.27, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –260.26 and the upper bound of 40.55 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of noncampus drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .32, SD = .75) was lower than the mean for the nonresidential system schools (M = 1.4, SD = 2.5). However, there was no statistically significant difference between the mean number of arrests for noncampus drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for noncampus drug law violations for the two groups was tested at the .05 level of significance (t (24) = -1.951, p = .063). In comparing p-value with alpha, .063 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .59, which was moderate by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was moderate. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –2.22 and the upper bound of .06 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of noncampus liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 4.8, SD = 11.02) was higher than the mean for the nonresidential system schools (M = 3.28, SD = 6.44). However, there was no statistically significant difference between the mean number of arrests for

noncampus liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for noncampus liquor law violations, for the two groups was tested at the .05 level of significance (t (24) = .599, p = .555). In comparing p-value with alpha, .555 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .17, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –3.71 and the upper bound of 6.75 confidence interval.

A paired-samples t test was conducted to evaluate the differences in reported incidences of disciplinary actions in the category of noncampus drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = .28, SD = .68) was lower than the mean for the nonresidential system schools (M = 18.12, SD = 88.33). However, there was no statistically significant difference between the mean number of disciplinary actions for noncampus drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of disciplinary actions for noncampus drug law violations for the two groups was tested at the .05 level of significance (t (24) = -1.009, p = .323). In comparing p-value with alpha, .323 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those

without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was -.29, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –54.33 and the upper bound of 18.65 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of public property drug law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 7.11, SD = 12.84) was lower than the mean for the nonresidential system schools (M = 22.59, SD = 82.81). However, there was no statistically significant difference between the mean number of arrests for public property drug law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for public property drug law violations, for the two groups was tested at the .05 level of significance (t (26) = -.998, p = .328). In comparing p-value with alpha, .328 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's *d* was -.26, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –47.37 and the upper bound of 16.41 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of arrests in the category of public property liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 23.67, SD = 45.59) was lower than the mean for the nonresidential system schools (M = 71.44, SD = 207.73). However, there was no statistically significant difference between the mean number of arrests for public property liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of arrests for public property liquor law violations, for the two groups was tested at the .05 level of significance (t (26) = -1.177, p = .250). In comparing p-value with alpha, .250 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was -.32, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –131.22 and the upper bound of 35.67 confidence interval.

A paired-samples *t* test was conducted to evaluate the differences in reported incidences of disciplinary actions in the category of public property liquor law violations for colleges with a residential college system and for colleges without a residential college system. The results indicated that the mean number of offenses for schools with the residential college system (M = 5.56, SD = 13.51) was higher than the mean for the nonresidential system schools (M = 1.26, SD = 5.04). However, there was no statistically significant difference between the mean number of

disciplinary actions for public property liquor law violations for the two groups of colleges. The null hypothesis that there would be no difference between the mean number of disciplinary actions for public property liquor law violations for the two groups was tested at the .05 level of significance (t (26) = -1.561, p = .131). In comparing p-value with alpha, .131 > .05; thus, we fail to reject the null hypothesis with at least 95% confidence and it can be concluded that the difference in the number of reported violations for schools with the residential college system and for those without the residential college system was not statistically significant. Effect size as measured by Cohen's d was .42, which was small by Cohen's and McLean's standards of interpretation. Thus, the practical significance of the difference between the two means was small. It can be claimed with 95% confidence that the true population mean for the difference scores will occur between the lower bound of –1.36 and the upper bound of 9.95 confidence interval.

Descriptive Data

Table 1 gives a summary of the number of reported offenses for the categories included in the analysis of data. Some categories were excluded from the t test due to insufficient data for analysis. Group A and Group B institutions are listed in Appendix A. Statistical comparisons and analyses of the data were reported in the previous section.

Table 1

Summary of Reported Offenses for Participant Group A and Group B Institutions

Crime/Offense	Number of Group A Institutions Reporting Offenses	Number of Group B Institutions Reporting Offenses	Highest Single Number for Group A	Highest Single Number for Group B	Total Number of Offenses for Group A	Total Number of Offenses for Group B
Criminal Offense: On Campus – Sex Offenses - Forcible	23	25	18	18	119	169
Criminal Offense: On Campus – Robbery	18	15	15	25	62	58
Criminal Offense: On Campus – Aggravated Assault	18	20	14	25	67	153
Criminal Offense: On Campus – Burglary	25	27	261	132	1680	1339
Criminal Offense: On Campus – Motor Vehicle Theft	20	20	73	46	198	160
Criminal Offense: On Campus – Arson	11	11	8	5	35	26
Criminal Offense: On Campus – Residence Halls – Sex Offenses – Forcible	21	25	16	16	87	122

Table 1 (continued)

Criminal Offense: On Campus – Residence Halls – Aggravated Assault	11	18	5	10	21	54
Criminal Offense: On Campus – Residence Halls – Burglary	25	27	62	67	590	677
Criminal Offense: On Campus – Residence Halls – Arson	8	9	6	4	21	17
Criminal Offense: Noncampus – Sex Offenses - Forcible	8	8	5	8	14	34
Criminal Offense: Noncampus – Aggravated Assault	8	9	3	8	13	19
Criminal Offense: Noncampus – Burglary	19	15	28	79	140	251
Criminal Offense: Noncampus – Motor Vehicle Theft	9	7	23	11	53	42
Criminal Offense: Public Property – Sex Offenses - Forcible	8	6	18	3	31	15

Table 1 (continued)

Criminal Offense: Public Property – Robbery	15	14	57	29	128	116
Criminal Offense: Public Property – Aggravated Assault	11	16	16	14	49	73
Criminal Offense: Public Property – Motor Vehicle Theft	15	14	60	28	157	77
Arrests: On Campus – Illegal Weapons Possession	15	14	15	7	50	41
Arrests: On Campus – Drug Law Violations	24	23	70	175	511	856
Arrests: On Campus – Liquor Law Violations	21	19	616	391	2262	1456
Arrests: On Campus – Residence Halls - Liquor Law Violations	15	15	221	189	922	515
Disciplinary Action: On Campus – Illegal Weapons Possession	12	9	11	17	52	40
Disciplinary Action: On Campus – Drug Law Violations	24	23	788	446	1608	1429

Table 1 (continued)

Disciplinary Action: On Campus – Liquor Law Violations	26	26	526	1087	7880	10846
Arrests – Noncampus – Drug Law Violations	5	9	3	8	8	35
Arrests – Noncampus – Liquor Law Violations	12	8	49	22	120	82
Disciplinary Action: Noncampus – Drug Law Violations	4	4	2	442	7	458
Arrests: Public Property – Drug Law Violations	18	13	62	434	192	610
Arrests: Public Property – Liquor Law Violations	15	15	165	1013	639	1929
Disciplinary Action: Public Property – Liquor Law Violations	15	4	59	26	150	34

Table 2 shows the total number of reported offenses for each of the main categories under the *Clery Act* reporting guidelines. The hate crimes category was not included because there were zero offenses reported by all participants and for all offenses in this category. Participant 20B had the only reported offense for Murder or Nonnegligent manslaughter. A list of the institutions by name is reported in Appendix A and the specific crimes or offenses in each of the categories are given in Appendix B. Data excluded in the *t* tests are shown in these totals.

Table 2

Total Crimes or Offenses in Main Categories for Each Institutional Participant

PARTICIPANT	TOTAL CRIMINAL OFFENSES	TOTAL ARRESTS	TOTAL DISCIPLINARY ACTIONS
Pair 1A	53	141	15
Pair 1B	120	91	823
Pair 2A	38	38	240
Pair 2B	218	513	1026
Pair 3A	426	11	49
Pair 3B	264	6	84
Pair 4A	16	338	484
Pair 4B	58	51	965
Pair 5A	0	0	0
Pair 5B	12	0	22
Pair 6A	347	5	12
Pair 6B	129	38	301
Pair 7A	4	6	43
Pair 7B	10	5	48
Pair 8A	48	1	70
Pair 8B	78	52	168
Pair 9A	71	81	3
Pair 9B	177	240	0
Pair 10A	251	19	244
Pair 10B	64	0	591
Pair 11A	112	42	43
Pair 11B	128	5	355
Pair 12A	82	41	62
Pair 12B	62	0	316
Pair 13A	21	207	62
Pair 13B	43	157	285
Pair 14A	300	91	1531
Pair 14B	248	551	402
Pair 15A	102	13	2340
Pair 15B	108	154	1228
Pair 16A	115	174	163
Pair 16B	22	18	101
Pair 17A	101	462	311
Pair 17B	26	42	23
Pair 18A	77	4	408
Pair 18B	276	20	262
Pair 19A	189	1057	1051
Pair 19B	153	331	591
Pair 20A	44	8	24

Table 2 (continued)

Pair 20B	20	17	11
Pair 21A	152	49	27
Pair 21B	223	1452	3458
Pair 22A	112	162	708
Pair 22B	231	488	1006
Pair 23A	195	166	50
Pair 23B	110	228	216
Pair 24A	259	890	653
Pair 24B	129	454	1535
Pair 25A	117	24	248
Pair 25B	133	14	580
Pair 26A	57	939	908
Pair 26B	154	1009	1106
Pair 27A	212	16	50
Pair 27B	294	87	52

Table 3 gives the total number of sex offenses, both forcible and nonforcible, for each case in the study. The offenses are further broken down by location, so the number of on-campus offenses can be compared against those that occurred in on-campus residences. In addition, the sex offenses that occurred in residence halls and elsewhere on campus can be compared with the numbers that occurred in the two off-campus geographic locations, which included noncampus and public property. All four geographic locations were mandated under the reporting guidelines of the *Clery Act*. Table 4 gives the total number of sex offenses by geographic location and by institutional group; thus, the two groups of institutions can be compared on this variable. Data excluded in the *t* tests for statistical analyses are included in the summary totals and in these tables and in subsequent tables.

