1994

Sexual Assertiveness Training for College Women: An Intervention Study

Pamela Deiter
University of Rhode Island

Follow this and additional works at: https://digitalcommons.uri.edu/oa_diss

Recommended Citation

Deiter, Pamela, "Sexual Assertiveness Training for College Women: An Intervention Study" (1994). *Open Access Dissertations*. Paper 1088.
https://digitalcommons.uri.edu/oa_diss/1088

This Dissertation is brought to you for free and open access by DigitalCommons@URI. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu.

7 F. 45
H85
5456
1994

SEXUAL ASSERTIVENESS TRAINING FOR COLLEGE WOMEN:
AN INTERVENTION STUDY

BY

PAMELA DEITER

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

IN

PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

1994

31948077

ABSTRACT

Thirty participants in a four-week Sexual Assertiveness training workshop series were compared to 30 participants in a placebo control condition for general assertiveness, and to 30 participants in a no-intervention control condition. All 90 participants were undergraduate women from a northeastern university. Dependent measures included three subscales of the Sexual Assertiveness Scale, an AIDS Prevention Self Efficacy measure, the Rathus Assertiveness Inventory, and three measures of self-reported recent sexual behavior. Two new communication-related subscales to the Sexual Assertiveness Scale were piloted. Additional measures of anticipated partner response to sexual assertiveness, and history of victimization were included to learn about their relationship to DV scores. Dependent measures were taken at four week intervals, providing pre-test, post-test and follow-up data. Significant decreases in mean scores on four DVs were noted over time, across conditions. These declining scores indicated that women reported less assertiveness and self-efficacy in AIDS prevention over the course of the study. Significant increases on mean scores over time were noted across conditions for two DVs, indicating that women reported more assertiveness in communicating about sex and about AIDS. For the two communication DVs, Sexual Assertiveness condition scores were lower than scores of the other conditions. Participation in the Sexual Assertiveness

training condition was not associated with higher post-test or follow-up scores than participation in other conditions. Twenty five percent of the sample reported a history of sexual victimization. Victimization history was negatively correlated with Sexual Assertiveness and AIDS Prevention Self-Efficacy, but positively correlated with number of sexual partners in lifetime, and ever having had intercourse. Four self-report measures of sexual beliefs and behaviors were developed and piloted in the study. Five existing measures were validated. Implications for repeated measures studies and a possible initial response bias in reporting sexual assertiveness are explored.

ACKNOWLEDGEMENTS

I want to thank my major professor Kat Quina, for generously providing me with her expertise, help, good will and friendship; Lisa Harlow, for having faith in my skills and providing me with inspiration to try new things; Patricia Morokoff, for modeling feminist therapy, feminist sensibility and humanism; Judith Anderson, for bridging the passage between Communications and Psychology, and for offering me warmth in every setting; and Denise DeZolt, for bringing her strength to our Department, and for graciously agreeing to join my Dissertation committee on short notice. Finally, I want to extend thanks and appreciation to Gene Knott, who has supported me practically and through his confidence, and has given me gifts I will carry gratefully into my clinical work.

I owe a special debt of gratitude to Jennifer Rose, who helped me work on this dissertation. Kindly and with humor, Jen taught me all kinds of things I needed to learn. Thanks also to Colleen Redding, for her help and attention at a time when both were dear, and to D. Michelle Kemp who, incredibly, agreed to help me run the workshops for my dissertation research. She carried this out with tremendous skill and dedication.

Finally, I want to thank Carl Rogers, who continues to teach me about unconditional positive regard, and Jill Maddison, the wonderful light at the end of a long tunnel.

TABLE OF CONTENTS

Introduction	1
Assertiveness	3
Workshop development	39
Study hypotheses	47
Methods	49
Subjects	49
Measures	51
Procedures	56
Workshops	58
Design	62
Results	63
Sample Characteristics	63
Workshop evaluations	66
Psychometric properties of the measures	67
Hypothesis testing	76
Communication subscale analysis	83
History of sexual victimization	86
Discussion	86
Hypotheses and outcome of hypothesis testing	86
Development and validation of scales	104
Other findings	106
Summary and conclusions	110
Future research	112
Tables	118
Appendices	132
Bibliography	156

LIST OF TABLES

Table 1	Maximum likelihood factor loadings for sex communication subscale and AIDS communication subscale	118
Table 2	Overview of workshops content	119
Table 3	Means and standard deviations for sample descriptive items	120
Table 4	Mean scores for evaluation dependent variables	121
Table 5	Mean scaores and standard deviations for scales	122
Table 6	Scale correlations at time 1, time 2, time 3	123
Table 7	Summary of 3x3 Repeated Measures MANOVA and follow up ANOVAS	128
Table 8	Summary of 3x2 Repeated Measures MANOVA and follow up ANOVAS	129
Table 9	Mean scores for dependent variables 1-6, treatment condition	130
Table 10	Intercorrelations of factors for the sexual assertiveness scale	131

APPENDICES

Appendix 1 Study Design	132
Appendix 2 Sample descriptive items	133
Appendix 3 Dependent measures and subscales	135
Appendix 4 Covariate measures and subscales	142
Appendix 5 Evaluation form	144
Appendix 6 Participants comments week 4	145
Appendix 7 Workshop outlines	148

INTRODUCTION

In our time, women in college must negotiate difficult sexual issues including the growing danger of AIDS and other sexually transmitted diseases, effective contraception, the use of alcohol and other drugs in sexual encounters, and the experience or threat of sexual coercion, harassment and assault. In many cases, these issues have been confronted before students begin college; few students will graduate from college without addressing them in some way (Arnstein, 1989; Centers for Disease Control, 1990, 1991; Spees, 1987).

Successfully coping with, and organizing one's own behavior around, such complex, personal issues demands sophisticated decision-making and interpersonal skills. Assertiveness in sexual matters can help students to carry themselves more safely through voluntary sexual encounters in their college years. Abilities to assert in the areas of sex refusal, and sex initiation, contraception, and communication about sex, are increasingly important in the lives of college women.

"Sexual assertiveness" is conceptualized here as suggested by Quina, Harlow, Gibson and Morokoff (1990) in the development of their Sexual Assertiveness Scale. Dimensions of sexual assertiveness include the ability to initiate sexual activity, to refuse unwanted sexual activity, and to implement contraception in a sexual encounter. Communication about sex, and communication about AIDS, can also be viewed as dimensions of sexual

assertiveness.

The purpose of this study was to test an intervention to increase the sexual assertiveness of college women. The study compared participant scores on dependent variables for women in four week Sexual Assertiveness training groups, General Assertiveness training groups, and a No-Intervention condition. Dependent variables were sex refusal, sex initiation, and use of birth control, the three dimensions of sexual assertiveness, each measured by a subscale of the Sexual Assertiveness Scale. Two new subscales were piloted in this study, to measure communication about sexual likes and dislikes, and communication about AIDS risk issues. Self-report behavioral measures of sex refusal, initiation, and contraceptive use were employed to add current behavioral information regarding sexual assertiveness. Anticipated negative partner response, and history of a past sexual victimization were also investigated.

This study adopted an empowerment and rights-focused model for increasing sexual assertiveness in women. This model is based on research indicating that women as a group do not have unusual skill deficits in assertiveness (MacDonald, 1982; Muelenhard et al., 1989; Rakos, 1991), and in fact, behave assertively much of the time. However, young women may have experienced and shaped their behavior around lack of reinforcement, or punishing consequences, for assertive behavior in heterosexual sexual contexts. Thus, the orientation of this study was toward empowerment of

college women to apply their assertive skills and recognize their right to self-determination in the critical area of sexual relationships.

Assertiveness

A review of the literature on assertiveness reveals dozens of definitions. In his comprehensive book reviewing the theoretical and intervention literature, Rakos (1991) identifies four broad types of definitions of assertiveness that have emerged since the concept became popular in the 1970s. They are: rights-focused definitions; definitions that focus on emotional expressiveness; definitions that focus on identifying classes of possible responses; and functional definitions, which focus on the goals and elements of assertive behavior. Muehlenhard (1983) identifies three areas of definitions: content definitions, which typically define assertive behavior in terms of positive assertion, negative assertion, and social initiation; definitions based on consequences or objectives of assertive behavior; and definitions that combine the concepts of behavior content and consequence.

Linehan's (1984) definition of assertive skills in relation to women's assertiveness addresses a number of important definitional issues, including the objective of the behavior, the relationship between involved persons, and the role of the self in the interaction. The latter issue is one frequently neglected in assertiveness training and theory. Linehan defines assertive skill as:

the complex capability to emit behaviors or patterns of responses that maximize interpersonal influence and personal resistance of unwanted social influences ("objectives effectiveness"), while at the same time maximizing gains and minimizing losses in the relationship with the other person ("relationship effectiveness"), and maintaining one's own integrity and sense of mastery ("self-respect effectiveness") (Linehan, 1984, p. 153).

Inherent in Linehan's definition are the issues of choice in response, the complexity of social interactions, power in relationships, and personal consequences of power negotiations. Although more eloquent and concise definitions of assertiveness have been offered, this one was selected as the most appropriate for work with college women and sexuality.

Wolpe (1958) explained assertiveness with the principles of reciprocal inhibition of emotional states and operant conditioning. He defined assertiveness as the expression of almost anything except anxiety. Lazarus (1971) built on Wolpe's model and added the idea that unassertiveness can be viewed as a lack of assertive skills. His model emphasized the importance of behavioral rehearsal and modeling in modification of assertion. Galassi and Galassi (1978) challenged the idea that theories like Wolpe's and Lazarus' could completely account for the development of assertive and nonassertive behaviors. Also

in 1978, Fiedler and Bach placed assertive behavior in an expectancy/decision-making model. Their research indicated that the decision to be assertive is determined not by the differential utility of positive and negative consequences, but by the differential perception of probability of consequences.

