The Efficacy of Adolescent Rape Prevention Education

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THE EFFICACY OF ADOLESCENT RAPE PREVENTION EDUCATION

DISSERTATION

Submitted to the College of Human Resources and Education of West Virginia University
In Partial Fulfillment of the Requirements for The Degree of Doctor of Education

by

Ruth E. Kershner

Morgantown

West Virginia

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This dissertation is dedicated in loving memory of my dear friends Eileen Grattan and Jan Davis and my father-in-law, Wayne Kershner.

"Dreams of mountains as in their sleep they brood on things eternal."
Acknowledgments

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CHAPTER I
THE PROBLEM

Background

During the past several years, an increased number of rapes have been reported in the adolescent population (Ageton, 1983; Erickson & Rapkin, 1991; Gidycz & Koss, 1989; Hall & Flannery, 1984; Hayman, 1971; Katz & Mazur, 1979; Krasner, Meyer, & Carroll, 1976; MacCahill, Meyer, & Fischman, 1979; Mann, 1981; McDermott, 1979; Medea & Thompson, 1974; U.S. Dept. of Justice, 1985; Walmsley & White, 1979; Warshaw, 1988). The problem has become so widespread that the U.S. Department of Health and Human Services has included reduction of rape and attempted rape of women aged 12 and older as a goal in its report Healthy People 2000: National Health Promotion and Disease Prevention Objectives (1990). Additionally, the American Medical Association, in its report Guidelines for Adolescent Prevention Services (1992) recommends that adolescents as young as 11 years of age receive sexual abuse and safety information.

The sexual abuse of young children has long been recognized as problematic (Peters, Wyatt, & Finkelhor, 1986), and a number of prevention modalities have been evaluated for effectiveness. Studies involving preschool children (Herndon, 1984) and elementary school-aged
children (Madak & Berg, 1992; Paulk & Kilpatrick, 1989) indicate that children in sexual abuse prevention programs demonstrate an increase in knowledge and self-protection skills. Sixty-four percent of children in Binder and McNeil's (1987) study reported feeling safer, whereas 72% felt they were better able to protect themselves. Knowledge retention was evident five months after participation in one child sexual abuse prevention program (Tutty, 1992) and at a one-year follow-up in another (Hazzard, Webb, Kleemeier, Angert, & Pohl, 1991).

Educational programs have also been targeted toward college students in an effort to increase awareness about rape and aggression. The Rape Prevention Education Project (Lee, 1986) offers a seminar course for men with four components: (1) defining rape and examining rape myths, (2) fostering more empathetic understanding of victims, (3) increasing male responsibility for rape prevention, and (4) empowering men to create a safer community. Males attending this program displayed attitudinal shifts after participation. In another college course, Sheffield (1990) explores power and dominance issues that contribute to the crime of rape. Again, this work has been helpful in raising consciousness about the problem of coercive sex. Hamilton and Yee (p. 118, 1990) found that an increase in
knowledge about the trauma of rape and the perception of rape as an aberrant behavior was associated with fewer rape-supportive attitudes.

Unfortunately, adolescents who are at greater risk for rape are not receiving the information they need to avoid victimization. Prevention education is generally within the scope of health education, yet review of junior high and high school health textbooks reveals that the topic of rape is either not mentioned at all or covered only marginally (Altheus, Thompson, Walker, & Zuti, 1987; Getchell, Pippin, & Varnes, 1987; Jones, Tsumura & Bonekempec, 1987; Lazarus & Vorys, 1987; McClendon & Johnson, 1987; Meeks-Mitchell & Heit, 1987; Merki & Merki, 1987; Swanson, Galpin, Brown, & Wantz, 1986). Rape prevention programs may not be an integral part of the health curriculum because of ambiguity on the part of educators and parents about what constitutes appropriate instruction (Bowen, 1993; Harris & Welshimer, 1993).

Adolescents are concerned about rape. A Teen magazine (1992) poll of readers' greatest fears included, in order, (1) murder, (2) rape, and (3) kidnapping. Focus group interviews with students in middle schools elicited these health concerns of primary importance to adolescents: drugs, sex, and violence. Sex education
was perceived by these students as limited to factual information only, ignoring social and relationship issues that accompany a burgeoning sexuality. Girls in this study verbalized anxiety about sexual assault and personal safety (Tanaka, Warren, & Tritsch, 1993). In a group of students aged 14 to 19 who attended a rape awareness program in a high school setting, only one student reported feeling uncomfortable about the topic, while 35% of the participants stated they felt this program should be provided at an earlier age (Kershner, 1993).

Although some prevention programs have been developed specifically for adolescents (Anderson-Kent, 1982; Flerchinger & Fay, 1985; Fortune, 1983; Parrot, 1991; Plummer, 1984), there has been no published evaluation of how effectively these programs have served adolescents. Pohl (1990) analyzed ninth-grade students' knowledge and attitudes after participating in an acquaintance rape program and found an increase in knowledge for treatment students. Using Burt's (1980) rape myth acceptance scale, Pohl (1990) also found that boys in the treatment group were significantly less accepting of rape myths. Ogletree, Kupecz, and LaCursia (1993) developed an instrument to measure student attitudes specific to coercive forcible intercourse by
using different situational statements, such as "she is wearing sexy clothes," "other kids say she is easy," and "it's prom night." These researchers found no change in attitudes towards rape after a three-day program but did note an increase in knowledge (Ogletree, et al., 1993).

The purpose of this study was to evaluate and compare the knowledge and attitudes of junior high and high school students after attending a five-day stranger and acquaintance rape prevention program. The prevention program included history of rape, incidence of rape, legal-socio-cultural issues, offenders, victims, rape myths, safety/prevention, community resources, and the rape recovery process.

Importance of the Study

Governmental surveys (Criminal Victimization in the United States, 1981; Uniform Crime Reports, 1990; U.S. Dept. of Justice, 1985) and research studies (Ageton, 1983; Burgess & Holmstrom, 1976; Hall & Flannery, 1984; Katz & Mazur, 1979; Warshaw, 1988) have drawn attention to the problem of adolescent rape victimization. It is believed that the true scope of adolescent rape is not known (Burgess, 1985).

As previously noted, adolescents are not receiving the information they need to understand why rape occurs. Health education textbooks tend to cover the topic only
minimally and generally from a safety perspective. More comprehensive programs for adolescents have been developed, but the effectiveness of these programs has not been assessed. Additionally, the few programs that have been evaluated have differed in content and/or methodology.

This study is the first to examine rape knowledge and attitudes of junior high and high school students utilizing new instruments developed specifically for adolescents. Because adolescents are dating at younger ages (Getts, 1988; Gibbs, 1986; Scott-Jones & White, 1990; Swenson, 1992), vulnerability to rape can increase, necessitating earlier intervention for rape prevention programs. This study is intended to provide health educators with information to (1) advocate more rape education for the adolescent population, (2) initiate prevention programs that begin from an etiological base, and (3) begin further research in the evaluation of such interventions.

Assumptions of the Study

There exist several underlying assumptions about the study and its procedure. It is assumed that:

1. The rape intervention program itself is credible, having been designed based on the literature.
2. Change is feasible with a five-day intervention.
3. The effects of change can be measured.
4. Responses to the survey instrument will be honest and accurate.

**Definition of Terms**

For ease of comprehension, the following definitions will be applicable. Because the legal definitions pertaining to rape terminology vary by state, the definitions included here will be in layperson's terminology.

**Acquaintance rape** Forced sex or threat of force by someone familiar to the victim.

**Attitude** Feelings regarding a situation or issue representative of conscious or unconscious mental views developed through cumulative experience.

**Child Sexual Abuse** Any unwanted, exploitive, or hurtful sexual activity involving children under the age of 12.

**Consent** To give assent or approval.

**Corroboration** To support with evidence (Connell & Wilson, 1974; Sloan, 1992).

**Date Rape** Forced sex or threat of force that occurs within the context of dating.

**High School** Grades 10 through 12.

**Incidence** Number of cases that develop over a specific period of time (Green, 1990).

**Junior High School** Grades 7 through 9.
**Knowledge** Acquaintance with facts or truths from study or investigation.

**Myth** A belief that is accepted without critical analysis. Some rape myths include "Only bad girls get raped," "Women who dress provocatively deserve to be raped," and "only sick, perverted men rape."

**Offender** One who has committed an act of rape or attempted rape.

**Patriarchal** A situation in which the rules of society are determined from the male perspective.

**Perpetrator** One who has committed an act of rape or attempted rape.

**Pornography** Depiction of erotic behavior designed to cause sexual excitement.

**Prevalence** A measure of frequency of occurrence based on total number of old and new cases existing at a given time (Green, 1990).

**Rape** Sex accompanied by force or threat of force. Can include oral, anal, vaginal intercourse, or use of objects. Victims and/or offenders can be either male or female.
Resistance  To fight against or oppose. Historically, the rape victim was expected to express "utmost" resistance throughout an attack even, for example, in a case involving multiple offenders or if weapons were used during the rape. Presently, victims are expected to show "reasonable" resistance since it has been ascertained that many victims are fearful for their lives/safety (Searles & Berger, 1987; Sloan, 1992; Tong, 1984).

Stranger Rape  Forced sex or threat of force by someone who is not known to the victim.

Unfounded  Rape cases reported to police that are not investigated and not included in calculating rape statistics. Reasons for unfounding can include, but are not limited to, lack of victim credibility about the rape, victim failure to follow through on the complaint, or the rape occurring in another locale not under jurisdiction of the law enforcement department receiving the complaint.

Victim  Individual (male or female) who has been raped or threatened with rape.
CHAPTER II
REVIEW OF LITERATURE

This chapter examines literature concerning the crime of rape. Because rape is a complex issue, a number of factors are examined to gain a perspective of the problem and to determine how rape affects adolescents. Although male rape is addressed, the bulk of the literature relates to women, who remain at the greatest risk for victimization.

Defining Rape

Rape is one of a vast number of deviant sexual crimes existing today. Sexual assault is a broad term whose definition includes such behaviors as fondling, voyeurism, incest, sodomy, exhibitionism, and the like. Child sexual assault (abuse) occurs when a child is used to meet the sexual needs of an adult. It is believed to occur mainly within the confines of the family, yet may also include acquaintances of the family. Child sexual assault does not always involve forced intercourse. Most victims are younger children (Basic Facts About Child Abuse, 1991).

Rape is just one facet of sexual assault. Tabulations of rape victims for governmental survey purposes count victims ages 12 and older. Rape is not a sexual act, although an element of sexuality is conjoined
with the offense. The word rape is derived from the Latin word *rapere*, meaning to seize, steal, or carry away; one dictionary defines it as the carnal knowledge of a woman through use of force or threat of force (Random House, 1988). Sir William Blackstone, an English journalist and historian during the 1700s, became one of the first to formally define the crime as "unlawful carnal knowledge of a woman, not one's wife, by force and against their will" (Bode, 1978).

Unfortunately, there exists no hard and fast definition of rape. Rape is defined at the state level, and each state’s legal code varies. In general, the legal codes defining rape encompass three aspects: (1) vaginal penetration, sexual intercourse, carnal knowledge; (2) force or threat of force; and (3) non-consent of the victim (Katz and Mazur, 1979). California further defines rape as including situations in which (1) the victim is legally incapable of consent, (2) an element of force renders the victim unable to resist, (3) resistance is inhibited by use of threats or drugs, (4) the victim is unconscious, or (5) the victim is deceived into believing the offender is her husband (Chappell, Geis & Geis, 1977). Rape definitions have expanded in some areas to include penetration other than vaginal, such as anal or oral, and also to include the use of
objects. Complete penetration and ejaculation is not always required, and lastly, the terminology in some states is not gender specific, since men comprise a small number of victims (Sloan, 1992).

Although each rape experience is different, there are generally five distinct features of the attack: (1) it is sudden and arbitrary, (2) many victims fear for their lives, (3) the victim's physical safety is jeopardized, (4) force is used to overwhelm the victim, and (5) the victim is unable to stop the assault (Warner, 1980). The first stage of the rape process is known as the pre-rape situation. The victim is set up for attack during this period. Different methods are used by the offender to isolate the victim so as to initiate the second stage of the rape, the actual assault. Two more steps in this process are the post-rape situation, which is a crisis period immediately following the rape, and a long-term recovery process known as coping (Roberts, 1989).

The crime of rape not only exposes the victim to an act of violence, it also strips her of her sense of dignity and self-worth. It robs her of her autonomy, while instilling in her a sense of guilt wherein she often blames herself for the attack. "Rape is a crime against women. Rape is a deadly assault against you as a
person. Rape is the deprivation of sexual self-determination. Rape is a woman's nightmare. Rape is all the hatred, contempt, and oppression of women in this society concentrated into one act" (Medea & Thompson, 1974, p. 11). "What a woman loses forever is a belief in the goodness of people and a trust in others. She loses faith in the power of reason and reasonableness. She pays the final, most brutal price for being a woman in a world ruled by men" (Cohn, 1975, p. 12).

**History**

The crime of rape has a long history. Much of what is known about rape can be found through the study of law. Statutes defining rape can be found in Roman, Jewish, and Anglo-Saxon legal history, indicating a public disapproval of rape for literally thousands of years. Descriptions of rape are also found in literature, drama, poetry, and the visual arts (Krasner, et al., 1976; Snelling, 1975).

Tales of rape are detailed in the Bible (New American Bible, 1970), and in Greek mythology (Stapleton, 1986; Zeitlin, 1986). Historically, rape was viewed as an offense against men as women were considered the property of men. The 17th century B.C. Code of Hammurabi contains the oldest written laws defining rape as a crime (Brownmiller, 1975; Smith, 1974). Retaliation against
the perpetrator was undertaken by the injured male: father, sons, or husband. A virgin was of more value than a married woman or spinster. A deflowered virgin could be deemed unmarriageable and possibly become a lifelong financial liability for her family.

Rape is consistent with the history of war. Traditionally, the women of the vanquished were often subject to the will of the victor, taken, as it were, as just more property. This has been noted during World War II (Ryan, 1966), the 1971 Pakistan-Bangladesh War (Laure & Goldman, 1972; Tong, 1984), and the Vietnam War (Hersh, 1970; Lang, 1969).

Even today, in the European war between Bosnia and Herzegovina, rape is rampant. It is estimated that 30,000 to 50,000 women, most of them Moslem, have been raped by Serbian troops. Serbian troop leaders have been observed ordering troops to rape, fully cognizant of the consequences to the victims (Morgan, 1993; Morrow, 1993; Pitter & Stiglmayer, 1993). In Peru, rape is used as a punitive device against incarcerated women and also as an interrogation tool (U.N. Honors Women, 1994).