Table 3

Total Forcible and Nonforcible Sex Offenses for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL SEX OFFENSES - ON CAMPUS	TOTAL SEX OFFENSES - ON CAMPUS RESIDENCE HALLS	TOTAL SEX OFFENSES – NONCAMPUS* AND ON PUBLIC PROPERTY**
Pair 1A	1	1	0
Pair 1B	18	16	4
Pair 2A	4	3	0
Pair 2B	12	6	0
Pair 3A	18	16	18
Pair 3B	5	3	0
Pair 4A	2	2	0
Pair 4B	4	4	0
Pair 5A	0	0	0
Pair 5B	1	1	0
Pair 6A	11	10	1
Pair 6B	7	3	0
Pair 7A	1	0	0
Pair 7B	2	2	0
Pair 8A	2	2	0
Pair 8B	6	6	0
Pair 9A	3	3	0
Pair 9B	4	3	0
Pair 10A	2	2	0
Pair 10B	5	5	2
Pair 11A	13	12	5
Pair 11B	10	7	0
Pair 12A	4	3	2
Pair 12B	1	2	0
Pair 13A	0	0	0
Pair 13B	1	1	3
Pair 14A	1	0	1
Pair 14B	9	6	1
Pair 15A	4	4	0
Pair 15B	11	6	2
Pair 16A	1	1	0
Pair 16B	3	2	0
Pair 17A	0	0	3
Pair 17B	0	0	0

Table 3 (continued)

Pair 18A	1	1	0
Pair 18B	16	7	7
Pair 19A	11	1	5
Pair 19B	7	6	3
Pair 20A	0	0	0
Pair 20B	0	0	0
Pair 21A	3	3	4
Pair 21B	3	3	9
Pair 22A	7	2	0
Pair 22B	6	5	10
Pair 23A	8	5	4
Pair 23B	12	8	0
Pair 24A	9	5	0
Pair 24B	4	4	2
Pair 25A	4	4	0
Pair 25B	3	2	3
Pair 26A	2	2	1
Pair 26B	9	7	3
Pair 27A	9	5	1
Pair 27B	12	9	0

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 4

Summary Totals of Forcible and Nonforcible Sex Offenses by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Sex Offenses – On Campus	121	171
Sex Offenses – On Campus – Residence Halls	87	124
Sex Offenses - Noncampus and on Public Property	45	49

Table 5 gives the total number of robberies for each participant. The on-campus offenses can be compared against those that occurred in on-campus residences. Also, the number of on-campus robberies can be compared with the number of off-campus robberies. Table 6 gives the total number of robberies by geographic location and by institutional group; thus, the two groups of institutions can be compared on this variable.

Table 5

Total Robberies for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL ROBBERIES - ON CAMPUS	TOTAL ROBBERIES - ON CAMPUS - RESIDENCE HALLS	TOTAL ROBBERIES – NONCAMPUS* AND ON PUBLIC PROPERTY**
Pair 1A	0	0	0
Pair 1B	0	0	0
Pair 2A	0	0	0
Pair 2B	2	0	0
Pair 3A	3	0	14
Pair 3B	3	0	29
Pair 4A	2	0	2
Pair 4B	0	0	0
Pair 5A	0	0	0
Pair 5B	0	0	0
Pair 6A	1	1	1
Pair 6B	0	0	5
Pair 7A	0	0	0
Pair 7B	0	0	0
Pair 8A	0	0	0
Pair 8B	0	0	0
Pair 9A	1	0	0
Pair 9B	0	0	2
Pair 10A	3	0	4
Pair 10B	1	0	5
Pair 11A	0	0	1
Pair 11B	2	0	1
Pair 12A	0	0	2
Pair 12B	7	0	4
Pair 13A	0	0	0
Pair 13B	0	0	0
Pair 14A	1	1	1

Table 5 (continued)

Pair 14B	4	1	1
Pair 15A	2	0	0
Pair 15B	3	1	0
Pair 16A	1	0	0
Pair 16B	0	0	0
Pair 17A	3	0	5
Pair 17B	0	0	0
Pair 18A	2	1	2
Pair 18B	25	3	36
Pair 19A	7	0	9
Pair 19B	5	1	25
Pair 20A	1	0	0
Pair 20B	1	0	0
Pair 21A	15	0	57
Pair 21B	0	0	15
Pair 22A	6	1	0
Pair 22B	4	0	14
Pair 23A	3	0	2
Pair 23B	2	0	6
Pair 24A	5	0	5
Pair 24B	1	0	2
Pair 25A	0	0	6
Pair 25B	0	0	2
Pair 26A	3	1	6
Pair 26B	1	0	0
Pair 27A	3	0	20
Pair 27B	3	1	3

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 6

Summary Totals of Robberies by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Robberies – On Campus	62	58
Robberies – On Campus – Residence Halls	5	7
Robberies - Noncampus and on Public Property	137	150

Table 7 gives the total number of aggravated assaults for each participant. The on-campus offenses can be compared against those that occurred in on-campus residences. Also, the number of on-campus aggravated assaults can be compared with the number of off-campus offenses. Table 8 gives the total number of aggravated assaults by geographic location and by institutional group to compare the two groups of institutions on this variable.

Table 7

Total Aggravated Assaults for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL AGGRAVATED ASSAULTS - ON CAMPUS	TOTAL AGGRAVATED ASSAULTS - ON CAMPUS RESIDENCE HALLS	TOTAL AGGRAVATED ASSAULTS – NONCAMPUS* AND ON PUBLIC PROPERTY**
Pair 1A	3	1	2
Pair 1B	2	1	1
Pair 2A	0	0	0
Pair 2B	13	6	1
Pair 3A	5	3	16
Pair 3B	8	3	8
Pair 4A	0	0	0
Pair 4B	1	1	0
Pair 5A	0	0	0
Pair 5B	0	0	0
Pair 6A	5	5	1
Pair 6B	4	0	5
Pair 7A	0	0	0
Pair 7B	0	0	0
Pair 8A	0	0	0

Table 7 (continued)

Pair 8B	4	4	4
Pair 9A	0	0	1
Pair 9B	0	0	2
Pair 10A	1	0	2
Pair 10B	0	0	0
Pair 11A	0	0	1
Pair 11B	9	1	6
Pair 12A	1	1	0
Pair 12B	0	0	2
Pair 13A	1	1	1
Pair 13B	0	0	0
Pair 14A	2	0	5
Pair 14B	4	2	1
Pair 15A	2	0	0
Pair 15B	25	8	1
Pair 16A	2	1	0
Pair 16B	1	0	0
Pair 17A	4	0	3
Pair 17B	9	6	0
Pair 18A	1	1	0
Pair 18B	9	2	11
Pair 19A	14	2	5
Pair 19B	4	2	12
Pair 20A	2	1	0
Pair 20B	1	1	0
Pair 21A	6	0	12
Pair 21B	0	0	10
Pair 22A	9	4	0
Pair 22B	8	1	16
Pair 23A	1	0	1
Pair 23B	16	1	2
Pair 24A	6	0	8
Pair 24B	5	1	4
Pair 25A	0	0	2
Pair 25B	13	10	3
Pair 26A	2	1	1
Pair 26B	6	1	2
Pair 27A	0	0	1
Pair 27B	11	3	1

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is

frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 8

Summary Totals of Aggravated Assaults by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Aggravated Assaults – On Campus	67	153
Aggravated Assaults – On Campus – Residence Halls	21	54
Aggravated Assaults - Noncampus and on Public Property	62	92

Table 9 gives the total number of burglaries for each institutional participant. The on-campus offenses can be compared against those that occurred in on-campus residences. Also, the number of on-campus burglaries can be compared with the number of off-campus offenses. Table 10 gives the total number of burglaries by geographic location and by institutional group to compare the two groups of institutions on this variable.

Table 9

Total Burglaries for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL BURGLARIES - ON CAMPUS	TOTAL BURGLARIES - ON CAMPUS RESIDENCE HALLS	TOTAL BURGLARIES – NONCAMPUS* AND ON PUBLIC PROPERTY**
Pair 1A	23	15	7
Pair 1B	36	32	0
Pair 2A	16	10	0
Pair 2B	102	61	5
Pair 3A	261	42	No data reported
Pair 3B	132	67	0
Pair 4A	4	4	0

Table 9 (continued)

Pair 4B	25	21	2
Pair 5A	0	0	0
Pair 5B	5	1	4
Pair 6A	253	51	0
Pair 6B	53	35	0
Pair 7A	0	0	1
Pair 7B	3	2	0
Pair 8A	24	18	0
Pair 8B	27	19	0
Pair 9A	28	18	2
Pair 9B	83	66	4
Pair 10A	168	62	No data reported
Pair 10B	22	20	3
Pair 11A	37	15	11
Pair 11B	54	33	1
Pair 12A	47	13	3
Pair 12B	16	9	0
Pair 13A	9	3	4
Pair 13B	15	11	1
Pair 14A	91	28	11
Pair 14B	132	59	7
Pair 15A	53	28	2
Pair 15B	31	15	0
Pair 16A	52	49	2
Pair 16B	10	3	0
Pair 17A	40	8	6
Pair 17B	5	5	0
Pair 18A	37	20	3
Pair 18B	76	21	31
Pair 19A	48	30	25
Pair 19B	32	23	0
Pair 20A	19	8	0
Pair 20B	11	2	0
Pair 21A	28	2	6
Pair 21B	86	11	79
Pair 22A	47	23	1
Pair 22B	103	31	23
Pair 23A	96	47	17
Pair 23B	29	2	23
Pair 24A	157	19	12
Pair 24B	32	23	21
Pair 25A	29	14	28
Pair 25B	60	34	0
Pair 26A	15	11	2

Table 9 (continued)

Pair 26B	52	45	17
Pair 27A	98	52	1
Pair 27B	107	48	31

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 10

Summary Totals of Burglaries by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Burglaries – On Campus	1680	1339
Burglaries – On Campus – Residence Halls	590	677
Burglaries - Noncampus and on Public Property	144	252

Table 11 gives the total number of motor vehicle thefts for each institutional participant. The number of on-campus motor vehicle thefts can be compared with the number of off-campus offenses. On-campus residence halls were not included because there were zero reported offenses. Table 12 gives the total number of motor vehicle thefts by geographic location and by institutional group in order to compare the two groups of institutions on this variable.