Definitions of assertiveness in the literature tend to be formulary and conditional. In addition, they are based on a body of research and theory that long assumed assertiveness to be a masculine gender characteristic. In this introduction, assertiveness is explored in relation to women, focusing on the assumptions that women are commonly assertive individuals in non-sexual arenas, and that application of assertive skills in sexual relations is much to the advantage of college women. Here, assertiveness will be defined as clear verbal communication of personal opinions, expectations, limits, and desires, often in defense of a personal right, with congruent non-verbal communication. Ideally, this communication takes place in the context of understanding of one's own power and responsibility, without capitulation or abuse of power, and without abdication or misplaced assumption of responsibility. Finally, awareness of possible negative consequences of assertion for women is important, but it is asserted here that negative responses of others must not persistently deter women from acting in their own interests.

Overt Behaviors and Covert Processes of Assertiveness

Effective assertion requires the ability to emit flexible responses that are sensitive to the unique circumstances manifested in each conflict situation. The words "sensitive" and "flexible" suggest that covert behaviors are involved in the selection of overt responses. The idea of selection implies that overt behaviors will vary across situations (Rakos, 1991, p.25).

Assertive skills are typically divided into the two sets of overt responses and covert processes. The overt response set focuses on communication content, paralinguistic elements, nonverbal behavior, and general social interaction skills. Overt responses are the observable acts of assertiveness that were the focus of early assertiveness training. Included in the overt set are positive and negative assertion skills. "Positive assertion," or commendatory assertion, involves the expression of positive feelings. Examples include praising others, thanking others, giving compliments, expressing liking and empathy, and self-disclosing. "Negative assertion", or conflict assertion, is more commonly addressed in assertiveness training, and by far the more studied behavior set. Negative, or conflict assertion, includes standing up for one's rights, and expressing negative feelings. Examples include expressing dissatisfaction, refusing requests, and requesting a change in someone else's behavior. A third area of behaviors,

social initiation, is more rarely studied, and is sometimes classified with positive assertion. Researchers who include this range of behaviors include examples like initiating conversations and asking for dates (Muehlenhard, 1983). Training methods, research and theory around overt skills are consistent with behavioral and learning theories in general, and are well-established in the literature (Rakos, 1991).

The other set of skills associated with assertiveness is covert processes. Assertion, like other interpersonal behavior, is mediated by cognitive representations of the self, the other, and the situation (Rudy, Merluzzi & Henahan, 1982). Seven categories of covert processes are: knowledge; self-statements; expectancies; philosophical beliefs; problem-solving skills; social perception skills, and self-monitoring skills. Cognitive factors include beliefs about personal rights and socially appropriate behavior, and about anticipated consequences and expectations (even when unrealistic). The importance of such internal processes in producing and monitoring assertive behavior is generally agreed upon at this time, but modalities for teaching covert skills remain an area of some controversy (Rakos, 1991).

The above review indicates that assertiveness may be viewed in terms of effectiveness related to the goal, the relationship and the self; is characterized by flexible and sensitive decisions appropriate to the circumstances; is

made up of covert mediational processes and overt actions; and that covert mediational processes include beliefs about personal rights, socially appropriate behaviors, and anticipated consequences.

Situational Factors and Assertive Behavior

Assertiveness is a function of the situation, and of the interaction of persons and situation (Rakos, 1991). Assertive behavior is no longer generally viewed as a function only of intrapersonal variables, or as a cross-situational trait. Research indicates that if situational cues and constraints are similar across situations, assertive behavior remains consistent within individuals (Deluty, 1985). However, even people who are generally assertive are influenced by context (Kirschner & Galassi, 1983). "Thus, an individual's performance of assertive behavior is likely to vary from situation to situation" (Rakos, 1991, p.10).

Research on situational parameters indicates that individuals construe assertion situations based on anticipated consequences, leading to behavioral decisions, and to action. Salient dimensions affecting an individual's construal include: intimacy with the other person involved; the status of the other person involved; the formality of the setting; and the location of the setting (Rudy et al., 1982). Although more research is needed in the area of determinants of assertiveness (Rakos, 1991), relationship variables, including power, status, intimacy, and expected

behavioral styles, emerge as central factors in making decisions about assertiveness. "It really cannot be any other way: The conceptualization of assertion as a situation-specific, learned skill places the interpersonal context in the position of the central determinant of the behavior" (Rakos, 1991, p.25).

Gervasio (1987) suggests that traditional assertive techniques have little value in intimate relationships, or in other very complex, ongoing situations. Her linguistic analysis of assertiveness points out that traditional assertiveness scripts violate a number of norms and parameters of our cultural communication patterns, particularly for women.

The concept of "empathic assertion" is supported by Gervasio's observations, and by studies of assertive behavior. Empathic assertion has emerged as the preferred verbal response goal of assertiveness training. An empathic assertion includes elaborations on a statement of desire or rights, including acknowledgement of the impact of the assertion on the other person, apology if appropriate, a statement of willingness to compromise, if appropriate, and a positive statement including praise, compliment or appreciation (Rakos, 1991). Research indicates that this style of assertion minimizes negative social reactions. In experimental trials, empathic assertion is judged to be as potent as standard assertion, and empathic asserters are viewed as equally competent as standard asserters, but more

likeable, desirable and appropriate. It is judged more favorably than aggression. Acceptance of assertion is further enhanced by adding positive assertion statements, or commendatory behaviors to the relationship, and by engaging in neutral conversation with the other person. "Standard assertion" is a statement of rights or desire, without elaboration. Although standard assertion is recommended for interactions with strangers or for brief exchanges ("functional relationships"), "close relationships" always require empathic assertion techniques (Rakos, 1991).

Because gender role expectations support women's role as empathic communicators, it is possible that concentrating heavily on the empathic part of the empathic assertion may lead to confusion regarding the intent of a woman's communication, (i.e., is she attempting to empathize as a supportive other, or to sensitively assert an opinion, desire, limit, or expectation, or defend a right?). In addition, empathic assertion may be experienced by the assertor or the recipient of the message as manipulative communication, as opposed to straight-forward communication. For these reasons, standard assertion skills are an important balance to empathic assertion skills, and skills for determining when to use different styles are especially desirable for women.

It is important to note that the experimentally evaluated judgments of assertion summarized above should themselves be considered in terms of situational variables.

Gormally (1982) showed that although people favorably judged assertive behavior in vignettes or role plays, they preferred and liked passive responses better when interacting with confederates. Most situations employed for evaluation are "impersonal, trivial and therefore inconsequential" (Gervasio & Crawford, 1989 in Rakos 1991, p.70). People may react very differently to assertion in general society than in a research setting. For example, assertion is judged as less positive when it requires a significant sacrifice from the other person, and when assertion is a response to a "reasonable request." It is important to note that college students as a group are more accepting of assertion as a conflict resolution technique with intimates; other adults see it as appropriate mainly in interactions with strangers (Rakos, 1991).

As noted above, in close relationships, the empathic style of assertion is preferred to a standard assertion. This interaction of nature of relationship and nature of assertion style further adds to the complexities of evaluating the utility of assertion, and probabilities of various consequences.

The situational nature of assertiveness is of particular importance in the area of sexual assertiveness for women. Assertion is outside the traditional gender role-associated behavioral expectations of women. It is important to be aware of the situation and style variables that maximize the likelihood that a woman's assertions will

be respected, will not be penalized, and thus may prove effective in terms of her goals, her relationships, and her self respect.

These things in mind, a rights-focus leads to the conclusion that delicate strategy is less an issue than effective action. One need not assert oneself "properly" in order to protect one's rights, particularly if the "proper" assertion for the gender is inadequate to meet the needs of the moment. Although strategies and propriety are addressed in this study in order to assist women in maximizing gains and minimizing losses from assertion, the reinforcement of women's right to assert, and the importance of acting on that right for one's own well-being, are central.

Assertiveness and Women

At the beginning of the assertiveness training movement, in the late 1960s, assertiveness was not considered by mental health professionals or by the general public to be characteristic of a healthy woman (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). The female sex-role stereotype in our culture is related to women's assertiveness in at least two ways. First, women tend to demonstrate less negative assertion and less social initiation than men, and to demonstrate more skills in positive assertion. These deficits and skills are consistent with stereotypes of women's behavior. Second, some people react negatively to women who do not behave in accordance with the feminine stereotype (Muehlenhard, 1983).

"Assertiveness" and "masculinity" are concepts frequently associated with each other by research subjects. Masculine sex-role characteristics are attributed to asserters in conflict situations (Hess, Bridgewater, Bornstein & Sweeney, 1980). Wildman and Clementz (1986) reported that both male and female observers perceived standard assertion to be "masculine," conversation to be "feminine," and empathic assertion to be "feminine," or "androgynous." Assertive women are judged to be more "masculine" or "androgynous" than non-assertive women (Rodriguez, Nietzel & Berzins, 1980). "Thus it is not surprising that females in the 1970s reported being less assertive than males (Hollandsworth & Wall, 1977), or that sexism was invoked to explain such differences" (Rakos, 1991, p. 71). Meuhlenhard (1983) illuminates the question of how assertive women and men actually are, commenting that research indicates that women are less assertive than men in the area of negative assertion, and in social initiation, but more assertive in positive assertion. "Whether men are generally more assertive than women depends on how heavily these different areas are weighed" (p.162).

In the 1970s, women became consumers of assertiveness training, and increasing women's assertiveness was frequently viewed as a vehicle for self-empowerment as part of the women's movement. Books about women and assertiveness addressed issues of power in relationships and in society, and reviewed the social conditioning of women to

be caretakers, to avoid conflict, and to behave in accordance with the feminine sex-role stereotype. Books and trainings encouraged women to take more control of their lives in their homes, workplaces, romantic relationships, and in political arenas (Bloom, Coburn & Pearlman, 1975, Osborne & Harris, 1975; Taubman, 1976). Assertiveness training can be part of a personal growth and consciousness raising experience (Lange & Jakubowski, 1976; Muehlenhard, Julsonnet, Carlson & Flarity-White, 1989; Osborne & Harris, 1975) producing a treatment that offers even greater benefits than assertion training alone (Kidder, Boell, & Moyer, 1983; Meehan & Godkopf, 1982).