Rape continues to be viewed as a crime that is inherently wrong. Women have evolved from "property" to individuals with intrinsic rights, yet the prevalence of rape continues and women and men of all ages are at risk.
Culture

The etiology of rape is complex. A cultural approach involves the evaluation of societal values, beliefs, and customs that contribute to the propensity of rape. Patriarchal attitudes, male-female socialization, and acceptance of interpersonal violence are believed to be causative factors behind the motivation to rape.

Do we live in a culture that supports rape? In a study of 95 tribal societies, 17% were found to be rape-free, 35% intermediate, and 18% rape-prone. In rape-free societies, women were respected and valued for their roles in the family and tribal hierarchies. Conversely, in rape-prone societies, women were demeaned and powerless, while males were perceived as authority figures. Also inherent was an acceptance of interpersonal violence. Aggression, even aggression against women, was taken for granted and indeed, socially acceptable (Sanday, 1981).

Brownmiller (1975), Friedan (1963), Griffin (1971), Koss and Harvey (1991), Millett (1970), Russell (1984), Rich (1976), and Scully (1990) espouse the theory that in our society patriarchal attitudes are responsible for the subordination of women. These traditional gender-role beliefs enhance an attitude of male domination which some believe allows rape to be used as a form of social
control. Women are expected to be submissive, noncompetitive, nurturing, and adherent to a behavioral code that dictates "appropriate" gender roles. People who stereotype women's roles are found to be (1) more accepting of violence against women, (2) to minimize rape as a crime, and (3) to have a tendency to blame victims for their own involvement in what is perceived as a sexually motivated crime (Burt, 1980; Field, 1978).

Men are misled by this socialization process as well. Not only are they recipients of misinformation about who women are, but they also are host to a barrage of misconceptions about masculinity and aggression. Doyle (1983) describes five central themes that foster traditional male gender roles: (1) the anti-feminine element which abhors anything that is remotely feminine; (2) that successful men are winners in sports and at play; (3) that men are aggressive, and have strength, power and a readiness to challenge adversity; (4) that men are always on the prowl and ready for sex; and (5) that self-reliant, independent, "real" men are neither emotional nor dependent on anyone. Men who subscribe to the aforementioned are perceived as traditional men who view women as sexual beings whose main function is sex and reproduction (Doyle, 1983). This is in contrast to
modern men who view women as companions in cooperative relationships (Pleck, 1981).

Social disorganization may contribute to the continuation of rape (Baron & Strass, 1989). A fragmented society is associated with an increase in violent crime. Societal pathology is relative to poverty, a more mobile society, a breakdown of family structure, and a lack of cohesiveness in neighborhoods.

Ours is a violent society. We are socialized to accept violence as normal behavior. The Center for Responsible Television, in a study commissioned by T.V. Guide magazine, reported that numerous acts of violence occur during each hour on television ("T.V. Violence, 1993). Such exposure desensitizes people to the problem. For those who live in an environment laced with violence, it may become a learned behavior. Anne Campbell (1993) agrees with this notion and rejects a genetic predisposition to violence, instead finding the cause of violence to be attitude related. Men learn to utilize aggression as a tool in the acquisition for power, while women are socialized to repress such tendencies (Campbell, 1993).

Aggression and acceptance of interpersonal violence are also apparent in the dating ritual. Men learn to be the aggressor in this process, while women are expected
to be passive. The process is similar in sexual relationships. The "ideal" woman is one who, on one level, resists any type of sexual overture, yet, on another level, desires sex. "The adolescent who engages in sex is incorrigible, the female adult who has pre- or extra-marital sex is promiscuous, and the woman who tries to affirm her own sexuality to be active and directing is called castrating or nymphomaniacal" (Melani & Fodaski, 1974, p. 97)

Is there a connection between pornography and rape? One review (Baron & Strauss, 1989) of pornography reveals an increase in reported rapes in states that have a large circulation of sexually explicit magazines. Baron and Strauss (1989), Morgan (1980), and Wheeler (1985) observed that violence against women is common in such material. Pornography tends to portray women in submissive acts of sex and adoration of men. It also serves to fuel the notion of women as sexual objects, severing the association of love from sex.

Pornography is moving into the mainstream. Objectification of and aggression towards women are common fare in rock videos (Peterson & Pfoist, 1989; Seidman, 1992; Sherman & Dominick, 1986; Summers-Flanagan, Summers-Flanagan, & Davis, 1993), movies and print media (Haskell, 1974; Malamuth & Check, 1981).
While there are rapists who have acknowledged an avid interest in pornography, some researchers are reluctant to conclusively identify a link between sexually aggressive behavior and the use of sexually explicit material (Christensen, 1990). Yet, others believe the use of aggressive pornography shows a correlation between aggression towards women and an increased likelihood of committing rape (Dworkin, 1979; Russell, 1988).

Finally, some western religions serve to support the notion of women as sexual beings subordinate to men. The role of women is limited in many churches (Gudorf, 1993; Rosten, 1975; Walters & Spring, 1992). Sex prior to marriage, or outside of marriage, is sometimes prohibited and considered to be indicative of spiritual poverty (Vraney, 1981). The Catholic saints Maria Goretti and Agnes both suffered tortuous deaths rather than submit to the unwanted sexual advances of their attackers. No males have been beatified for similar circumstances (Bokenham, 1992; Young, 1989). The guilt that rape survivors endure can only be intensified by the belief that rape victimization is akin to loss of spiritual integrity and salvation.

Obviously, rape is a phenomenon with profound social implications. Prevention programs for rape should address causative cultural issues. By designing
education interventions that examine violence and gender role stereotyping, perhaps the dynamics surrounding sexual coercion can begin to change.

**Incidence**

The Federal Bureau of Investigation (FBI) began keeping a record of rapes reported to police in the early 1930s. By 1973, 51,000 rapes or attempted rapes had been recorded. During the years 1968 to 1973 there was a 55% rise in rape (Uniform Crime Report, 1968, 1969, 1970, 1971, 1972, 1973). In 1987, the number of reported rapes was 91,110 (Uniform Crime Report, 1987). In the year 1990, the rape total rose to more than 100,000 for the first time (Uniform Crime Report, 1990; Violence Against Women: The Increase of Rape in America, 1990), which was an 8.5% increase from the previous year, 1989. These figures indicate an eight percent increase in rape rate victimization to an estimated 80 per 100,000 females. By 1993, 109,060 rapes were reported to the FBI, a 2.3% increase from the previous year (Skorneck, 1993). It is important to remember that these statistics do not include sexual assault of a child, statutory rape, or other sexual offenses such as harassment and fondling.

Several victim surveys have been initiated to more accurately compute sexually related criminal activity in the United States. By interviewing representative
households, it is possible to extrapolate results to the general population germane to victimization. A 1967 study by Ennis for the National Opinion Research Center found that the number of rapes was almost four times as high as those reported by the Uniform Crime Reports during the same time period. A significant number of these reported rapes were not included in the final analysis based on researcher criteria for probability of occurrence.

Perhaps the most well-known victimization survey is the National Crime Survey (NCS). A national probability sample of crime victims ages 12 and over is developed for this report. Respondents are not asked if they were raped; instead, they are asked questions about bodily harm. Voluntary responses about rape are garnered and compared to the size of the general population. In comparison with the Uniform Crime Report data previously mentioned for 1989 to 1990, the National Crime Survey reported 129,391 and 130,260 rapes, respectively. Utilizing this information, the Bureau of Justice statistics estimated a victimization rate of 16 rapes per 10,000 females (Criminal Victimization in the United States, June 1991; Criminal Victimization in the United States, February 1992).
Using the National Crime Survey data, *The Crime of Rape* (1985) examined rape statistics from the years 1973 to 1982. Attempted rapes of women numbered 1,032,000, completed rapes 479,000, and male victims totalled 123,000 for a combined total of 1,634,000. More than 75% of these rapes involved one victim and one offender, 15% of the victims were attacked by more than one perpetrator, while the remainder involved multiple offenders. Only 52% of these rapes were reported to law enforcement agencies.

A 1991 report by the Department of Justice (*Female Victims of Violent Crime*) also uses the NCS data for the years 1973 to 1987 to document the continuing spiral of rape victimization. Male rape accounted for 197,300, while female victims of rapes numbered 2,317,900. Women, it is noted, are more likely to be victims of violence by intimates. The Senate Judiciary Committee in 1992 reported more than 21,000 domestic assaults, rapes, and murders of women each week (*Violence Against Women: A week in the life of America*, 1992, p. 2). Two thousand female rapes were reported; if unreported rapes had been included, the total may have been as high as 12,000 per week. This number is similar to the statistics calculated by the National Victims Center (1992) in which 683,000 rapes were calculated for the year 1990.
The year 1990 was a hallmark year for rape statistics. Twenty-nine states set records for the number of rapes, and 27 states reported new records for the rate of rape victimization (Violence Against Women: The Increase of Rape, 1990). This same year, the United States held the dubious record of leading the world in both the number and the rate of rapes. The Increase of Rape Report (1990) indicates that the United States' rape rate is 20 times higher than Portugal's, 26 times higher than Japan's, and 46 times higher than Greece's.

As previously mentioned, rape is believed to be grossly under-reported to law enforcement agencies. Victim surveys further validate that "the National Crime Survey has methodical flaws that all, including the Bureau of Justice, agree result in a severe under-counting of victims" (Violence Against Women: The Increase of Rape, 1990, p.28).

A number of other surveys have been undertaken to evaluate the crime of rape. Research by Menachem Amir (1971) serves as a catalyst for the study of rape, though his work deals only with police-reported rapes. Other studies (Hayman, 1971; Hughes & Sandler, 1987; Koss, Gidycz & Wisniewski, 1987; MaCahill, et al., 1979; Medea & Thompson, 1974; Muehlenhard & Linton, 1987; Nelson & Clark, 1986; Russell, 1984) have evaluated victims, types
of rape (acquaintance or stranger) and, in some cases, whether or not the rapes were reported to the police. Again and again, it was found that rape is not reported. In a *MS* magazine survey, only five percent of rape victims had notified law enforcement officials (Warshaw, 1988).

It is important to note that these statistics do not include rapes that end in homicide. Russell (1984) contends that 1 out of 10 female murder victims is killed during a sexual offense. Approximately 20 rape-related homicides occur each year in New York City, most involving strangulation or suffocation (O’Reilly, 1984). In 1983, 185 rape-related homicides were reported to the FBI (Crime of Rape, 1985). Yet in England, sex-related murders number less than 10 per year (West, 1984).

In sum, governmental reports indicate an increase in the crime of rape. This is further supported by victimization surveys and research studies. Clearly, the escalating incidence of rape demonstrates that a substantial portion of the population is at risk for rape victimization.

**Male Rape**

Most victims of rape are females, yet males are also at risk. Much of what is written about males involves child sexual abuse. Peters, et al. (1986) evaluated a
number of studies about this issue and found a prevalence rate from 3%-31% for males. From a counseling perspective, the needs of male victims of child sexual abuse are not dissimilar from those of females, though certainly there are survivor issues specific to the male gender (Brown, 1991; Grayson, 1989; Hunter, 1989; Hunter 1990; Lew, 1988; Nice & Forrest, 1990).

Recently men have begun to break the silence of male rape victimization, though the literature is sketchy at best. Forman (1982) described 198 separate incidents of male rape reported to Columbia, South Carolina police in a one-year period. The Hartford, Connecticut Sexual Assault Center received 400 phone calls from men during 1992 (Rierden, 1993).

What is known about male rape victims is that men are reluctant to report rape because it is perceived to be a crime that is perpetuated against women, hence a sense of denial exists for many male victims (Senter, 1988). Some men believe that rape victimization is akin to homosexuality (Rierden, 1993). Emotional reactions of males include denial, somatic symptoms, sexual difficulties, and psychological distress (Forman, 1982; Goyer & Eddleman, 1984; Groth & Burgess, 1980; Rierden, 1993; Senter, 1988). Clearly, a need for more research is indicated concerning males and the crime of rape.
Legal Issues

A myriad of problems exist specific to legal issues pertaining to rape. There exists no national definition of rape. Each state has a different definition of the crime and what actually constitutes rape. Some states describe rape as: sexual assault, sexual battery, sexual abuse, sexual intercourse without consent, criminal sexual penetration, gross sexual imposition, and criminal sexual misconduct (Searles & Berger, 1987). Some states have rape laws defining female victims only, while 38 states have laws that are applicable to both males and females (Sloan, 1992).

The age of consent for sexual activity is an issue. Sixty percent of the states consider sexual penetration of anyone under the age of 16 criminal misconduct. Four states designate age 15, three states age 14, and two states age 13 (Searles & Berger, 1987). If the victim misrepresented her age, or the perpetrator did not know the age of the victim, the rape charge can be in question (Searles & Berger, 1987). Spousal exemption from rape charges remains a volatile issue (Sanchez, 1992; Sloan, 1992).

Perhaps the greatest hindrance to the processing of rape cases is corroboration. Historically, it was not enough for the victim to report a rape. Without some
supporting evidence to validate testimony, cases could be deemed unfounded, which meant that no action would be taken against the accused (Connell & Wilson, 1974; Sloan, 1992).

Historically, in order to believe the rape occurred, the burden of proof was placed on the victim, which contributed to a conciliatory attitude toward the perpetrator. A number of problems exist specific to corroboration. The majority of rapes involve one offender and one victim. Semen can be detected during a medical examination, but not all rapists ejaculate. Evidence of penetration can be detected by an examining physician, but it may be difficult to determine if it was obtained through force or consent (Chappell, et al., 1977; Hibey, 1975; Sloan, 1992). In a case reported by Vachyss (1993), a judge questioned how a victim could ascertain if penetration had indeed occurred because her head had been covered with the attacker's jacket.

Even videotaping is often not enough evidence for corroboration. Consider the case of the South Carolina housewife who was bound, beaten, and raped by her husband who videotaped the attack. He was found not guilty after he reported his wife enjoyed rough sex (Dismay at Verdict, 1992; Majority Staff of the Senate Judiciary Committee, 1993).
Another issue is resistance, a difficult concept to measure. In the past, rape victims were required to prove "utmost" resistance throughout a rape. Many victims report their immediate concern is staying alive. If the victim does not resist to whatever standard is deemed appropriate, it may be that "(1) she is ambivalent about her intentions; (2) quite willing if the male can be sufficiently persuasive; or (3) pretending to resist when she is actually playing a teasing game, wanting to be begged and finally taken" (Sloan, 1992, p. 14). Another matter of consideration when invoking the resistance issue is alcohol and drugs. A victim who, by choice or not, is under the influence of either may not be able to resist. Lastly, in cases involving multiple offenders, weapons, or physical restraint of the victim, resistance may not be a viable option (BenDor, 1976; Gordon & Riger, 1989; Hilberman, 1976; Kelly, 1988; Searles & Berger, 1987; Sloan, 1992).