Table 11

Total Motor Vehicle Thefts for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL MOTOR VEHICLE THEFTS - ON CAMPUS	TOTAL MOTOR VEHICLE THEFTS – NONCAMPUS*	TOTAL MOTOR VEHICLE THEFTS – PUBLIC PROPERTY**
Pair 1A	0	0	0
Pair 1B	8	0	0
Pair 2A	0	0	0
Pair 2B	6	0	0
Pair 3A	4	No data reported	26
Pair 3B	0	0	2
Pair 4A	0	0	0
Pair 4B	0	0	0
Pair 5A	0	0	0
Pair 5B	0	0	0
Pair 6A	3	0	3
Pair 6B	7	0	10
Pair 7A	1	1	0
Pair 7B	0	0	0
Pair 8A	0	0	2
Pair 8B	3	0	1
Pair 9A	1	1	0
Pair 9B	1	2	5
Pair 10A	2	No data reported	1
Pair 10B	0	1	0
Pair 11A	8	0	9
Pair 11B	0	0	4
Pair 12A	6	0	0
Pair 12B	10	0	8
Pair 13A	0	1	0
Pair 13B	4	0	2
Pair 14A	73	19	60
Pair 14B	11	0	0
Pair 15A	3	0	0
Pair 15B	1	0	0
Pair 16A	4	0	0
Pair 16B	3	0	0
Pair 17A	23	1	4
Pair 17B	1	0	0
Pair 18A	6	1	1
Pair 18B	20	9	3
Pair 19A	13	3	2
Pair 19B	5	0	28

Table 11 (continued)

Pair 20A	8	0	5
Pair 20B	2	0	0
Pair 21A	0	0	14
Pair 21B	0	0	3
Pair 22A	12	0	0
Pair 22B	10	0	0
Pair 23A	1	0	7
Pair 23B	2	3	3
Pair 24A	15	3	1
Pair 24B	12	11	3
Pair 25A	7	23	0
Pair 25B	2	0	1
Pair 26A	4	0	4
Pair 26B	6	5	0
Pair 27A	4	0	18
Pair 27B	46	11	4

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 12

Summary Totals of Motor Vehicle Thefts by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Motor Vehicle Thefts – On Campus	198	160
Motor Vehicle Thefts – Noncampus	53	42
Motor Vehicle Thefts - Public Property	157	77

Table 13 gives the total number of arson offenses for each institutional participant. The on-campus offenses can be compared against those that occurred in on-campus residences. Also, the number of on-campus arson incidences can be compared with the number of off-campus

offenses. Table 14 gives the total number of arson offenses by geographic location and by institutional group to compare the two groups of institutions on this variable.

Table 13

Total Arson for Participant Institutions by Geographic Location

PARTICIPANT INSTITUTION	TOTAL ARSON - ON CAMPUS	TOTAL ARSON – ON CAMPUS – RESIDENCE HALLS	TOTAL ARSON – NONCAMPUS* AND ON PUBLIC PROPERTY**
Pair 1A	0	0	0
Pair 1B	1	1	0
Pair 2A	3	2	0
Pair 2B	3	0	1
Pair 3A	0	0	0
Pair 3B	2	2	0
Pair 4A	0	0	0
Pair 4B	0	0	0
Pair 5A	0	0	0
Pair 5B	0	0	0
Pair 6A	1	0	0
Pair 6B	0	0	0
Pair 7A	0	0	0
Pair 7B	0	0	0
Pair 8A	0	0	0
Pair 8B	2	2	0
Pair 9A	6	6	0
Pair 9B	3	2	0
Pair 10A	2	2	0
Pair 10B	0	0	0
Pair 11A	0	0	0
Pair 11B	0	0	0
Pair 12A	0	0	0
Pair 12B	0	0	0
Pair 13A	0	0	1
Pair 13B	3	2	0
Pair 14A	5	1	0
Pair 14B	5	4	1
Pair 15A	2	2	0
Pair 15B	2	2	0
Pair 16A	1	1	0
Pair 16B	0	0	0
Pair 17A	0	0	1
Pair 17B	0	0	0

Table 13 (continued)

Pair 18A	0	0	0
Pair 18B	0	0	0
Pair 19A	8	4	2
Pair 19B	0	0	0
Pair 20A	0	0	0
Pair 20B	0	0	0
Pair 21A	0	0	0
Pair 21B	0	0	3
Pair 22A	0	0	0
Pair 22B	0	0	0
Pair 23A	3	0	0
Pair 23B	1	0	0
Pair 24A	3	3	8
Pair 24B	2	1	1
Pair 25A	0	0	0
Pair 25B	0	0	0
Pair 26A	1	0	0
Pair 26B	0	0	0
Pair 27A	0	0	0
Pair 27B	2	1	0

*Any building or property owned or controlled by a student organization that is officially recognized by the institution; or any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution (ED, 2005).

**All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus (ED, 2005).

Table 14

Summary Totals of Arson by Institutional Group for Geographic Location

	Group A Institutions	Group B Institutions
Arson – On Campus	35	26
Arson – On Campus – Residence Halls	21	17
Arson – Noncampus and Public Property	12	6

Summary

This chapter reported the data for the key variables and gave an account of the statistical relationships among the variables in response to the primary research question and the four hypotheses that guided the study. Tables provided descriptive data. A table was used to provide totals from each institution for three of the four main crime categories. Tables were included to provide a summary report for the crime category criminal offenses in four geographic locations. The following chapter provides discourse on the findings regarding future research and relevance for application in higher education.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The preceding chapters describe the purpose of the study, provide an overview of relevant literature, present the methodology and research questions, and report the statistical results. This chapter provides additional discussion of the findings and offers recommendations for further study and implications for practice in higher education.

Overview of the Problem

Campus crime and violence continues to be a lingering problem in today's world. Colleges and universities struggle to address the growing demands for accountability and improved safety and search for improvements by revising security standards and policies to better protect students and staff. Between 1995 and 2002, the annual average number of violent crimes against college students between the ages of 18 and 24 years was 479,150 (Baum & Klaus, 2005). Simple assault was the most common crime against members of the college student population, accounting for 63% of all violent crime against college students (Baum & Klaus, 2005). The U.S. Department of Justice (2005) found that strangers committed 58% of violent victimizations of college students and 93% of the victimizations occurred off campus.

The public's demand for clarity about and understanding of crime in schools and colleges was met in part through the passage of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, more commonly known as the *Clery Act* (Noonan & Vavra, 2007). The *Clery Act* was initially created to mandate the disclosure of information about campus crime statistics to prospective students and their families in order for them to make decisions about enrollment as informed consumers. Although the passage of the *Clery Act* represented the most important legislation to date that addressed the issue of campus safety,

compliance with the mandate has been inconsistent. Crime trends and crime rates cannot be studied with accuracy due to the short time during which reporting has occurred and the high rate of underreporting of crimes by victims. It was estimated that only about 35% of violent victimizations of college students are ever reported to police (Baum & Klaus, 2005) and that only about 25% of campus crimes across all types are reported to any authority (Carr, 2005). Following the Virginia Tech massacre, law Professor Lake (2007) predicted that there would be a paradigm shift in higher education law toward business-liability practices in cases of campus violence. In response to the disaster at Virginia Tech, institutions of higher learning have developed well-measured procedures to prevent such occurrences and to inform students and the public of reported crimes in a timely manner.

About 80% of 4-year public institutions offered campus housing, but an average of only 27% of college students at public schools lived in on campus residences (NCES, 1997). Private colleges with campus housing, on the other hand, averaged having 52% of their students living in campus housing (NCES, 1997). The most recent figures from the NCES (2008) indicated that overall, only 13.8% of all undergraduate students lived in on campus housing. Because 93% of campus crime occurred off campus, 72% of the off-campus crimes were committed at night (NCES, 1997), and the most common night activity student victims were engaged in at the time of victimization was engagement in leisure activity (Baum & Klaus, 2005), one tangible change that may curb the rate of campus crime is to provide more on-campus housing for students and make traditional campus residential living the new standard. This study sought to compare the crime rates at colleges that had the residential college system with colleges that did not have such on-campus living arrangements. The aim was to explore the possible relationship between the residential college system and campus safety as a novel approach to managing campus crime.