Research indicates that interventions can significantly enhance the negative assertion skills of women in university settings (Berah, 1981; Craighead, 1979; Rathus, 1873; Young, Rimm & Kennedy, 1973). Applied to areas of particular concern to women, assertiveness training has proven to be a useful intervention. Women in one study increased their ability to express sexual needs and desires (Hammond, Oei, & Tian, 1982). Assertiveness training combined with self defense training changed female subjects' perceptions of rights, enhanced their refusal skills, and broadened their definitions of what constitutes an unacceptable violation of their rights (Kidder et al., 1983). Another study combining assertiveness and self defense training increased women's ability to identify and resist unwanted sexual advances (Muehlenhard et al., 1989). Rape survivors trained in

assertive skills showed a decrease in fear, anxiety and depression, and increased self-esteem, self concept and assertion skills (Resick, 1988).

Although Rakos (1991) states that "a significant portion of female trainees fail to improve, maintain and generalize assertiveness gains in a natural environment" (p.16), a review of the literature indicates that sustained gains have been reported in a number of studies, with follow up measures taken at intervals ranging from one month to three years (Hammond, Oei, & Tian, 1982; Kaplan, 1982; Resick, Jordan, Girelli, Hutter, & Marhoefer-Dvorak, 1988; Waksman, 1984; Williams & Hall, 1988; Workman, Bloland, Grafton, & Donald, 1987). Nevertheless, Rakos' point is well taken. Because women's assertiveness is discouraged through sexist norms, values, and relationships in our culture, interventions with women must be strong and supportive. Rakos recommends that interventions: be relevant to womens' life situations; teach empathic assertion as well as standard skills; be led by women sensitive to issues of power, sexism, and other issues of womens' lives, as well as sensitive to sexism within the mental health field, and particularly in assertiveness training. Finally, it is important for researchers and trainers working with women to be aware that the amount of change shown by a woman is likely to be related to reactions by her significant other (Rakos, 1991).

Rakos also states that more intensive treatments are

required for women because women are subjected to far more rights violations than men. MacDonald (1982) found that women were confronted with over 50% more situations appropriate for assertion than were men. "Men treat women differently than they treat other men: they are more likely to ask women to change undesired behavior, and less likely to offer a spontaneous favor than to men (Deaux, 1971; Eisler, Fredrickson, & Peterson, 1975; Unger, Raymond, & Levine, 1974)" (Rakos, 1991, p.165). In addition, women are culturally and economically valued less than men, from childhood through adulthood (MacDonald 1982; Rakos, 1991). However, as Rakos states, American values stress rights, and the culture asserts that both sexes have equal rights. "Since women have equal theoretical rights, and fewer actual ones, they will be faced with a greater number of abstractly appropriate assertive situations" (p.165).

Considering that assertive behavior is not encouraged in gender roles for women, are women at greater social or personal risk when they choose assertion? Both women's behavior and men's behavior are influenced by expected consequences (Eisler et al., 1978; Feidler & Beach, 1978). In the course of evaluating options and constructing action choices, women may simply disregard assertiveness in situations that discourage assertive behavior, based on their expectations about consequences that may not be to their benefit.

Muehlenhard (1983) reviews literature on women and

assertiveness that suggests that women using negative assertion are viewed as less likeable (Kelly, Kern, Kirkley, Patterson, & Keane, 1980; Lao, Upchurch, Corwin, & Grossnickle, 1975). Other studies reviewed by Muehlenhard indicate that women asserting themselves in the area of social initiation experience some negative consequences. Women must work harder at initiating conversations than men to achieve the same response (Parlee, 1979). Within conversation, men interrupt women more than they interrupt other men, and more often than women interrupt people of either sex. Interrupted women are unlikely to protest (Haas, 1979). In the area of dating initiation, high-school aged females who asked out males were viewed as desiring sex on the date, and students believed it was acceptable for the male to force sex if the female had initiated the date (Fingler, 1981; Johnson, 1981, cited in Muelenhard, 1983), illustrating a risk of social initiation in dating.

Rakos (1991) reviewed 25 studies on the effect of sex of the assertor and/or sex of the judge on the evaluation of negative assertion. Results are mixed, and gender effects tend to be part of complex interactions, of limited usefulness.

The existence of these confusing and contradictory findings led Schroeder et al. (1983) to suggest that gender effects on the social reaction to conflict assertion may reside in sex-role orientation of the judge, rather than his or her sex. Unfortunately, here,

too, the data are less than illuminating (Rakos, 1991, p.72).

Sex role orientation research, too, has revealed contradictory and weak results. It appears that the predicting variable is neither sex nor sex role beliefs, but attitude toward women. Research indicates that conservative attitudes toward women may lead to less acceptance of women's assertive behaviors (Rakos, 1991).

Overall, the literature does not support a generalized and pervasive assumption that conflict assertion involves greater risks for women than for men. "Nevertheless, a cautious advocacy of assertion for women is indicated for at least (two) reasons" (Rakos, 1991, p.73):

1. The many gender-related interactions reported in the literature suggest that there are situations in which assertion is riskier for women. Variables like style of assertion used (empathic assertion is usually more accepted for women than standard assertion); the other person's attitude toward women; the social context of the assertion (social role demands for women seem to vary with setting), and the primacy of emotional or non-emotional content (women are judged more critically in emotional situations), may influence the response to women's assertiveness.

2. Although no consistent patterns have emerged for male raters of assertive females in research situations, actual involvement may alter a social context, thereby changing male responses to assertion by women. Rakos notes

that most women in assertiveness training (and mostly women seek assertiveness training) feel that male bosses, husbands, etc., are in power, and that women need to increase assertiveness to deal with them. "It is unlikely that these women are all excessively sensitive to, and inaccurate in their assessment of, the reactions of men."

A third caution is suggested above: women who ask for dates are presumed to be asking for sex (Fingler, 1981. Johnson, 1981). It appears that social initiation by women may be badly misunderstood, possibly leading to some risk for the woman. Clarity of communication may minimize risk, but awareness that non-traditional behavior may be misunderstood is important awareness for assertive women. In the context of this awareness, women can still be encouraged to ask for what they want and state expectations, express opinions, set limits, and defend rights.

To summarize: assertive behavior is still associated with "masculinity," and so may be viewed as negative for women. Subject performance on judgment measures in studies show assertion is equally valued in men and women in many situations, but reactions may be quite different in life situations. Rakos encourages women to observe individual men's behavior toward assertive women and assess outcome probabilities based on that previous behavior. Other important variables for women to evaluate in predicting outcomes are the level of sex-role stereotyping in a particular situation, and the conservative/liberal quality

of the situation and person in question. Situations valueing pragmatism and rationality are likely to be more encouraging of women's assertiveness than emotional situations. It is not clear whether women are consistently at greater risk in social situations involving assertive behavior, although they may be judged as less likeable when using negative assertion, and may be verbally discounted or viewed as more sexually available when initiating social contacts with men. Empathic assertion is probably better accepted for women, and more effective in complex, intimate, and long-term relationships than standard assertion. However, it has drawbacks, and cannot substitute for unselfconscious use of standard assertion in daily life.

Women may be judged as less assertive than men in studies, and may experience men as more powerful, but it should be noted that women are particularly skilled in positive assertion behaviors, and use them more frequently than do men.

Even considering the caveats above, research indicates that assertiveness training is beneficial to women. Benefits may be derived not just in skill-building, but through a personal growth and consciousness-raising experience. Measured gains in assertiveness may be maintained over months or even years.

In this study, rights-focused, skill-building workshops were designed to provide assertiveness training and sexual assertiveness training for college women.

Sexual Assertiveness

Sexual assertiveness is a concept including attitudes and practices relevant to sexual refusal, initiation, and birth control use, articulated by Quina, Harlow, Gibson and Morokoff (1990). The term "sexual assertiveness" does not appear elsewhere in the assertiveness literature. Some studies have been published in related areas, though, and the topics of these studies fit well within the three sexual assertiveness components identified by Quina, et al. Important information can be extrapolated from the existing literature.

A few studies have addressed women's assertiveness in sexual situations through an investigation of norms around refusal of sexual contact (Lewin, 1985; Muehlenhard, 1988; 1991). Graurholz and Serpe (1985) looked at "reactive power" (refusal of sexual contact) and "proactive power" (initiation of sexual contact) between men and women. Kidder, et al. (1983) and Muehlenhard et al. (1989) studied prevention of women's sexual victimization through assertiveness training. A treatment program for sexual assault survivors focused on assertiveness training (Resick, 1988). Osborn and Harris (1975) published a dialogue between several women about enhancing sexuality through assertiveness. Williams and Hall (1988) found that assertiveness training reduced peer conformity and increased college students' ability to resist peer influence to be sexually active. Two studies of men's responses to sexual

assertiveness in women suggest it is viewed positively by many men (Jesser, 1978; Sirkin & Mosher, 1988).

As noted earlier, interpersonal variables are primary determinants of assertive behavior (Rakos, 1991). One important parameter of assertiveness is status of the other person (Rudy et al., 1982). Because the status men hold in sexual situations is greater than women's, sexual assertiveness by the woman may be discouraged or minimized by this structural variable. In sexual interactions, men are expected to pursue women, and to assert themselves to achieve sexual intimacy (Goffman, 1977; Graurholtz & Serpe, 1985; Komarovsky, 1976; Muehlenhard, 1988), a role accorded more status in a patriarchal society, than the corresponding female role of limit-setting. Economic and political power rest mostly in the hands of men in our culture, as well (Meuhlenhard, 1983). In their study of assertiveness training for victimization prevention, Kidder et al. stated, "The assertiveness lessons and our observations pertain to people who find themselves in a relatively powerless position, or in frequent contact with someone who could overpower them" (1983, p.167). Women in heterosexual sex interactions often fit these criteria.

The degree of sex-role stereotyping in a situation is another limiting factor for women's assertiveness. Studies of power and initiative in sexual situations illustrate that sex roles in sexual situations are highly scripted; so highly scripted, in fact, that rape is facilitated by

disregarding women's refusal, confusing both men and women about the clarity of refusals (Goffman, 1977; Graurholtz & Serpe 1985; Komarovsky, 1976; Lewin, 1988; Muehlenhard, 1983; 1988; 1989).