The prejudices against victims do not end here. Menachem Amir (1972, p. 155) offers the theory of victim-precipitated behavior. He believes that "the victim becomes functionally responsible for the offense by entering and following a course that will provoke some males to commit crimes." This attitude is reinforced by the judicial systems as revealed by Bohmer (1977) in her
study of Philadelphia judges who handled rape cases. According to Bohmer, victims generally fall into three groups: (1) genuine victims, also known as "good victims" (Vachyss, 1993) who may be viewed as good, upstanding citizens, Christians, or who are perceived as trustworthy; (2) consensual participants who are seen engaging in behavior that sets them up as a victim, for example, accepting a ride with a stranger or a recently met acquaintance. The judges described these as "friendly rape" or "assault with failure to please;" and (3) vindictive females who are believed to have fabricated the reported rape to punish the accused (Bohmer, 1977).

The survivor of a rape must defend herself against a host of other misconceptions that accompany the victim-blaming mentality. The reliability of the victim as a witness is considered. Identification of the offender may be questioned if alcohol or drugs were involved. Promiscuity or past sexual history of the victim may be detailed in court (LeGrand, 1977). The jury in the case of the South Carolina housewife was regaled with testimony about her sexual preferences, yet the jury was barred from hearing testimony about the accused's prior arrest for rape (Majority Staff of the Senate Judiciary Committee, 1993). The victim's manner of dress can be
used as an excuse for rape. Time and time again, aggressors say that the victim's clothing provoked the attack, a misconception that shifts the responsibility from the perpetrator to the victim (Gordon & Riger, 1989; Hilberman, 1976; Kelly, 1988). Amir (1971) stated that 82.1% of the rapes he studied were either wholly or partially planned, which does not lend credence to the provocative dress excuse.

A woman who is raped by a stranger is more apt to be believed than one who is raped by an acquaintance or spouse. A young or elderly victim is more believable than an adolescent or college-age woman whose burgeoning sexuality may be deemed problematic. The victims receiving the harshest treatment are those who either work in professions that are subjected to close scrutiny (for example prostitution, waitresses, and dancers) or women whose behavior is called into question. Hitchhiking is seen as aberrant behavior, but even walking to one's vehicle in the evening can be construed as loose behavior that may "justify" being attacked (Hilberman, 1976; Kelly, 1988; Lottes, 1988; Schwendinger & Schwendinger, 1983; Silbert, 1988).

The sexuality of the victim and the male-female interplay can be problematic. Burt (1980), Burt and Albin (1981), Burt and Estep (1981), Groth (1979b) and
O'Reilly (1984) have all described rape myths and how belief in such myths continues to alleviate the rapist's responsibility for the attack and contributes to victim blaming. The behavior of the woman who engages in foreplay and then changes her mind may be used against her. It is believed that women need to be cajoled into having sex. A forceful "no" may be perceived as a need to be "wooed." A sense of hyper-masculinity is perpetuated by the misbelief that, unconsciously, women have a desire to be raped, to be forcefully "taken" by the man. Another misconception is the unbridled passion that men are supposed to possess (Doyle, 1983).

A last consideration is the issue of women falsely accusing men of rape. Some people believe that vindictive women, or perhaps women facing an unwanted pregnancy, may cry "rape." Statistics do not bear this out. In a six-month period in New York, of approximately 2,000 reported rapes, 250 were considered unfounded. In only five cases was it determined that the victim was lying (O'Reilly, 1984). The FBI believes that about two percent of reported rapes are false accusations. It is apparent that "time and time again, day after day, victims of rape are victims of our belief about rape" (Majority Staff of the Senate Judiciary Committee, 1993, p. 20).
Offender Models

A prevailing myth exists that rapists are mentally ill perverts who lurk in the shadows, watching and waiting for their victims to appear. In reality, the offender presents an interesting persona for study. In order to understand the crime of rape and develop prevention strategies, it is important that the offender be evaluated.

Most research is done on incarcerated rapists. This group represents the minority of perpetrators. One should be cautious in extrapolating these findings to all rapists in general. However, a number of these studies have determined that rapists have a personal history of sexual trauma in their formative years. One-third of rapists in Groth's (1979a) research reported such experiences which were generally incestuous in nature. Nine percent of convicted rapists professed to have been sexually abused as children in a study by Scully (1990), 34% were victims of beating that resulted in physical injury. A significant number had previous arrests (Scully, 1990).

The desire for sexual satisfaction is not the motivation for most rapists (Gebhard, Gagnon, Pomeroy & Christenson, 1965; Glueck, 1956; Groth, 1979b; Scully, 1990; Scully & Marolla, 1985). Glueck's findings
indicated that rapists may, indeed, find the sexual act an uncomfortable experience. Only 10% of his group enjoyed their first ejaculation, while 73% experienced moderate to severe anxiety with intercourse. More than 60% regarded women in a negative light, often separating sex from love (Glueck, 1956). Again and again, the literature reveals that rapists possess more conservative attitudes toward women and, in essence, blame women for their own victimization (Burt, 1980; Feild, 1978; Groth, 1979b; Scott & Tetreault, 1987; Scully & Marolla, 1985; West, 1984).

A "typical" offender has difficulty in coping with stress. He may possess poor social skills and low self-esteem, both of which may impede relationships with others. Communication skills are limited, and this type of person is incapable of expressing intimacy and love in a compassionate manner. Aggressiveness toward women is a common trait. Some bear a personal grudge against women, while others hold "women collectively liable for rapists' problems . . . . victims may represent a category of individuals being punished" (Scully & Marolla, 1985, p. 225).

Rapists have a tendency to deny responsibility for their offenses. Scully (1990) found that 69% of the offenders she studied believe that most accused rapists
are innocent. Sixty-five percent believed that women provoke rape by their manner of dress or by their actions and 59% believe rape charges come about when a women changes her mind after consensual acquaintance sex. Another 54% believed it was the woman’s responsibility to prevent her own rape, while 46% favored more stringent laws to prove a rape occurred.

Scully (1990) found that rapists tend to rationalize their behavior in three ways that absolve responsibility for the attack. The first group blames substance abuse, members of another group excuse their behavior by professing to emotional problems, and the last group exudes a "nice guy" image, remarking that rape is an isolated incident atypical of the usual behavior of the offender. One rapist claimed allegiance to the "nice guy" group even though he had raped and murdered five women, stating that he "killed them quickly so they wouldn’t know it was coming" (Scully, 1990).

Nicholas Groth is a well-known researcher who has investigated the rapist and his motivations. In his book entitled Men Who Rape (1979), he examined and defined three basic patterns of rape. In anger rape, an element of brutality exists that is the result of rage. This rape is not sexually motivated but an impulsive act wrought with physical and verbal abuse. The offender’s
actions are in response to a stressor that cause him to lose control. The victim may or may not be the cause of that stress. The anger rapist displaces the hostility he feels onto the victim. Many anger rapists cannot even describe or identify the victim of his attack. This type of offender's anger dissipates with the rape, but his volatile temper and inability to productively work through his feelings make him a candidate for repeat offenses.

The power rapist, as defined by Groth (1979), is an individual who obsesses about sexual conquest. An innate sense of inadequacy is apparent. The rape serves to bolster his diminished sense of self relative to his sexuality and masculinity. He fantasizes about the victim's response, believing that once the attack is initiated, the victim will come to find the experience pleasurable because of his powerful ways. Naturally, the rape experience never quite lives up to the fantasy in his mind. Because the power rapist believes that the victim enjoys the encounter, he has difficulty acknowledging that a rape occurred; hence, a sense of denial exists. This rapist has difficulty in taking "no" for an answer, since he ardently believes that his victims will succumb to meet his needs.
Groth's (1979) third type of rapist, the sadistic rapist, has also been described by Rada (1978). Fortunately, this is the rarest type, but perhaps unfortunately, this is the one that receives a good deal of media coverage. In this instance, the horrific aggression against the victim causes this rapist sexual gratification. This type of attack is usually planned. Some utilize theatrical ploys to ensnare victims. The sadistic rapist can be quite ritualistic, and a perverse sense of pleasure exists in administering pain and observing the victim's suffering. The torture of these victims may result in the death of the victim, but the abuse does not always end there. Some victims are dismembered and/or are subjected to sexual mutilation.

It is easy to see that the psychology and motivation of rapists is quite complex. Scully (1990) simplistically divided the rapists in her study into two groups: admitters and deniers. Admitters admit to their crimes and describe their behavior as rape, while deniers either deny that sexual contact occurred, or admit to "sex" but do not believe a rape occurred. In summary, there are no hard and fast conclusions about how a rapist develops. Family conflicts, culture, traditional gender roles, drug and alcohol use, anger, obsession, self-esteem problems, and perversion are noted in some, but
not all rapists. Treatment modalities are ongoing. The best course of action appears to be to begin with strategies for prevention.

**Adolescent Rape: Victims and Offenders**

A number of biological, psychological, and social changes occur during adolescence. The onset of puberty begins the development of secondary sex characteristics. Thought processes change from concrete to the formal operational stage which enables children to begin reasoning in an abstract manner (Berk, 1991).

It is of note that puberty appears to be arriving earlier in our children, quite possibly because of improved nutrition and better health care. Adolescence is also of longer duration because of changing patterns in our social systems, such as an increase in the number of years of schooling and postponement of marriage until after the completion of education. Additionally, many young people, because of economic conditions, live with their parents past high school and college, which also serves to prolong a sense of adolescence (Bell, 1971; Hopkins, 1983; McCary, 1978).

One of the major developmental tasks of adolescents is the need to loosen family controls and socialize with peer-group friends. This leads to the development of relationships with the opposite sex, and, subsequently,
Adolescence also begins a period when males and females begin sexual exploration. "Society, by operating on the assumption that adolescents should not have sexual relations, effectively bars them from the information they want and need. . . . The evidence seems to point to the fact that a great number of adolescents will engage in non-marital sexual relations no matter what adults think they should do" (Gordon, 1973, p. xv).

The literature, regarding adolescent sexual activity supports Gordon. Twenty years ago the Sorenson Report found that 52% of adolescents had experienced sexual intercourse, and the first sexual encounter occurred at the age of 12 or younger for 13% of the sample (Sorenson, 1973). In a group of 4,240 adolescents in Kantner and Zelnick’s (1972) study, nearly one in three was found to be sexually active. Fifty-four percent of the boys and 37% of the girls were sexually active by age 17 in a study of teenagers ages 15-18 (Ostrov, Offer, Howard, & Kaufman, 1985).

Younger adolescents are also dating at an earlier age and experimenting with sex. Getts (1988) discovered in his sample of military dependent adolescents that 50% of these students had dated by the completion of junior
high school, and 20% of those were sexually active. In other studies of younger adolescents (ages 12-16), 28% of the respondents reported having experienced intercourse at least once (Scott, et al., 1990); 41% were sexually experienced by ages 12 to 13 (Swenson, 1992), and the average age of initial sexual activity was 14.2 years for a group of 387 girls in a junior high setting (Gibbs, 1986).

Does rape affect adolescents? The answer is yes. Study after study demonstrates the vulnerability of young women to this crime. Not only are they at risk for stranger rape, but also rape that occurs within the context of dating (Ageton, 1983; Krasner, et al., 1976; Warshaw, 1988).

Unfortunately, young women comprise the group least likely to contact law enforcement agencies; even so, the statistics are troubling ( Majority Staff of the Senate Judiciary Committee, 1990). Between 1973 and 1987, 11% of female victims were deemed to be between the ages of 12 and 15, while 25% were ages 16 to 19 (U.S. Dept. of Justice, 1985). Females in the 16-to-24-year-old age group are most likely to be victims (Female Victims of Violent Crime, 1991). Youth Indicators (1991) indicated that for girls ages 16 to 19, 1.9 rapes occurred per 1,000 girls. The National Crime Survey (NCS) data for
1979, which measured reported and unreported crimes, indicated a victimization rate of 5.7 per 1,000 for girls ages 15 to 19 (or 18,320 attacks on females ages 12 to 15).

Research studies validate government studies. Walmsley and White (1979) note that 24.3% of rape/attempted rape victims were between the ages of 13 and 15. Other studies that support these findings include Hayman's (1971), where of 1,223 victims, 25% were ages 13 to 17; Medea and Thompson's (1974) where 8% were under 15, 20% between 15 and 17, and 23% ages 17 to 18; and MaCahill, et al. (1979), where of 3,971 victims, 23% were aged 12 to 15 and 24.7% were ages 16 to 20. The greatest at-risk group for rape is ages 13 to 17 (Katz & Mazur, 1979), while McDermott (1979) noted an increase in stranger rape for ages 16 to 19.

A longitudinal study by Ageton (1983) involved interviews with more than 1,700 adolescents over a five-year period. It was estimated that for female adolescents, the victimization rate (per 1,000) was 9.2, 6.8, and 12.7 for the years 1978 to 1980, respectively; a figure that is notably higher than that reported by NCS data. Hall and Flannery (1984) conducted a telephone survey of 508 Milwaukee adolescents in which 12% of the
females and 2% of the males contacted reported a sexual assault.

In another study of 122 adolescent victims, 45 were between ages 12 to 14, the remaining 77 were ages 15 to 17 (six victims in each group were males); 88% of the victims were raped, while the remaining 12% suffered some type of sexual molestation (Mann, 1981). Eight percent of 67 high school females who completed a Sexual Experiences Survey (Gidycz & Koss, 1989) revealed they were victims of a forcible rape. Of 1,197 students responding to a health survey, 15% said they had experienced unwanted sexual contact. Of these, 31% of the females and 8% of the males reported that experience to be a rape victimization (Erickson & Rapkin, 1991). Finally, the Justice Department indicates that 21% of rapes were perpetrated by adolescent males in the year 1979 (Criminal Victimization in the United States, 1981).

A large number of rape offenders are adolescents. Amir (1971) determined from an analysis of police records in Philadelphia that in the years 1958 and 1960, 40% of those arrested for rape were between the ages of 15 to 19. California arrests in 1978 included 3,075 adult men and 538 juveniles. Nationally, 30% of arrests for forcible rape in 1979 involved adolescent males ages 18 to 22 (Uniform Crime Reports, 1980). As noted in a
survey by Medea and Thompson (1974), adolescent males under 19 were responsible for 17% of rapes. Males between the ages of 12 to 20 were involved in 17% of single-offender rapes for the years 1973 to 1982 (The Crime of Rape, 1985). The ensuing years have offered no respite from this trend: statistics for the years 1979 to 1987 reveal that offenders twenty years of age or younger were responsible for 18% of single-offender and 30% of multiple-offender rapes (Female Victims of Violent Crime, 1991). The FBI reports a three percent increase in adult sexual offenders, but the greatest rise in arrests are adolescent offenders (Ingrassia, Annin, Biddle & Miller, 1993).