Summary of Study

Two groups of institutions made up the population included in the scope of this study. One group comprised the entire population of 27 colleges and universities located in the United States that incorporated some variation of the residential college system or house system that was fully operational at the time of this writing. These institutions were derived from the Website, http://collegiateway.org/colleges/, posted by Robert J. O'Hara, an educational consultant in residential college administration. A second group was made up of 27 matched colleges and universities similar to the other participants except that they did not use any variation of either the residential college system or house system. The matched pairs were selected and matched by using a Web-based search and sorting tool provided in the database from The Carnegie Foundation for the Advancement of Teaching. Level of the institution, type of control, enrollment profile, size and setting, and basic classification were all taken into consideration in creating the matching pairs.

The required annual security reports prepared under the Jeanne Clery Disclosure of Campus Policy and Campus Crime Statistics Act for 2006 and publicized on each participant's Website provided the source for reported crime statistics. The United States Department of Education's Office of Postsecondary Education conducts the Campus Crime and Security at Postsecondary Education Institutions Survey annually by using an intact Web-administered survey instrument designed by the department. The crime data from each participant institution were then analyzed for the 2006 calendar year.

The primary research question examined was: Are there differences in the mean number of crime statistics between colleges and universities with the residential college system and those without the system based on the crime categories reported to the U.S. Department of Education

for 2006? Data on the dependent variable (criterion) and independent variable (predictor) were input into the Statistical Package for the Social Sciences (SPSS). Frequency distributions provided an overview of the specific numbers of crimes and offenses from the 27 pairs of participant institutions for all crime categories reported under the *Clery Act*. A paired-samples *t* test was used to analyze each of the null hypotheses, which were:

1. There is no difference in the mean number of criminal offenses between colleges and universities with the residential college system and those without the system for 2006.
2. There is no difference in the mean number of hate offenses between colleges and universities with the residential college system and those without the system for 2006.
3. There is no difference in the mean number of arrests between colleges and universities with the residential college system and those without the system for 2006.
4. There is no difference in the mean number of disciplinary actions or judicial referrals between colleges and universities with the residential college system and those without the system for 2006.

The first null hypothesis was not rejected for all crimes in the category of *criminal offenses* with two exceptions: *criminal offenses*: on campus–aggravated assault; and *criminal offenses*: on campus–residence halls–aggravated assault. The second null hypothesis was not analyzed because none of the participant institutions reported hate crimes. The third null hypothesis was not rejected for all offenses with one exception: *arrests*: on campus–residence halls–liquor law violations. The fourth null hypothesis was not rejected. The results of this study indicate that there is a statistically significant difference in the means of three types of offenses for the criterion (dependent) variable occurrence of campus crime between colleges and

universities that have the residential college system and those that do not have a residential college system or house system.

Limitations of the Study

There is reason to doubt the validity and reliability of crime statistics reported under the *Clery Act,* which may have compromised the data used in this study. The reporting criteria of the *Clery Act* mandated the inclusion of personal crimes of violence but failed to mandate crimes related to theft (Sloan et al., 1997). This could bias the results because most campus crimes were property crimes, primarily theft and burglary (Sloan, 1994). It was estimated that 75% of campus crime consisted of larceny, vandalism, and firearms, and not all of these were required to be reported under the *Clery Act* (Hoffman et al., 1998). Larceny reportedly accounted for most crimes committed against college students, both on campus and off campus (Volkwein et al., 1995). Illegal weapons violations are reported under the *Clery Act*. Offenses exempt from being reported included larceny, theft, threats, harassment, and vandalism (Carr, 2005). For example, the *Clery Act* does not consider theft *from* a motor vehicle a crime, only the theft *of* the vehicle itself. Campus crime reports include only reported crimes, and some are not investigated. Arson is the only *Clery Act* offense that institutions are required to investigate before it can be reported in its crime statistics.

Crimes committed against students on public property that are not on campus, bordering the campus, or easily accessible to the campus are not reported under the *Clery Act* guidelines. Campus crime statistics did not include crimes committed against students in areas that exist outside the realm of these limits and were not included within the scope of this study.
Crime statistics must be provided in the annual report for a given institution, even when the perpetrator, the victim, or the person reporting the crime was not affiliated with the institution

(ED, 2007). Lively (1997b) disclosed that only 7 of the 15 murders that occurred on college campuses in 1995 involved students or college staff; the remaining 8 murders happened on a college campus by chance. Crime reporting under the Clery Act did not differentiate between types of offenders (ED, 2005). "An institution must disclose crime reports, regardless of whether any of the individuals involved in either the crime itself, or in the reporting of the crime, are associated with the institution" (ED, 2005, p. 23). In assessing campus crime, the usefulness of the *Clery Act* report is limited because it is not known precisely who was victimized by the offenses or crimes, and a clear profile of the offender cannot be determined. The crime statistics provided under the *Clery Act* reporting standards can be misleading because they offer more information about the geographic location of the crimes and offenses and the categorical types than the characteristics of the victims or the perpetrators. It cannot be determined from the campus crime reporting data if campus crimes were committed by students or by outsiders and if the crimes that occurred on campus involved students or others who were not affiliated with the institution.

There is the problem posed with underreporting previously mentioned. A 1995 study by Fernandez and Lizotte showed that the rate at which students reported violent crimes to campus police had fallen by 27% between 1974 and 1991 (as cited in Sloan et al., 1997). Only reported crimes are included in the *Clery* report. Additionally, under the *Clery Act*, pastoral counselors and professional counselors were exempt from disclosing reported offenses at institutions (ED, 2007). Police departments were not required to divulge crime statistics to institutions but colleges were encouraged to make good faith attempts to obtain such reports (ED, 2007). For these reasons, the Clery reports are not valid indicators of crimes committed by students and it does not accurately measure the risks of victimizations to students on any given campus.

Dimensions of interest used in finding matching institutions from the Carnegie Foundation for the Advancement of Teaching Classifications Web tool included: level, control, enrollment, classification, enrollment profile, undergraduate profile, size and setting, and basic. In each case, the schools included in Group A were entered first, and all dimensions of interest were enabled in the web tool to find each participant's matched pair. However, this did not always yield a matching school and some dimensions had to be eliminated in order to find a similar institution. In some cases, the matching institutions were already included as participants and dimensions were then adjusted until other schools were found. Thus, matched pairs were not found in a consistent manner using the same dimensions of interest.

Discussion and Interpretation of Findings

Thirty-two specific crimes or offenses were analyzed. Some of the specific crimes or offenses, or categories of such, were eliminated when there were insufficient data or no data for analysis. Of the 32 offenses considered, Group A institutions reported fewer total offenses in 16, or 50%, of the cases, as shown in Table 1. There were three statistically significant differences in the mean numbers of crimes or offenses. They included the following: (1) *criminal offense*: on campus – aggravated assault, with 67 total assaults, and a mean of 2.48 assaults from Group A; and 153 total assaults, and a mean of 5.66 assaults from Group B; (2) *criminal offense*: on campus – residence halls – aggravated assault, with 21 total assaults, and a mean of .78 assaults from Group A; and 54 total assaults, and a mean of 2.0 assaults from Group B; (3) *arrests*: on campus – residence halls – liquor law violations, with 922 total violations, and a mean of 34.15 from Group A; and 515 total violations, and a mean of 19.07 from Group B.

Some outliers may have affected the outcome of the results. One of the Group A schools reported 18 incidences for *criminal offense*: public property – sex offenses – forcible, while three

was the single highest number reported by any other participant school. Two outliers were found for *arrests*: on campus – liquor law violations, where one Group A school reported 616 arrests and another one reported 427 arrests, and the next higher number was 391, which was for a Group B school. An outlier was found in *disciplinary action*: on campus – drug law violations, where one Group A school reported 788 disciplinary actions, and the next higher number was 446 for one Group B school. An outlier was found in *disciplinary action*: noncampus – drug law violations, where one Group B school reported 442 violations, and 10 was the next higher number. An outlier was found for the same Group B school for *disciplinary action***:** noncampus – liquor law violations, with 2567 reported incidences. This offense was eliminated from the analysis.

As already stated, simple assault was the most common crime committed against members of the college student population, accounting for 63% of all violent crime against college students (Baum & Klaus, 2005). In this study, there were fewer total assaults in the group of colleges (Group A) with the residential college system in all four crime categories: (1) *criminal offense*: on campus–aggravated assault; (2) *criminal offense*: on campus–residence halls –aggravated assault; (3) *criminal offense*–noncampus–aggravated assault; (4) *criminal offense*: public property–aggravated assault. This fact suggests that there may actually be fewer assaults at schools with the residential college system. It might also suggest that the campus community may be more vigilant in enforcing safety standards; thus, the institutional infrastructure at schools with the residential college system may account for the lower number of assaults in all categories. However, it is not known who the perpetrators were or if the victims were students or nonstudents.

Sex offenses were also lower for institutions with the residential college system except in one category, which was previously described in the discussion of outliers. The categories analyzed for sex offenses that showed fewer offenses for Group A institutions were: (1) *criminal offense*: on campus–sex offenses–forcible; (2) *criminal offense*–on campus–residence halls–sex offenses–forcible; (3) *criminal offense*: noncampus–sex offenses–forcible. The category with the outlier was, *criminal offense*: public property–sex offenses–forcible. This category had an outlier of 18 for one of the Group A schools and without the outlier, Group A would have had fewer offenses. This finding suggests a similar explanation offered for the discrepancy in assault crime statistics. Colleges with the residential college system may have fewer sex offenses, or there may be fewer reported offenses. The campus community may be more conscientious in defending its constituents from predators. However, nothing is known of the victims or the offenders, so the explanations are entirely speculative.