Rakos (1991) warns that women's assertiveness is more discouraged, and may be responded to more punitively, by men while in emotional, as opposed to rational/objective situations. Sexual encounters could be viewed as more highly emotional than rational, suggesting that women's assertiveness may be less welcome and effective in sexual situations than in others.

Research and theory in assertiveness training support the importance of cognitive mediation in determining assertive action. For women in sexual situations, expected partner responses may be the most salient cognitions. A study by Lewin (1985) asked women to indicate costs and benefits to refusing unwanted sexual intercourse with a date, and submitting to unwanted sexual intercourse with a date. Statistical analysis of these costs and benefits, and the expected outcomes, revealed a double bind for about half the women, leaving them unhappy and regretful in either case. Although women had more negative than positive feelings about submitting, submitting emerged statistically as the more desirable course, because women's greatest concern was with the feelings of the sexual aggressor, whom they did not want to offend. This is consistent with Rakos' (1991) conclusion that women's assertiveness will change in

correlation with partner's support of assertive behavior. Harlow, Morokoff, Quina and Grimley (1991) showed that a woman's perception that a partner may react negatively to her refusal of specific sexual behaviors is related to her level of AIDS risking behavior, suggesting that expected negative consequences for refusal are correlated with less refusal by women. Partner response is also identified as important in women's use of contraception (Burger & Inderbitzen, 1985; Catania, Coates, Greenblatt, Dolcini, Kegeles, & Puckett, 1989; Herold & McNamee, 1982). In light of these data, Anticipated Partner Response to Assertiveness is a covariate in this study.

Refusal

Koss (1985) revealed "hidden rape victims" among a college sample of more than 2,000 women. Almost 42% of those women indicated they had experienced either sexual contact not including intercourse, against their will, through the use of force, or threat of force, or undesired sexual intercourse after extreme verbal coercion, insistent argument, false promises, and threats to end a relationship. In addition, 12.7% of respondents reported experiences that meet the legal definition of rape. Thus, almost 55% of this sample reported undesired sexual contact. Lewin (1979) found 30% of a sample of female college seniors reporting unwanted intercourse in one study, and 22% in a follow-up study. Sexual harassment is a common occurrence in the lives of college women. In 1986, Cornell University

surveyed women students and found 78% reporting sexist comments, and 68% reporting unwanted sexual attention. Eighty nine percent of these incidents involved individual males, and 11%, male groups. At Massachusetts Institute of Technology, 92% of women had experienced unwanted sexual attention (Hughes & Sander, 1989). At the University of Rhode Island, 70% of surveyed women reported sexual insults from a man. Unwanted sexual attention from professors toward students is also widespread (Hughes & Sander, 1989; Reilly, Lott, & Gallogly, 1986). Because of its frequency in college samples, and a possible relationship to sexual beliefs and behaviors, history of victimization was assessed, and explored for use as a covariate in this study.

Theorists (Goffman, 1977; Komarovsky, 1976) suggest the normative pattern of relationship formation in our culture is through aggressive initiation activity by males, who are encouraged to break through boundaries and pursue partners for sexual relationships and romantic relationships. Thus, "females are vulnerable in a chronic way, to being 'hassled'" (Goffman in Kidder et al., 1983, p.160). Through this pattern, partners stand to gain relationships, or at least to act out socially accepted gender roles. As noted above, this arrangement facilitates rape by encouraging men to disregard women's limit-setting statements, and even to use force in pursuing desired contact, and by discouraging women from freely and clearly expressing their sexual preferences (Goffman, 1977; Graurholtz & Serpe, 1985;

Komarovsky, 1976; Lewin, 1988; Muehlenhard, 1983; 1988; 1989).

Training to deal with extreme force or severe harassment is beyond the scope of this study. However, skills around assertive refusal of unwanted sexual attention and contact will be built in the treatment condition. Kidder et al. (1983) warn about the difficulty of teaching women to openly acknowledge and resist undesired attention in social situations. Gervasio (1977) illuminated the incongruity between socially accepted refusal patterns in daily language, and the refusal skills encouraged by standard assertion techniques. Refusal without an account of reasoning is interpreted in daily language to signal the end of an exchange, and to do so in a highly negative way. "Putting off" refusals are more socially acceptable, but are discouraged in assertiveness training, since they leave the speaker's intentions ambiguous. Thus, teaching refusal skills can involve teaching an empathic refusal; a clearly stated "no," with an elaboration that expresses awareness of the other person's feelings, and, if appropriate, offers a compromise or an apology. The use of other response categories also softens refusal. Engaging in discussion that allows positive assertion or social initiation results in more positive evaluation of a refusal (Rakos, 1991).

All this said, it must be re-stated that a primary goal of this assertiveness training with women is to facilitate assertive refusal. Exactly what form the refusal takes is

far less important than the action of refusal. A rights-focused approach is critical to encourage women to resist unwanted attention and refuse unwanted contact when that is possible.

Refusal of sexual contact or activity was measured in two ways in this study, to learn about 1) women's beliefs, and 2) their behavioral experiences. Refusal beliefs were measured with the Refusal subscale of the Sexual Assertiveness Scale (Quina et al., 1990), a dependent measure in this study. Self-reported refusal behavior "in the past four weeks" was assessed with items constituting another dependent measure.

Initiation

Researchers seem to agree that women are generally not comfortable initiating sexual contact, and might, in fact, suffer a high cost for initiation, since such action breaks with the female sex role stereotype and "sexual script" (Graurholz & Serpe, 1985; Muehlenhard & Hollabaugh, 1988; Muelenhard & McCoy, 1991). A study by Jesser (1978) revealed that about half the women surveyed reported using direct verbal initiation in a sexual relationship, and that they were rebuffed no more frequently than other women. Few men in this study reported refusing sex initiated by a woman, and very few cited type of approach as a reason for refusal when it did occur. Jesser found that women who initiated were higher on general assertiveness, less conventional regarding sex roles, more likely to have a

partner who also used direct verbal initiation to request sex, and more likely to have a partner they believed accepted their initiation. This is consistent with other studies that indicate sexual experience and liberalness on the part of women (along with younger age) predict initiating sex (Gruarholtz and Serpe, 1985). Also significant, though, is the finding that these initiating women were partners with liberal and accepting men. Consistent with the literature cited above about expected partner response, "It seems likely that what is important is not the woman's attitudes (alone), but her perceptions of the attitudes held by the culture in general, and by the man she is with, in particular" (Muehlenard, 1988, p.878).

Although men reported more positive feelings in response to an erotic fantasy in which a woman initiated sex than to the same fantasy based on male initiation (Sirkin & Mosher, 1988), and Jesser's male sample reported accepting female initiation, Rakos' cautions about women's assertiveness apply here. A large body of literature suggests that assertion is often viewed negatively in women, and that situational variables and type of assertiveness have an impact on acceptance of women's assertive behaviors. In addition, responses of men in research situations have not been demonstrated to correspond to responses in real life settings, or intimate relationships (Rakos, 1991). (One might expect this to be particularly relevant to the application of Sirkin & Mosher's 1988) fantasy findings, in

which female assertiveness was unreal and in which the male fantasizer maintained control of events.) Thus, it would be hasty to state that men are accepting of women's sexual assertiveness, and that women have misjudged the climate for sexual initiation. Finally, social initiation behaviors by women are not always easy to implement (recall that conversation initiated by women is less encouraged than conversation initiated by men), and may have unexpected consequences (women asking for dates are perceived as interested in and available for sex) (Muehlenhard, 1983).

Harlow, Morokoff & Quina (1991) found that, with a sample of college women, assertive sexual initiation was correlated with higher risk behaviors for AIDS. These results indicate that sexual initiation skills must be augmented with refusal and birth control assertiveness for women's safety.

Advice on rape prevention often recommends that women disregard the traditional sexual script by clearly communicating their level of sexual desire to their partner. It is unrealistic, though, to expect women to be open about desire if it leads to negative sanctions. Women, as well as men, engage in behavior that they expect will be rewarded, and avoid behavior they expect will be punished (Muehlenhard, 1991, p. 447).

Gervasio (1977) reviewed the use of request language (which might be employed in sexual initiation) in everyday life, and compared it with assertiveness language for

requests. She notes that in daily conversation, indirect requests are considered most socially appropriate and that direct requests may be viewed negatively. Direct requests are typically encouraged in assertiveness training. Gervasio further notes that both direct and indirect requests contain an "implicit challenge" to the person receiving the request. Training in initiation can help women develop a style that is direct, but which minimizes challenge or offense, and introduces discussion of specifics (condom use, style of sexual contact, etc.). For both initiation and behavior change requests, Rakos (1991) suggests a specific, respectful statement that describes behavior as well as stating a request. Empathic assertions, sometimes supported by commendatory assertions, are appropriate models for initiation statements.

Initiation of sexual contact or activity was measured in two ways in this study, to learn about: 1) women's beliefs, and 2) their behavioral experiences. Initiation beliefs were measured with the Initiation subscale of the Sexual Assertiveness Scale (Quina et al., 1990), a dependent measure in this study. Self-reported initiation behavior "in the past four weeks" was assessed with items constituting another dependent measure.

Again, regardless of the form of statement, a rights-focused training approach requires that empowerment to speak about desires and expectations be central, and that women be encouraged to use their assertiveness skills to inform

others of what they want, and to protect their rights to self-determination in matters of sexual behavior.

Birth Control Assertiveness

Despite some efforts to make information, and educational programs regarding contraception available to young people in the U.S., the unplanned pregnancy rate among college students has risen dramatically on most American campuses since the 1970s. Research consistently indicates that the major contributor to unwanted pregnancy is related to contraceptive use -- failure to practice any form of contraception, inadequate use of contraception, or reliance on ineffective contraception methods (Hester & Macrina, 1985). Condom use for AIDS prevention is similarly lacking in sample populations. Recent studies have found that fewer than 10% of sexually active adolescents use condoms (Kegeles, Adler & Irwin, 1988; Strunin & Hingson, 1987). In a study of students at the University of Rhode Island, about 17% of students reported condom use (Paxson & Quina, 1990). Students at highest risk for AIDS are often least likely to use condoms (Biglan, 1990).

