Peer influence within the student residential environment: The effectiveness of educational crime prevention programming

Stephen Damian Bisese

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Peer influence within the student residential environment: The effectiveness of educational crime prevention programming

Bisese, Stephen Damian, Ed.D.
The College of William and Mary, 1992

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PEER INFLUENCE WITHIN THE STUDENT RESIDENTIAL ENVIRONMENT: THE EFFECTIVENESS OF EDUCATIONAL CRIME PREVENTION PROGRAMMING

A Dissertation
Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Stephen D. Bisese

May 1992
PEER INFLUENCE WITHIN THE
STUDENT RESIDENTIAL ENVIRONMENT:
THE EFFECTIVENESS OF EDUCATIONAL
CRIME PREVENTION PROGRAMMING

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James M. Yankovich, Ed.D.
Chairman of Doctoral Committee
Dedicated

to

My Parents
My Brother
My Sister-in-Law
My Niece
My Grandmother
and
My Wife
ABSTRACT

PEER INFLUENCE WITHIN THE STUDENT RESIDENTIAL ENVIRONMENT: THE EFFECTIVENESS OF EDUCATIONAL CRIME PREVENTION PROGRAMMING


Chair: James M. Yankovich, Ed.D.

Recent instances of campus crime, government intervention, increased media attention, and significant public concern has caused widespread institutional reaction to the issue of campus crime. The purpose of this study was to measure the effectiveness of two types of educational, proactive, crime prevention programs implemented in the residential setting. The two programs evaluated were crime prevention seminars conducted by campus safety and residential life personnel and the periodic distribution of crime prevention literature within the residential environment. The author hoped to concentrate on filling the research deficiency in the area of actual effectiveness of the preventive, educational crime prevention programs.

Six single-sex residence hall environments were studied at the University of Richmond in Virginia. One residence hall in each of the gender categories served as a control residence area. The residents of the remaining
four residence halls were either distributed crime prevention literature or exposed to a crime prevention seminar. Prior to and following the implementation of the educational programs, students living in the six experimental residence hall completed a survey which assessed personal crime prevention behaviors and personal attitudes toward crime prevention. Also, prior to and following the implementation of the educational treatments, student residence life staff and computer equipment measured the number of unlocked room doors in the six experimental halls and the number of propped exterior doors in the three female residence halls. Statistical procedures permitted a comparison of the data prior to and following the experimental treatment in order to assess the effectiveness of the programs in improving survey responses, increasing the number of locked room doors, and decreasing the number of propped exterior doors.

The general hypothesis of the study was that these educational interventions within the residential environment would influence positive changes in the degree of safety conscious behaviors observed. The hypothesis was partially supported. Statistical tests were conducted to test four subsidiary research questions
which produced the following results. First, no evidence was found to suggest a difference between new students and upper-class students in regard to improving personal perceptions of crime prevention behaviors and attitudes as measured by the survey instrument. Secondly, the presence of an educational crime prevention treatment produced a lower overall unlocked room door mean in the female residence halls studied. The female residence hall populations receiving the literature and seminar treatments had lower overall means in terms of the number of times room doors were left unlocked in comparison to the female control residence hall. Thirdly, tests on the locked door data and propped exterior door data revealed that the seminar intervention was most influential in decreasing the mean score of the number of unlocked rooms.

The results of this study provide positive feedback to student affairs personnel who engage in the planning and implementation of residence hall programs. The results highlight the educational power of providing a live educational program revolving around an important campus topic within the residential environment.
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PEER INFLUENCE WITHIN THE STUDENT RESIDENTIAL ENVIRONMENT: THE EFFECTIVENESS OF EDUCATIONAL CRIME PREVENTION PROGRAMMING
CHAPTER 1
INTRODUCTION

Campus Crime is an important issue that is currently receiving escalated institutional and public attention. Media coverage of a number of recent incidents, namely violent murders that have taken place at Lehigh University, Tulane University, and the University of Florida has elevated public interest of the issue of campus crime. *The New York Times*, *Washington Post*, *Chronicle of Higher Education*, and *USA Today* have had numerous front page stories since July 1988 concerning campus crime. The headlines themselves reveal the emotion that journalists are trying to capture with titles such as, "Pressed by Students and Parents, Colleges Step Up Their Efforts To Fight Crime On Campus" (Greene, 1988), "After Their Daughter Is Murdered At College, Her Grieving Parents Mount A Crusade For Campus Safety", (Gross, 1990), and "Campus Crime: U.S.A.'s Bloody Secret" (Kalette, 1990-b). Janosik (1991) wrote that the increased publicity regarding campus crime has caused parents and concerned citizens to demand more accountability from college administrators regardless of the costs.
The most significant recent development is the November 11, 1990 signing of the Student-Right-to-Know and Campus Security Act by President Bush. More specifically, the legislation requires colleges and universities nationwide to disclose murder, rape, robbery, and other crime statistics, to the public (Kallette, 1990). Consequently, many colleges and universities are reevaluating their crime prevention programs. Additionally, a number of national, professional organizations have organized standing committees or developed position papers to study campus crime and recommend prevention strategies. The American College Personnel Administration (ACPA) formed the Commission I Task Force on Victimization and Violence (Roark, 1985) and the ACPA Forum on Campus Violence (Stevens, 1988), the Towson State University Campus Violence Prevention Center was formed (Sherrill, 1989), and the American Council on Education (1987), under the leadership of Robert Atwell, has addressed the concept of what is "reasonable campus security" (p.1). The American College Personnel Association (1989a) discussed at its annual convention that:

Feelings of personal safety and welfare appear
to be threatened by increasing incidents of interpersonal violence and aggressiveness. A strong commitment by the profession to address this issue is needed (p.3).

**A Perspective of Residential Life**

Baldwin and Thelin (1990) point out that the American system of higher education includes over 3000 institutions consisting of an incomprehensible number of student programs. Standardization of any one student program is virtually impossible. However, over the years, the phrase residential life has become widely accepted by the student services profession as the designation for the holistic student residential program at institutions offering student housing. The Council for the Advancement of Standards (CAS) for Student Services (1989) periodically publishes standards which residence life personnel may use as a guide to program development, self-study, staff development, program evaluation, accreditation or institutional comparison. The Council's mission statement directs residence life personnel to provide a residential program that is an integral part of the overall educational experience. To accomplish the mission the Council recommends the implementation of
educational programs in conjunction with necessary building management procedures. Residence life administrators work to supplement a residential student's formal education with developmental opportunities within the residential setting.

Need for the Study

Recent campus crime, government intervention, increased media attention, and significant public concern has caused widespread institutional reaction. The result has been the implementation of numerous, often expensive, prevention tactics including: facility improvements, increased staffing of residence hall counseling and police personnel, and implementation of educational programs/seminars. Unfortunately, many of the prevention programs are implemented in reaction to a particular incident. This method of program development does not allow for thorough examination and planning. Thus, little is known of the effectiveness of crime prevention programs, especially the more proactive, educational type.

In addition, research concerning campus crime prevention generally has not focused on educational efforts. J. Sherrill (personal communication, October 1,
1990), Director of the Campus Violence Prevention Center at Towson State University confirmed the absence of such research noting only recent concern over the issue. The majority of available research concerns basic crime statistics aimed at determining the extent of campus crime. Researchers have concerned themselves with trying to determine statistically whether campus crime is on the rise or with the factors that contribute to high crime rates. Focused knowledge of the effectiveness of specific educational crime prevention programs would aid campus safety personnel and student services specialists in planning and implementing meaningful crime prevention programs that encourage positive crime prevention behaviors.

In addition, by focusing on education, this research will broaden the campus crime prevention issue to incorporate the work of student development educators who have researched the collective power of positive change students can initiate within their peer environment. The knowledge will add to the work of researchers such as Feldman and Newcomb (1969), Sanford (1972, 1971, 1966), Astin (1977) and others who believe the residential living environment to be a powerful educational tool.
Purpose of the Study

The purpose of this study was to measure the effectiveness of two types of educational, proactive, crime prevention programs implemented in the residential setting. The two programs evaluated were crime prevention seminars conducted by campus safety and residential life personnel and the periodic distribution of crime prevention literature within the residential environment.

Research Questions

The major research question is whether educational crime prevention programs conducted in the residence hall setting produce significant changes in student safety conscious behaviors when compared to residential settings that do not have crime prevention programs? Specifically, the purpose was to provide answers to the following research questions:

1. Is there a significant difference between upper-class students and new students in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs?

2. Is there a difference between men and women in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime
prevention programs?

3. Is there a significant difference between the types of educational intervention introduced as part of this study?

4. Do students perceive the need for the implementation of the educational crime prevention programs employed as part of this study?

Operational Definitions

Campus Crime. Borrowing the Roark (1987-b) definition, crime is "any crime that harms another individual" (p. 367). Both Roark (1988, 1987b) and the Carnegie Foundation (1990) include sexual assaults, physical assaults, and robberies as prevalent campus crimes. Roark (1988) cautions that terms related to campus crime continue to evolve from further study and legislation. This study focused on the prevention of crime within the campus residential environment.

Safety-conscious Behavior. Measurable student behavior that is understood by student affairs and police personnel as effective in deterring crime in the residential setting. According to C. Stone (personal communication, September 30, 1990), Police Lieutenant at the College of William and Mary, this includes refraining
from propping open residence hall exterior doors after they are locked by housing personnel, locking student room doors when sleeping or absent from the room, securing personal possessions while in a common area of the residence hall, and attending educational programs facilitated by appropriate campus personnel.

**Educational Crime Prevention Programs.** Any informative program, proactive or reactive, written or oral, that is offered to the student population for the purposes of preventing or reacting to campus crime. These include; educational programs or seminars conducted in the residence halls or other public facilities, distribution of crime prevention literature, or the distribution of safety prevention items to the student community.

**Residence Halls.** Residence halls are housing facilities owned and operated by the University.

**On-campus Students.** Students who reside in housing facilities owned and operated by the University.

**New Students versus Upper-class Students.** New students are defined as students whose academic transcript contains less than twelve higher education academic credits. Upper-class students consist of all
other undergraduates enrolled at the University.

Research Method

The University that participated in this study is a private, small sized, coeducational institution that enrolls approximately 2800 students annually. Six residence hall environments were studied. Since on-campus students are housed by gender, three male and three female residence halls were tested. One residence hall in each of the gender categories served as a control residence area meaning no experimental intervention was implemented. The remaining two in each gender category received a treatment during the fall semester of 1991 with one of two educational safety program interventions. One of these interventions involved the distribution of crime prevention literature developed in consultation with the University's Safety Officer. The other intervention was the implementation of live, crime prevention seminars developed and implemented in consultation with the University's Safety Officer and the University's Crime Investigator.

Data Collection and Analysis

The experimental method chosen involved the collection of three distinct dependent data types. First
was the interest in individual data. Prior to and following the implementation of the two crime prevention programs, each individual student residing in the six residence halls involved in the experiment responded to a survey instrument that measured individual attitudes toward crime prevention education as well as the perceived frequency of positive safety conscious behaviors. The variance in survey scores was tested for significance by intervention-type, gender and academic class in accordance with the research questions using the analysis of variance statistic.

The second type of data collected was room data. Prior to and following each of the educational crime prevention programs, student residence life staff employed in each of the residence halls studied directly observed the number of locked residence hall room doors at five scheduled times. Each room received a score of 0 to 5 depending on the number of times a particular door was observed unlocked during the five scheduled measurements. The variance in room scores was tested for significance by intervention-type, gender and academic class in accordance with the research questions using the analysis of variance statistical technique.
The third type of data collected was residence hall data defined as the number of times University police personnel discovered exterior residence hall doors propped open in the residence halls being studied. The collection of this data was limited to the female residence halls studied since the male halls remain unlocked. University computers record through an elaborate alarm system when an exterior door has been propped and signals security personnel to the propped door. This data listing the propped door occurrences was collected prior to and following the implementations of the educational crime prevention programs. A chi-square test was performed to measure whether the recorded number of propped doors per day varies significantly when considering the timing of the experimental interventions.

**Hypotheses**

It is hypothesized that educational intervention within the residential environment will influence significant, positive changes in the degree of safety conscious behaviors observed in the residence halls receiving treatment. Therefore, the following hypotheses to the subsidiary research questions are proposed:

1. It was hypothesized that new students would show
the greatest positive change in survey responses as a result of the educational treatments due to their newness to the campus community.

2. It was hypothesized that the most significant, positive change in safety conscious behavior would be observed in the seminar halls since the intervention involved personalized discussion and instruction.

3. It was hypothesized that females would show significantly greater, positive change in regard to safety conscious behaviors.

4. It was hypothesized that students do perceive a need for educational programming.

Limitations of the Study

This study is limited by the constraints associated with the living arrangements of the residential population at the University being studied. The University studied is a private, small-sized, suburban institution. The University being studied houses students by gender. Caution should be taken in generalizing the results to co-educational living arrangements. In addition, due to the housing arrangement in the female residence halls, the female control hall used in the study was predominately a new student residence. Caution
should be taken in generalizing the results associated with academic class when considering the females used in this study. Further, caution must be taken in generalizing the conclusions to institutions varying in size and student demographics.

Secondly, the researcher had no control over historical occurrences that occurred during the course of the study. A record of campus crime related articles in the student newspaper, crime prevention programs sponsored by other organizations, and news of campus crime related events reported in the media was kept during the period of the study. During the fall semester of 1991 there were a four brief articles in the student newspaper reporting minor instances of theft and assault. The student awareness of these incidents of campus crime could have caused students to practice more positive safety conscious behaviors independent of the experimental implementation of crime prevention programs.

Finally, the researcher could not control what residents of the experimental halls shared with one another. Given the experimental methodology and the intimacy of the campus environment studied, there is the possibility that students residing in the experimental
residences discussed the experimental crime prevention programs with students residing in the control halls. This incidence might account for some error.

Summary

Campus crime is an issue that is in need of concentrated study. Recent developments have sparked the need for new information. Education is the prominent mission of any college or university. Effectiveness data regarding educational intervention in the residence halls for decision making purposes is needed as more and more institutions begin to develop proactive prevention programs. This experiment measured the effectiveness of two types of educational, proactive, crime prevention programs implemented in the residential setting. Chapter II includes a review of the literature concentrating on campus crime prevention, the theoretical constructs upon which this study is based, and the effectiveness of educational programming within the residence hall environment. Chapter III includes a more detailed discussion of the research methodology. The results of the data analysis is included in Chapter IV and the conclusions and implications are included in Chapter V.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

Scientific research concerning campus crime is for the most part limited to descriptive studies that assess the extent of the campus crime problem. The strategy employed in the organization of the literature review is to broaden the focus of the campus crime issue to incorporate the work of student development educators and to develop an understanding of the variables introduced in the study. This strategy will enable the understanding of the importance of proactive, educational crime prevention programs in the residential environment and serve as necessary background to the experimentation conducted as part of the study.