Table 2 figures showed the fewest reported offenses in the *criminal offense* category, and the highest number of reported offenses in the category of *disciplinary actions*. The total number of reported *criminal offenses* was 6,991 for both groups of participants, with Group A participants reporting 3,501 offenses and Group B participants reporting 3,490 offenses. The total number of *arrests* was 11,008, with Group A participants reporting 4,985 arrests and Group B participants reporting 6,023 arrests. The total number of *disciplinary actions* was 25,354, with Group A participants reporting 9,799 disciplinary actions and Group B participants reporting 15,555 disciplinary actions.

In comparing the two groups of institutions for three categories of crime reporting, Group A reported 11 more *criminal offenses* than Group B; Group B reported 1,038 more *arrests* than Group A; and Group B reported 5,756 more *disciplinary actions* than Group A. *Criminal*

offenses were similar for the two groups, indicating that the two groups are fairly comparable for that crime category and that the institutions with the residential college system do not have a significant advantage for campus safety. However, there were greater differences for *arrests* and *disciplinary actions*. It could be argued that the greater number of arrests and disciplinary actions increases campus safety and may indicate that the institution has a low tolerance for drug, alcohol, and weapons violations, thus, making the campus safer. A breakdown of the specific offenses and of the geographic location of the occurrence is necessary to conjecture about the meaning of the data.

Tables 3 and 4 indicate that sex offenses were higher in all three geographic locations for Group B institutions than Group A institutions. For both groups of participants, the greatest number of offenses occurred on campus, and the fewest number occurred in noncampus regions and on public property. This is somewhat consistent with the literature because the sexual assault rate was found to be 1.4 times higher on campus than off campus (Fisher et al., 1998). The gender of these victims is not known but it can be assumed that at least the majority of them are female. It cannot be assumed that because the sex offenses occurred on campus, the victims knew their perpetrators. The literature does, however, suggest that student victims of rape and sexual assault were four times more likely to have been victimized by nonstrangers (Baum & Klaus, 2005) than strangers, and that by nonstrangers committed 79% of all rapes and sexual assaults against students (Carr, 2005). The number of sex offenses for the two groups was fairly similar, with the largest discrepancy (Group B reported 50 more offenses) found between the groups for on campus offenses. It is of interest that the greatest number of sex offenses for this study occurred in two geographic locations: on campus and on campus–residence halls. In a study of college women conducted by the U.S. Department of Justice, 9 of 10 victims knew their

offenders in both completed and attempted rapes (Fisher et al., 2000). However, in the same study, researchers found that the settings for 60% of the on-campus sexual victimizations were the victim's campus housing, with another 31% occurring in other types of on-campus living quarters. Ten percent of the sexual offenses took place in fraternity houses (Fisher et al., 2000). This is somewhat consistent with the findings in this study because the fewest numbers of sex offenses occurred in the two off-campus geographic locations: noncampus and on public property. The literature in general and the Fisher (2000) study suggested that college women were involved less frequently in all types of sexual victimizations on campus than off campus. The sexual victimization of college women deserves further study because their risks are not accurately reflected in the statistics. It was estimated that only 5% of both completed and attempted rapes were reported to authorities (Fisher et al., 2000). Underreporting of sex offenses may cause students to be less vigilant and cautious.

Tables 5 and 6 showed that Group A had four more on-campus robberies than did Group B, and Group A had two fewer residence hall robberies than Group B. Group A had 13 fewer robberies in noncampus and public property locations. There were more robberies off campus than in both of the on-campus locations combined; this was true for both groups of institutions. The figures were fairly similar for the two groups of participants. Unlike sexual offenses, students appear to be less at risk for this type of victimization on campus than off campus.

At a glance, the reported number of aggravated assaults for the two groups of participants, shown in Tables 7 and 8, appears to be significantly different. Group A participants reported fewer assaults for all three geographic locations. The analysis of results showed a statistically significant difference in reported assaults for two geographic locations: on-campus and on-campus – residence halls. A paired-samples *t* test showed that there was a statistically

significant difference between the mean number of both on-campus and on-campus - residence hall aggravated assaults for the two groups of colleges. Although Group A had fewer assaults in all three locations, a similar pattern of assaults for both groups was found in this study with each group reporting assault frequency in descending numbers: on-campus had the highest number, the two off-campus locations followed, and residence halls had the lowest number. Fisher et al. (1998) found the aggravated assault rate was 4.5 times higher off campus than on campus and that assault was the most common crime of violence against college students. Based on this study, students attending institutions with a residential college system were at a lower risk for aggravated assault victimization. Fisher et al. (1998) also noted that the rate of violent crime off campus was 1.2 times higher than the on-campus rate. Thus, students living off campus were shown to be more vulnerable to violent crime. These findings by Fisher and associates lend some support to the findings in the current study for aggravated assault differentiated by geographic location.

Tables 9 and 10 indicate that Group A had more burglaries on campus than did Group B, but Group A had fewer burglaries in residence halls and in the two off-campus geographic locations. It is not known who committed the burglaries, and if students were the victims or the perpetrators. Motor vehicle theft and arson were higher for all three geographic locations for Group A. Rates of motor vehicle theft remained steady, while other areas of campus crime decreased (Volkwein et al., 1995).

Implications for Professional Practice

The results of this study indicate there was a statistically significant difference in reported campus crimes between institutions of higher education that have the residential college system and those that do not have this type of on campus residential system in the area of aggravated

assault for two offenses in the *criminal offense* category: on campus; and on campus – residence halls; and in the area of *arrests*: on campus liquor law violations. These data may have implications for higher education practitioners concerned with creating safe environments for students. It is noteworthy that assault in the two on campus geographic locations was significantly lower for the institutions with the residential college system. Because assault was one of the most common violent criminal offenses for college students both on campus and off campus (Volkwein et al., 1995), these data are valuable in informing institutional policy making in regard to campus safety. As Putman (2000) explained in *Bowling Alone,* cohesive communities were the least likely to suffer from crime and when people had connections with one another they were less likely to succumb to their worst impulses. Residential college systems create socially cohesive living units for students.

Although this study cannot establish a causal relationship between the existence of the residential college system and the significantly lower number of assaults, it can, however, offer some insight into the possible benefits of living with fellow students in a cohesive environment. As Lake (2007) wrote, following the Virginia Tech shootings:

> A new generation of martyrs has arrived to illustrate the need for wellness in higher education, and undoubtedly their sacrifice will not be in vain. It is impossible for students to learn and thrive in an environment filled with substance abuse, sexual violence, and untreated mental- and physical-health issues. What happens to one, happens to all. Virginia Tech will remind us that a college is a unitary organism, and that it cannot afford to have any student who is seriously withdrawn and isolated or a total loner…We should ask what we can do to create a safer and healthier learning experience. (p. 6)

Based on this study, living arrangements for college students may offer some stabilizing foundation from which they can develop a sense of belonging and becoming familiar with and connected to others may be a crime deterrent. As O'Hara (2007) pointed out:

> When we destroy social cohesion – in a university setting, by repeatedly moving students from one building to the next…by depriving them of traditions and domestic stability, by

> preventing them from getting to know their neighbors well – we destroy the ability to face difficult challenges and to accomplish extraordinary things. (p. 1)

A college campus as a community can be altered in ways to enhance student safety and growth. And as Cohen and Felson (1979) argued in applying the routine activities theory to student victimization, people bound by primary group ties would have a greater mutual interest in each other's well-being and welfare than if they were continually coming into contact with many people or living alone. They observed that the lack of any one of the three elements, motivated offenders, suitable targets, or the absence of capable guardians against a violation, "is sufficient to prevent the successful completion of a direct-contact predatory crime and the convergence of suitable targets and the absence of … guardians may even lead to large increases in crime" (Cohen & Felson, p. 589). Based on their observations, it appears that the residential college system design has some effect on campus crime, especially for assault. Administrators considering the restructuring of their on campus residential system should review the literature in the areas of campus crime data, campus organizational variables, and student characteristics. Some of the research referenced in this study may serve as a guide for policy changes and decisions concerning campus safety. However, as has been previously stated, the crime data used in this study may not be reliable due to underreporting and other limitations in *Clery Act* reporting guidelines. It is advised that college administrators view and interpret this study and its resulting findings with caution and not depend solely on this data in making policy changes or implementing practices related to campus crime.

Additionally, when campus crime studies are collectively analyzed, it is noted that violent crime and property crime have different underlying forces and different causal relationships. Based on the broad analyses done by Volkwein and associates (1995), property crime could be solidly explained by a combination of organizational and student factors; thus, it could be

assumed that this type of crime was rational or goal oriented. On the other hand, variables singled out for the study of violent crime explain only a small variance of this type of crime, making it more difficult to understand and predict. It was assumed, based on the collective analyses of numerous studies, that violent crime on campus was highly irrational and not goal directed (Volkwein et al.).

Recommendations for Future Research

As stated in the methodology section, the data collection relied on the total number of crimes reported by a college or university under the Clery Act guidelines for the 2006 calendar year. Other sources of crime data would have been helpful in making inferences about campus crime rates. Clery crime statistics were organized in aggregate by type of crime without any differentiation as to who committed the crime. Further, it was not known if the victims were students, college employees, strangers, or affiliates of the institution. It is recommended that the reporting guidelines be changed to include the type of offender committing each crime. It would be useful to student and parent consumers to know if students or college personnel are committing crimes or if outsiders are committing the offenses. This clarification in reporting would also help institutions determine crime patterns and develop appropriate remedies in the form of policy changes and crime prevention measures.