Juvenile sexual assailters tend to receive lenient treatment in the judicial system. Groth (1979b, p. 180) believes this is because of the misperception of rape as situational, sexual experimentation, or attributed to the aggressiveness of boys. Yet, Groth notes that 20% of adult sexual offenders have a history of juvenile offenses. An analysis of 15 adolescent rapists by Hsu and Starzynski (1990) confirms Groth's findings. Thirty percent of these rapists had been previously charged with sex offenses. Adolescent offenders possess a poor self-image that can lead to destructive or anti-social behavior (Groth, 1979a; Vinogradov, Dishotsky, Doty, and
Tinklenberg, 1988). Poor self-esteem, in this instance, is associated with limited goal setting, conduct disorder, depression, and a tendency to act out in order to prove masculinity. In order to bolster self-esteem, many adolescents use either alcohol or drugs. Groth (1979a), Hsu and Starzynski (1990), and Vinogradov, Dishotsky, Doty, and Tinklenberg's (1988) studies of juvenile sex offenders describe the association of substance abuse and rape. While it is not an excuse for such behavior, the relationship between substance abuse and rape needs to be further evaluated.

It is important not to minimize adolescent participation in rape. Such behavior may be a result of confusion of what constitutes socially acceptable behavior, or it may be a symptom of a deep-seeded psychopathology. In either case, the adolescent offender needs not only to be punished for his crime, but treatment should be provided in which the offender learns to function in society in an appropriate manner.

Adolescence begins a period of developing autonomy and disengagement from parental safety supports. This age group is at risk for victimization. Additionally, young males may begin and continue aggression against women. Adolescent participation/victimization must be recognized and acknowledged as problematic.
Adolescent Recovery

Many adult victims report that the healing process after rape is long and complex. For adolescents, this process is complicated by the fact that many victims receive no intervention from family or supportive networks because they choose not to inform their parents (Ageton, 1983). Schmidt (1981) and Hall (1987) have found that the adolescent victim's reluctance to inform parents about the assault is related to perceptions of the reaction of the family and whether the victim will be believed. While support is usually proffered in instances of stranger rape, in cases of acquaintance or date rape, believing the victim may be a problem.

A number of reasons exist for this. Many parents believe it is inappropriate for adolescents to be sexually active, yet if a rape occurs, there is a tendency to question if there was some consensual or causal behavior on the part of the victim (Felice, 1980; Schmidt, 1981). Some adults continue to view rape as a "sex" crime, negating the violence associated with sexual assault. Finally, adolescents are also blamed for their own victimization, especially in instances of engaging in behavior that may be deemed as precipitating the attack, such as alcohol use or sneaking out of the house. If the victim is not believed by family members, the ability to
trust is further confounded (Felice, 1980; Mann, 1981; Schmidt, 1981; Warshaw, 1988).

A number of psychological responses have been observed in adolescent victims. Fear, anger, guilt, and embarrassment were experienced by most. Fear for personal safety is paramount. If the attacker is a stranger, the victim may exhibit fear of being alone and feel more comfortable in surrounding herself with friends or family. Eliminating situations that may call for interactions with strangers is also a coping mechanism. The situation can be more complex if the offender is an acquaintance; the victim may react by distancing herself from family and friends and questioning their motives (Ageton, 1983; Burgess & Holmstrum, 1974; Krasner, et al., 1976; MacAehill, et al., 1979; Mann, 1981; Schmidt, 1981; Warshaw, 1988).

Behavioral changes have also been noted in adolescents. Changes in eating and/or sleeping habits have been noted in some victims. School problems include changing schools, truancy, and difficulty in concentration resulting in a decrease in academic functioning. Because the majority of rapes are unreported, such disruptive behavior by victims may be misinterpreted (Ageton, 1983; Burgess & Holmstrum, 1976;

All of the aforementioned studies report that the victim's social life is directly affected by the assault. A breakdown in heterosexual relationships was detailed in 42.1% of victims ages 12 to 17 (MaCahill, et al., 1979), while dating activities of 22% of victims (Ageton, 1983) decreased.

Not to be overlooked is the guilt and often self-blame experienced by many of the adolescents. Fifty-nine percent of 122 victims evaluated by Mann reported such feelings. Self-blame may inhibit victims from either reporting the abuse or seeking the help needed to recover. Adolescents are not immune to the myth of victim-precipitated behavior, an issue that may be prevalent, especially with date or acquaintance rape (MaCahill, et al., 1979; Medea & Thompson, 1974).

Somatic responses are not unknown and may be a clue that an assault has occurred. Certainly a victim may be at risk for sexually transmitted diseases, pregnancy, or even AIDS, but other physical symptoms may also be apparent. Urinary tract infections, skeletal-muscle tension, headaches, or unspecified pain are just a few of the complaints that may be apparent. Health problems can affect school performance and optimal recovery. For some
adolescents, somatic complaints may be indicative of repression of emotions associated with the attack (Burgess & Holmstrum, 1974).

In summary, adolescent responses to rape are not dissimilar to those experienced by adults. Counselors, families, teachers, and health professionals must be cognizant of the signs and symptoms of sexual assault in order to support the adolescent victim through the recovery process.

Educational Concerns

Educational programs for children specific to sexual abuse began in the 1970s. A major focus of these programs was helping elementary school children learn to differentiate between appropriate and inappropriate touching, to develop "ownership" of one's own body, to learn safety strategies, and to report to an adult any questionable behavior (Williams, 1980). College-age students have also been the recipients of sexual assault information as the college environs have seen an increased rate of rape in the past few years. Yet, adolescents have not received the same attention as have young children and adults (Gruber, 1984).

A number of reasons for this exist. Bowen (1993) found that educators believed that resistance on the part of parents, the community, and the school administration
impedes the delivery of safety information pertaining to child abuse. Harris and Welshimer (1993) report that schools are often reluctant to expand the sex education curricula, but found that 86% of surveyed parents supported providing students with this information. More than half of the parents supported the inclusion of rape education into the curriculum (Harris & Welshimer, 1993).

Perhaps the misconception of defining rape as a "sex crime" and sensitivity surrounding sex education has limited rape prevention instruction. Because rape is a crime of violence, we must work to ensure that students come to perceive it as such. It is believed that violence education can be addressed within the scope of health education. Health educators surveyed by Page and Marten (1993) report that rape and acquaintance rape is one of "the most commonly addressed topics in violence prevention, yet 24.1% of health coordinators provide no violence prevention education at all, and 34.4% describe their coverage as 'very little'." Less than 10% devote "a great deal" of time to the issue of violence.

**Attitude and Adolescents**

The concept of attitude is frequently mentioned in research. Allport (1935) observed that historically three fields of science initiated interest in the field of attitudes: experimental psychology, psychoanalysis,
and sociology. He defined attitude as a "mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935). Thurston (1946, p. 36) clarified attitude as the "intensity of psychological object, a psychological object being any symbol, person, phrase, slogan, or idea toward which people can differ as regards positive or negative affect." Rokeach (1968, p. 112) defined attitude as a "relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner."

An attitude is generally believed to have three components--affect, cognition, and behavior. The affective component of an attitude is described as the emotional response to an object or person. Cognition represents factual knowledge about the object or person. The behavioral element of an attitude involves overt action directed toward the object or person (Rokeach, 1968; Suedfeld, 1971; Zimbardo, 1969). Suedfeld (1971) proposed that behavior can be perceived as independent of the first two dimensions or recognized as an integral component of attitude.

It is believed that attitudes are not innate, but are learned through cumulative experiences or

What is the function of attitudes? Daniel Katz (1960) described four factors specific to attitude function: (1) Utilitarian, Instrumental, or Adjustive—adherence to attitude serves to avoid punishment and obtain some type of positive gain; (2) Ego-Defensive—provides protection from acknowledgement of unacceptable truths about one’s self or the world; (3) Value-Expressive—enables expression of personally held values or beliefs; and (4) Knowledge—provides understanding and ability to synthesize and integrate fact. Understanding the functional roles that attitudes serve is essential in the study of attitude changes.

Although a number of ideas about attitude change exist, they can best be summarized by the following: (1) attitudes can be changed if suggestion for change is received and deemed acceptable; (2) change is more likely to occur if in accordance with group values and the
source is considered trustworthy; (3) mass media reinforcement coupled with face-to-face reinforcement are more likely to be accepted; and (4) attitude change is more likely to occur if the suggestion for change is also accompanied by other factors such as factual knowledge (Haloran, 1967). Generally, an attitude changes when its functional purpose changes (Suedfeld, 1971). To that end, two major evaluative tools exist to measure attitude and attitude change. Indirect or physiological procedures involve such techniques as galvanic skin response, pupillary response, and facial myography (Keisler, Collins, & Miller, 1969; Petty & Cacioppo, 1981).

Many health education research studies that involve adolescents utilize direct assessment of attitudes by self-reports, Likert, or semantic differential scales. In the following studies (Table 1), a pre-test/post-test design was used with a treatment group and, in some instances, a control group. An educational intervention was then implemented. After post-testing, results were then analyzed to determine if any significant changes occurred in attitudes. In a number of these studies, knowledge acquisition was also ascertained.

Although 85% of the following research studies demonstrated significant knowledge gain, the results are
<table>
<thead>
<tr>
<th>Research Topic</th>
<th>Attitude Change</th>
<th>Knowledge Gain</th>
<th>Author(s)</th>
</tr>
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<td>AIDS</td>
<td>+</td>
<td>+</td>
<td>Farley, Pomdoutius, Sabella, and Hadler (1991)</td>
</tr>
<tr>
<td>AIDS</td>
<td>+</td>
<td></td>
<td>Husztic, Clopton, and Mason (1989)</td>
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<td>AIDS</td>
<td>+</td>
<td>+</td>
<td>Kipke, Boyer, and Hein (1993)</td>
</tr>
<tr>
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<td>NC</td>
<td></td>
<td>Ponton, DiClemente, and McKenna (1991)</td>
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<tr>
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<td>+</td>
<td></td>
<td>Revista, Alverio, and Melvk (1991)</td>
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<td>AIDS</td>
<td>+</td>
<td>+</td>
<td>Rickert, Jay, and Gottlieb (1991)</td>
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<td>AIDS</td>
<td>+</td>
<td>Females—+ Males—NS</td>
<td>Steitz and Munn (1993)</td>
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<td></td>
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<td>NS</td>
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<td>Glass and Knot (1984)</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>PS</td>
<td>NC</td>
<td>Friel, Hudson, Banoub, and Ross (1989)</td>
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<td>Cardiovascular Health</td>
<td>+</td>
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<td>Pike and Banoub-Baddour (1991)</td>
</tr>
<tr>
<td>Skin Cancer</td>
<td>+</td>
<td>+</td>
<td>Hughes, Altman, and Newton (1993)</td>
</tr>
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Table 1

<table>
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<tr>
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</tr>
<tr>
<td><strong>Suicide Prevention</strong></td>
<td>PS</td>
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<tr>
<td><strong>Sexuality Education</strong></td>
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<tr>
<td><strong>Sexuality Education</strong></td>
<td>NS</td>
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<tr>
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<td>NS</td>
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<tr>
<td><strong>Sexuality Education</strong></td>
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<tr>
<td><strong>Substance Abuse</strong></td>
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<td><strong>Substance Abuse</strong></td>
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<td>NS</td>
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<tr>
<td><strong>Substance Abuse</strong></td>
<td>NS</td>
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<tr>
<td><strong>Substance Abuse</strong></td>
<td>+</td>
</tr>
<tr>
<td><strong>Teen Parenting</strong></td>
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</tbody>
</table>

**Key:**

+ = Significant change observed.
NC = No change observed.
NS = Change not statistically significant.
PS = Some elements of post-testing results found to be statistically significant, but not all.
varied specific to attitude. The results of 50% of these studies reported significant attitude changes. A number of researchers reported changes in the domain of AIDS education which has seen a barrage of media attention as well as educational intervention of late. Nineteen percent of the studies showed results that were partly significant. In these works, certain elements of the research were found to indicate attitude changes, while other components were not found to be significant. The remaining 31% were found to have measurable attitudinal changes which did not reach the level of significance. Some researchers believe that intensive treatment interventions of long duration are responsible for producing attitude changes in adolescents (Herz, et al., 1986).

Interestingly, sexuality education interventions were least successful in changing attitudes. The crime of rape is often misconstrued as a "sex" crime. Groth (1983) has stated that most sex offenders lack a basic understanding of human sexuality and hold conservative sexual attitudes which may be indicative of the need for earlier, ongoing sexuality education.

Adolescents’ Attitudes About Rape

What do young people know and believe about rape? Much of the information we have comes from college-age
students. Coercive sex is complicated by the fact that perpetrators and victims are often not cognizant of what constitutes assault. A number of studies have been administered to evaluate college students' attitudes (Copenhaver & Graverholz, 1991; Miller & Marshall, 1987; Peterson & Franzese, 1987; Sandberg, Jackson, Petretic-Jackson, 1987). Results were then analyzed to examine the frequency of sexual assault, whether physical or psychological force was used, and the difference in male and female perspectives concerning sexual assault.

In all of these studies, an interesting finding emerges. Although female respondents often answered affirmatively to having been recipients of either physical or psychological force during male-female encounters, they frequently responded negatively to the question of ever being raped. Men who responded affirmatively to the use of force do not see themselves as rapists. Another significant finding was that the students' use of alcohol or drugs in the context of the assault may hinder the victim's ability to resist and provide the attacker with an "excuse" for his actions.

Completed rapes were reported by 17% (Copenhaver & Graverholz, 1991), 21% (Sandberg, et al., 1987), and 21% (Miller & Marshall, 1987) of the female respondents. Peterson and Franzese (1987), whose study evaluated
college males' abusive behaviors, had only one affirmative (N = 99) confession of rape, yet numerous positive responses when males were questioned about the use of such coercive behaviors as threats, physical force, and speaking untruths (e.g., threatening to end relationship, saying things you don't mean) in obtaining their goal of sexual gratification. In another group of college males, 35% responded that they believed they would be inclined to rape a woman if they thought they could get away with it. These same respondents also adhered to belief in rape myths (Malamuth, 1981).

Evaluation of adolescent attitudes about rape render some illuminating findings. In a 1979 study by Giarusso, Johnson, Goodchilds and Zellman, 36% to 54% of high school males and 12% to 42% of females found physically forced intercourse acceptable if: (1) the male spent a lot of money on the female, (2) the boy is so turned on he cannot stop, (3) the girl gets the boy sexually excited, (4) she lets him touch her above the waist, (5) she has had intercourse with other males, (6) they have dated a long time, (7) she changes her mind about having sex, (8) she is stoned or drunk, or (9) she led him on.