Research clearly indicates that information is not a sufficient predictor or facilitator of contraception (Foriet & Foriet, 1978; Hester & Macrina, 1985; Hynes & Bruch, 1985). Cognitive and relationship variables are frequently used to explain the gap between contraceptive knowledge and use. Acceptance of sexuality, attitude toward contraception, confidence in use, perceived peer group norm, and partner

support appear to be related to contraceptive use in women (Burger & Inderbitzen; 1985; Catania et al., 1989; Herold & McNamee, 1982; Hynes & Bruch, 1985). The role of the partner in encouraging contraceptive use seems to be an important variable (Catania et al., 1989; Herold & McNamee, 1982; Thompson & Spanier, 1978).

Byrnes (1983, cited in Hynes & Bruch, 1985) proposed a conceptual model of contraceptive use specifying several antecedent tasks which should facilitate planned contraceptive use. "Each antecedent step occurs in a social context and involves a potential variety of interpersonal interactions" (Hynes & Bruch, 1985, p.423). Of Byrne's five steps, Burger and Inderbitzen (1985) found that step #4, "communicating with partner about contraception," was the best statistical predictor of contraception. Other research supports the importance of communication about contraception (Catania et al., 1989; Herold & McNamee, 1982; Hester & Macrina, 1985). Research indicates that communication increases with knowledge, and that women who communicate with partners about contraception have less traditional gender roles, are better contraceptors, and have more supportive partners (MacCorquedale, 1984).

Hynes and Bruch (1985) studied social skills and responses in simulated contraceptive problem situations. They found that positive self-assertion skills were correlated with effectiveness in initiating conversations regarding contraception, for both men and women, and that

rights assertion skills were correlated with inquiring about and obtaining contraceptive supplies. Hester and McNamee (1985) state that contraceptive method decisions seem to be cognitive and technical, relying on an information based-process. Reasoning about contraception, though, is more affective and emotionally based in college students. "Based on these findings, it would seem that the primary objective of contraceptive education should not be directed at the promotion of specific methods, but at the promotion of positive general attitudes toward contraception" (p.250). Positive general attitudes that could be promoted through a rights-focused approach to birth control assertive-ness include: openness to exploration of birth control methods; openness to requesting information and medical care; assertive introduction and use of contraception in sexual relations; commitment to use of contraception as a personal right for health, safety and self-determination in sexual relations.

Attention to overt and covert assertion skills, contraceptive information, partner communication practice, technical use skills, and a rights orientation were included in the contraception intervention in this study.

Contraception activity was measured in two ways in this study, to learn about: 1) women's contraceptive beliefs, and 2) their behavioral experiences. Contraceptive beliefs were measured with the Birth Control subscale of the Sexual Assertiveness Scale (Quina et al., 1990), a dependent

measure in this study. Self-reported contraceptive behavior "in the past four weeks" was assessed with items constituting another dependent measure.

Communication About Sex and AIDS

Overt assertion skills are made up of verbal and non-verbal assertive actions. Assertiveness training typically focuses on developing overt skills through teaching and practice of communication styles and methods (Alberti, 1986; Bloom, Coburn, & Perlman, 1980; Kelley, 1979; Linehan, 1984; Osborn & Harris, 1975; Phelps & Austin, 1987). To support overt assertion, covert skills must also be developed, so that women feel able and allowed to compose and deliver assertive communications. Thus, sexual assertiveness training should emphasize styles and methods of communication (overt skills), with a rights-focused and problem-solving approach (covert skills).

Verbal and non-verbal communication skills are central to women's ability to assert themselves and to negotiate regarding sex. It is conceivable that refusal and initiation of sex might be carried out non-verbally on occasion, although the dangers of miscommunication must be considered. Verbal communication is clearly necessary in the areas of contraception and safer sex, where many choices exist, and cooperation is essential for effective AIDS risk reduction. The importance of verbal communication in initiation, refusal, and birth control assertions is evident in the foregoing discussions of each.

In writing about behavioral training programs for adolescents and sexuality, Frost, McCluskey-Fawcett and Sharp (1989) emphasize the importance of communication. They report that studies of college students indicate that students do not generally discuss contraception before intercourse, and that nearly 75% of students report using no contraception at least some of the time. Stressing the importance of communication for effective AIDS prevention, the authors write:

Training in general communication skills is not enough. Specific training is needed in order for adolescents to be able to discuss sex and sexuality comfortably and productively...It is critical that these techniques be used specifically to train individuals to deal with sexual situations (p.240).

For sexual assertiveness training, verbal communications should be stressed for all three dimensions (initiation, refusal, and birth control). Non-verbal communications should be emphasized as congruent and observable cues to enhance effective verbal assertion, but never to substitute for important verbal communication. A focus on the rights of women to speak out for themselves is called for, because assertive communication may initially feel unnatural, or may violate norms in sexual communication (Gervasio, 1987; Graurholz & Serpe, 1985; Muelenhard, 1988).

In this study, styles of communication, communication techniques, and conflict negotiation were taught. These

skills and concepts were practiced in relation to each area of assertiveness. The use of empathic assertions was emphasized. Communication beliefs were measured with 16 items concerning sexual communication. These items constitute two dependent measures in this study. The items were analyzed to investigate their properties as additional subscales of the Sexual Assertiveness Scale.

AIDS Prevention Efficacy

One purpose of sexual assertiveness is to enable women to reduce possible contact with sexually transmitted diseases. Women and girls between 13 and 19 years old are the fastest growing group affected by the AIDS epidemic in the U.S. In February 1993, the number of women in the U.S. diagnosed with AIDS was 40,702 (CDC, 1993). This a substantial increase (more than 30%) over the previous year, and represents 11% of cases in the U.S. In Rhode Island in 1993, 17% of the diagnosed cases of AIDS were in women. AIDS became the eighth leading cause of death in women in the U.S. by 1991 (CDC, 1991). It was already the leading cause of death among women aged 15-34 in New York City by 1986, six years before this writing (Chaisson et al., 1987). The risk for women continues to grow, and current statistics may pale in comparison with those of years to come. Projections released at the International AIDS Conference, held in Berlin in June, 1993, indicate that women will account for more than half the diagnosed AIDS cases in the world by the year 2000. In addition, researchers warn of an

impending explosion in AIDS diagnoses, and of the tremendous dangers for young adults and adolescents, who are contracting the virus at an increasing rate (CDC, 1993).

Recommended AIDS prevention and safer-sex practices for heterosexual women include avoiding the sharing of IV drug needles, inquiring about the sexual history of partners, effectively using condoms and spermicides, and engaging in intercourse-alternative sexual behavior (Watstein & Laurich, 1991). "Current views emphasize that effective STD prevention must provide factual information, teach skills on decision-making and social assertiveness, and address motivational issues" (Catania et al., 1989, p.514). These goals are central to this study.

Examination of the recommendations cited above for reducing women's risk of AIDS reveals that the strategies are highly dependent on the behavior of the male sex partner. For example, inquiring about the sex history or other risk factors of a male partner is a useful strategy only if the responses are true and complete. Research indicates that men's responses cannot be relied upon to protect women's health (Cochran & Mays, 1990). Similarly, effective use of condoms cannot be achieved through the will of a female partner alone, since they must be applied to and removed from the genitals of the male partner, properly and in a timely manner. In addition, acting on recommendations to inquire about the partner's history or current practices, or to control the partner's behavior, may result in

punishing consequences for a woman, if her partner responds aggressively or by withdrawing affection (Corea, 1992; Deiter, Lang, Johnsen, Rose, Morokoff, Harlow, & Quina, 1993).

Although attempts to support women in effectively implementing these recommendations are central to this study, it is very important that the recommendations are recognized as inadequate for the self-protection of women (Corea, 1992). This recognition leads to two conclusions: a) a rights-focused, empowerment model that increases women's general effectiveness in asserting personal rights, in interpersonal negotiation, and in self-protection through refusal or departure from a destructive situation is critical to women's well-being, and b) research on chemical agents and physical barriers to protect women from the virus through their own use, must be vigorously supported and pursued. The use of the "vaginal condom," for example, would have been an ideal training module for this study, had the condom been available at the time of study implementation.

In assertiveness training, discussion of the matter of who is responsible for male contraceptive use is important. Although women must be in charge of their own health and safety, they cannot control the behavior of a male partner. Clear communication of expectations and desires and assertive limit setting to protect rights, are strategies available to women (in non-violent sexual encounters).

In this study, perceived self-efficacy in AIDS prevention behaviors was a dependent variable. Training interventions included AIDS prevention assertiveness training, a rights-focus, and information and skill building.

General Assertiveness

As discussed above, assertive behavior is situation specific. In fact, "the situational specificity of behavior is now well-recognized, and applies to social skills as well as most other behaviors" (Bellack, 1979, in Tucker, Weaver, Duran & Redden, 1983, p. 369). For that reason, it could be expected that training in general assertiveness would not necessarily lead to greater assertiveness in sexual situations. Conversely, training to be more assertive in sexual situations may not lead to greater general assertiveness. However, generalization could occur if the training experiences were not sufficiently different, or if participants spontaneously tried out their new skills in various situations. A measure of general assertiveness was included here as the final dependent measure. Use of this measure provided information about possible generalization between sexual assertiveness skills and general assertiveness skills.

Workshop development

"To become aware of rights - to refuse a request or make a request - is to have one's consciousness raised" (Kidder et al., 1985, p.167).

The workshops developed for and implemented in this study were intended to increase women's sexual assertiveness. As noted, "sexual assertiveness" is not a common concept, so a body of sexual assertiveness training literature does not yet exist. Assertiveness training with women, though, is well developed and researched (Rakos, 1991). Assertiveness training techniques, combined with the available information about sexuality and assertiveness, provide an abundance of material to draw on in developing theoretically and technically sound interventions.