Although the literature consistently supported the theory that there was no correlation between community crime and campus crime, it is suggested that because of the Clery Act reporting guidelines, reported crimes and offenses overestimated the amount of crime directed toward students within the geographic locations considered to be on campus and failed to consider the crimes committed against students in off campus locations (Volkwein et al., 1995).

This is one of the main failures of the Clery Act and it is recommended that colleges rely more on FBI crime reports and ferret out their own crime statistics for the victims and offenders.

The primary recommendation for future research is the replication of this study using a different matched group. This study involved a group of all known colleges and universities with functioning residential college systems matched with a comparable group of institutions. The findings may be somewhat different if the matching pairs were different. This study was limited to one predictor variable, the existence of the residential college design. Other variables may be explored as well, such as host community characteristics, other organizational variables, and student variables. Additional studies could be conducted with this research. The data on the gender distributions for each participant college are available on the Carnegie Website and could be analyzed in a comparison of crime statistics between schools with and without *residential college system*. It could be determined if male gender dominance was a factor for particular types of offenses.

Conclusions

In conclusion, this study investigated whether there was any association between campus crime and the existence or lack of the residential house system. The results of this study indicate that there were significant differences between institutions with the residential college system and those without the system for the on campus aggravated assault offense and the on campus residence halls aggravated assault offense. Findings showed fewer aggravated assaults for the group of institutions with the residential college system, implying that the practice of having a residential college system is somewhat effective in addressing campus crime. Replication using different populations and multiyear aggregations of data are recommended for future research to further develop this novel approach as a campus safety enhancement.

REFERENCES

American College Health Association. (2004, Spring). *National college health assessment: Reference group executive summary.* Baltimore, MD: American College Health Association.

American College Health Association. (2007, Spring). American college health association national college health assessment: Spring 2006 reference group data report (abridged). *Journal of American College Health*, *54*, 195-206.

Baum, K., & Klaus, P. (2005, January). *National crime victimization survey: Violent victimization of college students, 1995-2002*. Retrieved November 17, 2007, from http://ojp.usdoj.gov

Bausell, C., & Maloy, C. E. (1990, January 10). *The links among drugs, alcohol, and student crime: Research results from the Center for the Study and Prevention of Campus Violence's Second Victimization Survey.* Paper presented at the Fourth National Conference on Campus Violence, Towson, MD.

Bazelon, D. L. (2007). Supporting students: A model policy for colleges and universities. Retrieved August 7, 2007, from http://www.bazelon.org/pdf/SupportingStudents.pdf

Bromley, M. L. (1995). Comparing campus and city crime rates: A descriptive study. *American Journal of Police, 14*(1), 131-148.

Campus revolts over. (1970, February 16). *U.S. News and World Report*, *68*, 53-55.

Catalano, S. M. (2006, September). *National crime victimization survey: Criminal victimization, 2005.* Retrieved November 17, 2007, from http://www.ojp.usdoj.gov/bjs/pub/pdf/cv05.pdf

Carnegie Foundation for the Advancement of Teaching (2007). *Classifications*. Retrieved August 1, 2007, from http://www.carnegiefoundation.org/classifications/index.asp?key=807

Carr, J. L. (2005). *American College Health Association: Campus violence white paper.* Baltimore, MD: American College Health Association. Retrieved November 17, 2007, from http://youthviolence.edschool.virginia.edu/White%20paper.pdf

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control Center. (2007, November). *School associated violent deaths.* Retrieved November 20, 2007, from http://www.cdc.gov/ncipc/sch-shooting.htm

Cheng, D. X. (2004, Winter). Students' sense of campus community: What it means, and what to do about it. *NASPA Journal, 41*(2), 216-234.

Cheng, D. X. (2005, Spring). Assessing students' perceptions of campus community: A focus group approach. *Association for Institutional Research*, 95, 1-11.

Clarke, L. (2006). *Worst cases: Terror and catastrophe in the popular imagination*. Chicago and London: The University of Chicago Press.

Colb, S. F. (2007, April 30). Lessons of the Virginia Tech shooting: Should we lock up all the maniacs? *FindLaw Legal News and Commentary*. Retrieved August 7, 2007, from http://writ.news.findlaw.com/scripts/printer_friendly.pl?page=/colb/20070430.html

Cohen, L. E., & Felson, M. (1979, August). Social change and crime rate trends: A routine activity approach. *American Sociological Review, 44*, 588-608.

Cohen, L. E., Kluegel, J. R., & Land, K. C. (1981, October). Social inequality and predatory criminal victimization: An exposition and test of a formal theory. *American Sociological Review, 46,* 505-524.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Daniel, L. G. (1998, Fall). Statistical significance testing: A historical overview of misuse and misinterpretation with implications for the editorial policies of educational journals. *Research in the Schools, 5*(2), 24-32.

Fact File. (1998, May 8). Crime data from 487 U.S. colleges and universities. *The Chronicle of Higher Education, 44*(35), A51-A57.

Fenske, R. H., & Hood, S. L. (1998). Profile of students coming to campus. In A. M. Hoffman, J. H. Schuh, & R. H. Fenske (Eds.), *Violence on campus: Defining the problems, strategies for action* (pp. 29-52). Gaithersburg, MD: Aspen.

Fernandez, A., & Lizotte, A. (1995). An analysis of the relationship between campus crime and community crime: Reciprocal effects. In J. Sloan & B. Fisher (Eds.), *Campus crime: Legal, social, and policy contexts* (pp. 79-102). Springfield, IL: Charles Thomas.

Fisher, B. S. (1995, May). Crime and fear on campus. *Annals of the American Academy of Political and Social Science, 539*, 85-101.

Fisher, B. S., Cullen, F. T., & Turner, M. G. (2000). *The sexual victimization of college women.* Washington, DC: U.S. Department of Justice, National Criminal Justice Reference Service.

Fisher, B. S., Hartman, J. L., Cullen, F. T., & Turner, M. G. (2002). Making campuses safer for students: The Clery Act as a symbolic legal reform [Electronic version]. *Stetson Law Review.* Retrieved December 7, 2007, from http://www.law.stetson.edu/LAWREV/abstracts/PDF/32-1Fisher.pdf

Fisher, B. S., Sloan, J. J., Cullen, F. T., & Lu, C. (1998). Crime in the ivory tower: The level and sources of student victimization. *Criminology, 36,* 671-710.

Fox, J. A., & Hellman, D. A. (1985). Location and other correlates of campus crime. *Journal of Criminal Justice, 13,* 429-444.

Fox, J. A. (2007, August 28). Q: Are college campuses safe? A: Yes. *USA Today*, p.11A.

Friedman, L. M. (1993). *Crime and punishment in American history.* New York: Basic Books.

Goodchild, L. F. (1999, Spring). Transformations of the American college ideal: Six historic ways of learning. *New Directions for Higher Education,* 105, 7-23.

Green, S. B., & Salkind, N. J. (2005). *Using SPSS for windows and Macintosh: Analyzing and understanding data* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Gregory, D. E., & Janosik, S. M. (2003, November/December). The effect of the Clery Act on campus judicial practices [Electronic version]. *Journal of College Student Development, 44,* pp. 763-778.

Gumprecht, B. (2007). The campus as a public space in the American college town. *Journal of Historical Geography, 33,* 72-103.

Hardy, T. (1994). *The works of Thomas Hardy: With an introduction and bibliography.* Ware: Wordsworth Poetry Library.

Hart, T. C. (2003, December). *National Crime Victimization Survey, 1995-2000: Violent victimization of college students.* Retrieved November 17, 2007, from http://ojp.usdoj.gov

Henson, V. A., & Stone, W. E. (1999, July). Campus crime: A victimization study. *Journal of Criminal Justice, 27,* 295-307.

Hoffman, A. M., Summers, R. W., & Schoenwald, I. (1998). Violent crime in the college and university workplace. In A. M. Hoffman, J. H. Schuh, & R. H. Fenske (Eds.), *Violence on campus: Defining the problems, strategies for action* (pp. 87-109). Gaithersburg, MD: Aspen.

Hoover, E. (2004, February 27). Judge orders university to turn over crime records: Georgia ruling is latest in battle over documents at private colleges [Electronic version]. *The Chronicle of Higher Education, 50*(25), A1.

Huck, S. W., Cormier, W. H., & Bounds, W. G. (1974). *Reading statistics and research*. New York: Harper & Row.

Janosik, S. M. (2001, Spring). The impact of the Campus Crime Awareness Act of 1998 on student decision-making. *NASPA Journal, 38,* 348-360.

Janosik, S. M., & Gehring, D. D. (2003a). The Clery Act and its influence on campus law enforcement practices. *NASPA Journal, 41*(1), 182-199.

Janosik, S. M., & Gehring, D. D. (2003b). The impact of the Clery Campus Crime Disclosure Act on student behavior [Electronic version]. *Journal of College Student Development, 44*(1), 81-91.

Johnson, T. (2007, August 31). Not your dad's dorm. *The Burlington Free Press*, p.1-4.

Kaplin, W. A. (1985). *The law of higher education: A comprehensive guide to legal implications of administrative decision making.* (2nd ed.) San Francisco: Jossey-Bass.

Karjane, H. M., Fisher, B. S., & Cullen, F. T. (2002). *Executive summary. Campus sexual assault: How America's institutions of higher education respond* [Electronic version]. Final Report, NIJ Grant# 1999-WA-VX-008. Newton, MA: Education Development Center.

Katyal, N. K. (2002, March). Architecture as crime control. *The Yale Law Journal*, *3*(5), 1038-1139.