The relationship between victim blaming and adhering to rape myths was analyzed by Blumberg and Lester (1991) who found that high school males subscribed to rape myths
more than high school females. For both males and females, it was determined that belief in rape myths was associated with an element of blaming the victim.

In a survey of 973 adolescents, Hall, Howard and Boezio (1986) discovered that the males were more likely to perceive women as sex objects and possess a belief in male dominance. In further analysis of this work, it was found that adolescents tend to perceive the rapist’s motivation for attack as sexual in nature. Also of note is the discovery that adolescents do not perceive acquaintance rape as sexual assault (Hall, 1987). Another study found that adolescents do not perceive date rape as a serious crime (White & Humphrey, 1991).

Zellman and Goodchilds (1983) found, in their study of 14- through 18-year-olds, that these adolescents held fast to conservative views about relationships. Additionally, these students believe occasions exist that may necessitate the need for the male to force sex on the female. The majority of respondents in this work named peers as primary sources of information about sex.

Obviously, the information that adolescents have about the crime of rape is limited and fraught with misconceptions. Historically, adolescent males have been conditioned to be the sexual aggressor, while young females are conditioned to be passive yet responsible for

It has been observed that many rape prevention programs have focused on the premise that women must take safety precautions to prevent rape victimization, thus putting the responsibility for prevention squarely on the shoulders of females. (Freeing our lives, 1978; Gordon & Riger, 1989). Others believe that prevention modalities that include cultural attitudes, gender issues, and societal violence, will serve not only victims, but perpetrators as well, in reducing the incidence of rape (Funk, 1992; Koss, 1990; Warshaw, 1988; White & Humphrey, 1991).

Gordon (1973) believes that sex education curricula for adolescents should include not only factual information, but must provide opportunities to discuss issues about sexuality, including the dictum that sexual choices must be voluntary and not coercive. Gruber (1984) supports the adoption of rape prevention education that adolescents will perceive as personally relevant by
assessing the social-situation context surrounding the crime.

Educational programs must focus on the multiple factors that encompass coercive sex. Safety information is indeed imperative, but it appears from the literature that culture, gender roles, violence, and sexuality are issues that must be addressed with adolescents in order to eradicate the rape myth mentality that perpetuates the belief that rape is only a "sex crime."

**Summary**

It is obvious there exists no simple root cause for the crime of rape. The long history of rape and conservative beliefs about men, women, and sex have essentially desensitized the American public to a crime that, quite literally, puts a large number of the population at risk. Additionally, these misconceptions have served to attribute an element of responsibility for victimization to the survivor of assaultive sex. Not only are these prejudices found in the community at large, the judicial system has also been found guilty of adopting a collusive view of the victim and her role, although change is forthcoming.

What has been learned from the rape victim is that recovery is long and complex. Survivors are not immune from the myth of victim-precipitation, nor to the social
matrix that espouses gender stereotyping and cultural supports for rape. Estrangement from family and friends is not uncommon.

A summary of the research related to rape statistics reveals that adolescents are at greatest risk for victimization, and a large number of perpetrators are adolescent males. Many incarcerated offenders confess to a history of sexual offenses that began during adolescence. Rapists tend to denigrate females and adhere to a code of aggression specific to women. Communication problems with the opposite sex are also paramount in these assailants.

Adolescents are not receiving the information they need to live safely in our society. The dynamics of early dating and sexual activity in young people calls for rape prevention programs in junior high and high schools. It may, for many students, be the only opportunity for such intervention. By addressing the socio-cultural aspects that encompass the crime of rape, students may learn to identify what constitutes exploitive, nonconsensual sex, and begin to adopt egalitarian belief systems that may lead to decrease the incidence of rape.
Overview

The research design will be detailed in this chapter. A one-week (225-minute) rape education prevention program was administered to students in junior and senior high schools. Students' knowledge and attitudes about rape were analyzed prior to and after the rape intervention program.

Instrumentation

Phase I-Item Development

In developing the adolescent rape attitude (ARA) instrument, an item pool of 65 statements was extrapolated from the literature, including items about gender roles, rape myths, and attitudes toward rape victims. This group of declarative statements was followed by a five point Likert scale, in which respondents could indicate acceptance or rejection of the opinion expressed in the statement. A number of items were written to be non-gender specific. A higher numerical score was indicative of less conservative attitudes about rape.

An item pool of 50 statements was written to assess knowledge about victims, offenders, rape recovery, types, and occurrences of rape. These statements were written
to be concisely worded and they were judged by experts to be factual, worthy of remembering, and representative of knowledge specific to the topic of assaultive sex (Ebel & Frisbie, 1986, p. 32). Again, a number of these statements were written to be non-gender specific. The majority of the knowledge statements are false as recommended by Ebel and Frisbie (1986) whose work in test development indicates that false items tend to be higher in discrimination. Only correct responses to knowledge questions received point credit.

The test item pool was read by three parents of adolescents to determine if any of the wording or subject matter was offensive. Four adolescents (grades 7-11) then analyzed the item bank for problematic terminology.

Phase II—Judgment of Validity

The original test pool of knowledge and attitude items was then sent to a review panel for evaluation. The judges included health education teachers, school counselors, a physician who works with rape victims, and rape crisis center coordinators. The judges were contacted by phone to explain the scale development and educational intervention being planned. A cover letter reiterating the nature and purpose of the instrument accompanied the item test pool. Judges were asked to evaluate the items for content, clarity, readability, and
appropriateness for the adolescent population. The researcher also met with two university professors with expertise in instrument development. Based on the analysis of the judges, numerous items were eliminated and those deemed problematic by the reviewers were rewritten. The revised scale contained 25 attitude and 20 knowledge items that met with approval of the judges.

Phase III—Pilot Testing for Reliability

The revised instruments were pilot-tested with students in six health education classes in a high school in northern West Virginia. Consent/assent forms were sent home to 154 students. Eight students were not allowed to participate. On the day of administration 13 students were absent, and 11 were eliminated because of missing data, resulting in 122 participants (ages 14-19) who completed the instrument anonymously after receiving oral instructions.

The ARA scale had a coefficient alpha of .791. One item was found to have a negative item-to-total correlation (our society usually does not tolerate violence against women). When this item was deleted, the coefficient alpha increased to .804 and the split-half correlation was .766, indicating a good internal consistency.
Knowledge questions were then evaluated for reliability. Correct responses to these questions received one (1) point, while incorrect or "don't know" responses received zero (0) points. When pilot-tested, the knowledge scale was found to have a coefficient alpha of .680, indicative of moderate internal consistency. A response to any of the questions only moderately predicted performance on other items in the knowledge scale. There were no negatively correlated items, but two items were found to have an item-to-total correlation of less than 0.1. These were rewritten to clarify item content.

**Pilot Test Results Summary**

Students in a northern West Virginia high school participated in the pilot testing of the survey instruments after approval was received from the West Virginia University Institutional Review Board. The pre-test instruments were administered to one hundred thirty-three students in six health education classes. Three classes were used as a treatment group, receiving a five-day rape education prevention program, while three classes served as a control group. Two weeks after the program, the post-test was administered. The researcher then returned to the school and presented the rape program to the students in the control group.
Survey forms completed by students who missed any classes or who returned instruments with incomplete data were eliminated, resulting in 79 participants, including 43 in the treatment group and 36 in the control group.

A T-test was used to evaluate the mean differences between the control and treatment group. Analysis of the results revealed a significant difference (p<.05) in knowledge scores between the two groups at post-testing. Evaluation of the attitude instrument scores indicated that students who were recipients of the rape prevention program demonstrated less conservative attitudes about rape but the difference with the control group did not reach the level of significance (p>.05). These results are consistent with those of Ogletree, et al. (1993) who measured adolescent attitude and knowledge changes specific to forcible sexual behaviors.

Subjects

The 186 adolescents in this study were students in a junior high school and two high schools in Monongalia County, West Virginia. The pilot test school was not part of the final study. Application was made to the Monongalia County School Board office seeking permission to conduct the study within the school system. Approval was granted for the study.
The high school participants in this work were members of health education classes. The junior high students were enrolled in science classes because health education is integrated within the science curriculum. According to the West Virginia Report Card for 1992-1993, average class size is 23.5 and 23.2 students in the high schools and the junior high school respectively. Original plans for the study called for only one high school to participate in this study. Because only nine males returned the necessary consent forms, another high school was solicited for participation. The data from the two high schools were treated as one group.

**Research Design**

A truly experimental design was difficult to arrange in the school setting since students were assigned to classes by administrative policies. In this study, a quasi-experimental design was utilized by randomly assigning intact classes to either a control or treatment group.

An application for the study was approved by the West Virginia University Institutional Review Board for Human Subjects. A cover letter explaining the purpose and nature of the study was sent home to parents and students. Consent and assent forms accompanied the cover letter to assure confidentiality and anonymity specific
to the survey instrument. The accompanying letter stressed to parents and students that participants in this research would not be queried about sexual behavior. Students did not receive extra credit for participating, nor did they incur demerits for not participating. Provisions were made for students who did not choose to participate or did not receive parental consent.

Pre-test instruments were administered to both control and treatment classes the week prior to the intervention. The treatment group then received the rape education program which was administered by the researcher. Two weeks after the completion of the rape program both the control and treatment groups completed the post-test instruments which were identical to the pre-test. Testing was done by a health education graduate student, except for post-testing in one school, which was done by the classroom teacher. The researcher then returned to the schools to present the rape education program to students in the control groups as requested by classroom teachers. Demographic items were included at the end of the instruments; however, only items specific to gender and grade were included for evaluative purposes.
Program Overview

A number of adolescent curricular programs and books were reviewed prior to developing the educational component of this research (Anderson-Kent, 1982; Bateman & Stringer, 1984; Benedict, 1987; Flerchinger & Fay, 1988; Fortune, 1983; Parrot, 1991; Plummer, 1984; Primary Prevention of Sexual Assault, 1982; Shuker-Haines, 1990; Stringer & Rands-Rodriguez, 1989). Although the content of the aforementioned programs was varied, the major issues of concern were inappropriate touching, acquaintance rape, instilling the notion that assaultive sex is unacceptable, and prevention techniques.

The basic program for both junior high and high school students was similar. The rape education prevention program utilized lecture, films, class discussion/participation, and games to increase awareness about the crime of rape. The high school students received more in-depth definitions about what constitutes assaultive sex and also examined the psychology of the offender. The junior high school students in question met for 45 minutes a day, five days a week. One high school education class was 75 minutes long, three days a week, while the other met for 45 minutes, five days a week. An overview of the program follows.
### Table 2

**Overview: 5 Day Program for Junior High Students**

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<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tr>
<td><strong>1. Introduction</strong></td>
<td><strong>1. Societal Messages</strong></td>
<td><strong>1. Continuum Model</strong></td>
<td><strong>1. Victim Issues</strong></td>
<td><strong>1. Reaction to Rape</strong></td>
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<td><strong>2. Definitions:</strong></td>
<td>&quot;Girl stuff&quot;</td>
<td>(Bateman &amp; Stringer, 1984)</td>
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<td>Physical</td>
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<td>Mutual exploration</td>
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<td>a reluctant</td>
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<td>Offender</td>
<td></td>
<td>partner</td>
<td></td>
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<td><strong>3. History</strong></td>
<td><strong>2. Media Messages</strong></td>
<td><strong>2. If Attacked</strong></td>
<td><strong>3. Community Resources</strong></td>
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<td>Define media</td>
<td>Medical</td>
<td></td>
<td></td>
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<td>Evaluation:</td>
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<td>Toys</td>
<td>Exploitive</td>
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<td>sexual activity</td>
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<td>Movies</td>
<td>Sexual coercion</td>
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<td>rape</td>
<td>Music Videos</td>
<td>Sexual harassment</td>
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<td>Sexual assault</td>
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### Table 3

#### Overview: 3 Day Program for High School Students

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<td>1. If Attacked</td>
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<td>Persuasion of a reluctant partner</td>
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<td>3. History</td>
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<td>Physical</td>
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<td>Emotional</td>
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<tr>
<td>Examines numbers and ages of victims</td>
<td>Date</td>
<td>(Playing it Safe, 1986)</td>
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<td>5. Rape Myths</td>
<td>Acquaintance</td>
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<td>&quot;Girl stuff&quot;</td>
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<td>&quot;Boy stuff&quot;</td>
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<tr>
<td>Music Videos</td>
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Table 4

Overview: 5 Day Program for High School Students

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<th>Day 4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>&quot;Girl stuff&quot;</td>
<td>(Bateman &amp; Stringer, 1984)</td>
<td>Activities</td>
<td>Physical</td>
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<tr>
<td></td>
<td>&quot;Boy stuff&quot;</td>
<td>Mutual exploration</td>
<td>2. Victim</td>
<td>Emotional</td>
</tr>
<tr>
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<td>2. Media Messages</td>
<td>Persuasion of a reluctant</td>
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<td>Define media</td>
<td>partner</td>
<td>Blaming the victim</td>
<td>2. Review:</td>
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<td>Consent</td>
<td>Evaluation:</td>
<td>Exploitive sexual</td>
<td>Male rape</td>
<td>Rape Safe</td>
</tr>
<tr>
<td>Victim</td>
<td>Toys</td>
<td>activity</td>
<td></td>
<td>(Playing it Safe, 1986)</td>
</tr>
<tr>
<td>Offender (perpetrator)</td>
<td>Magazines</td>
<td>Sexual</td>
<td>3. If Attacked</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Movies</td>
<td>coercion</td>
<td>Medical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Music Videos</td>
<td>Sexual harassment</td>
<td>Legal</td>
<td></td>
</tr>
<tr>
<td>3. History</td>
<td></td>
<td>Sexual assault</td>
<td>4. Community</td>
<td></td>
</tr>
<tr>
<td>Brief</td>
<td></td>
<td></td>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>overview of historical-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>current events about rape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Statistics/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examine numbers and ages of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>victims</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Rape Myths</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data Analysis

A factorial analysis of variance with repeated measures served as the statistical tool for this study. The independent factors (variables) each had different levels. They are as follows:

1. Condition  
   a. treatment  
   b. control

2. Gender  
   a. male  
   b. female

3. School  
   a. junior high  
   b. high school

4. Time  
   a. pre  
   b. post

5. Grade  
   a. seventh  
   b. ninth  
   c. tenth  
   d. eleventh  
   e. twelfth

Condition, gender, grade, and school served as the between subjects factor with time as the within subjects factor. The two dependent variables were the scores on the knowledge and attitude instruments. A significance level of 0.05 was used for purposes of statistical decision making.