Assertiveness training was originally seen as an application of classical learning theories (reciprocal inhibition and operant conditioning) (Wolpe, 1969). Later viewed as a skill-deficit problem (Lazarus, 1971), interventions including behavior rehearsal and modeling were stressed.

In light of the theoretical formulations of Kelly (1955: personal construct theory) and Bandura (1977: social learning theory), a profitable approach reconceptualizes assertion by emphasizing that a) how individuals construct situations frequently determines the salient information they extract; and b) how they process that information influences their actions (Rudy et al., 1982, p.125).

This perspective emphasizes the importance of training overt behaviors, through rehearsal, modeling and skill development. Equally or more important, it points to

training in covert processes, through rights-focused interventions, increasing knowledge, encouraging positive self-statements, training for self-monitoring and outcome assessment, etc.

Dale (1956) identified three domains of learning, each with corresponding behavioral outcomes, and preferred methods of presentation. They are:

1. The cognitive domain. Cognitive outcomes are recall and application of information. Appropriate presentation modes for cognitive interventions are audio-visual modes, essay-writing, lecture, and discussion.
2. The affective domain. Affective outcomes are empathy, endorsement of particular beliefs, exhibition of feelings, and demonstration of preferences. Presentation modes are role-playing, dramatic presentation, discussion, and directed group activity.
3. Skill-building behavior domain. Skill outcomes are performed actions. Presentation modes are practice through repetition, demonstration, and reinforcement.

Dale asserts that learning and behavior change interventions should address all three domains, through appropriate modes. He further states that concrete experiential activities that are affectively engaging, are best remembered.

The Stages of Change model of behavior change posits that individuals differ in level of readiness for behavior change. Processes used by self-changers vary with level of

readiness. People who are precontemplative, or are contemplating change, use cognitive methods. People in action and post-action stages of change use behavioral processes. (Prochaska, DiClemente, Velicer, & Fava, 1988). Cognitive methods are processes related to the ones identified by Dale as in the cognitive and affective domains. Behavioral processes are similar to those in Dale's skill-building domain.

The Health Beliefs Model focuses attention on individuals' beliefs and perceptions regarding health practices, and their influence on behavior. "Comprised of a number of psychosocial variables, the model has as its basic components the dimensions of perceived susceptibility to a specific condition, perceived severity or seriousness of a condition, perceived benefits of preventive health actions, and perceived costs or barriers to those actions" (Hester & Macrina, 1985, p.246).

Taken together, these approaches indicate that effective behavior change and training experiences should be based on the following principles:

1. Participatory activity is essential.
2. Participation as part of a group motivates learning.
3. Training methods should be appropriate to content and desired outcome.
4. A variety of methods should be used, to maximize benefit for group members at various stages of change.
5. Experiential, affectively engaging activities that

stimulate group interaction should be included, along with lecture style and practice-based components.

6. Attention should be given to processes of decision making regarding sexual behavior, particularly costs and benefits of action.

7. Risk factors for pregnancy and disease should be clearly addressed and personalized.

8. A supportive and rights-focused approach to sexuality is needed for women.

9. Sensitivity to sexism, power, and the possible negative effects of assertion for women is important.

10. Empathic assertion skills should be included.

11. Both overt and covert skills should be identified and strengthened to maximize the power of the intervention.

A final issue must be considered. In the literature, assertiveness is sometimes offered as a method that one can use to manage or control the behavior of others. It is important that women's sexual assertiveness is not mistakenly understood as a solution to problems of male use of force in sexual relations, or male reluctance to comply with safer sex guidelines. A rights-focus approach should help women to clarify appropriate responsibility for personal behavior, and to ascribe personal and partner responsibility properly, rather than assume responsibility for the behavior or attitudes of a partner.

The assertion interventions developed and implemented in this study were designed to increase sexual

assertiveness, by helping women to expand their perceptions of their rights and choices in sexual situations, and their behavioral repertoire. As Kidder et al. (1983, p.153) note in their study of victim prevention training, "The actual behaviors the students learn here are not very novel. What is novel is engaging in those behaviors in situations where they have previously felt they had no right..."

Overview of The Study

This study compared 10 dependent measure scores for college student women participating in one of three assertiveness training conditions. Paper and pencil pre-test measures were given to participants, who were randomly assigned to one of the three conditions. Women in the Sexual Assertiveness training condition, meeting in groups of 4 to 8 participants for 1.5 hours weekly for four weeks, acted as the treatment group in this design. Training included learning sexual communication, refusal, initiation, and contraception information and skills. Women in the General Assertiveness training condition also met in groups of 4 to 8 participants for 1.5 hours weekly, for four weeks, and served as the placebo-control condition in this design. Training included learning general assertiveness skills and information. Women assigned to a third condition received no intervention, serving as a no-intervention control condition. After the treatment and placebo-control groups met four times, post-test measures were given to all participants. Four weeks later, (eight weeks after the pre-

test) all participants filled out dependent measures for the third and final time, as a follow-up.

Sexual assertiveness training was the treatment of interest here. Sexual assertiveness is made up of at least three component skill and belief sets, including initiation of sex, refusal of sex, and birth control use. Sexual communication was explored in this study as an additional component of sexual assertiveness. Although initiation of sex is a component of sexual assertiveness, it was not the purpose of this study to increase the frequency of women's sexual encounters. Instead, the intent was to empower women. Women trained in sexual assertiveness may be able to recognize unwanted sexual contact, and to effectively refuse it (where force is not involved). When they choose to take part in a desired sexual encounter, they may be able to protect themselves from pregnancy and disease.

Women in this study were advised that the University of Rhode Island does not endorse non-marital sexual activity. The alternative of abstinence from sexual intercourse was discussed. Information about abstinence, safer sex, contraception, venereal diseases, etc., made available by URI Health Services was distributed. Students were repeatedly informed about, and encouraged to take advantage of, health care and counseling services offered on campus, to support them in healthful development. The primary end of sexual assertiveness training for women is to provide them with tools they need to refuse unwanted sexual

attention, to initiate wanted sexual contact, and to organize sexual activity in such a way that encounters are non-coercive, responsible contacts. To these ends, it was considered absolutely critical for women to feel confident and secure in choosing abstinence from sexual intercourse on any occasion, or as a lifestyle choice.

Many of the materials and techniques to be used in this study were adapted or taken directly from a previous study conducted at URI, to increase women's safer sex knowledge and skills (Gallagher, 1990). That study was built from measures and hypotheses generated from the URI Lifestyle survey, administered to undergraduates at URI in 1990 (Harlow, Quina, & Morokoff, 1991). All measures (Sexual Assertiveness Scale, contraceptive use, AIDS self-efficacy, anticipated partner response, self report of refusal and initiation behavior, contraceptive behavior) were used in the Lifestyle Survey or Gallagher's study, or are adaptations of items used in either study. Only the Rathus Assertiveness Inventory (Rathus, 1973a), a measure of general assertiveness with no sexual content, was not used on Gallagher's study or the Lifestyle survey. In addition, intervention designs were closely related to Gallagher's. (The author of this dissertation was also a leader of groups in Gallagher's study.)

It is important that women have a repertoire of ways to handle problem situations, and that they are able to predict with some accuracy the consequences of these alternatives.

Important consequences include whether the woman is effective in reaching her goal, how people feel about her, and, most important, how she feels about herself. A goal of assertiveness training is to help women assess and order the importance of consequences. College women may choose to place the comfort of others, or the opinion others hold of them, as higher priorities than self-respect and self-protection. A rights-focused approach returns focus to the self as priority. As women increase their behavioral repertoires, re-order the importance of consequences, and increase understanding of likely consequences, they will have more options for effectively reaching their goals, and will be better able to make informed decisions about how they want to behave.

Study Hypotheses

Six major hypotheses were tested in this study. A graphic summary of major hypotheses is included as Appendix 1 of this document. The hypotheses are listed below.

1. It was predicted that participants in the Sexual Assertiveness group would show, from pre-test to post-test and from pre-test to follow-up, an increase in scores on:
 - a. the Sexual Assertiveness Scale sub-scale "Refusal;"
 - b. the Sexual Assertiveness Scale subscale "Initiation;"
 - c. the Sexual Assertiveness Scale subscale "Birth Control Use;"
 - d. the Sexual Assertiveness Scale subscale "Sex Communication;"

- e. the Sexual Assertiveness Scale subscale "AIDS Communication;"
- f. the AIDS Prevention Self Efficacy scale

2. It was predicated that participants in the Sexual Assertiveness intervention condition would have higher scores, at post test and at follow up, on

- a. the Sexual Assertiveness Scale sub-scale "Refusal;"
- b. the Sexual Assertiveness Scale subscale "Initiation;"
- c. the Sexual Assertiveness Scale subscale "Birth Control Use;"
- d. the Sexual Assertiveness Scale subscale "Sex Communication;"
- e. the Sexual Assertiveness Scale subscale "AIDS Communication;"
- f. the AIDS Prevention Self Efficacy scale

than would participants in the General Assertiveness or the No Intervention conditions.

3. It was predicted that participants in the Sexual Assertiveness group who reported refusal situations, would have higher scores on self-reported Refusal Experience after completion of the intervention, than would participants in the General Assertiveness group and the no-intervention group who report refusal situations.

4. It was predicted that participants in the Sexual Assertiveness group who reported initiation situations, would have higher scores on self-reported Initiation Experience after completion of the intervention, than would

participants in the General Assertiveness group and the no-intervention group who report initiation.

5. It was predicted that participants in the Sexual Assertiveness group would have higher scores on self-reported Contraceptive Use after completion of the intervention, than would participants in the General Assertiveness group and the no-intervention group.

6. It was predicted that participants in the General Assertiveness (control) group would have higher scores on a measure of General Assertiveness after completion of the intervention, than would participants in the Sexual Assertiveness group and the no-intervention group.