Knapp, T. R. (1998, Fall). Comments on the statistical significance testing articles. *Research in the Schools, 5*(2), 39-41.

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55*, 64-170.

Lake, P. F. (2007). Higher education called to account: Colleges and the law after Virginia Tech [Electronic version]. *The Chronicle of Higher Education, 53*, B6-8.

Leavitt, M. O., Spellings, M., & Gonzales, A. R. (2007, June 13). *Report to the President on issues raised by the Virginia Tech tragedy.* Retrieved November 17, 2007, from http://www.hhs.gov/vtreport.html

Lederman, D. (1995, February 3). Colleges report rise in violent crime. *The Chronicle of Higher Education, 41*(21), A31.

Lenihan, G. O., & Rawlins, M. E. (1994). Rape supportive attitudes among Greek students before and after a date rape prevention program. *Journal of College Student Development, 35*, 450-455.

Lively, K. (1997a, March 21). Crime survey shows campus drug arrests rose 18% in 1995. *The Chronicle of Higher Education, 43*(28), A44.

Lively, K. (1997b, March 21). Many murders on campuses involve neither students nor faculty members. *The Chronicle of Higher Education, 43*(28), A46.

Lively, K. (1998, May 8). Alcohol arrests on campuses jumped 10% in 1996; drug arrests increased by 5%. *The Chronicle of Higher Education, 44*(35), A48.

Low, J. M., Williamson, D., & Cottingham, J. (2004). Predictors of university student lawbreaking behaviors [Electronic version]. *Journal of College Student Development, 45*(5), 535-548.

Lunden, W. A. (1983, September). A decade of crimes on campus. *The Police Chief*, 66-68.

Marcus, R. F., & Swett, B. (2003). Multiple-precursor scenarios: Predicting and reducing campus violence. *Journal of Interpersonal Violence, 18*, 553-571.

McLean, J. E. (1995). *Improving education through action research*. Thousand Oaks, CA: Corwin Press.

McLean, J. E. (2004, March). Handout: Effect size and practical significance (1999, January). Lecture for *Educational Leadership and Policy Analysis 7810*, East Tennessee State University, Johnson City, Tennessee.

McLean, J. E. (2004, March). PowerPoint: Using effect size measures in research. Lecture for *Educational Leadership and Policy Analysis 7810*, East Tennessee State University, Johnson City, Tennessee.

McLean, J. E., & Ernest, J. M. (1998, Fall). The role of statistical significance testing in educational research. *Research in the Schools*, *5*(2), 24-32.

McPheters, L. R. (1978). Econometric analysis of factors influencing crime on the campus. *Journal of Criminal Justice, 6*, 47-52.

Melton, H. C. (2005). Stalking in the context of domestic violence: Findings on the criminal justice system. *Women and Criminal Justice, 15*(3/4), 33-58.

Melton, H. C. (2007). Closing in: Stalking in the context of intimate partner abuse [Electronic Version]. *Sociology Compass* 1/2, 520-535.

Melton, H. C. (2007). Predicting the occurrence of stalking in relationships characterized by domestic violence. *Journal of Interpersonal Violence, 22*(1), 3-25.

Miethe, T. D. & Meier, R. F. (1994). *Crime and its social context: Toward an integrated theory of offenders, victims, and situations.* Albany: State University of New York Press.

Miller, M., Hemenway, D., & Wechsler, H. (2002). Guns and gun threats at college. *Journal of American College Health*, *51*(2), 57-66.

Morriss, S. B. (1993, May). *The influences of campus characteristics on college crime rates*. Paper presented at the Annual Forum of the Association for Institutional Research, Chicago, Illinois.

Nasar, J. L., Fisher, B., & Grannis, M. (1993). Proximate physical cues to fear of crime. *Landscape and Urban Planning*, *26*, 161-178.

National Center for Education Statistics. (1997, February). *Campus crime and security at postsecondary education institutions.* Retrieved November 16, 2007, from http://nces.ed.gov/survery/peqis/publications/97402/

National Center for Education Statistics. (2007). *College navigator*. Retrieved August 1, 2007, from http://nces.ed.gov/collegenavigator/

National Center for Education Statistics. (2008, March). *Digest of education statistics: 2007.* Retrieved September 21, 2008, from http://nces.ed.gov/programs/digest/

National Center for Education Statistics. (2007). *School, college, and library search.* Retrieved August 1, 2007, from http://nces.ed.gov/globallocator/

Nearly 1 million college students may be armed, survey finds. (1997, July 3). *The Chronicle of Higher Education*, *43*(43), A6.

Noonan, J. H., & Vavra, M. C. (2007, October). *Crime in schools and colleges: A study of offenders and arrestees reported via national incident-based reporting system data*. Retrieved November 16, 2007, from http://www.fbi.gov/ucr/schoolviolence/2007/

O'Hara, R. J. (2001-2002, Winter). Viewpoint: How to build a residential college. *Planning for Higher Education*, *30*(2), 52-57.

O'Hara, R. J. (2003, January 10). *Social cohesion helps prevent psychological injury.* Retrieved November 18, 2007, from http://collegiateway.org/news/2003-social-cohesion

O'Hara, R. J. (2007). *House systems in schools and universities.* Retrieved November 24, 2007, from http://collegiateway.org/house-system/

O'Hara, R. J. (2007). *Residential colleges worldwide.* Retrieved November 18, 2007, from http://collegiateway.org/colleges/

O'Hara, R. J. (2007). *The collegiate way: Residential colleges and the renewal of university life.* Retrieved May 23, 2007, from http://collegiateway.org/

Ortiz, A. M. (1999, Spring). The student affairs establishment and the institutionalization of the collegiate ideal. *New Directions for Higher Education,* 105, 47-57.

Paulson, A., & Scherer, R. (2007, April 18). The shootings at Virginia Tech may challenge a cherished culture of openness [Electronic version]. *The Christian Science Monitor*. Retrieved November 20, 2007, from http://www.csmonitor.com/2007/0418/p01s04-ussc.htm

Pearce, J. (2003, November 9). When campus violence flares. *The New York Times*. Retrieved November 20, 2007, from http://query.nytimes.com/gst/fullpage.html?res=9B04E7DB1039F93AA35752C1A9659C

Pesch, M. (2008, August 17). Study finds college crime rates are decreasing. *The Tufts Daily*. Retrieved October 11, 2008, from http://www.tuftsdaily.com/2.5512/1.588110

Porter, J. R. (2006, October 27). Arrests for alcohol rise on campuses [Electronic version]. *The Chronicle of Higher Education, 53*, A40.

Putman, R. D. (2000). *Bowling alone: The collapse and revival of American community.* New York: Simon and Schuster.

Rasmussen, C., & Johnson, G. (2008, May). The ripple effect of Virginia Tech: Assessing the nationwide impact on campus safety and security policy and practice. Retrieved September 17, 2007, from http://www.mhec.org/policyresearch/052308mhecsafetyrpt_lr.pdf

Residential college. (2007). In *Education Encyclopedia* [Electronic version]. Retrieved November 18, 2007, from http://www.answers.com/topic/residential-college

Rickgarn, R. L. (1989). Violence in residence halls: Campus domestic violence. In J. Sherrill and D. Siegel (Eds.), *Responding to violence on campus* (pp. 29-40). San Francisco: Jossey-Bass.

Rudolph, F. (1990). *The American college and university: A history.* Athens, GA: The University of Georgia Press.

Russell, J. (2002, September 30). Some colleges find a bit of faculty life enriches dorm life. *The Boston Globe*, A1.

Sampson, R. J., & Lauritsen, J. L. (1990, May). *Journal of Research in Crime and Deliquency, 27*(2), 110-139).

Sanday, P. R. (1990). *Fraternity gang rape: Sex, brotherhood and privilege on campus.* New York: New York University Press.

Sandler, B. R., & Shoop, R. J. (Eds.). (1997). *Sexual harassment on campus: A guide for administrators, faculty and students.* Boston: Allyn and Bacon.

Sebok, A. J. (2007, April 24). Could Virginia Tech be held liable for Cho Seung Hui's shootings, if an investigation were to reveal it had been negligent? *FindLaw Legal News and Commentary.* Retrieved August 7, 2007, from http://writ.news.findlaw.com/sebok/20070424.html

Security On Campus, Inc. (2007). *Campus Sex Crimes Prevention Act.* Retrieved August 7, 2007, from http://www.securityoncampus.org/congress/cscpa/index.html

Security On Campus, Inc. (2007). *Complying with the Jeanne Clery Act.* Retrieved November 16, 2007, from http://www.securityoncampus.org/schools/cleryact/index.html

Security On Campus, Inc. (2008). *Jeanne Clery Act Amendments included in "Higher Education Opportunity Act" (Public Law 110-315) enacted into law August 14, 2008; effective immediately.* Retrieved September 17, 2008, from http://www.securityoncampus.org/congress/ClerySummary08.htm

Sells, D. (2002, Fall). Parents and campus safety. *New Directions for Student Services,* 99, 25-35.

Seng, M. J. (1995). The Crime Awareness and Campus Security Act: Some observations, critical comments, and suggestions. In B. S. Fisher and J. J. Sloan, III (Eds.). *Campus Crime: Legal, Social, and Policy Perspectives* (pp. 38-52). Springfield, IL: Charles C. Thomas.

Shay, J. (2002). *Odysseus in America: Combat trauma and the trials of homecoming.* New York: Simon and Schuster.

Siegel, D. G., & Raymond, C. H. (1992, December). An ecological approach to violent crime on campus. *Journal of Security Administration, 15*(2), 19-30.