Research Questions

Research questions about attitudes and knowledge analyzed in the study were as follows:

Attitudes

1. Did students who attended the rape education prevention program have significantly different post-test attitude scores about rape than students in a control group?
1a. Was there a difference in attitude change scores as a function of gender in students who attended the rape prevention program.

1b. Was there a difference in attitude change scores as a function of school level in students who attended the rape prevention program?

1c. Was there a difference in attitude change scores as a function of grade level in students who attended the rape prevention program?

1d. Was there a difference in attitude change scores as a function of gender and school level in students who attended the rape prevention program?

2. Did students who attended the rape education prevention program have significantly different knowledge scores about rapes than students in a control group?

2a. Was there a difference in knowledge change scores as a function of gender in students who attended the rape prevention program?

2b. Was there a difference in knowledge change scores as a function of school level in
students who attended the rape prevention program?

2c. Was there a difference in knowledge change scores as a function of grade level in students who attended the rape prevention program?

2d. Was there a difference in knowledge change scores as a function of gender and grade level in students who attended the rape prevention program?
CHAPTER IV
ANALYSIS

Introduction

The purpose of this study was to evaluate the effect of a rape education program on the knowledge and attitudes of adolescents. This chapter describes the sample, the statistical methodology, and the findings.

Sample

Consent and assent forms were distributed to 343 students enrolled in junior high and high school. Three parents called the researcher requesting more information about the survey questions and the nature of the intervention. Two hundred twenty-six (66%) students returned forms with the required signatures. No forms were returned denying parental consent. The remaining 117 forms were not returned. Eighty-one percent of the junior high school students and 54% of the high school students returned signed forms necessary for inclusion in the study.

Data were not included for analysis if students missed any school the week of the intervention or if survey forms were incomplete. The data for 40 students were eliminated for this reason. One hundred eighty-six students comprised the final sample. High school students numbered 79 (42%) and 107 (58%) junior high
school students participated. One hundred and fifteen females (62%) and 71 males (38%) made up the sample. Table 5 describes a breakdown of students by treatment, control, school level, and gender. Table 6 displays the distribution of students by grade.

Table 5

<table>
<thead>
<tr>
<th>Group</th>
<th>School</th>
<th>Gender</th>
<th>#</th>
<th>% of total</th>
<th>Subtotal</th>
<th>% Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>JHS</td>
<td>Males</td>
<td>16</td>
<td>8</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>Males</td>
<td>17</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JHS</td>
<td>Females</td>
<td>34</td>
<td>18</td>
<td>57</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>Females</td>
<td>23</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotals</td>
<td>(90)</td>
<td>(48%)</td>
<td>(90)</td>
<td>(48%)</td>
<td>(90)</td>
<td>(48%)</td>
</tr>
<tr>
<td>Control</td>
<td>JHS</td>
<td>Males</td>
<td>22</td>
<td>12</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>Males</td>
<td>16</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JHS</td>
<td>Females</td>
<td>35</td>
<td>19</td>
<td>58</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>Females</td>
<td>23</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotals</td>
<td>(96)</td>
<td>(52%)</td>
<td>(96)</td>
<td>(52%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100%</td>
<td>186</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6

<table>
<thead>
<tr>
<th>Grade</th>
<th>Treatment</th>
<th>Control</th>
<th>Total (by grade)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>38</td>
<td>39</td>
<td>77</td>
<td>41%</td>
</tr>
<tr>
<td>9</td>
<td>12</td>
<td>18</td>
<td>30</td>
<td>16%</td>
</tr>
<tr>
<td>10</td>
<td>29</td>
<td>30</td>
<td>59</td>
<td>32%</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>96</td>
<td>186</td>
<td>100%</td>
</tr>
</tbody>
</table>

Attitudes

The impact of a number of variables on attitudes were considered. These included evaluation of the effects of the rape education program on pre- and post-test scores of students in treatment and control groups, and the effect of gender, school, gender and school, and the grade level of participants.

**Question 1:** Did students who attended the rape education prevention program have significantly different post-test attitude scores about rape than students in a control group?

A $2 \times 2$ analysis of variance was used to analyze attitudes. The between-groups factor was condition (treatment or control), while time (pre or post) was the within-groups factor. This two-way interaction was found to be significant ($f = 10.35$, $p < .001$). The mean score
for students in the control group increased by less than one point during post-testing, while the treatment groups post-test score increased by 8.1 points. A higher score is indicative of less conservative attitudes about rape. Table 7 provides information about scoring for both groups.

**Table 7**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Control (n = 96)</td>
<td>83.87</td>
<td>84.60</td>
</tr>
<tr>
<td>Treatment (n = 90)</td>
<td>86.60</td>
<td>94.70</td>
</tr>
</tbody>
</table>

* Higher scores indicative of less conservative attitudes about rape. p < .001

From contrast data, the pre- and post-test scores are not significantly different in the control group (t = 0.58, p > 0.58). Significance was found in the treatment groups' pre- and post-test scores (t = 5.10, p < .001). A graphic representation of scores can be found in Figure 1.
Figure 1. Attitude Pre-Test-Post-Test Score
**Question 1a:** Was there a difference in attitude change scores as a function of gender in students who attended the rape prevention program?

For this analysis a $2 \times 2 \times 2$ analysis of variance was conducted to observe for statistical differences relative to gender and the effects of treatment conditions. The between-groups factors were condition (treatment or control) and gender (male or female), while time (pre or post) served as the within-groups factor. This three-way interaction resulted in values of $f = 1.06$, $p > 0.30$. No significance was observed. Control group females' post-test scores increased by 1.45 points while treatment group females increased their scoring by 7.1 points. In the control group males' score increase was 0.02 points while treatment males pre- to post-test scores increased by 9.74 points. Table 8 provides scores and standard deviations for both groups. Figure 2 demonstrates the scores graphically.
| Groups             | Mean     | Std. Dev.     |
|--------------------|----------|---------------|-----------------|-----------------|-----------------|
|                    | Pre-test | Post-test     | Pre-test        | Post-test       |
| Female Control     | 87.13    | 88.58         | (10.72)         | (11.73)         |
| (n = 58)           |          |               |                 |                 |
| Female Treatment   | 89.17    | 96.27         | (10.17)         | (9.27)          |
| (n = 57)           |          |               |                 |                 |
| Male Control       | 75.93    | 75.95         | (9.05)          | (8.09)          |
| (n = 38)           |          |               |                 |                 |
| Male Treatment     | 78.53    | 88.27         | (10.0)          | (11.63)         |
| (n = 33)           |          |               |                 |                 |

* Higher score indicative of less conservative attitudes about rape.
Figure 2. Attitudes Scores by Gender
Question 1b: Was there a difference in attitude change scores as a function of school level in students who attended the rape prevention program? This three-way analysis was conducted to determine if differences existed in attitude scores because of school level. Between-group factors included school (junior high or high school) and condition (treatment or control), with time (pre or post) serving as the within-group factor. This interaction was not found to be significant ($f = 0.09, p > 0.91$). Table 9 details pre- and post-test scores. Results are graphically presented in Figure 3.
Table 9

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Control JHS¹ (n = 57)</td>
<td>79.25</td>
<td>80.75</td>
</tr>
<tr>
<td>Control HS² (n = 39)</td>
<td>86.18</td>
<td>86.60</td>
</tr>
<tr>
<td>Treatment JHS¹ (n = 50)</td>
<td>80.44</td>
<td>89.22</td>
</tr>
<tr>
<td>Treatment HS² (n = 40)</td>
<td>89.70</td>
<td>94.50</td>
</tr>
</tbody>
</table>

* Higher score indicative of less conservative attitudes about rape. 1 JHS—Junior High School, 2 HS—High School
Figure 3. Attitude Scores by School Level
**Question 1c:** Was there a difference in attitude change scores as a function of grade level in students who attended the rape prevention program?

The 186 students in this study were enrolled in grades seven, nine, ten, eleven and twelve. A $2 \times 2 \times 2$ analysis of variance specific to grade (7, 9, 10, 11, 12) and condition (treatment or control) as the between-groups factors and time (pre or post) as the within-groups factor was not found to be specific ($f = 0.0606$, $p > 0.99$). Mean pre-test scores for the control group ranged from 78.21 - 93.2, while post-test scores ranged from 80.3 - 92.2. The treatment groups' mean pre-test scores were 76.91 - 92.1, with post-test scores ranging from 84.83 - 99.38. Individual scores by grade are found in Table 10. Figure 4 displays the results in graphic form.
### Table 10

#### Attitude Scores* by Grade Level

<table>
<thead>
<tr>
<th>Grade</th>
<th>Treatment</th>
<th></th>
<th></th>
<th>Control</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
<td></td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Mean</td>
<td>81.55</td>
<td>90.68</td>
<td>78.21</td>
<td>80.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Std. Dev.)</td>
<td>(10.3)</td>
<td>(10.31)</td>
<td>(10.74)</td>
<td>(11.10)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mean</td>
<td>76.91</td>
<td>84.83</td>
<td>81.50</td>
<td>81.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Std. Dev.)</td>
<td>(11.65)</td>
<td>(10.77)</td>
<td>(11.79)</td>
<td>(13.70)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mean</td>
<td>92.10</td>
<td>99.38</td>
<td>84.43</td>
<td>84.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Std. Dev.)</td>
<td>(11.60)</td>
<td>(10.82)</td>
<td>(9.54)</td>
<td>(10.40)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Mean</td>
<td>82.8</td>
<td>90.40</td>
<td>88.75</td>
<td>91.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Std. Dev.)</td>
<td>(14.06)</td>
<td>(15.97)</td>
<td>(22.54)</td>
<td>(21.24)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Mean</td>
<td>83.66</td>
<td>94.16</td>
<td>93.2</td>
<td>92.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Std. Dev.)</td>
<td>(6.21)</td>
<td>(7.41)</td>
<td>(15.2)</td>
<td>(18.61)</td>
<td></td>
</tr>
</tbody>
</table>

* Higher score indicative of less conservative attitudes about rape.
Figure 4. Attitudes Scores by Grade Level
**Question 1d:** Was there a difference in attitudes change scores as a function of gender and school level in students who attended the rape prevention program?

To analyze the effects of school level and gender on attitude scores, a $2 \times 2 \times 2 \times 2$ analysis of variance was conducted. Gender, condition (treatment or control), and school were the between-group factors, with time (pre or post) as the within-group factor. Table 11 provides scores for these groups as described. This four-way interaction was not found to be significant ($F = 0.019, p > 0.88$). Figure 5 graphically displays the results.
<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>JHS Female Control (n = 58)</td>
<td>82.00</td>
<td>83.80</td>
</tr>
<tr>
<td>JHS Female Treatment (n = 34)</td>
<td>82.94</td>
<td>90.53</td>
</tr>
<tr>
<td>HS Female Control (n = 38)</td>
<td>92.26</td>
<td>93.35</td>
</tr>
<tr>
<td>HS Female Treatment (n = 23)</td>
<td>95.39</td>
<td>102.00</td>
</tr>
<tr>
<td>JHS Male Control (n = 22)</td>
<td>74.86</td>
<td>75.90</td>
</tr>
<tr>
<td>JHS Male Treatment (n = 16)</td>
<td>75.13</td>
<td>85.23</td>
</tr>
<tr>
<td>HS Male Control (n = 16)</td>
<td>77.00</td>
<td>76.00</td>
</tr>
<tr>
<td>HS Male Treatment (n = 17)</td>
<td>81.94</td>
<td>91.30</td>
</tr>
</tbody>
</table>

* Higher score indicative of less conservative attitudes about rape. 1 JHS—Junior High School, 2 HS—High School
Figure 5. Attitude Scores by Gender and School Level
Knowledge

The next group of analyses explores the effects of rape prevention education as applied to adolescent knowledge. Again, pre- and post-test scores were analyzed with respect to treatment and control groups, school level, grade gender, and gender and school.

**Question 2:** Did students who attended the rape prevention education program have significantly different knowledge scores about rape than students in a control group?

A 2 X 2 analysis of variance was used to analyze knowledge scores. Condition (treatment or control) was the between-group factor and time (pre or post) the within-group factor. This interaction was found to be significant ($f=45.00, p < .001$). The mean score of control students at post-testing actually decreased by 0.08 points, while the treatment group increased their scores by 5.28 points. Contrast data between the groups found that scores of the control group were not statistically significant ($t = 0.15, p > 0.87$). Conversely, the pre- and post-test scores for the treatment group were significantly different ($t = 9.28, p < .001$). Table 12 provides details about each group's score. Figure 6 graphically displays the results.
Table 12

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Control Students</td>
<td>9.41</td>
<td>9.33</td>
</tr>
<tr>
<td>(n = 96)</td>
<td>(3.18)</td>
<td>(3.51)</td>
</tr>
<tr>
<td>Treatment Students</td>
<td>10.13</td>
<td>15.41</td>
</tr>
<tr>
<td>(n = 90)</td>
<td>(3.16)</td>
<td>(3.21)</td>
</tr>
</tbody>
</table>

*p < .001
Figure 6. Knowledge: Pre-test and Post-test Scores

![Graph showing pre-test and post-test scores for control and treatment groups.](image-url)
**Question 2a:** Was there a difference in knowledge change scores as a function of gender in students who attended the rape prevention program?

Knowledge scores were analyzed to observe for statistical differences relative to gender using a $2 \times 2 \times 2$ analysis of variance. The between-group factors were condition (treatment and control) and gender (male or female) with time (pre or post) as the within-group factor. The mean group score for control group females decreased by 0.31 while treatment female scores increased by 4.89 points. Males in the control group demonstrated an increase of 0.39 points while treatment males' mean score increased by 5.74 points. Table 13 provides information specific to scores by group. Statistical analysis of this three-way interaction was not found to be significant ($f = 1.06, p > 0.30$). Graphic interpretation of these findings are found in Figure 7.
Table 13

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Female Control (n = 58)</td>
<td>9.71</td>
<td>9.40</td>
</tr>
<tr>
<td>Female Treatment (n = 57)</td>
<td>10.66</td>
<td>15.55</td>
</tr>
<tr>
<td>Male Control (n = 38)</td>
<td>8.71</td>
<td>9.10</td>
</tr>
<tr>
<td>Male Treatment (n = 33)</td>
<td>9.31</td>
<td>15.05</td>
</tr>
</tbody>
</table>
Figure 7. Knowledge Scores by Gender
**Question 2b:** Was there a difference in knowledge change scores as a function of school level in students who attended the rape prevention program?