Historical Overview of Campus Crime

Early Developments

The increased public concern regarding campus crime and its prevention has caused college and university administrators to give increased attention to an issue that has been a part of the campus environment since its inception. Smith (1988) noted that campuses have never been without crime and violence. Early power struggles
between the princes and bishops for control of the medieval university of the 1400's resulted in violence. Haskins (1957) wrote that a review of records from medieval courts of law reveal details of petty disorders as well as records of many town and gown riots. The seventeenth, eighteenth, and nineteenth century American college was far from void of campus crime and violence. Crimes of the nineteenth century were no less notorious than modern crime as is evidenced by an incident at Princeton University in 1807 where half of student body was suspended after a bloody campus riot (Smith, 1989). In 1850 a Harvard medical professor was convicted for the murder of another physician (Commonwealth v. Webster, 1850).

Prior to the 1960's the amount of campus crime is believed to have been vastly underreported because campus crime conviction was handled internally. Smith (1989) concluded that activity that would be considered a criminal offense in the outside world was handled internally by college and university administrators. Remedies were inconsistent as administrators developed sanctions as seen fit to a particular case. This practice caused information about campus crime to be shielded from
the attention of the greater society.

In Loco Parentis and Campus Crime

Kaplan (1988) believed the contemporary court's continued refusal to acknowledge the English Common Law Doctrine of in loco parentis has changed how colleges must interpret liability and student rights. This in turn affects how colleges and universities respond to campus crime. The judgement in Gott v. Berea College (1913) permitted the institution complete disciplinary authority over students' lives. An excerpt from the decision read:

College authorities stand in loco parentis concerning the physical, moral welfare, and mental training of the pupils and we (the court) are unable to see why to that end they may not make any rule or regulation for the government or betterment of their pupils that a parent could for the same purpose.

Kaplan (1988) noted that since the Gott decision colleges have grown in size opening their doors to a broader cross section of the population including numerous social, economic, and ethnic groups. In addition, the loosening of the acceptance of only traditional age college students, the lowered age of
majority from twenty-one to eighteen years, the emergence of the student veteran, student interests in social and political movements such as Vietnam and civil rights, and the understanding of students as consumers combined to make the in loco parentis relationship between institution and student less viable. Biggs & White (1975) described how traditions such as curfews, dress codes, and strict protection-oriented policies were now seen as a violation of a student's rights as an adult, causing a reevaluation of student safety. The Carnegie Foundation (1990) reported that the abandonment by colleges of the parental role associated with in loco parentis policies is partly a cause to the Foundation's conclusion that campus life is deteriorating. The Foundation's report did not promote a return to the in loco parentis philosophy but urged colleges to develop stricter disciplinary policies in response to greater student independence.

Recent Developments

With the widespread civil rights protests and the Vietnam demonstrations of the 1960's and 1970's, campus crime became more closely tied to criminal law and of greater concern to society as a whole. The public was made more aware of students' behavior as students
participated in sit-ins, free speech movements, and marches. Schuh (1984) believed that media attention to these activities caused public awareness of student involvement in criminal incidents such as assault and arson leading to mass arrests. Pehler (1982) commented that though college administrators began to recognize a need for an organized security campaign during the 1940's and 1950's, it was not until 1970 that most colleges and universities recognized the need to maintain some type of internal police agencies. Students faced criminal charges and individual felony indictments for crimes of various degrees of seriousness. Sherrill (1988) concluded that administrators have always experienced some degree of violence and lawlessness, but the 1960's and 1970's introduced a broader degree of student violence. Smith (1988) mentioned that recent court decisions have been holding institutions, as well as administrator's, liable for persons injured on campus. According to Smith (1988), in the past five years the number of crime victims suing higher education institutions has more than tripled. Courts are holding colleges more responsible for maintaining reasonably safe campuses and keeping students informed about potential danger. The National Association
of College and University Attorneys (1988) developed a pamphlet addressing this issue. The introduction reads:

To protect themselves from liability, especially for crime committed on campus, colleges and universities need to take steps to protect students and other potential victims (p. 4).

Campus Crime Statistics

The Right to Know Act

No story is more worthy of mention in the area of campus crime than the 1986 murder of Jeanne Anne Clery at Lehigh University in Bethlehem, Pennsylvania. The murder was committed by a student enrolled at Lehigh University in one of the University’s residence halls. The student responsible for the crime was able to enter Jeanne Clery's room through a series of residence hall doors that were either unlocked or propped open. Gross (1990) reported the political implications of the incident. Constance and Howard Clery, parents of Jeanne, were persistent in their lobbying efforts to the point that in May 1988, the Pennsylvania governor signed a state bill that mandated that all colleges in Pennsylvania publish and make available their crime statistics. In May of
1990, Pennsylvania Republican William F. Goolding sponsored a bill, known as the "Right to Know Bill", in the House of Representatives that would require nationwide compliance with campus crime statistics reporting (Janosik, 1989). On Saturday November 10, 1990, President Bush signed the Student-Right-to-Know and Campus Security Act that mandates the reporting of campus crime statistics (Kallette, 1990a). The law requires colleges and universities to make crime statistics available to any person requesting the information.

Effects of Right to Know Legislation

Stormer (1990), President of the International Association of Campus Law Enforcement Administrators, believed that college crime reporting could actually hinder a campus' motivation to step-up crime prevention tactics. Stormer (1990) concluded that a high crime statistic may mean a campus is dealing with a problem that may have otherwise been overlooked. He wrote:

If statistics are simply reported without allowing institutions to attach supporting data including; surrounding community crime statistics, increases in the number of arrests due to increased security, and increased
victim self-reporting numbers, they are misleading (p. B3).

Deloughry (1990) reported that proponents of the legislation believe it will give prospective students and employers of a particular institution more complete information to make a more informed choice. Regardless of the outcome, this debate has fueled increased attention to the issue. The Carnegie Foundation For The Advancement of Teaching (1990) acknowledges that colleges and universities are devoting more time than ever to fighting and preventing crime. The ACPA (1989c) released a position statement concerning campus violence that states:

There is an increased consciousness of the violence that is taking place on college campuses as in society most notably acts of assault, rape, hazing, harassment, and bias related violence. Individuals, institutions, and society are harmed by the acts of violence. ACPA wants to encourage its members to actively promote the development of policies, services, security measures, and educational programming aimed at the prevention and elimination of violence on campus (p. 3).
Increase in Campus Crime

The American Council on Education (1987) reported that there is "ample evidence that violent crime on the nation's campuses is increasing (p. 1)". The FBI revealed that college and university officials reported over 2000 violent crimes including aggravated assault, forcible rape, robbery, manslaughter, and murder in 1989 (Uniform Crime Reports, 1990). Newspapers comment regularly on the rise in violent crime in society as a whole (Crimes of violence are up 5% in the U.S., 1990, April 9; Serious crime is reported up for third year in U.S., 1988, April 17). The USA Today has devoted substantial press specifically to campus crime. The Special Issue on Campus Crime (1988) published that over the past five years violent crime on college campuses has increased by at least five percent per year. The authors indicated that in 1987, 31 students were killed on college campuses in the United States. In addition, more than 18,000 were victims of armed robberies and 13,000 were physically assaulted. Crimes of a less violent nature have also been reported to be on the rise. Ordovensky's (1990) statistical analysis revealed that a larceny occurs every 3.4 minutes and auto theft occurs every 3 hours and 20
minutes on America's campuses. Smith (1990) reported that recent studies confirm that college and university campuses have inordinately higher instances of rape, burglary, and theft than most American cities.

Interpretation of Campus Crime Statistics

Several researchers (Roark, 1987a, 1987b; Smith, 1988; Cockney, Sherrill, & Cave, 1989) contend that it is dangerous to rely on hard statistics to assess the extent of campus crime. Factors such as: unreported crime, improved reporting procedures, reluctance of some universities to report crime, and increased awareness of newer categories of crime such as acquaintance rape, threaten the reliability of widespread implications regarding the rise of campus crime. The Federal Bureau of Investigation compiles Uniform Crime Reports (UCR) annually that do provide some statistics about crime on our nation's campuses. Towson State University Campus Violence Prevention Center also compiles crime data from participating institutions on an annual basis. Sherrill (1989), Director of the Campus Violence Prevention Center and Smith (1988) cautioned that both the Towson data and UCR reports are limited because the schools from which data are gathered change from year to year and how one
school may define a specific crime may differ from another. Smith (1989) found that only fifteen percent of colleges generally report crimes to the F.B.I. meaning the rate of campus violence is actually much greater. Kilpatrick (1985), in her study of student rape victims found that only five to twenty-nine percent report their victimization to the proper authorities.

The USA Today publishes extensive statistics for all higher education institutions organized by state and categories of crime on an annual basis. In this feature, the USA Today assigns a safety rating to each institution based on the frequency of various crimes, ratio of students to security staff, and facility conditions. The Director of Campus Safety at the University of Richmond commented on the difficulty of interpreting the safety score because it publishes the data institutions choose to release and does not account for the location of the institution or the surrounding community crime rates (personal communication, October 16, 1991).

Some researchers have studied crime rates at specific institutions. Fox (1977) analyzed crime statistics at the University of Virginia from 1964-1972 and found a steady increase in the number of assaults
through the period. Lamont (1979) measured the crime rates at Harvard and the University of Chicago. At each institution he found marked increases in the crime rates as well as increases in the seriousness of the crimes committed. Fox (1977) cautioned:

Because there is so much unreported crime it is theoretically possible to have a crime wave on the index charts, when in fact nothing but reporting habits have changed. Crime rate rises can occur when the police become more diligent in reporting (p. 345).

Roark and Roark (1987) wrote in a paper presented at the National Association of Student Personal Administrators convention that:

Whether the extent of violence is a matter of concern on a particular campus relies more (as does much of student affairs work) on the judgement about its existence and whether it is increasing, and about how destructive it is in a particular setting than the reliance on statistics (p. 3).

According to Hanson, Turbett, and Wheelan (1986), "Interpersonal violence is underreported, underprosecuted, and underpunished, thus allowing it to
occur in secrecy, ignorance, and shame" (p. 10).

Campus Reaction to Rise in Crime Statistics

Some researchers have found that students believe campus safety is an important concern. Smith (1988) reported that a 1986 Newsweek poll involving 508 face to face interviews on 100 campuses nationwide found thirty-eight percent worry about crime on their campus. Arthur Levine (1984) during his study of college student extracurricular life asked student leaders to designate the major concerns of undergraduates. Campus security was the most often cited concern. Levine (1984) also reported that in at least one of the urban areas studied, students thought the city offered a safer environment for out of class activity than the residential college. Ana Boynton, safety director at the University of Georgia stated:

The types of crimes are still the same. We have the theft. We have the burglary. We have the rapes. The difference today is that students are asking how safe is the campus and how do you protect us? In the past, it was just generally accepted that the campus would take care of you and everything would be O.K. (Greene, 1998, p.A28).
Factors Associated with the Increase in Campus Crime

Type of Institution

Smith (1988) reviewed a number of studies concerning factors hypothesized as influencing campus crime. Mcpheters (1978) obtained budget, student population, campus physical and location data from thirty-eight institutions and compared it with Uniform Crime Reports. The results found only two independent variables that seemed to result in higher crime rates; the percentage of students living in residence halls and proximity to an urban area with high unemployment rates. However, Fox and Hellman (1985), in their study of 222 institutions using an analysis of variance framework to investigate a variety of factors, found only minor differences between rural and urban institutional crime rates. Fox and Hellman (1985) also tested police characteristics, density measures, scholastic characteristics, student population characteristics, faculty salaries, campus size, and scholastic quality. Among these correlates only the percentage of male students positively correlated with campus crime rates to a level of significance. The percentage of minority students present on campus, while a positive correlate, was not statistically
significant.

**Crimes Committed by Students Against Other Students**

There is a growing number of studies revealing the increase in student against student crime. The Carnegie Commission (1990) published its findings that 78% of sexual assaults, 52% of physical assaults, 66% of armed robberies, 90% of arson, and 85% of vandalism on college campuses were committed by students. The Commission also reported a close connection between student alcohol abuse and campus crime. The FBI revealed in its 1990 report that 95% of violent campus crimes involved drugs or alcohol (*Uniform Crime Report, 1990*). Bausell, Malloy, & Sherrill (1989) disclosed that students found guilty of campus crime offenses tend to be heavy drug or alcohol users. Sherrill, in a personal correspondence writes, "We (Campus Violence Prevention Center) know that campus crime is largely student to student and we know that students tend to believe themselves invulnerable (September 25, 1990)."

Regarding the student response to the campus crime issue, Drum (1984) wrote:

College students are at risk of failing to develop adequate solutions to the challenges of independent
living and the increased responsibilities of adulthood. Students are perpetuating habits of avoidance or compensation for their unresolved problems, habits that reveal themselves in statistics of the present generation of adults (p. 509).

Smith (1990) believes that 80-90 percent of campus crimes are committed by students themselves. Smith wrote: While larceny, the theft of property belonging to another, is by far the most common crime on campus (as it is in society overall), there are no hard statistics on who commits these crimes, because most thieves are never caught. But there can be no doubt that most campus thefts are committed by students (p. 5).

A New Kind of Violence: Acquaintance Rape

Widespread public attention has recently been given to colleges and universities in regard to the crime known as acquaintance rape. Acquaintance rape is the act of rape committed by an acquaintance of the victim. Koss and Oros (1982) and Eskridge (1988) indicated that approximately one in four women will be raped by an acquaintance or a stranger before finishing colleges.
According to experts, at least sixty percent of these rapes will be caused by acquaintances of the victim. Smith (1988) commented that acquaintance rape is a new type of violence that administrators are just beginning to understand. Roark and Roark (1987) used the term "sexual violence" to describe student crime that involves the concepts and behaviors associated with a mixture of student sexual desire with violent tendencies (p.2). College and university administrators will continue to research sexual violence issues in the hopes of developing specific institutional policies and more informed prevention programs for the campus communities.

Perception of the Campus as a Sanctuary

Another factor that relates to the frequency of campus crime, is society's perception of the college campus as a sanctuary. It is almost as if a college campus is considered an easy place to commit a crime. The sanctuary perception is a product of a long-standing attitude that a college or university is a peaceful-haven set apart from the outside world. Smith (1990) described this ivory tower perception of a college as:

It (the college community) is a dense concentrations of people living, studying, and
playing with little emphasis on physical security and safety (p.2).

Smith (1989) wrote that the idea of the university as isolated has its roots in the medieval university with the notion of conflicts between the town and gown. Haskins (1957) commented that the students of Bologna organized the University as a means of protection against the townspeople. The student community became a strong isolated body whose presence became necessary to the economic prosperity of the town. Smith (1989) believed this economic issue caused many townships to protect the social and educational interest of the medieval university. The negotiating power caused the crown to give special legal independence to the universities and their inhabitants.