METHODS

Subjects

Subjects for this study were 96 female college students between the ages of 18 and 30, enrolled in undergraduate psychology courses during spring semester, 1992, at a northeastern state university. Students received course credit for voluntary participation in this study or other studies. Women who were interested in volunteering for a study on assertiveness were invited to informational meetings held after classes. The researcher explained the mechanics of this study, and flyers were provided detailing times of small group meetings and data collection sessions that participants would be required to attend. Participants indicated available times on a schedule they turned into the researcher at the informational meeting. It was suggested

to participants that they could benefit from the training by receiving extra credit, and possibly by learning something about themselves and about assertiveness.

Participants in the Sexual Assertiveness (SA) group and General Assertiveness (GA) group were drawn from one 100 - level undergraduate psychology course and randomly assigned to one of the two intervention conditions. Participants in the No Intervention (NI) control condition were drawn from a different 100 - level psychology course. The use of two courses to fill these conditions was less than ideal, because it introduced possible group differences. However, it reduced the likelihood of "contamination" of the no-intervention condition through cross-discussion by subjects in different interventions.

Every condition included at least thirty participants at Time 1. Five participants departed the study before time 3. These students reported that they were dropping their psychology course, or had earned sufficient research credits through other studies, so did not desire to continue with this study. No subjects reported that they were leaving the study because of dissatisfaction with the questionnaire or intervention.

Complete data were gathered for groups as follows:

Sexual Assertiveness treatment group: 27 cases

General Assertiveness placebo group: 30 cases

No Intervention control group: 33 cases.

Sample characteristics are described in the Results

section of this document.

Measures

Fourteen items requesting background information about participants' demographic characteristics and sexual history were included (Appendix 2).

Independent variables in this study were Time (pre-test, post-test and follow-up) and Intervention (SA, GA, NI). The ten dependent variables were scores on measures of self-reports of sexual assertiveness (5 measures), self-reported recent sexual assertiveness behaviors (3 measures), perceived self-efficacy in AIDS prevention (1 measure), and general assertiveness (1 measure). Psychometric characteristics of each measure are addressed in the Results section of this document.

Sexual Assertiveness (DVs 1-5)

Self assessments of participants' Sexual Assertiveness were determined using the 18 - item version of the Sexual Assertiveness Scale developed at University of Rhode Island (Quina, Harlow, Gibson & Morokoff, 1990). The scale is made up of three subscales, with each subscale serving as a dependent measure in this study. The subscales are self assessments of assertiveness for Refusal (DV #1), Initiation (DV #2), and Birth Control (DV #3). The full scale appears in Appendix 3 of this document. Internal consistencies for the 18-item version, in two previous studies, ranged from .73 to .85 (Grimley 1991).

It was suggested by Grimley (1991) that the Sexual

Assertiveness questionnaire should contain additional subscales, to assess communication in sexual situations. A subscale for Communication about sexual matters was designed and piloted in this study. Sixteen communication items, which paralleled the other subscale items, were developed by the researcher and two of the original authors of the full scale (Quina and Harlow). Items were intended to assess verbal and non-verbal communication about sex initiation, sex refusal, condom use, and AIDS-related safer sex issues. The new items were included in the questionnaire. Items were analyzed with Principal Components analysis as the original extraction method, followed by an oblique rotation. Internal consistencies, construct validity, and reliability over time were assessed. Two new factors of 6 items each emerged and were added to the Sexual Assertiveness Scale (Table 1). These items became DV #4 (Sex Communication) and DV#5 (AIDS Communication) (Appendix 3).

AIDS Prevention Self Efficacy (DV#6)

A measure of self-efficacy in AIDS prevention, adapted from Sorenson et al. 1988, served as DV #6. This measure consists of three items, rated on a five-point Likert-type scale from less confident to more confident about AIDS prevention. In a recent study of female students at this university, the items showed good internal consistency, with a Cronbach's alpha of .81 (Grimley, 1991). (Appendix 3).

Sex Refusal Behavior (DV#7)

For subjects who indicated any incidence of refusal

situations "in the past four weeks" on the first item of this scale, eight more items assessed frequency of refusal situations. Subjects were asked to endorse the nine items on a 5 point Likert-type scale ranging from low frequency to high frequency of refusal behavior. In its refined form with 2 items dropped, this scale can be used as a full scale of 7 items. It can also be used as subscales measuring Non-Refusal behavior (3 items), and Refusal-only behavior (4 items) (Appendix 3). Sex Refusal Behavior items were designed for and piloted in this study.

Sex Initiation Behavior (DV#8)

DV#8, Sex Initiation Behavior, was assessed with a similar scale also designed for and piloted in this study. Self-reported initiation behaviors acted out by participants "in the past four weeks" were assessed through 9 items requesting information about incidence and frequency of initiation behavior. Participants were asked to endorse items on a 5 point Likert-type scale ranging from low frequency to high frequency of initiation behavior (Appendix 3).

Contraceptive Behavior (DV#9)

Contraceptive Behavior (DV#9) was assessed with an eleven-item questionnaire reported by the unpublished URI Lifestyle Survey (Harlow, Quina, & Morokoff, 1990), slightly modified to elicit information for the "past four weeks," as opposed to anytime in the past. (Appendix 3). Reliability and validity were explored in this study and are reported in

the Results section of this document.

The pre-test gathered data on refusal, initiation and contraceptive use behaviors in the four week period preceding the Pre-Test. Assessment at post-test provided information about contraceptive use during the training period. Assessment again at Follow-Up provided information about behavior for four weeks after the intervention. In a review of research on self-report measures of sexual activity and AIDS-related behaviors, Catania et al. (1990) concluded that young women can be expected to report on sexual activity with a high degree of accuracy, for a retrospective period of up to two months.

General Assertiveness (DV#10)

General Assertiveness (DV#10) was measured with the 30-item Rathus Assertiveness Inventory (Rathus, 1973). The Rathus scale asks the subject to rate how descriptive each statement is of herself on a six point Likert-type scale (Appendix 3). Henderson and Furnham (1984) call the Rathus scale "the most widely used and investigated of the assertiveness inventories." The Rathus scale has been deemed suitable for use with male and female college students. It demonstrates acceptable test-retest and split-half reliabilities. Validity studies have yielded correlations ranging from .60 to .70 with a variety of other self-report measures and observer ratings of assertiveness (Hersen, Eisler & Miller, 1973).

Covariates

Four scales were included for possible use as covariates in statistical analysis: three assessments of anticipated partner response to assertiveness, and one measure of past sexual victimization.

Anticipated Partner Negative Response to Assertiveness (Covariates #1-3)

Measures of anticipated partner response consisted of twelve items endorsed on a 5 point Likert-type scale that described anticipated partner reaction to assertive behavior, from positive response to negative response (Appendix 4). The scale can be used as a full scale and as subscales. In its refined form, the scale's items assess anticipated partner response to condom use (Covariate #1, 2 items), sex refusal (Covariate #2, 3 items), and sex initiation (Covariate #3, 2 items). Original items were drawn from by Harlow et al. (1991). Internal consistency for three condom use items in a previous study of female students was high, with an alpha of .96 (Grimley, 1991). The two additional subscales were developed and piloted in this study.

Sexual Victimization (Covariate #4)

Five items assessing past sexual victimization (Covariate #4) were selected from the Koss (1985) scale for sexual victimization as used by Harlow, Quina and Morokoff (1991) in the URI Lifestyle Survey (Appendix 4). Internal consistency for the scale as used in that study was high,

with coefficient alpha of .84.

Workshop Evaluations

The workshop evaluation forms provided at each workshop were designed by the researcher. Workshop evaluations asked participants to rate four items on a scale of 1-5. Leader style, explanation of the material, usefulness of the material, and enjoyment of the workshop were assessed. These evaluations were anonymous. Space was provided for comments (Appendix 5).

Procedures

All subjects completed an anonymous paper-and-pencil questionnaire consisting of the measures described in this document. The questionnaire was filled out at three time points. These times were 1) pre-intervention (Pre-Test, Time 1), then 2) four weeks later, post-intervention (Post-Test, Time 2), and 3) four weeks later, for follow-up (Follow-Up, Time 3). Every study participant completed the questionnaire three times, requiring about 2 hours of total assessment time from each subject. For two groups of subjects, interventions took place between Time 1 (pre-test) and Time 2 (post-test), and involved four 1.5 hour workshops, once per week for four weeks. Workshops provided an equal number of hours of training in Sexual Assertiveness (SA), or General Assertiveness (GA). Participants in the No Intervention condition (NI) received no intervention between pre-test and post-test. From pre-test to follow-up, this study lasted for ten weeks.

The mechanics of the study were presented to groups of women from two undergraduate psychology courses during study recruitment, and flyers were provided explaining the study and the various small group and assessment times. Study details, participant rights, and general procedures were again reviewed at the first questionnaire administration, and in the first workshop meetings. Informed consent was obtained at the first questionnaire administration. Participants were provided with a fuller view of the study after all data were collected, in a written de-briefing that was mailed to each participant. In addition, each participant was provided with the researcher's home telephone number, and the home phone number of her workshop leader. Several participants took advantage of these numbers to ask questions or seek assistance from the workshop leaders during and after the study.

Intervention Group Assignment

At least thirty students were assigned to each of the three groups, SA, GA, or NI. Those participants who were taking part in an intervention condition (SA or GA) indicated their availability for one of eight group time slots, and were then randomly assigned to a group time for which they were available. Whether time slots were for SA or GA training was not known to the participants when they indicated available time. Data collection took place during three weeks (data collection for Time 1, for Time 2, and for Time 3) four weeks apart. Data collection was separate from

workshops, which took place between data collection Time 1 and data collection Time 2. Women selected a session from several data collection sessions held in each week, and completed the questionnaires independently, within a large group of other participants.

Workshops

Workshops took place in small groups of 6-10 participants, who met with the same leader, at the same time, in the same room, and with the same group members each week. Workshops were developed by the researcher, based on the literature reviewed in previous sections, the work of Gallagher (1991), and current materials and techniques used for safer-sex education (See Table 2 for overview, and Appendix 7 for workshop outlines). Workshops were outlined in detail for the leaders in manuals. Visual aids, scripts for role-plays, participant handouts, and all other supplies were precisely matched between all groups in the same treatment condition. Group experiences and teaching methods were closely matched across conditions, so that content would be the primary aspect that differentiated treatment conditions.