Sloan, J. J. (1994). The correlates of campus crime: An analysis of reported crimes on college and university campuses. *Journal of Criminal Justice, 22*, 51-61.

Sloan, J. J., Fisher, B. S., & Cullen, F. T. (1997, April). Assessing the student right-to-know and campus security act of 1990: An analysis of the victim reporting practices of college and university students. *Crime & Delinquency, 43*, 148-168.

Smith, M. C. (1989). The ancestry of campus violence [Electronic version]. *New directions for student services,* (47), pp. 5-15.

Summers, R. W., & Hoffman, A. M. (1998). Weapon carrying on campus. In A. M. Hoffman, J. H. Schuh, & R. H. Fenske (Eds.), *Violence on campus: Defining the problems, strategies for action* (pp. 53-67). Gaithersburg, MD: Aspen.

Turrentine, C. G., Schnure, S. L., Ostroth, D. D., & Ward-Roof, J. A. (2000). The parent project: What parents want from the college experience. *NASPA Journal, 38*, 31-43.

United States Department of Education. (2006). *End-of-year report for 2005-2006.* Retrieved September 26, 2008, from http://www.ed.gov/index.jhtml

United States Department of Education. Office of Postsecondary Education. (2005). *The handbook for campus crime reporting.* Retrieved October 1, 2007, from http://www.ed.gov/admins/lead/safety/handbook.pdf

United States Department of Education. Office of Postsecondary Education. (2007). *Campus security data analysis cutting tool website.* Retrieved August 1, 2007, from http://ope.ed.gov/security/

United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. (2001, January). *Criminal victimization in United States, 1999 statistical tables: National crime victimization survey.* Retrieved November 17, 2007, from http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus9902.pdf

Vedantam, S. (2006, June 23). Social isolation growing in U. S., study says: The number of people who say they have no one to confide in has risen. *Washington Post,* A03.

Violence Goes to College Conference 2005. (2005). *Prevention, interruption and critical management.* [Brochure]. Denver, CO: Author.

Virginia Tech Review Panel. (2007, August). *Mass shootings at Virginia Tech April 16, 2007: Report of the Virginia Tech Review Panel presented to Timothy M. Kaine, Governor, Commonwealth of Virginia, August 2007.* Retrieved November 16, 2007, from http://www.governor.virginia.gov/TempContent/techPanelReport.cfm

Volkwein, J. F., Szelest, B. P. & Lizotte, A. J. (1995). The relationship of campus crime to campus and student characteristics. *Research in Higher Education, 36*(6), pp. 647-670.

Weber, B. (2007, July 29). The residential collage. *New York Times*, p. 18-19.

Wechsler, H. (2005). *Findings from the Harvard School of Public Health College alcohol study*: *Binge drinking on America's college campuses*. Retrieved January 3, 2008, from http://www.hsph.harvard.edu/cas/

Wessler, S., & Moss, M. (2001, October). *Hate crimes on campus: The problem and efforts to confront it* (NCJ Publication No. 187249). Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance.

Wilkins, A. (2007, March 16). Keeping students on grounds [Electronic version]. *The Cavalier Daily*.

Witte, R. S., & Witte, J. S. (2004). *Statistics* (7th ed.). Hoboken, NJ: John Wiley & Sons.

Wolf-Wendel, L. E., & Ruel, M. (1999, Spring). Developing the whole student: The collegiate ideal. *New Directions for Higher Education*, 105, 35-46.

Wooldredge, J., Cullen, F., & Latessa. E. (1995). Predicting the likelihood of faculty victimization: Individual demographics and routine activities. In J. Sloan & B. Fisher (Eds.), *Campus crime*: *Legal, social and policy contexts*. Springfield, IL: Charles Thomas.

World Health Organization. Violence and Injury Prevention and Disability (VIP). (2002). *World report on violence and health.* Retrieved November 20, 2007, from http://whqlibdoc.who.int/publications/2002/9241545615_eng.pdf

APPENDICES

Appendix A
List of Participant Groups

Twenty-seven matched-pairs of participant institutions include List A that contains all known cases of colleges or universities that have some version of the residential college system, and List B, which is the matching pair set derived from the Carnegie Foundation for the Advancement of Teaching Web tool.

List A	List B
1.Baylor University, TX	1.University of Rhode Island
2.SUNY at Binghamton, NY	2.University of MA, Amherst
3.Harvard University, MA	3.Columbia University, NY
4.Lehigh University, PA	4.Villanova University
5.Lyon College, AR	5.Wells College, NY
6.MA Institute of Technology	6.Duke University, NC
7.Messiah College, PA	7.Maryville College, TN
8.Middlebury College, VT	8.Amherst College, MA
9.Murray State University, KY	9.University of West GA
10.Northwestern University, IL	10.Georgetown University, DC
11.Princeton University, NJ	11.Tufts University, MA
12.Rice University, TX	12.Catholic Univ. of America, DC
13.Truman State University, MO	13.Sonoma State University, CA
14.University of CA, San Diego	14.Rutgers University, NJ
15.University of CA, Santa Cruz	15.Illinois State University
16.University of Central AR	16.The University of West Florida
17.University of Georgia	17.Texas A & M University
18.University of Miami	18.University of Southern CA
19.University of Michigan – Ann Arbor	19.University of Pittsburgh, PA
20.University of Missouri – St. Louis	20.University of New Orleans, LA
21.University of Pennsylvania	21.New York University
22.University of S. Carolina, Columbia	22.University of Illinois, Champaign
23.University of Virginia	23. University of N.C., Chapel Hill
24.University of Wisconsin – Madison	24. University of Oregon
25.Washington University, St. Louis	25.Boston College
26.West Virginia University	26.Indiana University
27.Yale University	27.Stanford University, CA

Appendix B
Crime Report Offenses

There were 12 total categories of variables organized as follows: (Note: The category HATE CRIMES was eliminated from the list because, in every case, there were no crimes reported in all sub-categories of hate crimes for the matched pairs.)

CRIMINAL OFFENSES

CRIMINAL OFFENSES–ON CAMPUS
- Murder or Nonnegligent manslaughter
- Negligent manslaughter
- Sex offenses–Forcible
- Sex offenses–Nonforcible (incest and statutory rape only)
- Robbery
- Aggravated assault
- Burglary
- Motor vehicle theft
- Arson

CRIMINAL OFFENSES–ON-CAMPUS RESIDENCE HALLS
- Murder or Nonnegligent manslaughter
- Negligent manslaughter
- Sex offenses–Forcible
- Sex offenses–Nonforcible (incest and statutory rape only)
- Robbery
- Aggravated assault
- Burglary
- Motor vehicle theft
- Arson

CRIMINAL OFFENSES–NONCAMPUS
- Murder or Nonnegligent manslaughter
- Negligent manslaughter
- Sex offenses–Forcible
- Sex offenses–Nonforcible (incest and statutory rape only)
- Robbery
- Aggravated assault
- Burglary
- Motor vehicle theft
- Arson

CRIMINAL OFFENSES–PUBLIC PROPERTY

- Murder or Nonnegligent manslaughter
- Negligent manslaughter
- Sex offenses–Forcible
- Sex offenses–Nonforcible (incest and statutory rape only)
- Robbery
- Aggravated assault
- Burglary
- Motor vehicle theft
- Arson

ARRESTS AND DISCIPLINARY ACTIONS

ARRESTS–ON CAMPUS

- Illegal weapons possession
- Drug law violations
- Liquor law violations

ARRESTS–ON-CAMPUS RESIDENCE HALLS

- Illegal weapons possession
- Drug law violations
- Liquor law violations

DISCIPLINARY ACTIONS AND JUDICIAL REFERRALS–ON CAMPUS

- Illegal weapons possession
- Drug law violations
- Liquor law violations

ARRESTS – NONCAMPUS

- Illegal weapons possession
- Drug law violations
- Liquor law violations

DISCIPLINARY ACTIONS AND JUDICIAL REFERRALS–NONCAMPUS

- Illegal weapons possession
- Drug law violations
- Liquor law violations

ARRESTS–PUBLIC PROPERTY

- Illegal weapons possession
- Drug law violations
- Liquor law violations

DISCIPLINARY ACTIONS AND JUDICIAL REFERRALS–PUBLIC PROPERTY

Illegal weapons possession

Drug law violations

Liquor law violations

VITA

MAVIS WINONA FLEENOR

Personal Data:	Date of Birth: March 19, 1950 Place of Birth: Bristol, Virginia Marital Status: Married
Education:	Radford College, Radford, Virginia; Home Economics Education: Child and Family Studies, B.S., August 1971
	The University of Tennessee, Knoxville, Tennessee; Home Economics Education: Child and Family Studies, M.S., August 1976
	East Tennessee State University, Johnson City, Tennessee; Psychology, Post M.S., 1977, 1984, 1987, 1988
	The University of Virginia, Charlottesville, Virginia; Child Development, Post M.S., 1989
	Radford University, Radford, Virginia; Psychology, Post M.S., 1990
	East Tennessee State University, Johnson City, Tennessee; Educational Leadership and Policy Analysis, Ed.D., 2009
Professional Experience:	Preschool Teacher, People Incorporated: Benhams Child Development Center, Bristol, Virginia 1973 -1974
	Instructor, Virginia Alcohol Safety Action Program, Continuing Education – Virginia Highlands Community College, Abingdon, Virginia 1978 – 1981
	Associate Professor – Psychology, Emory and Henry College, Emory, Virginia 1977
	Associate Professor – Psychology; Human Services, Virginia Highlands Community College, Abingdon, Virginia 1976 - present