American institutions of higher education continue to present themselves as isolated. Bok (1980) and others reinforce this notion when they write of the traditional higher education ideals of academic freedom and immunity from governmental intervention. Kaplan (1988) outlined these freedoms from a legal standpoint citing governmental immunity doctrines that protected many public institutions and charitable immunity doctrines.
that protected private institutions from governmental intervention. However, Bok (1980), Kaplan (1988), and Finn (1978) respectively conclude that over the past two decades immunity clauses have been less powerful and government has extensively intervened in higher education for a variety of reasons. Roark and Roark (1987) stated that it is time that colleges be seen as part of society, "subject to the same forces that permeate contemporary culture" (p. 15). Greene (1988) reported that the public will no longer accept the notion that a college or university is a "safe, isolated world" (p. A3).

Student Behaviors that Perpetuate Campus Crime

Gunson (1986) noted that educational institutions are unique organizations that serve a clientele with complex and sensitive needs. Fox and Hellman (1985) describe the even more complex problems are associated with residential campuses. Though housing administrators strive to create a residential community that facilitates trust and cooperation, students in residential environments tend to practice behaviors that make crime prevention a challenging issue. Waylord (1990) wrote:
It is not uncommon for two roommates occupying a room to own a computer, cameras, stereo, VCR, TV, jewelry and to have cash on hand. Yet, individual room doors are left wide open. Strangers are allowed to roam the halls and exterior doors are propped open to allow easy access to everyone and anyone (p. 32).

At the University of Richmond, the Safety Officer commented during a crime prevention seminar that over 75% of the burglaries reported to the University of Richmond Campus Police over the past three years involved unlocked doors (October 19, 1991). Smith (1990) cited that college students need to be more aware of campus crime and do a better job of protecting themselves by using more common sense and being less careless. In the rural community of Lexington, Virginia, a Washington and Lee University female student was raped by a Virginia Military Institute cadet who found his way into the victim's room through a series of unlocked doors (Washington and Lee Student Assaulted, 1991). Smith (1990) cited the following student behaviors as responsible for a large number of campus crime instances; failing to lock room and car doors, leaving valuables in plain view in residence hall
rooms and automobiles, failing to engrave or register personal possessions, and walking alone at night.

Roark (1988) contended that college students of traditional age (18-22 years) are vulnerable to being victims of violence. Roark (1987b) outlined the factors she believed underlie various forms of campus violence. Further, she believed that an examination and understanding of these attitudes and/or behaviors can give direction to crime prevention programs. Her factors included:

1. Vulnerability of traditional age college students
2. Societal Legitimization of violence
3. Entanglement of sexuality and violence
4. Sex role socialization process
5. Hierarchial patterns of dominance
6. Abusive use of substances
7. Inequality and prejudice
8. Denial (p. 369).

Campus Crime Prevention

The research concerning the factors associated with campus crime and the detailed campus crime statistics only provide a background to the difficult task of developing effective institutional prevention programs.
The American College Personnel Association (1989) concluded that "the possible institutional responses to campus violence are too many to mention" (p. 4). Roark, in a personal correspondence, mentioned, "All my work on the topic (campus crime) has brought me back to where I began..... as a developmental educator" (October 19, 1990). Sanford (1972) believed that the educator's objective should be to understand why, when, and how something happens and to respond effectively, maximizing its potential power.

The range of institutional response to the suspected rise in campus crime is broad. Colleges and universities have responded with numerous, expensive, facility improvements as well as a range of educational programs (Carnegie Commission, 1990). Since the development of many of these responses has been in recent years, little information is available as to the effectiveness of these programs.

Crime Prevention Programs: Physical Plant Improvements and Campus Security Resources

Hirschorn (1987) reported that since the Clery murder at Lehigh, the Lehigh University has improved the police force, installed outside phones, initiated a
shuttle service, and improved campus lighting. In a confidential letter prepared for attorney's during pending litigation with the Clery's, John Smeaton, Assistant Vice President and Dean of students wrote:

The murder at Lehigh in the spring of 1986 was horrible. Unfortunately, no community academic or civic, is immune from the problems of the society in which we live, work, and learn. The challenge for college administrators on every campus is to properly assess and then adequately address the security issue at their institution. In the past fifteen months (since the murder) we (Lehigh) have taken a number of steps to improve security. Exterior doors to all residence halls have been locked, patrol officers have been hired to patrol the living area from 11 p.m. to 7 a.m., an evening shuttle operates every evening from 8 p.m. to 12:30 a.m. Also, in the past three years, over $50,000 of lighting improvements have been made (personal communication, June 14, 1988).

A number of professional organizations have discussed crime prevention from a physical plant perspective by recommending improvements to residence
hall access systems, campus security, and lighting (National Association of College and University Attorneys, 1988; Hirschcorn, 1987; Church, 1988). David Stormer, President of the International Association of Campus Law Enforcement Administrators commented that popular anti-crime tactics include card access systems for residence hall doors and blue-light emergency phones tapped into security office switchboards (Castelli, 1990). Brook (1990) cited the cost of a card access system that secures the outside entrances of 58 University of Delaware residence halls as $750,000. The system has the technology to alarm the police in the event a door is left open and restricts access to residents. Many institutions, facing serious budget deficits, must search for less costly searches.

The American Council on Education (1985), published a document that addressed the concept of reasonable campus security. In a cover letter attached to the reissue of the document, Robert Atwell, President of the American Council on Education writes:

Since 1985, the public concern over crime on campus has been steadily mounting. A recent wave of media attention and the efforts of the parents of a
Pennsylvania victim are part of the attention. More than ever, it is important to review the points made in the document to be sure that each institution has properly aligned its administrative efforts to ensure security. I urge you (colleagues) to review the attached copy of the 1985 statement (August 16, 1987).

The ACE (1985) report called for; adequate facilities and police staff, trained personnel, an informed community, and institutional crime data collection. The document specifically addressed the importance of reviewing the institution's security procedures and examining the level of law enforcement resources. A complete review of the document revealed its strong focus on the physical plant issues and the allocation of adequate resources for police personnel hiring and training. The American College Personnel Association (1989) urged institutions to analyze facilities with safety in mind.

Educational Prevention Programs

Smith (1988) contended that responses to campus crime must include comprehensive educational programs. Smith (1988) urged institutions to establish programs and
develop policies which persuade offenders not to commit offenses, make it difficult for offenders to act, and provide support services for victims and rehabilitation programs for offenders, in cases where the actual crime was prevented. He wrote:

Education has a key role to play in all these response aspects. Potential offenders may be taught that the conduct in question is unacceptable, that there are alternative ways to get along in life, and that detection and punishment for infractions is certain or highly likely. Crime exists only to the extent that society permits it (p. 28.).

Sanford (1971) also emphasized the educational approach to crime prevention and believed that prevention is not an adequate word for what institutions should be doing. He wrote:

It is not enough to prevent dehumanization and destructiveness; a more worthy goal, and just as obtainable, is to humanize and to develop constructive relationships among people. The best overall strategy is to work with features that have determining relationships with most other features. The formulation of ways in which individuals manage
their impulses and inner conflicts is necessary to an understanding of how culture is generated and sustained. Changing personality and culture are, to be sure long-term processes but we do not have to wait to start trying (p. 303).


The American College Personnel Association (1989) offered the following guidelines for its member institution to consider in the development of
institutional responses:

1. Institutions should condemn any acts of violence, crime, or racial harassment immediately rather than allowing for a cool down period.

2. Institutions, in the event of an incident, should inform the campus community of the specific crime immediately.

3. Institutions should provide a centralized referral and counseling service for crime victims.

4. Institutions should inform the campus community, in a timely manner, of what is being done in response to particular incidents.

5. Institutions should encourage faculty, staff, and students to organize in order to increase communication and enhance a united crime prevention effort.

6. Institutions should create supportive living areas making sure that residence hall staff and campus police and security are trained to respond proactively and reactively to the types of crime that are currently being reported.

7. Administrators should critically examine student conduct policies and codes being specific of the consequences of particular criminal acts.
The ACE (1985) report urged student affairs administrators to insist upon an informed campus community on issues related to campus crime and for the detailed collection of institutional crime data. The document specifically addressed residence life staff, campus police, and persons responsible for the development of policy as critical to the achievement of these goals.

Castelli (1990) and Frankel (1989) reported on a number of specific programs at institutions nation-wide that educate the campus community on various aspects of the campus crime issue.

**Campus Crime Prevention Model**

Roark (1987a; 1987b) provided a useful model that organizes institutional crime prevention responses by categorizing them according to the level of prevention provided. The categories included:

1. **Tertiary Prevention.** Programs of direct service to individuals who have been victimized. These services include medical care, post-trauma counseling, protection, and the involvement of university and community judiciary procedures.

2. **Secondary Prevention.** Identification of existing
problems and targeting effective correction strategies in order to eliminate precipitating factors. This level includes establishing responsive institutional policies.

3. Primary Prevention. This level includes actions that take place before the onset of a problem. Thorough participation at this phase involves defining causes, actions, attitudes, and values relating to the conditions that foster violence.

Roark (1987b) believed that institutions must respond to this issue on all three levels using open discussion between administration and students as a tool. Roark (1988) has developed a handbook designed as a check-list for student affairs professionals and others to use as a tool in assessing the strengths and weaknesses of a particular institution's crime prevention program. The handbook included items from all three levels of her prevention framework.

Residence Life and Peer Influence: A Theoretical Framework for Crime Prevention Programs in the Residential Setting

A substantial amount of research has been devoted to the effectiveness of educating students outside the classroom setting. Sanford (1966) used the terms student
society and student culture to describe the out of classroom student environment. Sanford (1966) describes the structure of students' social roles and the patterns of values, beliefs, and behavior patterns that underline these roles. More recently, DeCoster & Mable (1981) described the sudden reshaping of student attitudes, values, and beliefs in terms of the dramatic transition from home to the college environment. They noted family, friends, and religion as the major factors influencing the pre-college attitudes, values, and beliefs. The transition to college means the distancing from parents and the establishment of new friends in a less restrictive environment. DeCoster and Mable wrote:

The campus scene, in contrast to high school, often presents students with a more cosmopolitan, pluralistic community, and exposure to a broad range of values and lifestyles. Peers are an immediate source of ideas, experiences, and challenges that significantly affect moral and ethical development (p. 23).

Sanford (1971) suggested that what students learn in college is determined by the norms, behaviors, attitudes, and values exhibited by fellow students in the peer
groups to which they belong. Anthropologist, John Bushnell (1966) conducted a four-year longitudinal study of student culture at Vasser College. His results were a central feature of the 1960 Mellon study of the contemporary college student (Sanford, 1966). Bushnell (1966) used the term "enculturate" to describe the informal student socialization process (p. 510). The enculturation process included an understanding of the ground rules for peer behavior and an understanding of the specialized symbols and prevailing attitude-value systems that with only minor modification, are passed down from one student generation to the next.

Theodore Newcomb (1966) provided a useful scheme that diagrams the importance of peer groups in the development of final student characteristics. The diagram of his theory is included as Figure 1. Sanford (1966) reports that Newcomb's framework relied on the premise that human beings need one another. With time, a group of people acquire the power to reward and punish behavior based on the degree of conformity of the group's individual members. Feldman and Newcomb (1973) believed that various institutional arrangements including student living conditions, roommate pairing, and membership in
Figure 1

Diagram illustrating influences upon final student characteristics

Greek-letter fraternities can cause substantial changes in student attitudes and behavior. Taylor wrote, "The relationship among students in the residences are the greatest factors in their general attitude toward the college and toward themselves" (Adams, 1970, p. 134). Davis (1977) summarized the results of a number of studies involving residence hall groupings and their effects on students. Of significance to this study is the conclusion that:

Students view their residence environment and the total university environment in much the same way. A comprehensive residence hall program may improve students' perceptions of the total university environment (p. 211).

Newcomb (1966) wrote that even though colleges in the United States vary enormously, peer groups of the most diverse form in them all. He stated:

In virtually all colleges, regardless of size and other characteristics, there are roommate pairs or triads, interest and activity groups, and informal circles of friends whose impact upon their members is often decisive (p. 473).

With time peer groups begin to accept one another
and to adopt shared attitudes and norms. The group's subsequent behavior reflects these shared beliefs (Sanford, 1971). Feldman and Newcomb (1973) identified three conditions that facilitate the influence of a peer group's attitude: size of the group, homogeneity of the group, and the importance to individuals of attitudes that are group supported. According to Newcomb (1966):

The social-psychological fact seems to be that group continuity is fostered by high levels of consensuality of both of two kinds: favorable attitudes toward each other, and similar attitudes toward things of common importance (p. 482).

Sanford (1972) emphasized that the educator who ignores the power of student peer-group influences is sacrificing an important educational opportunity.

**Summary**

Researchers have studied and theorized of the potential power of using the student environment and more specifically the residence hall environment as a setting for the education of students. This research provides a framework for testing the effectiveness of crime prevention education within the student residential environment. Campus crime is an important issue that is
deserved of experimental attention. The development of educational programs and testing their effectiveness in the student residential setting is timely. Statistics show that reported campus crime of many types are rising. Educational agencies, college and university administration, professional organizations, and students view crime and prevention as an important issue in need of institutional attention. Developmental educators have written extensively of the power of the campus environment and peer culture to influence positive change. The campus residential environment offers a useful arena to test the ability to promote positive change through educational intervention. Residence life administrators are personnel committed to education outside the classroom within the residential environment. The charge has been delivered by educational agencies, college and university administration, professional organizations, and students to develop comprehensive crime prevention programs that include educational intervention.
CHAPTER III

METHODS AND PROCEDURES

The major purpose of this study was to determine the effectiveness of two types of educational crime prevention programs within the residential environment. The two programs implemented as part of the study were the distribution of crime prevention literature and the presentation of crime prevention seminars within the residential environment.

For this purpose, the student population living in six residence halls at the University of Richmond in Virginia were studied during the fall semester 1991. The experiment involved the collection of three types of data including a questionnaire and two direct observations in order to determine the effectiveness of the two types of educational, crime prevention programs. Figure 2 diagrams the experiment from the perspective of the six residential environments studied.

Sample

The subjects used in the experiment were traditional aged, undergraduate male and female residential students enrolled at the University of Richmond. The University of Richmond is a private, small to medium sized,
Figure 2

Diagram of the experimental method by residence hall studied

Female Residence Hall A
Male Residence Hall A

Pretest
Data Collection

No Experimental Intervention

Post-test
Data Collection

Female Residence Hall B
Male Residence Hall B

Pretest
Data Collection

Crime Prevention Literature

Post-test
Data Collection

Female Residence Hall C
Male Residence Hall C

Pretest
Data Collection

Crime Prevention Seminars

Post-test
Data Collection
coeducational institution that enrolls approximately 2800 students annually. The student population comes from 38 states, the District of Columbia, Puerto Rico, and 18 foreign countries. The undergraduates are divided into two undergraduate divisions by gender. Each division has a residence life office that is managed by the Dean of each division. There are no coeducational residence halls. The men's division houses students, regardless of academic status, in eight traditional style residence halls. The women's division houses students in five facilities based on academic status. New women students are housed in three of the facilities while upper-class students are housed in the remaining three.