This three-way interaction was conducted to analyze for differences in scores because of school level. School (junior high or high school) and treatment (treatment or control) were utilized as between group factors and time (pre and post) as the within-group factor. Mean score post-test change for the junior high control group was 0.06. The treatment group in junior high demonstrated a mean score increase of 5.98 points. High school control mean knowledge scores decreased at post-test by 0.23 points with the treatment group displaying an increase of 4.58 points. Table 14 provides test scores for each group. The three-way ANOVA was not found to be significant \( (f = 0.0, p > 0.99) \). A graphic display of this grouping is found in Figure 8.
Table 14

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Control JHS</td>
<td>8.32</td>
<td>8.38</td>
</tr>
<tr>
<td>(n = 57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control HS</td>
<td>10.51</td>
<td>10.28</td>
</tr>
<tr>
<td>(n = 39)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment JHS</td>
<td>8.14</td>
<td>14.12</td>
</tr>
<tr>
<td>(n = 50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment HS</td>
<td>12.12</td>
<td>16.70</td>
</tr>
<tr>
<td>(n = 40)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 JHS—Junior High School, 2 HS—High School
Figure 8. Knowledge Scores by School Level
Question 2c: Was there a difference in knowledge change scores as a function of grade level in students who attended the rape education program?

No significance was found in this three-way analysis ($f = 1.068, p > 0.37$). Between group-factors included grade (7, 9, 10, 11, 12) and condition (treatment or control), while time was the within-groups factor. Mean post-test scores can be found in Table 15. Ranges for the control group at post-testing were 8.0–10.56. The treatment groups’ mean scores at post-testing were 11.8–17.8. Figure 9 displays the results in a graphic form.

Table 15

<table>
<thead>
<tr>
<th>Grade</th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>7</td>
<td>Mean</td>
<td>(Std. Dev.)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mean</td>
<td>(Std. Dev.)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mean</td>
<td>(Std. Dev.)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Mean</td>
<td>(Std. Dev.)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Mean</td>
<td>(Std. Dev.)</td>
</tr>
</tbody>
</table>
Figure 9. Knowledge Scores by Grade Level
**Question 2d:** Was there a difference in knowledge change scores as a function of gender and school level in students who attended the rape education program?

For this analysis a $2 \times 2 \times 2 \times 2$ analysis of variance was conducted with school (junior high school and high school), condition (treatment or control) and gender serving as the between-groups factors and time (pre and post) as the within-groups factor. No significance was found ($f = 0.03$, $p > 0.85$). Scores for each groups are presented in Table 16, with Figure 10 providing graphic results.
Table 16

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th></th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td>JHS Female Control</td>
<td>8.42</td>
<td>8.28</td>
<td>(3.00)</td>
</tr>
<tr>
<td>(n = 35)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHS Female Treatment</td>
<td>8.38</td>
<td>14.20</td>
<td>(3.00)</td>
</tr>
<tr>
<td>(n = 34)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Female Control</td>
<td>11.00</td>
<td>10.52</td>
<td>(3.06)</td>
</tr>
<tr>
<td>(n = 23)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Female Treatment</td>
<td>12.95</td>
<td>16.91</td>
<td>(2.86)</td>
</tr>
<tr>
<td>(n = 23)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHS Male Control</td>
<td>8.13</td>
<td>8.46</td>
<td>(2.74)</td>
</tr>
<tr>
<td>(n = 22)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHS Male Treatment</td>
<td>7.62</td>
<td>13.92</td>
<td>(2.41)</td>
</tr>
<tr>
<td>(n = 16)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Male Control</td>
<td>9.81</td>
<td>9.93</td>
<td>(4.00)</td>
</tr>
<tr>
<td>(n = 16)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Male Treatment</td>
<td>11.00</td>
<td>16.18</td>
<td>(3.98)</td>
</tr>
<tr>
<td>(n = 17)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 JHS—Junior High School, 2 HS—High School
Figure 10. Knowledge Scores by Gender and School Level
Summary

Junior high school and high school students were administered survey instruments designed to measure knowledge and attitudes about rape. Treatment group students received an educational intervention about rape, while control group students did not. A post-test was administered two weeks after the intervention.

The results of this research indicate that significant differences (p < .001) were found in attitudes scores of students who attended the rape prevention education program when compared to the control group. Analyses were also conducted to determine if score changes were functions of gender (p > 0.30); school level (p > 0.91); grade level (p > 0.99); or gender and grade level (p > 0.88). None of these variables were found to be significant.

Results of the knowledge survey also indicate that significant differences (p < .001) were found in treatment students. Categories of variables that included gender (p > 0.30); school level (p > 0.99); grade level (p > 0.37); and gender and school level (p > 0.85) were analyzed and no significant differences between the treatment and control groups were found specific to change in knowledge scores.
CHAPTER V
DISCUSSION

Summary of the Study

The purpose of this study was to assess the knowledge and attitude changes of adolescents who attended a rape prevention education program. After a review of the literature, a knowledge survey and an attitude survey were developed. The original item-pool was reviewed by a group of parents and adolescents prior to evaluation by a panel of judges with expertise in education and/or rape services. After revision and approval by the West Virginia Institutional Review Board, a pilot test was conducted.

For this study, a quasi-experimental, pretest-posttest design was utilized and included treatment and control groups. Students in two high schools and one junior high school participated after receiving parental consent. The format of the rape prevention program included a sociocultural model which examined how such factors affect sexual violence, and a prevention/safety component.

After post-testing, scores of participants were analyzed for significance specific to knowledge gain and attitude change. Analyses were also conducted to
determine if gender, school level or grade assignment had any effect on score changes.

**Interpretation of the Data**

Analysis of variance was the statistical tool used to test the research questions. The data were analyzed using the JMP-SAS statistical package, with the .05 level of significance used for the purposes of statistical decision making. Interpretation of findings relative to attitudes and knowledge will be addressed individually.

**Attitudes.** Items were developed to measure attitudes about gender roles, rape myths, and attitudes towards rape victims. Previous researchers have found that those who adhere to rape myths, and hold conservative attitudes about stereotypical gender roles tend to hold rape survivors responsible for their victimization (Blumberg & Lester, 1991; Burt, 1980; Burt & Albin, 1981; Feild, 1978; Gilmartin-Zena, 1988; Giarusso et al., 1979; Hall et al., 1986; Muelenhard et al., 1985; Zellman & Goodchild, 1983).

Results of this study suggest that rape prevention education is effective in changing attitudes. Students in the treatment group demonstrated less conservative attitudes at post-testing, while no such change was evident in the control group. The attitude statements were followed by a five-point scale, in which a
respondent could indicate acceptance or rejection of the opinion expressed in the statement. Any score less than four could indicate some ambiguity for that statement. The treatment groups' mean score on twelve of the twenty-four attitude statements was four or more at post-testing; conversely, the control group was observed to have a score of four or more on only six items. Additionally, the control group was observed to have a decreased score on eight attitude items at post-testing, while no such score decreases occurred in the treatment group.

Attitude changes were also analyzed for significance on a number of variables including gender, school level (junior high school or high school), gender and school level, and grade (7, 9, 10, 11, 12). No significant differences were found specific to the aforementioned variables, indicating that the rape prevention program appears to show promise in changing attitudes regardless of gender, school level, gender and school level, and grade assignment.

Females consistently exhibited less conservative attitudes about rape. This trend is apparent in the literature as well (Felty et al., 1991; Gilmartin-Zena, 1988; Hall et al., 1986; White & Humphrey, 1991). School levels appeared to have no impact on this result. High
school males, for example, had lower attitude scores than junior high school females at pre-testing. With intervention, male scores increased more than females at post-testing.

Both high school and junior high school treatment group students were found to have increased attitude scores at post-testing. This finding is important considering the fact that adolescence is considered the time of strongest conformity to stereotypical gender roles and traditional dating behaviors that may put young women at risk for rape (Allegeir & McCormick, 1983; Emerich & Shephard, 1982; White & Humphrey, 1991; Zellman & Goodchilds, 1983). Any change in attitudes that helps adolescents question misconceptions about rape can be seen as beneficial.

When student attitude change scores were analyzed by grade no statistical significance was observed. Because of the small sample of students in the eleventh and twelfth grades these findings should be interpreted with caution. It was observed that ninth grade treatment students, while amenable to change, had the lowest scores of all the grades. This group of students was the only class that met immediately after the lunch break and that may have had some effect on their attention to the intervention.
Knowledge. Twenty items comprised the knowledge survey which was written to assess knowledge about victims, offenders, rape recovery, types, and occurrences of rape. Prior to the rape prevention program students were able to correctly answer approximately 50% of the items. At post-testing no gains were evident in the control group (their overall scores actually decreased) while the treatment group was able to correctly answer over 75% of the items. These results reached the level of significance. With intervention, the students in the treatment group became more knowledgeable about the crime of rape. These findings are similar to those of Ogletree et al. (1993) and Pohl (1990) whose research addressed problems of acquaintance rape and adolescents.

Analyses were also conducted for knowledge score changes specific to gender, school level (junior high or high school) grade, and gender and school. As with attitudes, no significant differences were found that would attribute knowledge changes to these variables. Both males and females in the treatment groups displayed more knowledge about rape and, indeed, had quite similar post-test scores, 15.05 and 15.55, respectively. Junior high school males and females demonstrated greater knowledge gains than the high school students. Yet it
must be remembered that the high school students also had higher scores at pre-testing.

Knowledge scores were also analyzed by grade. Although this interaction was not found to be significant, caution is urged in interpreting these findings because of the small number of students in the eleventh and twelfth grade samples. Ninth grade treatment students again experienced the least amount of gain, but they did increase their correct responses by 15%.

It appears that rape prevention education for adolescents is effective in changing attitudes and increasing knowledge. Because large numbers of offenders and even larger numbers of victims are found in the adolescent population, it seems only reasonable to address prevention efforts with this group.

Methodological Limitations

Several methodological concerns limit this study. First, the small sample size, especially in the upper grades, is of concern. A larger sample size might bring different results. The study was conducted in only one geographical area and included students enrolled in either health classes or science classes that included a health component. A more heterogeneous sample might provide additional salient information. Lastly, this
research was quasi-experimental in design. While this may be difficult to rectify because of school policies, it certainly must be considered in generalizing the results to the adolescent population.

Implications

It is well documented that adolescents are at risk for rape victimization. What is less understood is the effectiveness of educational programs that seek to reverse that trend. Experts in the prevention field cannot even agree on which type of treatment modality is best (Morgan, 1986). Historically, prevention programs focused on preparation of the victim (women only) to reduce vulnerability to rape by limiting their activities, wearing appropriate clothing, and adopting "acceptable" behaviors. Such programs served not only to restrict the independence of women, but the rape victim was assumed responsible for an attack if she did not adhere accordingly (Freeing our lives, 1978; Koss, 1990; Koss & Harvey, 1991; Riger & Gordon, 1979). A few prevention programs for males are also found in the prison environments, yet the majority of incarcerated rapists do not receive treatment, and most rapists do not receive prison sentences (Goleman, 1992; Groth, 1979).

A more global approach to prevention is the sociocultural model. In this type of program an overview
of societal attitudes is explored. As observed by Sanday (1981), in rape-prone societies an imbalance of power exists between men and women, and violence and aggression are deemed acceptable.

Burkhart and Fromoth (1991) identified three societal issues that should be addressed in the prevention arena: (1) gender-role socialization patterns, (2) conservatively held beliefs that tend to blame the victim, and (3) social-sexual interaction relative to dating. By examining the causal factors that contribute to assaultive sex, students may begin to understand that rape is an unacceptable crime of violence.

The prevention program that was developed for this study included a sociocultural model and a prevention/safety component. Males and females were not separated at any time during the program, thus reducing the notion of rape as a "sex" issue pertinent only to females. Instead, all students received information about rape, and learned about misconceptions that serve to perpetuate rape. The participants had opportunities for dialogue about gender stereotypes and dating issues throughout the intervention. The problem of adolescent male rape, which has not traditionally been included in educational programs for adolescents, was also addressed.
Both male and female students learned to identify potentially dangerous situations that may be a prelude to rape, not only in the instance of stranger rape, but problems that arise within the context of dating. Students also learned assertiveness skills that may prove helpful in decreasing the risk of rape, and that might also instill in students a sense of self-empowerment.

From the literature it is apparent that sexual abuse educational programs have been targeted to elementary school children and to college students, while adolescents do not appear to be receiving the information they need. The plethora of AIDS education programs that have recently been implemented have demonstrated that such interventions can be successful in increasing knowledge about risk factors and in changing attitudes. Schools can be instrumental in developing curricula that identify sexually assaultive behaviors and in teaching about gender issues, relationship skills, and refusal techniques. Helping adolescents to live safely should be a primary concern of educators.

**Recommendations for Further Study**

As a result of the findings of this study the following recommendations are made:
1. Although the prevention program was found to be effective in changing attitudes and increasing knowledge, it may be useful to replicate this study using a larger sample size, and one with more equality in numbers relative to the number of students in different grades.

2. Replication of the study in a variety of geographical locales may prove helpful in designing curricular materials for specific populations.

3. Future research in the area of adolescent rape prevention might consider curricular format. Since there are available programs for males-only, females-only, and coeducational programs, it may be interesting to analyze a comparative study of the different formats.

4. A longitudinal study design that would examine the effects of long-range exposure to repeated prevention curricula throughout junior high and high school could be evaluated for its ability to produce lasting attitudinal changes.

**Conclusion**

Ultimately, in order to decrease the incidence of rape, broad societal changes must occur. Based on the results of this study, education has the potential to be
a powerful tool to change attitudes and increase knowledge about rape. While there is no guarantee that prevention education will eradicate rape, it appears to be a good place to begin.
List of References


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Media violence. (1993, June 8), Cable Network News (CNN) broadcast.


**Primary prevention of sexual assault.** (1982). Southern California Rape Prevention Study Center, Culver City, CA.


Williams, J. (1980). Red flag, green flag people. Rape and Abuse Crisis Center, P.O. Box 1655, Fargo, ND.


Appendix A

Human Subjects Approval
DATE: October 4, 1994

NOTICE OF APPROVAL FOR PROTOCOL # 12583
ADDITIONAL # 1

TO: Ruth Kershner/MaryAlice Barksdale-Ladd

PROJECT TITLE: The Impact of a Rape Education Program on the Knowledge and Attitudes of Adolescents

*SPONSORING AGENCY: N/A

The Institutional Review Board for the Protection of Human Research Subjects (IRB) has approved the project described above. Approval was based on the descriptive material and procedures you submitted for review. Should any changes in your protocol/consent form be necessary, prior approval must be obtained from the IRB. Any deviations from the approved protocol, as well as any new risks, reactions, injuries or deaths of research subjects must be reported to the Board immediately.

A consent form* X is required of each subject. ___ is not required of each subject.

An assent form X is required of each subject. ___ is not required of each subject.