Both divisions place new students at random into available facilities as they are accepted and pay the required housing deposit. Upper-class students participate in an annual housing lottery, by division. Lottery numbers are assigned by academic class (sophomore, junior, senior). Based on the power of the lottery number, students pick their choice of available upper-class housing.

Three residence halls housing men and three residence halls housing women were chosen for the study.
since the experiment involved two experimental interventions and a control for each gender. The three male halls studied encompass 33% of the men's residence hall population. The three male halls studied accounted for 36% of the residence hall rooms available to men. The three female halls represented 63% of the women's residence hall population. The three female halls studied accounted for 60% of the residence hall rooms available to women. The percentage discrepancy between the number of male and female students studied represent the smaller size of each of the male residence halls. The sample size for the male and female residence halls studied in terms of the total population of residential students is outlined in Table 1. The sample size for the male and female residence hall rooms studied in terms of the total number of residence hall rooms is outlined in Table 2.
Table 1

Sample Size in Relation to Total Residential Population

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sample of Students Studied</th>
<th>Total Number of Residential Students</th>
<th>Percentage (%) Studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>323</td>
<td>987</td>
<td>33</td>
</tr>
<tr>
<td>Female</td>
<td>634</td>
<td>1015</td>
<td>63</td>
</tr>
</tbody>
</table>

Table 2

Sample Size in Relation to Total Number of Residence Hall Rooms

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sample of Rooms Studied</th>
<th>Total Number of Residence Hall Rooms</th>
<th>Percentage (%) Studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>192</td>
<td>530</td>
<td>36</td>
</tr>
<tr>
<td>Female</td>
<td>316</td>
<td>526</td>
<td>60</td>
</tr>
</tbody>
</table>

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Types of Experimental Interventions

Control

Residents of one residence hall of each gender served as control groups meaning they were exposed to no experimental treatment. The male control hall housed 103 residents while the female control hall housed 270 residents.

Crime prevention literature

Residents of one residence hall of each gender were distributed a packet of crime prevention information and literature developed in consultation with the University's Safety Officer. The literature was given to all 107 residents of a male hall and to all 62 residents of a female hall. The crime prevention literature packet included:

1. Crime statistics for Virginia Colleges and Universities

2. Articles from three college newspapers describing tragic crimes that likely could have been avoided if residents had practiced more positive safety conscious behaviors

3. University police information including crime prevention tips and prevention services currently

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available through the University police

4. Newspaper articles from the Chronicle of Higher Education (Dodge, 1990) and the USA Today (Burgett, 1990; Kallette, 1990) calling for campus community awareness and action in the midst of escalating crime statistics. Specific instances of campus crime prevention programs developed and implemented by students are chronicled in these articles. Also specific information of the relationship between drugs and alcohol is included within these articles.

*Crime Prevention Seminars*

Residents of one residence hall of each gender were invited to attend a crime prevention seminar developed and implemented by the University's Safety Officer, the University's Crime Investigator, and the researcher. The seminar programs were approximately 45 minutes in length. The agenda for the seminars consisted of:

1. Introduction of the program presenters
2. Description of the University's crime statistics for the period 1985-1991
3. Description of actual, disturbing stories of crime occurrences at the University of Richmond. Each of the stories involved crimes that probably could have been
avoided if the students involved had practiced a higher degree of safety conscious behaviors

4. Discussion of crime prevention tips and of the crime prevention services offered by the University of Richmond police

5. Questions and answers

The seminar was advertised to all 301 residents of a female hall and to all 107 residents of a male hall. The seminar was purposely promoted, designed, and implemented in a fashion similar to other educational, residence hall programs presented at the University. Attendance was voluntary and was offered twice for each gender to accommodate conflicting student schedules. Fifty-three percent (160) of the 301 residents living in the female seminar hall attended one of the two crime prevention seminars. Thirty-eight percent (41) of the 107 residents living in the male seminar hall attended one of the two crime prevention seminars. The types of experimental interventions for the male residence halls studied are outlined in Table 3. The types of experimental interventions for the female residence halls studied are outlined in Table 4. A timeline of the entire
### Table 3

**Male Students Studied by Residence Hall, Type of Intervention, Number of Residents, Number of Rooms**

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Type of Intervention</th>
<th>Total Number of Residents</th>
<th>Total Number of Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeter</td>
<td>Control</td>
<td>107</td>
<td>68</td>
</tr>
<tr>
<td>Dennis</td>
<td>Literature</td>
<td>103</td>
<td>52</td>
</tr>
<tr>
<td>Thomas</td>
<td>Seminar</td>
<td>113</td>
<td>72</td>
</tr>
</tbody>
</table>

### Table 4

**Female Students Studied by Residence Hall, Type of Intervention, Number of Residents, Number of Rooms**

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Type of Intervention</th>
<th>Total Number of Residents</th>
<th>Total Number of Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora Robins</td>
<td>Control</td>
<td>270</td>
<td>140</td>
</tr>
<tr>
<td>Keller</td>
<td>Literature</td>
<td>63</td>
<td>29</td>
</tr>
<tr>
<td>Gray</td>
<td>Seminar</td>
<td>301</td>
<td>147</td>
</tr>
</tbody>
</table>
experiment highlighting experimental interventions is included as Appendix A.

Data Definitions and Measurement

The experiment involved the collection of three types of dependent data. For purposes of clarity, this data has been termed, individual data, room data, and building data since each type of data involved different collection methods. These data types are detailed in the next three sections.

Individual Data

A two part "Safety Behavior and Crime Attitude Survey" was developed to directly measure individual safety conscious behaviors and crime prevention attitudes. A copy of the survey form is included as Appendix B. The survey was developed in consultation with police and safety administration at two small to medium sized Virginia universities. In addition, recommendations found in the Roark model (1987a; 1987b), the Guide for Preventing Campus Violence (Roark, 1988), the American College Personnel Association Task Force report (1989) and the American Council on Education's (1987) Achieving Reasonable Campus Security were considered during survey development. Part One of the survey consisted of 13
questions that assessed actual safety conscious behaviors including the degree to which individuals lock room and car doors, walk alone at night, engrave personal belongings, pay attention to campus crime alerts, and prop exterior residence hall doors. Survey raters assessed their behavior by choosing between five responses; always, almost always (more than 50% of the time), sometimes (50% of the time), seldom (less than 50% of the time), and never.

Part Two of the survey assessed individual attitudes toward campus crime and its prevention. The section consisted of seventeen statements reflecting personal feelings of campus crime in general as well as specific beliefs of how to properly educate the University of Richmond residential community regarding crime prevention. Survey raters assessed their behavior by choosing between five responses; strongly agree, agree, neutral, disagree, and strongly disagree.

All residents from the six residence halls studied were invited to respond to the survey two different times during the fall semester 1991. Student residence life staff in each of the six halls distributed and collected the survey forms from residents living in their area of
responsibility. The first survey distribution, described as the pre-test, occurred immediately preceding the introduction of the experimental interventions. The second survey distribution, described as the post-test, occurred immediately following the implementation of the experimental interventions. Figures 3 offer a diagram of the individual data type and when the data collection occurred in relation to the entire experimental process.

For purposes of analysis, each survey was scored. Each survey participant received two scores for their pre and post test responses for part 1 of the survey and two scores for their pre and post test responses for part 2 of the survey. A higher numerical score on either part of the survey reflected a greater degree of practice of safety conscious behavior or a more positive attitude toward campus crime prevention. For purposes of analysis, scores for responses to questions 9, 10 and 11, and 12 and 13 were calculated separately since respondents had to meet certain criteria in order to answer the questions. Only survey data from students completing both the pre and post test could be considered for purposes of statistical analysis. The response rates for the pretest, post-test, and combined pre and post-test surveys for the
Figure 3

Diagram of "Individual Data" collection highlighting the survey data collection process

Pre-test (Distribution and Collection of Survey to the six Experimental Residence Halls Two Weeks Preceding Experimental Interventions)

Intervention (Crime Prevention Literature Distributed and Crime Prevention Seminars Presented Two Weeks Following Pretest Data Collection in the Halls Receiving Experimental Treatment)

Post-test (Distribution and Collection of Survey to the Six Experimental Halls Two Weeks Following Interventions)

Data Analysis using Analysis of Variance
residents of the six residence halls studied are included in Tables 5, 6, and 7.

Pilot Study

A sample of 46 students and administrators participated in a pilot study involving the survey. These respondents were either professional or paraprofessional as they included only student residence life staff or professional residence life personnel. Their positive reaction to the survey was considered expert opinion and confirmed face and content validity.

Residence Hall Room Data

A methodology was developed for measuring the instances of unlocked room doors in the six residence halls studied. Student residence life staff in the six experimental residence halls observed the occurrence of unlocked room doors on two occasions. The first observation, described as the pre-test, occurred immediately preceding the introduction of the educational, experimental interventions. The second observation, described as the post-test, occurred immediately following the implementation of the experimental interventions. Each of the observations involved five checks of all room doors in each of the
Table 5

"Safety Behavior and Crime Attitude Survey": Pretest
Response Rates by Residence Hall

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Number of Residents</th>
<th>Number of Pretest Surveys Returned</th>
<th>Percentage Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora Robins (Female, Control)</td>
<td>270</td>
<td>238</td>
<td>88</td>
</tr>
<tr>
<td>Keller (Female, Literature)</td>
<td>63</td>
<td>51</td>
<td>81</td>
</tr>
<tr>
<td>Gray (Female, Seminar)</td>
<td>301</td>
<td>221</td>
<td>73</td>
</tr>
<tr>
<td>Jeter (Male, Control)</td>
<td>107</td>
<td>88</td>
<td>82</td>
</tr>
<tr>
<td>Dennis (Male, Literature)</td>
<td>103</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>Thomas (Male, Seminar)</td>
<td>113</td>
<td>102</td>
<td>90</td>
</tr>
</tbody>
</table>
"Safety Behavior and Crime Attitude Survey": Posttest
Response Rates by Residence Hall

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Number of Residents</th>
<th>Number of Posttest Surveys Returned</th>
<th>Percentage Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora Robins (Female, Control)</td>
<td>270</td>
<td>178</td>
<td>66</td>
</tr>
<tr>
<td>Keller (Female, Literature)</td>
<td>63</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td>Gray (Female, Seminar)</td>
<td>301</td>
<td>182</td>
<td>60</td>
</tr>
<tr>
<td>Jeter (Male, Control)</td>
<td>107</td>
<td>71</td>
<td>66</td>
</tr>
<tr>
<td>Dennis (Male, Literature)</td>
<td>103</td>
<td>63</td>
<td>61</td>
</tr>
<tr>
<td>Thomas (Male, Seminar)</td>
<td>113</td>
<td>75</td>
<td>66</td>
</tr>
</tbody>
</table>
Table 7

"Safety Behavior and Crime Attitude Survey": Percentage of Students Returning Both Pre and Post Test Surveys by Residence Hall

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Number of Residents</th>
<th>Number of Students Returning both Pre and Post Test Surveys</th>
<th>Percentage Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora Robins (Female, Control)</td>
<td>270</td>
<td>166</td>
<td>61</td>
</tr>
<tr>
<td>Keller (Female, Literature)</td>
<td>63</td>
<td>38</td>
<td>60</td>
</tr>
<tr>
<td>Gray (Female, Seminar)</td>
<td>301</td>
<td>164</td>
<td>55</td>
</tr>
<tr>
<td>Jeter (Male, Control)</td>
<td>107</td>
<td>58</td>
<td>54</td>
</tr>
<tr>
<td>Dennis (Male, Literature)</td>
<td>103</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>Thomas (Male, Seminar)</td>
<td>113</td>
<td>66</td>
<td>58</td>
</tr>
</tbody>
</table>

Note. The analysis of variance for the survey data was calculated using only the data from students who completed both the pre and post tests.
residence halls over a 24 hour period. The checks occurred at 10 p.m., 1 a.m., 8:30 a.m., 12 noon and 6 p.m. on a Sunday/Monday prior to and following the educational, crime prevention program interventions. Each locked door check involved the student staff member knocking on the room door and checking the door lock by turning the door knob. A room door was considered locked if the door knob would not turn. A room door was considered unlocked if the door knob turned and the room could be entered to find no one in the room or the occupants of the room asleep. Results of the observations were recorded on a "Pre-Test Locked Door Sheet" and a "Post-Test Locked Door Sheet by room. Unlocked doors were recorded by designating a "no" in the appropriate cell corresponding to the room number and time of the observation on the door sheets. The number of "no" designations were calculated for each room and recorded in the score column of the sheet. Therefore, each room received a 1-5 score on each of the pre and post test checks depending on the number of times the room door was left unlocked. The room scores from the pre and post test observations were used to calculate the necessary analysis of variance F statistic. Figures 4 offer a
diagram of the residence hall room data type and when the data collection occurred in relation to the entire experimental process. A sample of one of the Pre-test/Post-test locked door sheets is included as Appendix C.

Residence Hall Building Data

A methodology was developed for collecting data of the number of occurrences residence hall exterior doors were propped open during certain defined periods in the experimental process. This data could only be collected for the female residence halls studied since only these halls are equipped with exterior doors that are locked on a 24 hour basis. The male residence halls remain open on a 24 hour basis. The exterior doors to the women's residence halls are equipped with an alarm that signals the University Police station when a door is propped open for more than 30 seconds. This alarm is recorded on the computer system located in the police station. Once the alarm is sounded in the police station, a police or security staff person immediately responds to the building and secures the propped door. The University's computer system records these incidents seven days a week during the hours 10 p.m. until 7 a.m. Computer printouts
Figure 4
Diagram of "Room Data" collection highlighting the unlocked room door data collection process

Pre-test Observation (Student Residence Life Staff observe the number of locked room doors in all six experimental residence halls two weeks following the experimental interventions)

Intervention (Crime prevention literature distributed and crime prevention seminars presented two weeks following pretest data collection in the halls receiving experimental treatment)

Post-test Observation (Student residence life staff observe number of locked room doors in all six experimental residence halls two weeks following experimental interventions)

Data Analysis using Analysis of Variance

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were collected on a daily basis throughout the fall semester 1991. Printouts were examined extracting specific instances of the number of recorded propped exterior door incidents for the six residence halls studied for three precise weeks. The first week long propped exterior door count, described as the pre-test check, occurred the week immediately prior to the introduction of the experimental interventions. The second period of data collection, described as the post test check, occurred the week following the experimental interventions. The third week period, described as the delayed check, occurred five weeks following the experimental interventions. During each of these specific weeks, the number of propped door occurrences as observed on the computer printouts were recorded. This data was used to calculate the necessary chi-square comparison statistic. Figures 5 offer a diagram of the building data type and when the data collection occurred in relation to the entire experimental process. The number of propped exterior residence hall doors for the three designated weeks by female residence hall are indicated in Table 8.
Figure 5
Diagram of "Building Data" collection highlighting the propped exterior door data collection process

Continuous Daily Observation of Propped Door Instances Using Alarm Door Computer Printouts Beginning Two Weeks Proceeding Experimental Interventions

Intervention (Crime Prevention Literature Distributed and Crime Prevention Seminars Presented in the Residence Halls Receiving Experimental Treatment)

Daily Observation of Alarm Door Computer Printouts Continues Until Five Weeks Following Experimental Interventions

Data Analysis using Chi-Square Comparison
Table 8
Number of Propped Exterior Doors Observed in the Female Residence Halls During Designated Weeks

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Delayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lora Robins (Control)</td>
<td>7</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Keller Hall (Literature)</td>
<td>9</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Gray Court (Seminar)</td>
<td>15</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
Specific Research Questions and Statistical Analysis

It is hypothesized that educational intervention within the residential environment will influence significant, positive changes in the degree of safety conscious behaviors observed in the residence halls receiving treatment. The previously reported research questions were studied using the following statistical techniques:

1. Is there a significant difference between upper-class students and new students in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs? A $2 \times 2 \times 3 \times 2$ analysis of variance was conducted to test for significant differences in survey scores achieved on the crime prevention survey administered before and after the experimental interventions. The analysis tested for the independent variable, academic class.

It is hypothesized that new students will show the greatest change in responses due to their newness to the campus community. In addition, new students are less likely to have developed hard to break habits, positive or negative, regarding crime prevention behaviors.
2. Is there a difference between men and women in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs? A 2 X 2 X 3 X 2 analysis of variance was conducted to test for significant differences in survey scores achieved on the crime prevention survey administered before and after the experimental interventions. The analysis tested for the independent variable, gender. Also, a 2 X 3 X 2 analysis of variance was conducted on room scores achieved as a result of the locked door checks before and after experimental interventions. The test included gender as an independent variable.

It is hypothesized that females will show significantly greater, positive change in regard to safety conscious behaviors. The literature and safety interventions described a number of serious crimes that involved women. The discussion of crimes involving men were limited to less emotional crimes such as theft or trespassing. In addition, the crime prevention information available from university police departments and professional associations used in developing the educational programs were targeted at women. This
information emphasized sexual assault and rape.

3. Is there a significant difference between types of educational intervention? Three treatments were administered as a part of this study. No treatment, literature treatment, and seminar treatment. A $2 \times 2 \times 3 \times 2$ analysis of variance was conducted to test for significant differences in survey scores achieved on the crime prevention survey administered before and after each of the experimental interventions. The analysis included intervention type as an independent variable. Also, a $2 \times 3 \times 2$ analysis of variance was conducted on room scores achieved as a result of locked door checks before and after experimental interventions. The test included intervention types as an independent variable. Finally, the chi-square statistical procedure was used to examine the propped exterior door data collected for the three female experimental residence halls. This enabled the comparison of the number of propped door incidents prior to the experimental interventions, immediately following the experimental interventions, and five weeks following the experimental interventions.

It is hypothesized that the most significant, positive change in safety conscious behavior would be
observed in the seminar halls since the intervention involves personalized discussion and instruction. Also, it is hypothesized that the second most significant degree of positive change in safety conscious behavior will occur in the literature halls. The residents of these halls were exposed to specific information regarding the campus crime problem and the need for personal crime prevention responsibility. It is hypothesized that statistical tests involving the control halls will be nonsignificant since residents were exposed to no campus crime information or crime prevention tips.

4. Do students perceive the need for the implementation of the educational crime prevention programs employed as part of this study? All students surveyed were asked if they would like the University to provide crime safety information and crime prevention seminars in the residence halls. Descriptive statistics were calculated concerning the frequency of positive responses. A comparison of these statistics by residence hall will reveal if the perceived need of the residential populations increased significantly after being exposed to these type of crime prevention programs.

It is hypothesized that students do perceive a need
for educational programming. Astin (1984) and the Carnegie Foundation (1990) reported have reported that students perceive campus crime to be an important issue facing college life. Details of this and other reports concerning student perception of campus crime are included in Chapter 2.
CHAPTER 4
ANALYSIS OF RESULTS

Three types of dependent data were collected during the fall semester 1991 to determine if educational intervention, in the form of residence hall programming, affected the level of safety conscious behaviors exhibited by residential students at the university studied. The independent variables involved were academic class (new students versus upper-class students), gender, time (pre and post-test time interval) and type of experimental intervention. The three types of experimental interventions included; the distribution of crime prevention literature to residential students, the presentation of crime prevention seminars to residential students, and no intervention (control). The dependent variables involved in the study included; scores achieved on pre and post-test distributions of the "Safety Behavior and Crime Attitude" survey, pre and post-test scores achieved on locked room door observations, and the number of occurrences of propped exterior doors in the female residence halls observed at different times throughout the experiment. Three male residence halls and three female residence halls were used in the study. The
analysis of variance and the Pearson chi-square were the two statistical procedures employed in the study.

**Hypothesis**

The purpose of this study was to measure the effectiveness of crime prevention seminars conducted by campus safety and residential life personnel and the effectiveness of the distribution of crime prevention literature in influencing positive change in safety conscious behaviors. It was hypothesized that these educational interventions within the residential environment would influence significant, positive changes in the degree of safety conscious behaviors observed in the residence halls receiving treatment. A thorough analysis of the three types of dependent data collected was performed. This analysis revealed some significant findings that support the hypothesis. This chapter is arranged using the research questions outlined in Chapter 1 as headings. This organization allows for the discussion of the specific results associated with each type of dependent data for each of the subsidiary research questions to the hypothesis.
New Students versus Upper-class Students

The first research question was concerned with whether there is a significant difference between upper-class students and new students in regard to positive changes in safety conscious behaviors as a result of the implementation of the two educational crime prevention interventions. It was hypothesized that new students will show the greatest positive change in survey responses due to their newness to the campus community. In addition, it is believed that new students are less likely to have developed hard to break habits, positive or negative, regarding crime prevention behaviors. Two analysis of variance procedures were conducted to test for significant differences in the survey scores achieved on the "Safety Behavior and Crime Attitude" survey administered before and after the experimental interventions in the three male residence halls studied. The first analysis of variance test was conducted using pre and post-test scores achieved on the safety behavior portion (part 1) of the survey. The second analysis of variance test was conducted using pre and post-test scores achieved on the crime attitude portion (part 2) of the survey. Both analyses considered the independent
variable, academic class since students completing the survey revealed their academic status. Unfortunately the number of upper-class female students completing the survey in the control hall were too few (n= 9) to allow the consideration of analysis of variance findings for female students. Critical to the analyses of the survey data is the independent variable time. Academic class would have to interact with time between the pre and post-test significantly in order to conclude that there was a significant difference between men and women in regard to survey scores achieved before and after the experimental interventions. The analysis of variance for the male students studied produced insignificant findings when considering scores achieved on the safety behavior portion of the survey (part 1). The three way interaction between class, type of intervention and time between pre and post test was insignificant. All two way interactions of the independent variables also produced insignificant F statistics. The analysis of variance for the male students studied also produced insignificant findings when considering scores achieved on the crime attitude portion of the survey (part 2). The three way interaction between class, type of intervention and time between pre
and post test was insignificant. All two way interactions of the independent variables also produced insignificant F statistics. Therefore, the hypothesis that new students will show the greatest positive change in survey responses due to their newness to the campus community is rejected. Male new students living in residential areas receiving educational, experimental treatment did not score significantly higher on post-test surveys completed following these interventions. The results of the analysis of variance considering academic class using pre and post-test survey scores achieved on the safety behavior portion of the survey (part 1) for the 170 male students studied are indicated in Table 9. The results of the analysis of variance considering academic class using pre and post-test survey scores achieved on the crime attitude portion of the survey (part 2) for the 170 male students studied are indicated in Table 10.

**Gender**

The second research question asked if there is a significant difference between men and women in regard to positive changes in safety conscious behaviors as a result of the implementation of the two educational crime prevention programs in the residence halls studied. It
Table 9

ANOVA Summary Table for Test of Significance Considering Academic Class of Male Students Studied for Safety Behavior (Part 1) Survey Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>18.0</td>
<td>18.0</td>
<td>.05</td>
<td>.479</td>
</tr>
<tr>
<td>Type</td>
<td>2</td>
<td>608</td>
<td>304.1</td>
<td>.848</td>
<td>.000</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>3.48</td>
<td>3.48</td>
<td>.032</td>
<td>.571</td>
</tr>
<tr>
<td>Class*Time</td>
<td>1</td>
<td>0.07</td>
<td>0.07</td>
<td>.01</td>
<td>.936</td>
</tr>
<tr>
<td>Class*Type</td>
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<td>9.21</td>
<td>4.61</td>
<td>.013</td>
<td>.880</td>
</tr>
<tr>
<td>Class<em>Type</em></td>
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<td>1.16</td>
<td>0.58</td>
<td>.05</td>
<td>.948</td>
</tr>
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<td>Time</td>
<td>164</td>
<td>1770</td>
<td>10.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study
Table 10

ANOVA Summary Table for Test of Significance Considering Academic Class of Male Students Studied for Crime Attitude (Part 2) Survey Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
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<td>67.5</td>
<td>67.5</td>
<td>1.4</td>
<td>.238</td>
</tr>
<tr>
<td>Type</td>
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<td>24.7</td>
<td>.51</td>
<td>.599</td>
</tr>
<tr>
<td>Time</td>
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<td>0.01</td>
<td>0.01</td>
<td>.00</td>
<td>.990</td>
</tr>
<tr>
<td>Class*Time</td>
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<td>54.8</td>
<td>54.8</td>
<td>1.8</td>
<td>.180</td>
</tr>
<tr>
<td>Class*Type</td>
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<td>85.1</td>
<td>42.5</td>
<td>.88</td>
<td>.416</td>
</tr>
<tr>
<td>Class<em>Type</em></td>
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<td>51.5</td>
<td>25.7</td>
<td>.85</td>
<td>.428</td>
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<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>163</td>
<td>4921</td>
<td>30.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study
was hypothesized that females would show significantly greater, positive change in regard to safety conscious behaviors. Two types of dependent data collected as part of this study were used in analyzing this question. The following outlines the results of statistical tests involving the locked room data and crime prevention survey data.

Locked Room Data

The results of the analysis of the locked room door data partially supported the hypothesis. The analysis of variance conducted on the locked room data collected by the Resident Assistants considered the independent variable, gender. The first locked door observation, described as the pre-test, occurred immediately preceding the introduction of the experimental interventions. The second locked door observation, described as the post-test, occurred immediately following the implementation of the experimental interventions. Each of the observations involved five checks of all room doors in each of the residence halls over a 24 hour period. The checks occurred at 10 p.m., 1 a.m., 8:30 a.m., 12 noon and 6 p.m. on a Sunday/Monday prior to and following the educational, crime prevention program interventions. Pre
and post-test room scores reflecting the number of times residence hall room doors were left unlocked before and after experimental intervention were compared for all residence hall rooms studied. Results of the analysis of variance revealed an insignificant three way interaction between gender, type of intervention, and time between the pre and post-test. The two way interaction between gender and time between the pre and post-test observation produced an insignificant F statistic. However, the analysis did reveal a significant F (11.01) statistic for the gender by type interaction. The follow-up Wholly Significant Difference (WSD) test revealed significant differences in the unlocked door means by type of intervention for the female population studied. The q (.05, 508, 6) value of 4.03 was used in calculating a WSD calculated value of .2469 that was used to examine the difference between the male and female locked room door score means by type of intervention. This critical value was small enough to determine a substantial enough difference between the locked door means for the female population studied to conclude that the literature intervention was most effective at reducing the mean number of unlocked room doors. The WSD test, using the
calculated value of .2469 was not conclusive in determining a most effective treatment type for the male population studied. Given this gender difference associated with the WSD test results, it was concluded that the literature treatment had the lowest mean unlocked room score. The female residence hall receiving the seminar treatment had the second lowest mean locked room score. The female residence hall receiving no treatment had the highest mean unlocked room door score. Therefore, the female residence halls studied showed the greatest variation in mean scores associated with the number of residence hall rooms left unlocked. The residence hall populations receiving the literature and seminar interventions had lower overall means in terms of the number of times room doors were left unlocked. The follow-up WSD test did not reveal significant differences in regard to locked room door means when considering the male residence hall populations studied. The results of the analysis of variance considering gender using the pre and post-test locked room score data for the 1028 residence hall rooms studied are indicated in Table 11. Results of the WSD follow up statistic for the significant interaction between gender and type of
intervention are indicated in Table 12.

Survey Data

An analysis of variance was performed using pre and post-test survey scores achieved before and after the experimental interventions for all students involved in the study. The test included gender as an independent variable. A separate analysis was run for each part of the survey. Part 1 of the survey involved questions concerning actual crime prevention behaviors while Part 2 involved questions concerning personal attitudes towards crime prevention behaviors. Critical to the analysis of the survey data is the independent variable time. Gender would have to interact with time between the pre and post-test significantly in order to conclude that there was a significant difference between men and women in regard to survey scores achieved before and after the experimental interventions. Results of the two analysis of variance tests using part 1 and part 2 pre and post-test survey scores demonstrated an insignificant F statistic at the .05 level of significance in regard to gender differences. There were no significant interactions involving gender and time. Therefore, it was concluded that there was no significant difference
Table 11

ANOVA Summary Table for Test of Significance Considering Gender Using Locked Room Door Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>6.29</td>
<td>6.29</td>
<td>5.3</td>
<td>.021</td>
</tr>
<tr>
<td>Type</td>
<td>2</td>
<td>41.9</td>
<td>20.9</td>
<td>17</td>
<td>.000</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>2.86</td>
<td>2.86</td>
<td>4.8</td>
<td>.029</td>
</tr>
<tr>
<td>Gender*Time</td>
<td>1</td>
<td>0.01</td>
<td>0.01</td>
<td>.01</td>
<td>.920</td>
</tr>
<tr>
<td>Gender*Type</td>
<td>2</td>
<td>27.2</td>
<td>13.64</td>
<td>11</td>
<td>**.000</td>
</tr>
<tr>
<td>Gender<em>Type</em>Time</td>
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<td>0.92</td>
<td>0.46</td>
<td>.77</td>
<td>.463</td>
</tr>
<tr>
<td>Error</td>
<td>508</td>
<td>600</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study
** Significant at the .05 level of significance
Table 12

WSD Follow Up Test Data for the Gender by Type Interaction

<table>
<thead>
<tr>
<th>Type/Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>.7360</td>
<td>1.386</td>
</tr>
<tr>
<td>Literature</td>
<td>.7075</td>
<td>.3905</td>
</tr>
<tr>
<td>Seminar</td>
<td>.5625</td>
<td>.7685</td>
</tr>
</tbody>
</table>

q (.05, 508, 6 or 4.03) .6/160 = .2469
between men and women in regard to pre and post-test survey scores achieved before and after the experimental interventions. There was not a significant difference by gender on either the behavior portion (part 1) or the attitude portion (part 2) of the survey in terms of increases in survey scores. Men and women were not influenced to respond differently to survey questions concerning crime prevention behaviors or crime prevention attitudes as result of the implementation of the experimental crime prevention program interventions. Critical analysis of variance calculations for part 1 (behavior questions) pre and post-test survey scores are indicated in Table 13. Table 14 includes analysis of variance calculations using part 2 (attitude questions) pre and post-test survey scores.