A recruitment ad has ___ has not X been approved.

* Only copies of the consent and/or assent form with the IRB's approval stamp may be used with human subject research. It is the responsibility of the investigator to submit a revised consent form for the IRB's approval should funding be obtained. This stamped consent form must then be used for subjects enrolled. A copy of each subject's signed Consent/Assent Form must be retained by the investigator and accessible to federal regulatory authorities for at least three years after the study is completed.

This protocol was first approved on December 16, 1992. This research will be monitored for re-approval every 6 months.

Marian J. Turner
IRB/ACUC Administrator
Appendix B

School Board Approval
August 17, 1994

Ruth Kershner
352 Grandview
Morgantown, WV 26505

Dear Ms. Kershner:

I have reviewed your proposed research and consider it to be worthwhile and the research technique(s) to be satisfactory.

You have received permission from selected schools in Monongalia County to proceed with your research.

Sincerely,

[Signature]

Jenifer Snider
Assistant Superintendent

JS/dm

"Our Mission is to help all children develop a positive self-concept and to reach their potential."
Appendix C

Parent Cover Letter
Dear Parents:

My name is Ruth Kershner. I am a doctoral student at West Virginia University. I am also a registered nurse and a certified teacher in Health Education. I am requesting your child’s participation in a research study I am doing at your child’s school in the health education/science classes. The topic of this research is rape education and knowledge and attitudes of adolescents. The crime of rape is on the rise. Between 1973 and 1982, 1,634,000 rapes were reported to law enforcement officials in the United States. Eleven percent of the female victims were ages 12-15, while 25% of the female victims were ages 16-19. Over 120,000 males were also victims of rape during this time. In 1990, 102,555 rapes were reported to the police, a 9% increase from the previous year. It is generally believed that rape is the most under-reported crime. It is estimated that less than 20% of rapes are reported to the police.

Victims of rape suffer in a number of ways, physically and emotionally. Students may experience problems that interfere with school and home. Some victims engage in self-destructive behaviors such as drugs or alcohol. Health problems are often a result of rape.

Many colleges offer rape education programs, but not all adolescents go to college, and must receive information from other sources. Waiting for college may be too late for some victims. This research seeks to evaluate students’ knowledge and attitudes about rape. All the participating students will take a pretest. Half of the students will then receive a rape education program that will increase their knowledge about rape and provide them with information about safety/prevention. The educational program will be administered in one week (225 minutes). Two weeks after the end of the program all of the students will then take another test that will again evaluate knowledge and attitudes about rape. Students will not be asked questions about their own behaviors.

I am available to answer any questions about this study. If any parents desire to see the test questions prior to giving consent, this can be arranged. Because rape crimes are on the rise, let’s help our children avoid being victims. Let’s help them to be safe.

Sincerely,

Ruth Kershner, RN, MS, CHES

* The next few pages are a consent form you will need to read and sign if you wish to allow your child to participate in this program. I am enclosing a copy of this form for you to keep. Please sign and date the two pages that require a signature. Send in the last page with your child. The students also have a form to read and sign, with your permission. Thanks so much for taking the time to read this material.
Appendix D

Student Cover Letter
Dear Students,

My name is Ruth Kershner. I am a doctoral student at West Virginia University. I am also a registered nurse and a health education teacher. I would like to invite you to participate in a study I am doing at your school. I would like to learn more about what students know and how they feel about rape. Because rape is a serious crime, I feel it is important to know about rape and learn safety measures to help prevent rape. I will be using two groups of students. All of the students will answer a questionnaire about rape. Half of the students will then take part in a rape education program. After the program is over, all of the students will again answer a questionnaire. This study will take place in the health education or science classes at your school.

I will be happy to answer any questions you have about the study. You do not have to participate if you do not wish. Because I feel so strongly about the importance of this topic, after the study is over I will come back to your school to provide the rape education program for the students who do not receive this information during the study if requested by your teacher. Please talk this over with your family or guardian. Let's work together to be safe.

Sincerely,

Ruth Kershner

* The next page is a form for you to sign if you wish to participate. Please sign and date both copies. Keep one copy for yourself and bring the other back to school. Thanks!
Appendix E

Consent Form
CONSENT FORM

The Impact of a Rape Education Program on the Knowledge and Attitudes of Adolescents

INTRODUCTION. My child, ______________________, has been invited to participate in this research study which is being conducted by Ruth Kershner. This study is being done to complete a class requirement for a doctoral degree in curriculum and instruction at West Virginia University.

PURPOSES OF THE STUDY. The purpose of this study is to evaluate adolescent knowledge and attitudes about rape by comparing two groups of students. One group will participate in a rape education program, while the other group will receive no intervention.

PROCEDURES. This study will begin with a pre-test about knowledge and attitudes specific to rape. All of the students will take the test which will take approximately 30 minutes to complete. Half of the students will then receive an educational program about rape and rape prevention. Two weeks after the end of the program all the students will take a post-test (approximately 30 minutes to complete) to evaluate if any changes in knowledge or attitudes have occurred. Several classes will be involved in the study, which will involve about 150-180 students. The classes that receive the educational program will be selected by a random drawing. My child has an equal chance of being assigned to either group. My child may withdraw from the study at any time. I understand that parents/guardians are welcome to read the pre-/post-test and ask questions about the educational program before signing the consent form. My child is not required to answer all the questions if he/she does not desire to do so. Students who have questions beyond the scope of the program will be referred to the school guidance counselor.

RISKS AND DISCOMFORTS. There are no known or expected risks from taking part in this study, except for the mild frustration some students experience taking tests.

BENEFITS. Students who are part of the educational program can expect to gain knowledge about the crime of rape and prevention strategies. Students who are not part of the intervention group will not directly benefit at the time of the study. The researcher has agreed to return to the school after the research study is completed to provide the rape education program to the students in the control group if so desired by the classroom teacher.

CONTACT PERSON. For more information about this research I can contact Ruth Kershner at 296-9444, or her chairperson, Dr. Jerrald Shive at 293-3441. For information regarding my rights as a research subject, I may contact the Executive Secretary of the Institutional Review Board at 293-7073.

CONFIDENTIALITY. I understand that any information obtained from my child will be kept as confidential as legally possible. My child will not be asked to put his/her name on either of the two tests and there will be no way the researcher will be able to identify my child’s answers. In any publications that may result from this research, neither my child’s name nor his/her school will be identified.

VOLUNTARY PARTICIPATION. Participation in this study is voluntary. I am free to withdraw consent for my child’s participation at any time during the study. Refusal to participate or withdrawal will not affect my child’s grade or class standing. I have been given the opportunity to ask questions about this research, and I have received answers concerning areas I did not understand.

Upon signing this form, I will receive a copy.

I willingly give my consent for my child to participate in this study.

________________________________________   ______________________________
Signature of Child’s Parent or Guardian Date

________________________________________   ______________________________
Signature of Investigator or Investigator’s Representative Date
Appendix F

Assent Form
ASSENT FORM

The Impact of a Rape Education Program on the Knowledge and Attitudes of Adolescents

INTRODUCTION. I, _______________, have been asked to be in this research study, which has been explained to me by Ruth Kershner.

PURPOSES OF THE STUDY. I have been told that the purpose of this study is to learn how a rape education program affects student's knowledge and attitudes about rape.

DESCRIPTION OF PROCEDURES. This study will be performed at __________. Several classes will participate. These classes will be divided into two groups. I have an equal chance of being assigned to either group. All of the students will complete a questionnaire about rape. Half of the classes will then receive a week-long (225 minutes) educational program about rape and safety measures to prevent rape. Two weeks after the end of the program, all of the students will then complete another questionnaire. Each of the questionnaires will take approximately 30 minutes to complete. I do not have to answer all of the questions. I can withdraw from the study at any time. I will be referred to the school guidance counselor if I have any additional questions about this subject.

DISCOMFORTS. Some students do not like to answer questions.

BENEFITS. I understand that this study may help me to learn about rape and safety measures to prevent rape if I am in a class that receives the educational program. If I am not in the educational program group, the study will not benefit me at the time of the study. I will have the opportunity to take part in the educational program at a later date if my teacher requests it.

CONFIDENTIALITY. I have been promised that anything that is learned about me will be kept as secret as possible. I will not be asked to put my name on either of the two questionnaires, and no one will be able to identify my answers.

VOLUNTARY PARTICIPATION. I have been told I do not have to do this. No one will be mad at me if I refuse to do this or if I decide to quit. Should I choose not to participate or if I decide to quit, I understand that it will not affect my grade or class standing. I have been allowed to ask questions about the research, and all of my questions were answered. I will receive a copy of this form after I sign it.

I willingly agree to be in this study.

Signature of Student ___________________________ Date ________________

Signature of Investigator or Investigator's Representative ___________________________ Date ________________
Appendix G

Survey Questionnaire
### SURVEY QUESTIONS

**DIRECTIONS:** Please circle the number that best describes how you feel about each statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generally, women should not be out alone at night.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Rapists usually have a history of criminal behavior.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. Rapists have a greater need for sex than other people.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. Women are often portrayed as sex objects in the media.*</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. The main role of a wife is to take care of her husband.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. Most women fantasize about being raped by a man.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. It is easier for a married woman, than a single woman, to get over being raped.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. Stranger rape is a more serious crime than date rape.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. A rape victim should actively resist throughout the attack.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. Raping a virgin is more serious than raping someone who is not a virgin.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
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<tr>
<td>11. In most cases, the rape victim shares some of the responsibility for the attack.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>12. Some girls encourage rape just by the way they dress.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<td>13. The best way to get over being raped is to avoid thinking about it.</td>
<td>5</td>
<td>4</td>
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<tr>
<td>14. A woman will fight off a man if she really wants to avoid being raped.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
<tr>
<td>15. A victim's sexual history should not be made public during a rape trial.*</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<td>16. It is easier to believe a physically injured rape victim than one who has no injuries.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>17. The victim should be required to prove his/her innocence during a rape trial.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>18. The best relationships are those in which the man is in control.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>19. Many girls falsely report rape if they are facing an unwanted pregnancy.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>20. Strong men do not cry.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
21. Victims of rape react in a very similar manner.  
   | Strongly | Agree | Agree | Neutral | Disagree | Strongly | Agree |
   | Agree    |       |       |         |          | Agree    |       |
   | 5        | 4     | 3     | 2       | 1        |          |       |

22. Girls should not ask boys out on dates.  
   | Strongly | Agree | Agree | Neutral | Disagree | Strongly | Agree |
   | Agree    |       |       |         |          | Agree    |       |
   | 5        | 4     | 3     | 2       | 1        |          |       |

23. Some women provoke men into raping them.  
   | Strongly | Agree | Agree | Neutral | Disagree | Strongly | Agree |
   | Agree    |       |       |         |          | Agree    |       |
   | 5        | 4     | 3     | 2       | 1        |          |       |

24. Most men who are raped are gay.  
   | Strongly | Agree | Agree | Neutral | Disagree | Strongly | Agree |
   | Agree    |       |       |         |          | Agree    |       |
   | 5        | 4     | 3     | 2       | 1        |          |       |

* Reverse scored

DIRECTIONS: Please circle your response to the statements below.

25. West Virginia has the greatest number of rapes in the United States.  
   True  False  Don't know

26. Stranger rape is the most frequent type of rape.  
   True  False  Don't know

27. Rape rarely occurs in the home of the victim.  
   True  False  Don't know

28. A rape crisis center's function is to provide legal help for the victim.  
   True  False  Don't know

29. A man cannot be raped.  
   True  False  Don't know

30. Most rapists are over forty years old.  
   True  False  Don't know

31. Whites are more frequently arrested for rape than any other racial group.  
   True  False  Don't know

32. A woman cannot be raped by her husband.  
   True  False  Don't know

33. The greatest number of rapes happen in the summertime.  
   True  False  Don't know

34. The majority of rapists go to jail.  
   True  False  Don't know
35. The first thing to do if you are raped is to take a shower. True False Don't know

36. The largest number of rape victims are over thirty years of age. True False Don't know

37. Less than 20% of rapes are reported to the police. True False Don't know

38. The younger the rape victim, the easier it is to get over being raped. True False Don't know

39. The motive for rape is sexual satisfaction. True False Don't know

40. Most victims of rape are beaten during their attack. True False Don’t know

41. Rapists frequently blame drug or alcohol use for their involvement in rape. True False Don’t know

42. Everyone found guilty of rape receives special counseling while in jail. True False Don’t know

43. Many sex offenders begin offending during adolescence. True False Don’t know

44. The majority of rapes involve the use of a weapon. True False Don’t know

The next group of questions will help me to know about the students who are taking this survey. Just circle your answers.

45. Are you? male female

46. What is your age?
   12 13 14 15 16 17 18

47. Circle your grade?
   7 8 9 10 11 12

48. What is your race? White Black Asian Hispanic Other

49. Do you have? brothers sisters both brothers and sisters none

50. With whom do you live? mother father mother and father other relative foster home
51. How much education does your father have?
   less than high school  high school graduate
   some college  college graduate  don’t know

52. How much education does your mother have?
   less than high school  high school graduate
   some college  college graduate  don’t know

53. Does your mother work outside the home?
   yes  no  don’t know

54. Does your father work outside the home?
   yes  no  don’t know

Thank you for taking the time to answer these questions. I really appreciate your help!
Appendix H

Signature Page
APPROVAL OF EXAMINING COMMITTEE

Jeanne Gerlach, Ed.D.

Anne Nardi, Ph.D.

Karen K. Douglas, Ph.D.

Nancy Hoffman, Ed.D.

R. Jerrald Shive, Ed.D., Chair

Date 040395
The Efficacy of Adolescent Rape Prevention Education

Abstract

During the past several years, an increased number of rapes have been reported in the adolescent population. Adolescents have not been receiving the information they need to learn about the crime of rape and how to avoid victimization. The purpose of this study was to assess the knowledge and attitude changes of adolescents who attended a rape prevention education program. A knowledge survey and an attitude survey were developed. The original item pool was reviewed by a group of parents and adolescents prior to evaluation by a panel of judges with expertise in education and/or rape services. After revision a pilot test was conducted. For this study, a quasi-experimental, pre-test/post-test design was utilized and included treatment and control groups. Students in two high schools and one junior high school participated after receiving parental consent. The format of the rape prevention program included a social cultural model which examined how such factors affect sexual violence, and a prevention/safety component. After post-testing, scores of participants were analyzed and a significant difference in attitudes and knowledge was found between the treatment and control groups. Knowledge and attitude scores were also analyzed for
significance on a number of variables including gender, school level, gender or school level and grade. No significant differences were found specific to the aforementioned variables, indicating that the rape prevention program appears to show promise in changing attitudes and increasing knowledge regardless of gender, grade, or school.