**Type of Experimental Intervention**

The third research question asked if there is a significant difference between the types of educational intervention employed in the study. The three treatments that were administered as a part of this study were, no treatment, literature treatment, and seminar treatment. It was hypothesized that the most significant, positive change in safety conscious behavior would be observed in
Table 13
ANOVA Calculation For Gender by Time Interaction Using Part 1 (Crime Prevention Behaviors Questions) Survey Score Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender *Time</td>
<td>1</td>
<td>3.40</td>
<td>3.40</td>
<td>.41</td>
<td>.523</td>
</tr>
<tr>
<td>Gender <em>Type</em> Time</td>
<td>2</td>
<td>29.2</td>
<td>14.6</td>
<td>1.75</td>
<td>.175</td>
</tr>
<tr>
<td>Error</td>
<td>529</td>
<td>4410.5</td>
<td>8.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study

Table 14
ANOVA Calculation For Gender by Time Interaction Using Part 2 (Crime Prevention Attitude Questions) Survey Score Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender *Time</td>
<td>1</td>
<td>4.59</td>
<td>4.59</td>
<td>.24</td>
<td>.626</td>
</tr>
<tr>
<td>Gender <em>Type</em> Time</td>
<td>2</td>
<td>19.47</td>
<td>9.73</td>
<td>.50</td>
<td>.604</td>
</tr>
<tr>
<td>Error</td>
<td>528</td>
<td>10192.01</td>
<td>19.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study
the seminar halls since the intervention involved personalized discussion and instruction. Also, it was hypothesized that the second most significant degree of positive change in safety conscious behavior would occur in the literature halls since the residents of these halls were exposed to specific information regarding the campus crime problem and the need for personal crime prevention responsibility. It was hypothesized that statistical tests involving the control halls would produce insignificant results since residents were exposed to no crime prevention education. All three types of dependent data collected as part of this study were used in analyzing this question. Results of the locked door data and propped exterior door data supported the hypotheses stated for this research question while the survey data analysis revealed insignificant results. The following outlines the results of statistical tests involving the locked room data, survey score data, and propped exterior door data.

Locked Door Data

The analysis of variance conducted on the locked room data collected by the Resident Assistants considered the type of intervention independent variable. Pre and
post-test room scores reflecting the number of times residence hall room doors were left unlocked before and after experimental intervention were compared for all residence hall rooms studied. Results of the analysis of variance revealed an insignificant three way interaction between gender, type of intervention, and time between the pre and post-test. However, the two way interaction between type of intervention and time between the pre and post-test observation produced a significant $F = 11.24$ (2, 1028) statistic. The follow up WSD test was conclusive in determining that the seminar intervention was most influential in decreasing the mean score of the number of unlocked room scores. The $q (.05, 508, 6)$ value of 4.03 was used in calculating a WSD critical value of .23920 that was used to examine the difference between the pre and post-test locked room door score means by type of intervention. This critical value was small enough to determine a substantial enough difference between the pre and post-test locked room door means (time) for the seminar intervention to conclude that the exposure to the crime prevention seminar was most effective at producing a decrease in the number of locked room doors. The results of the analysis of variance
considering type of experimental intervention using the pre and post-test locked room score data for the 1028 residence hall rooms studied are indicated in Table 15. Results of the WSD follow up statistic for the significant interaction between gender and type of intervention are indicated in Table 16.

**Propped Exterior Door Data**

The Pearson chi-square statistical procedure was used to examine the propped exterior door data collected for the three female experimental residence halls. The results supported the hypothesis. The number of propped exterior door incidents for the three female residence halls studied was recorded for three precise weeks. The first week long count, described as the pre-test check, occurred the week immediately prior to the introduction of the experimental interventions. The second period of data collection, described as the post test check, occurred the week following the experimental interventions. The third week period, described as the delayed check, occurred five weeks following the experimental interventions. Table 8 in Chapter 3 outlines the specific number of propped door incidents in each of the three female residence halls studied for the three
Table 15

ANOVA Summary Table for Test of Significance Considering Type of Intervention Using Locked Room Door Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td>6.29</td>
<td>6.29</td>
<td>5.3</td>
<td>.021</td>
</tr>
<tr>
<td>Type</td>
<td>2</td>
<td>41.9</td>
<td>20.9</td>
<td>17</td>
<td>.000</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>2.86</td>
<td>2.86</td>
<td>4.8</td>
<td>.029</td>
</tr>
<tr>
<td>Type*Time</td>
<td>2</td>
<td>13.4</td>
<td>6.72</td>
<td>11.2</td>
<td>**.000</td>
</tr>
<tr>
<td>Gender*Type</td>
<td>2</td>
<td>0.92</td>
<td>0.46</td>
<td>.77</td>
<td>.463</td>
</tr>
<tr>
<td>*Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>508</td>
<td>600</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* .05 level of significance was used in this study

** Significant at the .05 level of significance

Table 16

WSD Follow Up Test Data for the Time by Type Interaction

<table>
<thead>
<tr>
<th>Type/Time</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>1.149</td>
<td>1.197</td>
</tr>
<tr>
<td>Literature</td>
<td>.5413</td>
<td>.6350</td>
</tr>
<tr>
<td>* Seminar</td>
<td>.9275</td>
<td>.4753</td>
</tr>
</tbody>
</table>

\[ q (.05, 508, 6 or 4.03) .6/171.333 = .23920 \]

* Difference between means large enough to conclude seminar intervention significantly influenced cell means
experimental periods. The purpose of the chi-square calculation was to compare whether the actual number of propped door occurrences deviated from the expected number of propped door occurrences significantly. The chi-square procedure produced a calculated value of 8.36141 (df = 4) and a minimum expected frequency of 5.6 propped door occurrences for each cell. The appropriate chi-square tables were consulted in order to determine that the calculated value demonstrated a .07920 level of significance, shy of the .05 level of significance being used in the study. However, it was concluded that the difference between the actual and expected number of propped exterior doors was approaching the .05 level of significance. The residence hall exposed to the crime prevention seminar showed the greatest improvement in terms of the number of propped exterior doors between the initial pre-intervention observation and the delayed observation. Table 17 outlines the Pearson Chi-square calculations for the propped exterior data collected for the female residence halls.

Survey Data

An analysis of variance was performed using pre and post-test survey scores achieved before and after the
Table 17

Frequency Distribution and Chi Square Calculations for Propped Exterior Door Observations in the Female Residence Halls Studied

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Pre</th>
<th>Post</th>
<th>Delayed</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Hall</td>
<td>6</td>
<td>10</td>
<td>11</td>
<td>27 (39.7%)</td>
</tr>
<tr>
<td>Literature Hall</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>20 (29.4%)</td>
</tr>
<tr>
<td>Seminar Hall</td>
<td>13</td>
<td>4</td>
<td>4</td>
<td>21 (30.9%)</td>
</tr>
<tr>
<td>Column Total</td>
<td>26</td>
<td>19</td>
<td>23</td>
<td>68 (100%)</td>
</tr>
<tr>
<td></td>
<td>38.2%</td>
<td>27.9%</td>
<td>33.8%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Pearson value = 8.36141

**Level of Significance = .07920

***Minimum Expected Frequency of Locked Door Occurrences per Cell = 5.58
experimental interventions for all students involved in the study. The test included type of intervention as an independent variable. A separate analysis was run for each part of the survey. Part 1 of the survey involved questions concerning actual crime prevention behaviors while Part 2 involved questions concerning personal attitudes towards crime prevention behaviors. Critical to the analysis of the survey data is the independent variable, time. Type of intervention would have to interact with time between the pre and post-test significantly in order to conclude that there was a significant difference between men and women in regard to survey scores achieved before and after the experimental interventions. Results of the two analysis of variance tests using part 1 and part 2 pre and post-test survey scores demonstrated an insignificant F statistic at the .05 level of significance in regard to type of intervention differences. There were no significant interactions involving type of intervention and time. Therefore, it was concluded that there was no significant difference between types of experimental intervention in regard to pre and post-test survey scores achieved before and after the experimental interventions. There was not
a significant difference by type of intervention on either the behavior portion (part 1) or the attitude portion (part 2) of the survey in terms of increases in survey scores. The residential students studied were not influenced to respond differently to survey questions concerning crime prevention behaviors or crime prevention attitudes as result of the exposure to one of the experimental crime prevention program interventions. Critical analysis of variance calculations for part 1 (behavior questions) pre and post-test survey scores are indicated in Table 18. Table 19 includes analysis of variance calculations using part 2 (attitude questions) pre and post-test survey scores.

**Perceived Student Need**

The fourth research question asked if students perceive the need for the implementation of the educational crime prevention programs used in this study. It was hypothesized that students do perceive a need for educational programming since the literature review revealed that researchers have found that students consider campus crime an important and serious issue. Astin (1984) and the Carnegie Foundation (1990) have
Table 18

ANOVA Calculation For Type of Intervention by Time Interaction Using Part 1 (Crime Prevention Behaviors Questions Survey Score Data)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>2</td>
<td>5.82</td>
<td>2.91</td>
<td>.35</td>
<td>.706</td>
</tr>
<tr>
<td>*Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2</td>
<td>29.2</td>
<td>14.6</td>
<td>1.75</td>
<td>.175</td>
</tr>
<tr>
<td><em>Type</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>529</td>
<td>4410.5</td>
<td>8.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*.05 level of significance was used in this study

Table 19

ANOVA Calculation For Type of Intervention by Time Interaction Using Part 2 (Crime Prevention Attitude Questions) Survey Score Data

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>* Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>1</td>
<td>13.15</td>
<td>6.58</td>
<td>.34</td>
<td>.711</td>
</tr>
<tr>
<td>*Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2</td>
<td>19.47</td>
<td>9.73</td>
<td>.50</td>
<td>.604</td>
</tr>
<tr>
<td><em>Type</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>528</td>
<td>10192.01</td>
<td>19.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*.05 level of significance was used in this study
found that students consider campus crime an important and serious issue.

All students participating in the study were surveyed. One of the questions asked if they would like the University to provide crime prevention seminars in the residence halls. Specifically, the survey question read: "The university should periodically provide live crime prevention seminars in the residence hall lounges to discuss campus crime and prevention techniques".

Students completing the survey could respond using the following key: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree. Descriptive statistics were calculated concerning the frequency of positive responses. An outline of the mean response rates for this survey question for the pre-test survey administration is included as Table 20. An outline of the mean response rates for this survey question for the post-test survey administration is included as Table 21.

The descriptive statistics reveal whether students, on the average, responded favorably to this question. An analysis of variance procedure by residence hall revealed if the perceived need of the residential population increased significantly after being exposed to these type
Table 20
Mean Pre-test Response and Standard Deviation to Survey Question Regarding Perception of Need for Crime Prevention Seminars

<table>
<thead>
<tr>
<th>MEN</th>
<th>Number in Sample (n)</th>
<th>Mean Score on Survey Question</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>59</td>
<td>3.169</td>
<td>.746</td>
</tr>
<tr>
<td>Literature</td>
<td>49</td>
<td>3.143</td>
<td>.957</td>
</tr>
<tr>
<td>Seminar</td>
<td>63</td>
<td>3.286</td>
<td>.750</td>
</tr>
<tr>
<td>FEMALE</td>
<td>Control</td>
<td>164</td>
<td>3.274</td>
</tr>
<tr>
<td>Literature</td>
<td>38</td>
<td>3.553</td>
<td>.860</td>
</tr>
<tr>
<td>Seminar</td>
<td>162</td>
<td>3.475</td>
<td>.858</td>
</tr>
<tr>
<td>TOTAL FOR ENTIRE SAMPLE</td>
<td>535</td>
<td>3.333</td>
<td>.900</td>
</tr>
</tbody>
</table>

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Table 21

Mean Post-test Response and Standard Deviation to Survey Question Regarding Perception of Need for Crime Prevention Seminars

<table>
<thead>
<tr>
<th></th>
<th>Number in Sample (n)</th>
<th>Mean Score on Survey Question</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>59</td>
<td>3.169</td>
<td>.874</td>
</tr>
<tr>
<td>Literature</td>
<td>49</td>
<td>3.286</td>
<td>1.080</td>
</tr>
<tr>
<td>Seminar</td>
<td>63</td>
<td>3.460</td>
<td>1.105</td>
</tr>
<tr>
<td><strong>FEMALE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>164</td>
<td>3.317</td>
<td>.938</td>
</tr>
<tr>
<td>Literature</td>
<td>38</td>
<td>3.605</td>
<td>1.028</td>
</tr>
<tr>
<td>Seminar</td>
<td>162</td>
<td>3.543</td>
<td>.913</td>
</tr>
<tr>
<td><strong>TOTAL FOR ENTIRE SAMPLE</strong></td>
<td>535</td>
<td>3.404</td>
<td>.970</td>
</tr>
</tbody>
</table>
of crime prevention programs. Descriptive statistics were calculated regarding the frequency of positive responses associated with the 535 students completing usable pre and post intervention surveys. The mean response for all 535 students completing the pretest question was 3.333. A response of 3 meant the survey-taker was neutral to the question and a response of 4 meant the survey taker "agreed" with the statement. The average response for all 535 students completing usable surveys was 3.333 with an average standard deviation of only .900. The average response to the same question given on the post-test administered to all 535 students completing usable surveys two weeks following the experimental intervention was 3.404 with a standard deviation of only .970. An analysis of variance comparison of these means produced insignificant F statistics when considering the intervention associated with each residence hall environment. Student's perception of their willingness to support crime prevention seminars did not increase significantly between pre and post-test responses by type of intervention. However, the positive mean response associated with this direct question concerning the implementation of education crime prevention programming
reveals the students' willingness to accept a university's educational effort within the residential environment. Mean responses were above 3 for all categories of survey respondents on both the pre and post-test and increased for between the pre and post-test in the halls receiving experimental treatment. These figures are outlined in Tables 20 and 21.
CHAPTER 5
CONCLUSIONS

Background

Campus Crime is an important issue that is receiving an increased amount of public and institutional attention. Towson State University (College Security Report, July 1990) surveyed 1800 randomly selected undergraduate students and found that 36% reported being a victim of a campus crime. A number of recent tragedies on college campuses have helped to bring campus crime to the attention of state and federal legislators, higher education professional organizations, and prospective students and parents. The Carnegie Foundation For The Advancement of Teaching (1990) concluded that colleges and universities are devoting more time than ever to fighting and preventing crime. Without a doubt, institutions are being called upon to provide effective crime prevention tactics. The American College Personnel Administration (ACPA) is just one of a number of professional organizations that has called upon its members to respond to the problem of campus crime. The ACPA (1989c) released a position statement on campus violence that states:
Individuals, institutions, and society are harmed by the acts of violence (campus crime). ACPA wants to encourage its members to actively promote the development of policies, services, security measures, and educational programming aimed at the prevention and elimination of violence on campus (p. 3).

In 1990, federal legislation was enacted requiring colleges and universities to make crime statistics available to prospective students, parents, staff and faculty. This reporting has fueled a debate between those that feel reporting will not accurately assess the level of crime on America's campuses due to a lack of consistency in crime definitions and those who feel it will force institutions to be more responsible. The campus crime issue has caused widespread institutional response. Colleges and Universities have begun to increase the amount of resources used to prevent campus crime. The increased resources have been used to increase staff in the areas of campus police and psychological services. Physical plants have responded with increased attention to campus lighting, building security, and residence hall access systems. College and university
administrators with the help of employees and students have begun to develop elaborate escort policies, reexamine discipline procedures, and initiate educational crime prevention awareness programs.

Prior research concerning campus crime prevention generally has not focused on educational efforts. The majority of available research concerns basic crime statistics aimed at determining the extent of campus crime. Researchers have concerned themselves with trying to determine statistically whether campus crime is on the rise or with the factors that contribute to high crime rates. Fox (1977), Fox & Hellman (1985), McPheters (1978) and others have researched student and/or campus characteristics that contribute to high crime rates. Several researchers (Roark, 1987a, 1987b; Smith, 1988; Cockney, Sherrill, & Cave, 1989) contend that it is dangerous to rely on hard statistics to assess the extent of campus crime. Factors such as; unreported crime, improved reporting procedures, reluctance of some universities to report crime, and increased awareness of newer categories of crime such as acquaintance rape, threaten the reliability of widespread implications regarding the rise of campus crime. Focused knowledge of
the effectiveness of specific educational crime prevention programs would aid campus safety personnel and student services specialists in planning and implementing meaningful crime prevention programs that encourage positive crime prevention behaviors. A substantial amount of study has been devoted to the effectiveness of educating students outside the classroom setting. Sanford (1966) used the terms student society and student culture to describe the out of classroom student environment. Sanford (1966) describes the structure of students' social roles and the patterns of values, beliefs, and behavior patterns that underline these roles. More recently, DeCoster & Mable (1981) described the sudden reshaping of student attitudes, values, and beliefs in terms of the dramatic transition from home to the college environment. Sanford (in Herron, 1970) suggested that what students learn in college is determined by the norms, behaviors, attitudes, and values exhibited by fellow students in the peer groups to which they belong.

This research emphasizes the important role education can play in preventing campus crime. This study builds on the theoretical base developed by Feldman and Newcomb (1969), Sanford (1972, 1971, 1966), Astin (1977)
and others who believe the residential living environment to be a powerful educational tool that can be used to facilitate positive behavioral changes. These researches have studied the collective power of positive change students can initiate within their peer environment.

Focus of the Study

This research concentrates on filling the research deficiency in the area of actual effectiveness of the preventive, educational crime prevention programs. Roark (1987a; 1987b), in her three step model of campus crime prevention categorized educational crime prevention programs implemented by colleges and universities as primary prevention methods. The purpose of this study was to measure the effectiveness of two primary crime prevention programs. Specifically, two types of educational, proactive, crime prevention programs implemented in the residential environment were studied. The first was the distribution of crime prevention literature focusing on positive crime prevention behaviors and recent instances of campus crime at American colleges and universities. The second was the presentation of live, crime prevention seminars presented within the student residential environment. Effectiveness
data regarding educational intervention in the residence halls for decision making purposes is needed as more and more institutions begin to develop primary prevention programs.

**Method**

Six single-sex residence hall environments were studied at a private, small to medium sized, coeducational institution that enrolls approximately 2800 students. One residence hall in each of the gender categories served as a control residence area meaning no experimental intervention was implemented. The remaining two in each gender category received a treatment during the fall semester with one of two educational safety program interventions. One of these interventions involved the distribution of crime prevention literature developed in consultation with the University's Safety Officer. The other intervention was the implementation of live, crime prevention seminars developed and implemented in consultation with the University's Safety Officer. Prior to the implementation of the educational programs, students living in the six experimental residence hall completed a survey which assessed personal crime prevention behaviors and personal attitudes toward crime.
prevention at the University being studied. Secondly, prior to and following the implementation of the educational treatments, student residence life staff measured the number of unlocked room doors in the six experimental halls. Also, the researcher was able to observe the number of propped exterior doors in the three female experimental residence halls prior to the implementation of the experimental treatments. The same measurements were taken following the introduction of the two experimental treatments. Statistical procedures permitted a comparison of the dependent data prior to and following the experimental treatment in order to assess the effectiveness of the crime prevention interventions in improving survey responses, increasing the number of locked room doors, and decreasing the number of propped exterior doors.

Conclusions

The major purpose of this study was to determine the effectiveness of two types of educational crime prevention programs within the residential environment. Therefore, the study was concerned with the effectiveness of the crime prevention seminars conducted by campus safety and residential life personnel and the
effectiveness of the distribution of crime prevention literature in influencing positive change in safety conscious behaviors. The general hypothesis of the study was that these educational interventions within the residential environment would influence significant, positive changes in the degree of safety conscious behaviors observed in the residence halls receiving treatment. This study focused on four specific research questions in order to assess the overall effectiveness of the two experimental interventions. These questions restated from Chapter 1 were:

1. Is there a significant difference between upper-class students and new students in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs?

2. Is there a difference between men and women in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs?

3. Is there a significant difference between the types of educational intervention introduced as part of this study?

4. Do students perceive the need for the
implementation of the educational crime prevention programs employed as part of this study?

The following four sections of this study discuss the conclusions reached for each of these questions.

**Academic Class**

Is there a significant difference between upper-class students and new students in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs?

It was hypothesized that new students would show the greatest positive change in survey responses as a result of the educational treatments due to their newness to the campus community. Two analysis of variance procedures were conducted to test for significant differences in the survey scores achieved on the "Safety Behavior and Crime Attitude" survey administered before and after the experimental interventions in the three male residence halls studied. The first analysis of variance test was conducted using pre and post-test scores achieved on the safety behavior portion (part 1) of the survey. The second analysis of variance test was conducted using pre and post-test scores achieved on the crime attitude portion (part 2) of the survey. Both analyses considered
the independent variable, academic class. Results of these two analysis of variance tests were insignificant at the .05 alpha level. Therefore, this hypothesis was rejected. No evidence was found to suggest a deference between new students and upper-class students in regard to improving personal perceptions of crime prevention behaviors and attitudes as measured by the survey instrument.

A possible explanation for the insignificant results is the powerful peer influence associated with the residential environment discussed. The literature base for this explanation is included in Chapter 2. Since new students and upper-class students live together in the same residential environment, a shared attitude toward the perceived importance of crime prevention behaviors and attitudes may develop. This common perception could permeate the characteristics associated with being a member of a particular academic class. The survey responses measure a student's perceptions as opposed to actual behaviors that were measured by the locked room door observations and the exterior door measurement. Students may develop their perceptions of their level of participation in safety conscious behaviors as a result
of being a member of a residence hall environment as opposed to a member of a particular academic class. Therefore, the change in survey responses between the pre and post test surveys could have been influenced by the shared perceptions associated with the residential environments studied.

Gender

Is there a difference between men and women in regard to positive changes in safety conscious behaviors as a result of the implementation of educational crime prevention programs? It was hypothesized that females would show significantly greater, positive change in regard to safety conscious behaviors. As a rule the sexual violence that is discussed on college campuses involve crimes against women. Further, it was believed that the literature and crime prevention seminar interventions described a number of serious crimes that involved women. The crimes discussed involving men were limited to less serious crimes such as theft or trespassing. Two types of data were examined in researching this question. Analysis of the locked room door data supported the hypothesis. Analysis of the survey data did not support the hypothesis.
An analysis of variance was conducted using pre and post intervention scores achieved on locked residence hall room door observations. Student residential life staff in the six residence halls studied checked the actual number of locked room doors at five different times within a 24 hour period the week prior to and the week following the experimental intervention. Each residence hall room received a score based on the number of times the room door was left unlocked. This analysis produced significant results. A significant F (11.01) statistic was calculated for the gender by type of intervention interaction. The follow-up WSD test revealed significant differences in the locked door means by type of intervention for the female population studied. Given this gender finding, the WSD test showed that the residence hall receiving the literature treatment had the lowest mean unlocked room score. The female residence hall receiving the seminar treatment had the second lowest mean locked room score. The female residence hall receiving no treatment had the highest mean unlocked room door score. Therefore, the female residence halls studied showed the greatest variation in mean scores associated with the number of residence hall rooms left unlocked.
The presence of an educational crime prevention treatment produced a lower overall unlocked room door mean in the female residence halls studied. The female residence hall populations receiving the literature and seminar treatments had lower overall means in terms of the number of times room doors were left unlocked in comparison to the female control residence hall. The follow-up WSD test did not reveal significant differences in regard to locked room door means when considering the male residence hall populations studied. These findings partially support the hypothesis that women would be influenced to a greater extent by the experimental educational programs.

Survey response data obtained on the pre and post test "Safety Behavior and Crime Attitude Survey was also used to test the gender hypothesis. An analysis of variance was performed using pre and post-test survey scores achieved before and after the experimental interventions for all students involved in the study. The test included gender as an independent variable. A separate analysis was run for each part of the survey. Part 1 of the survey involved questions concerning actual crime prevention behaviors while Part 2 involved
questions concerning personal attitudes towards crime prevention behaviors. Special attention was paid to examining the independent variable time since gender would have to interact with time between the pre and post-test significantly in order to conclude that there was a significant difference between men and women in regard to survey scores achieved before and after the experimental interventions. The two analysis of variance procedures using part 1 and part 2 pre and post-test survey scores produced insignificant F statistics at the .05 level of significance in regard to gender differences. There were no significant interactions involving gender and time. Therefore, it was concluded that there was no significant difference between men and women in regard to perceived improvements in student safety behaviors (part 1 survey responses) and crime attitudes (part 1 survey responses) as measured by the survey instrument. Men and women were not influenced to respond differently to survey questions concerning crime prevention behaviors or crime prevention attitudes as result of the implementation of the experimental crime prevention program interventions.

As with the first hypothesis involving academic
class, a possible explanation for the insignificant results associated with the survey data is the powerful peer influence associated with the residential environment discussed in Chapter 2. Since new students and upper-class students live together in the same residential environment, a shared attitude toward the perceived importance of crime prevention behaviors and attitudes may develop. This common perception could permeate the characteristics associated with being a member of a particular gender. The survey responses measure a student's perceptions as opposed to actual behaviors that were measured by the locked room door observations and the exterior door measurement. Students may develop their perceptions of their level of participation in safety conscious behaviors as a result of being a member of a residence hall environment as opposed to being male or female. Therefore, the change in survey responses between the pre and post test surveys could have been influenced by the shared perceptions associated with the residential environments studied. Support to this assertion is the finding that tests using actual behavioral data obtained as a result of the locked door observations produced significant results while
tests using the perceptive survey data produced insignificant results.

Type of Intervention

Is there a significant difference between the types of educational intervention introduced as part of this study? It was hypothesized that the most significant, positive change in safety conscious behavior would be observed in the seminar halls since the intervention involved personalized discussion and instruction. Also, it was hypothesized that the second most significant degree of positive change in safety conscious behavior would occur in the literature halls since the residents of these halls were exposed to specific information regarding the campus crime problem and the need for personal crime prevention responsibility. It was hypothesized that statistical tests involving the control halls would produce insignificant results since residents were exposed to no crime prevention education. All three types of dependent data collected as part of this study were used in analyzing this question. Analysis of the locked room door data partially supported these hypotheses. Analysis of the propped exterior door data partially supported these hypotheses. Analysis of the
survey data did not support these hypotheses.

The analysis of variance conducted on the locked room data collected by the Resident Assistants considered the type of intervention as an independent variable. Pre and post-test room scores reflecting the number of times residence hall room doors were left unlocked before and after experimental intervention were compared for all residence hall rooms studied. A significant two way interaction between type of intervention and time between the pre and post-test was discovered. The follow up WSD test was conclusive in determining that the seminar intervention was most influential in decreasing the mean score of the number of locked rooms. The WSD test revealed insignificant differences in the means of the pre and post-test unlocked room door scores for residents of the control halls and residents of the literature halls.

The Pearson chi-square statistical procedure was used to examine the propped exterior door data collected for the three female experimental residence halls. Observations of the number of times exterior doors were left propped were compared for three specific weeks; before the intervention, immediately following the
intervention, and five weeks following the intervention. The numbers were compared using the chi-square test and it was revealed that the difference between the actual and expected number of propped exterior doors was approaching the .05 level of significance (.0729). Residents of the female residence hall exposed to the crime prevention seminar showed the greatest improvement in terms of the number of propped exterior doors between the initial pre intervention observation and the delayed observation. It is believed that the low number of observations (n < 13) contributed to the level of significance remaining above .05. Unfortunately, in regard to propped doors, the number of observations was low for statistical purposes but high relative to the dangers that can occur with only a small number of propped doors when considering violent campus crime.

Two analysis of variance tests were performed using pre and post-test survey scores achieved on the safety behavior (part 1) and crime attitude (part 2) portions of the survey before and after the experimental interventions for all students involved in the study. The test included type of intervention as an independent variable. There were no significant interactions
involving type of intervention and time using scores achieved. Therefore, it was concluded that there was no significant difference between types of experimental intervention in regard to pre and post-test survey scores achieved before and after the experimental interventions. The residential students studied were not influenced to respond more positively to survey question questions concerning crime prevention behaviors or crime prevention attitudes as result of the exposure to one of the experimental crime prevention program interventions. An explanation for the results of the survey data analysis is that residential students actually act differently than they perceive they act. Actual behavior as measured by the locked room door data and the propped exterior door data was influenced positively in the halls receiving the seminar treatment. However, tests revealed that student perception of their behaviors and attitudes as measured by the survey did not increase as a result of the treatment.

Perceived Student Need

Do students perceive the need for the implementation of the educational crime prevention programs employed as part of this study? It was hypothesized that students do
perceive a need for educational programming since the literature review revealed that researchers such as Astin (1984) and the Carnegie Foundation (1990) have found that students consider campus crime an important and serious issue. All students surveyed were asked if they would like the University to provide crime prevention seminars in the residence halls. Descriptive statistics were calculated regarding the frequency of positive responses associated with the 535 students completing usable pre and post intervention surveys. The mean response for all students participating in the study on the pretest question which asked if students felt the university should present live, crime prevention seminars within the residential environment was more positive then the neutral response on the response scale. A response of 3 meant the survey taker was neutral to the question and a response of 4 meant the survey taker "agreed" with the statement. The average response for all 535 students completing usable surveys was 3.333 with an average standard deviation of only .900. The average response to the same question given on the post-test administered to all 535 students completing usable surveys two weeks following the experimental intervention was 3.404 with a
standard deviation of only .970. An analysis of variance comparison of these means produced insignificant F statistics when considering the intervention associated with each residence hall environment. However, the positive mean response associated with this direct question concerning the implementation of education crime prevention programming reveals the students' willingness to accept a university's educational efforts within the residential environment. It is believed that personal awareness of the campus crime issue as well as the researcher's concentrated efforts regarding the campus crime issue and the importance of personal prevention responsibility influenced positive survey responses to this question.

Implications

Much has been written over the past six years regarding the campus crime issue. Newspaper reporters have been most instrumental in examining the extent of the campus crime issue by detailing crime statistics. However, professional organizations such as the American College Personnel Association (1989b), American Council on Education (1985), National Association of College and University Attorneys (1988), and the Carnegie Foundation
(1990) have discussed the need for Colleges and universities to react to this problem in a comprehensive fashion. Campus police, student affairs, and physical plants have all been called upon to develop everything from facility improvements to educational awareness programs.

The results of this study provide positive feedback to student affairs personnel who engage in the planning and implementation of residence hall programs. The CAS Standards and Guidelines for Student Services (1989) that are widely used by colleges and universities to evaluate the quality of their residence life program suggests that residence hall educational programming is an important responsibility that should be included in a comprehensive residence life program. Therefore, residence life offices nation-wide regularly participate in funding residence hall programs. Unfortunately, there has been little research of the actual effectiveness of these programming efforts. This study included research findings that assess the positive impact residential programming can have on a residential population. The following implications are drawn from the conclusions reached in this study:
1. Female students reacted more positively than men to the educational programming interventions employed as part of this study. Women were more influenced by the literature and seminar treatments. Women are exposed to a multitude of information regarding violent crime and victimization from a variety of sources. Universities should capitalize on this timely issue and work to develop educational programs that are aimed at developing positive crime prevention behaviors. The first step in developing educational programs usually involves assessing the need of the program. Various factors involved in this study have confirmed that women perceive campus crime to be an important issue. These factors include; a 60% attendance rate at the crime prevention seminar developed for this experiment, positive changes in crime prevention behaviors as a result of exposure to the literature and seminar treatments, and positive response rates on the survey question which asked if the university should provide crime prevention seminars.

2. The seminar treatment was the most influential in promoting positive change in actual student crime prevention behavior. This finding underscores the power of developing educational programs that can be presented
within the student living environment. College and university educators can utilize a variety of campus resources in the development and implementation of educational programming revolving around virtually any timely issue.

3. Researchers including Astin (1984) and the Carnegie Foundation (1990) have concluded that campus crime is an important issue of concern to the contemporary student. The media continues to report extensively on crimes occurring on American college campuses. Colleges and universities should respond to the student concern regarding the campus crime issue by providing valuable educational programs at a time when students are willing to participate. Further, the results of this study demonstrate that college and university educators can facilitate positive change in student behavior concerning an issue of perceived importance to the student community.

4. Men and women's behavior in regard to locked doors improved most significantly in the residence hall exposed to the live seminar. This reveals the power of providing a live, educational session revolving around an important topic. The seminar emphasized personal
responsibility in regard to crime prevention. The format of instruction was similar to the educational format employed in the college classroom. Resident improvement in locking room doors was a direct message of the seminar program. The residential environment proved to be a productive environment to deliver this message as the students respond by improving their behavior in accordance with the instruction delivered during the seminar.

5. The researcher intentionally marketed the seminar program in the same manner other residence hall programs are marketed at the university studied. Using minimal advertising, over 60% of the female population of the seminar hall attended the program. Over 30% of the male seminar hall population attended. The participation is positive in terms of demonstrating that a timely topic of interest will produce an audience of students. Further, the cost involved in developing and presenting the seminar was minimal. Campus police personnel volunteered to help with the presentation of the seminar presented as part of this experiment. Campus resources such as police personnel and residence life professional staff are in many cases qualified and willing to develop
educational programs at relatively low cost. The seminar developed for this study emphasized the fact that a university can spend thousands of dollars on facility improvements but these improvements cannot be fully effective unless students take personal responsibility in developing positive safety conscious behaviors. The results of this study demonstrated that seminar education within the student living environment can positively influence a campus' crime prevention efforts by emphasizing basic crime prevention behaviors. It would seem similar type programs could be developed and presented at other institutions at relatively low costs.

6. The analysis of the research data uncovered a pattern. The survey data was insignificant in supporting three of the research questions examined while the actual behavioral data was supportive of the hypotheses associated with the research questions. This pattern demonstrates that students do not necessarily act as they perceive they act. Caution should be taken in judging the effectiveness of a particular program solely on student perception. Results of this study demonstrate the need to develop behavioral as well as perceptive measurements in order to effectively evaluate an educational program. By
employing actual behavioral measurements, a particular program aimed at promoting positive behavioral changes might be evaluated more positively than it would be if the program were evaluated exclusively on the basis of survey data.

Further Study

Some constraints associated with the residence hall environments at the university studied provide an opportunity for further research into the effectiveness of the experimental interventions. For instance, it was not possible to study co-educational residence hall areas. It is unknown whether men and women participating in education regarding campus crime would react more positively if they were exposed to the information as part of a co-educational experience. Secondly, the exterior doors to the male residence halls at the university studied were never locked. Therefore it was not possible to study whether the experimental interventions influenced a decrease in the number of instances of propped exterior doors in the male halls.

Opportunity exists to develop a more comprehensive crime prevention literature program. The crime prevention information distributed to residents of the male and
female literature halls emphasized crimes where females were the victims. Redirecting the gender focus of the crime prevention information distributed in the male residence halls might improve the effectiveness of this educational program in the male residence area.

The first research question asked whether academic class influenced positive change in crime prevention behaviors. Unfortunately an analysis of variance could not be conducted for this question for the female residence halls studied since new students live in separate residence halls. Studying an environment where female students live in the same residence halls as upper-class students would provide an opportunity to study whether being of a particular academic class influences positive change after being exposed to various educational, crime prevention programs.

This study was conducted over the period of one semester. The intervention was presented only once to residents in the experimental halls. The opportunity exists for a more longitudinal format where multiple interventions could be introduced over a longer period of time. Multiple measurements could be taken to observe whether positive changes remains in affect over a longer
Finally, the survey used in this study was personally developed and lacked standardized reliability and validity measures. The opportunity to develop a more standardized measure of student crime prevention behaviors and crime prevention attitudes exists. The survey data analyzed as part of this study consistently demonstrated insignificant results. Possible improvement in survey scores between the pre and post-test could have been masked. Students might improve by only a few points which could in turn demonstrate a substantial improvement in safety conscious behavior. However, a comparison of the scores may not demonstrate statistical significance due to the slight numerical improvement.
Appendix A
Experiment Timeline

Sunday, August 25 & 26, 1991: Upperclass students arrive

Tuesday September 3, 1991: Begin collecting dispatch computer sheets that record exterior door propping for female residence halls.

Monday, September 16, 1991 (7:00 p.m.): Meeting with male residence life staff of Dennis, Thomas, and Jeter halls to explain the experiment and distribute "Safety Behavior and Crime Attitude Surveys".

Monday, September 16, 1991 (8:00 p.m.): Meeting with female residence life staff of Lora Robins, Keller Hall and Gray Ct. halls to explain the experiment and distribute "Safety Behavior and Crime Attitude Surveys".

Sunday, September 22 - Monday, September 23, 1991: All student staff involved complete pre-intervention door lock sheets. Doors will be checked at five agreed upon times. One person may do each building or all can do their floor/section. This will be decided at Sep. 16 meetings.

The five door checks will occur:

Sunday, Sep. 22, 1991 at 10:00 p.m.
Sunday, Sep. 22, 1991 (really Mon. a.m.) at 1 a.m.
Monday, Sep. 23, 1991 at 8:30 a.m.
Monday, Sep 23, 1991 at 12 noon
Monday, Sep 23, 1991 at 6:00 p.m.

Directions:
Student staff will check each room and mark yes or no (whether or not the door is locked) on room sheet, next to the proper room number and time. If door is unlocked make sure and check whether someone is present. If someone is present, student staff will they are performing an RA safety check.
Appendix A

Continued

Tuesday, September 22 - Friday, September 27, 1991: Pretest surveys are distributed, collected and checked off master sheets by student staff in all buildings being studied.

Sunday, September 30 - Tuesday, October 1: Follow up period to collect any missing surveys.

Sunday, September 30: Begin advertising safety seminar in Gray Ct. and Thomas Hall.

Monday, October 7: Begin first round of distribution of safety literature/tips in Dennis and Keller.

Wednesday, October 9: Safety seminar #1 in Gray Ct. basement. Students sign in at door (7:00 p.m.). Presenters include John Sheffield, Safety Officer, Sgt. Buddy Norton, Crime Specialist, and Steve Bisese, Researcher.

Wednesday, October 9: Safety seminar #1 in Thomas lounge. Students sign in at door (8:00 p.m.). Presenters include John Sheffield, Safety Officer, Sgt. Buddy Norton, Crime Specialist, and Steve Bisese, Researcher.

Thursday, October 10: Safety seminar #2 in Gray Ct. basement. Students sign in at door (7:00 p.m.). Presenters include John Sheffield, Safety Officer, Sgt. Buddy Norton, Crime Specialist, and Steve Bisese, Researcher.

Thursday, October 10: Safety seminar #2 in Thomas lounge. Students sign in at door (8:30 p.m.). Presenters include John Sheffield, Safety Officer, Sgt. Buddy Norton, Crime Specialist, and Steve Bisese, Researcher.

October 11-15: Fall Break

Sunday, October 27 - Monday, October 28: All student staff involved complete post-intervention door lock sheets. Doors will be checked at five agreed upon times. One person may do each building or all can do their floor/section.
Appendix A

Continued

The five door checks will occur:

Sunday, Oct. 27 at 10:00 p.m.
Sunday, Oct. 27 (really Mon. a.m.) at 1 a.m.
Monday, Oct. 28 at 8:30 a.m.
Monday, Oct. 28 at 12 noon
Monday, Oct. 28 at 6:00 p.m.

Directions:
Student staff will check each room and mark yes or no (whether or not the door is locked) on room sheet, next to the proper room number and time. If door is unlocked make sure and check whether someone is present. If someone is present, student staff will they are performing an RA safety check.

Tuesday, October 29 - Friday, November 1: Post intervention surveys distributed and collected and checked off master sheets in all halls involved.

Sunday, November 3 - November 7: Follow up period to collect missing surveys.

Monday, November 11: Thank you pizza for all those who helped.

Tuesday, November 26: Last day of receiving dispatch computer readings from University police.
Appendix B

Safety Behavior and Crime Attitude Survey

Safety Behavior and Crime Attitude Survey

Academic Class: (Fresh, Soph, Junior, or Senior) ______

Residence Hall: _________________________________

Room Number: _________________________________

Gender: (male or female): ________________________

Part 1: Safety Behaviors: Please respond to each of the following items by circling the number that most accurately describes your behavior in the space provided. The numbers and their meaning are:

Example: I am late to meetings.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

1. I lock my room door when I am doing my laundry in the laundry room.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

2. I walk around campus alone at night

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never
Appendix B

Continued

3. I lock my room door when I am not in my room.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

4. I leave loose valuables (e.g. wallet, keys, money, credit cards) in plain sight when my room door is left open and I am not in the room.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

5. I leave loose valuables (e.g. wallet, keys, money, credit cards) in plain sight in the bathroom when I am in the shower.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

6. I have engraved a personal marking (e.g. initials, last 4 numbers of social security number) on my valuable items (e.g. stereo, computer).

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never
Appendix B

Continued

7. I read the "Crime Alert" notices that are posted around campus by the University police.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

8. I lock my room door before I go to sleep.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

Answer the following only if you have a roommate

9. If my roommate leaves the door unlocked when no one is home, I would confront him/her to try and stop this from happening again.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

Answer the following two items only if you have a car here on campus.

10. I leave my car door unlocked when it is parked in a campus parking lot.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never
11. I leave loose valuables (e.g. wallet, keys, money, credit cards) in my car.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

Answer the following two items only if you are a female.

12. I prop the outside doors open so a guest may enter who does not have an access card.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

13. I prop the outside doors open when I am moving "things" in or out.

5 = Always
4 = Almost Always (more than 50% of the time)
3 = Sometimes (50% of the time)
2 = Seldom (less than 50% of the time)
1 = Never

Part 2: Attitude Toward Crime and Prevention: Please respond to each of the following items by circling the number that most accurately describes your attitude in the space provided.

Sample: I feel the University of Richmond is a great school.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree
1. I am concerned about the level of crime that occurs in my residence hall

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

2. I feel safe on this campus

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

3. The university should periodically provide safety prevention literature/statistics to all students living in the residence halls

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

4. I feel crime is not a problem on this campus

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree
Appendix B

Continued

5. I feel the university is concerned with student safety

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

6. I feel the university provides adequate crime prevention information to students

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

7. The university should periodically publish crime statistics in the Collegian

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

8. The university should periodically provide "live" crime prevention seminars in the residence hall lounges to discuss campus crime and prevention techniques

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree
Appendix B

Continued

9. I feel the lighting around campus is sufficient

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

10. I remember the crime prevention techniques/"tips" presented at the mandatory new student orientation program titled fire and crime prevention

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

11. I am aware of the standards of conduct (policies) that as a student I am bound to uphold

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

12. I feel the university adequately punishes, by particular crime, students who are involved in criminal violations that cause harm to another student

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree
Appendix B

Continued

13. I feel theft is a problem on this campus

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

14. I feel the majority of the crime that occurs on this campus is done by students

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

15. I feel the residence hall exterior door security is adequate in my residence hall

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

16. I feel my residence hall is a safe place to live.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

17. I would report suspicious persons to the University Police immediately.

5=Strongly Agree
4=Agree
3=Neutral
2=Disagree
1=Strongly Disagree

THANK YOU VERY MUCH!!!
Appendix C

Sample Locked Door Data Collection Sheet

LOCKED DOOR SCORE SHEET

Directions: Check each room listed below and mark "NO" IF A DOOR IS UNLOCKED in the proper date and time column. If you find an unlocked door make sure and check whether someone is present. If someone is present, you may say that you are performing an RA safety check.

Remember: Mark "NO" if a door is unlocked
Do not mark anything if door is locked
Do not mark anything in "S" column

DENNIS HALL (Literature Hall)

<table>
<thead>
<tr>
<th>ROOM #</th>
<th>9/22 10:00 PM</th>
<th>9/23 1:00 AM</th>
<th>9/23 8:30 AM</th>
<th>9/23 12 N</th>
<th>9/23 6 PM</th>
<th>S</th>
</tr>
</thead>
<tbody>
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<td>A101</td>
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<td>Suite</td>
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<td>C121</td>
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<tr>
<td>C123</td>
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Note. The analysis of variance for the room data was calculated comparing scores from the "s" column of the Pre and Posttest locked door sheets by residence hall.

Appendix C

Continued
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