Leaders were two female graduate students (the researcher and a volunteer) in Clinical Psychology, aged 28 and 30. Both leaders were trained as graduate students in workshop development and leadership at the same university and by the same professor. One leader was Caucasian, the other African American. Identical visual aid and hand-out

materials were used by each leader, and detailed workshop outlines were carefully adhered to by each leader. Leaders met weekly to prepare for workshops, and communicated between workshops in person and by telephone, to maximize the similarity of small group experiences for all participants. Each leader conducted four workshops per week, for four weeks (2 Sexual Assertiveness and 2 General Assertiveness workshops per leader per week, for a total of 16 workshops by each leader in four weeks).

At the end of every workshop session, participants were asked to fill out evaluations anonymously and place them in an envelope before leaving the workshop room. Data gathered from evaluations are analyzed in Results.

Workshop leaders used duplicate manuals with full instructions for each week to guide them. Duplicate multi-colored flipcharts were used by leaders to guide the groups, with definitions, questions, task instructions and blank spaces for recording of group responses provided. Flipcharts ran about 20 pages each week. In addition, printed materials were provided for each group. These included role-play scripts, large prepared pages to hang on walls for full group activities, self-assessment forms for women to use in the course of the workshop, informational booklets and pamphlets, and action plans for women to fill out. Other supplies were used in the course of workshops. For the Sexual Assertiveness training condition, contraceptive devices were examined one week, and condoms,

penis models (zucchini), and spermicidal jelly were used for learning about safer sex. Also in the Sexual Assertiveness condition, a videotape on condom use scenarios, borrowed from Planned Parenthood of Rhode Island, was used. In the General Assertiveness condition, a videotape on general assertiveness scenarios, borrowed from the University of Rhode Island Counseling Center, was used.

Week 1 workshops began with an introduction, in which the general principles and goals of group workshops were outlined. These guidelines and principles around confidentiality, participant's rights, and resources to explore if strong feelings were provoked by content were repeated weekly, along with reinforcement of the message that workshop leaders could be reached between workshops to follow-up as needed. Starting in week 2, workshops opened with review of the previous week. This was an interactive process led by the workshop leader, who engaged workshop members in recall and re-statement of the definition and goals of sexual assertiveness (for SA workshops) or general assertiveness (GA workshops), as well as central themes regarding the previous week's topic.

Each week, workshop activities included a group examination of rights associated with assertiveness and the particular topic at hand. Each week's structured activities were a balance of 1) didactic presentation of information by the leader, guided by her flipchart and manual, 2) interactive presentation of information in which the leader

engaged the group in verbal expression of ideas, problem situations, solutions, and statement of assertiveness principles, using her flipchart to record group responses, 3) role plays and group practice of principles with feedback from group members and the leader, 4) self-assessment of personal habits, styles, opinions, and preparation of action plans for personal change by members, with appropriate sharing and feedback by the group, 5) large group activities including viewing videotapes and participating in assertiveness scenarios presented in them, determining together the level of safety associated with particular sexual behaviors, and participating in psycho-drama activities and processing them with the group, and 6) general discussion of issues related to the topic, focusing on application of learned principles to real-world situations.

Workshops closed each week with an activity intended to enhance women's sense of accomplishment and participation in the group. The week's central themes and related rights were reviewed and materials for examination between workshops (published pamphlets relating to the week's topic) were distributed. As stated above, participants confidentially completed their evaluation forms at the end of each session.

Every attempt was made to engage each member while maintaining respect for the choices each woman would make regarding her own participation. In addition, leaders worked together each week to plan and process around group

atmosphere, with the intention of introducing humor and warmth to groups. Groups were intended to be empowering and provocative, and to provide a safe setting for women to explore their own strength. Leaders attempted to act as role models of confident and caring women who were aware of personal rights and the rights of others.

Design

The two independent variables for this study were: 1) type of treatment intervention (Sexual Assertiveness, General Assertiveness, and No Intervention), and 2) time (Pre-Test, Post-Test, Follow-Up). There were 10 dependent measures.

An experimental design was employed to evaluate changes in six dependent variables (DV#1 Sex Refusal Beliefs, DV#2 Sex Initiation Beliefs, DV#3 Birth Control Beliefs, DV#4 Sex Communication Beliefs, DV#5 AIDS Communication Beliefs, and DV#6 AIDS Prevention Self-Efficacy), across three time points; pre-test, post-test, and a follow-up four weeks after the end of treatment. Differences were examined among three different groups (Sexual Assertiveness Training, General Assertiveness Training, and No Intervention) using a 3x3 Repeated Measures MANOVA, with the BMDP statistical program 4V.

The design was also employed to examine group differences after treatment (at post-test and follow up), on four dependent variables (DV#7 Sex Refusal Behavior, DV#8 Sex Initiation Behavior, DV#9 Contraceptive Behavior, and

DV#10 General Assertiveness). Group differences on these dependent variables (#7-#10) were analyzed with a series of eight one-way ANOVAs with BMDP 4V.

Analyses were run without a covariate, initially, then again as MANCOVAs and ANCOVAs in BMDP 4V, using appropriate covariates. Proposed covariates were three for Anticipated Partner Negative Response, COV #1-3, and one for History of Victimization, COV#4.

RESULTS

Sample Characteristics

Mean group scores on dependent measures were tested for difference at Pre-Test using MANOVAs with Treatment Intervention condition (SA, GA, NI) as the IV. No significant differences in group mean scores on dependent measures were revealed at Pre-Test. This indicates that groups did not differ systematically on the dependent measures before intervention.

Mean group scores on fourteen sample descriptive items (Appendix 2) were tested for difference using fourteen 3x3 (time by group) Repeated Measures ANOVAs. These ANOVAs revealed no meaningful changes in sample characteristics over time. One statistically significant difference was revealed. More participants replied "no" to the question "Have you ever had penile-vaginal intercourse, or penile-anal intercourse?" at Time 3 than at Time 1. This result was considered uninterpretable, and may be evidence of inconsistency in participant reporting, or improved

participant understanding of the question's intent over time. Mean scores and standard deviations for sample characteristics from participant reports at Pre-Test, Post-Test and Follow-Up are presented in Table 3. These mean scores were collapsed across groups and calculated with the BMDP statistical program 2D.

Age, year in college, race

Mean age for the sample at Pre-Test was 20 years old, with a range from 19-30 years old. The mode was 19 years. Fifty five percent of the sample reported that they were in their first year of college; 29% in their second year, 12% in their third, and 4% in the fourth year of college. Ninety three percent of the sample participants reported that they are Caucasian, with 2% African American, 1% Asian American, and 3% Hispanic American.

Living arrangement, sexual orientation, relationships with steady partner

Ninety-eight percent of the sample reported they were single and not living with a sexual partner during the study. Seventy nine percent of the sample reported having sex "only with men" "in the past year;" 2% reported sex only or mainly with women; 19% endorsed "does not apply" to this question about sex in the past year. Thirty nine percent of participants reported they do not have a steady male sexual partner. Sixteen percent reported a new relationship with a steady male partner, with 5% reporting a steady male partner for one month or less, and 11% for one to six months. Forty

five percent reported longer-term relationships, with 30% of the sample reporting a steady male partner for 6 months to two years, and 14% for more than two years.

Sexual experience in lifetime

Seventy six percent of the sample reported they had engaged in oral sex. Seventy five percent reported they had "ever had" sexual intercourse. Sixteen percent of participants reported no sexual partners in their lifetimes ("sexual partners" here was undefined, allowing women to include non-intercourse sex partners), and 21% reported one or two sex partners in their lifetime. Thirty eight percent reported having 2-5 sexual partners in their lifetime; 14% reported 6-10, and 6% reported 11 or more partners in their lifetime.

Sexual experience in past month and past year

For the four weeks preceding the study, 36% of subjects reported having had no sexual partners; 61% reported one, and 2% reported 2-5 sexual partners. Thirty six percent reported having not had sex for the four weeks preceding the study; 9% reported having sex once, 30% 2-5 times, 13% 6-10 times, and twelve percent reported having sex 11 times or more. For the year preceding the study, 17% of participants reported no sex partner, 42% reported one partner, 35% reported 2-5 partners.

Alcohol and drugs with sex

When asked "During the past four weeks, when you have had sex, how often have you also used alcohol or drugs?"

participants reported: 6% used alcohol or drugs every time they had sex; 6%, more than half the time, 3%, less than half the time, 16% "once or twice," and 61%, never. For the past year, 10% reported using alcohol or drugs more than half the time, 20% less than half the time, 20% once or twice, and 50% not at all.

Victimization History

To assess victimization history, subjects were given a list of adult and child sexual victimization experiences, and asked to "answer whether each of the experiences has ever happened to you" on a four point scale of "definitely no" to "definitely yes." Twenty five percent of the sample (21 individuals) reported some history of sexual victimization. This proportion of a college sample is consistent with results reported by Koss (1985) and Russell (1983).

Workshop Evaluations

Two hundred thirty five anonymous workshop evaluation forms were collected (Appendix 5) over the three assessment time points, covering a total of ten weeks. Workshop evaluations asked participants to rate four items on a scale of 1-5. Because evaluations were anonymous, repeated measures analyses could not be used. Four 2X2 (leader by intervention) MANOVAS were conducted, one for each week, with four evaluation items as DVs. No main effect or interaction for these IVs was revealed. This suggests that groups were comparable in their assessment of the workshops,

regardless of leader or type of intervention. Mean endorsement of these items for all four weeks combined was high (Table 4).

A 4x2 (week by intervention) MANOVA with follow-up ANOVAs on data for all four weeks, revealed a main effect for Week ($F(15,616) = 1.95, p < .01$). Follow-up ANOVAs showed that "enjoyment of the workshop" varied by week. Weeks 2 and 4 were rated significantly higher than other weeks. "Explanation of the material" also varied by week, with weeks 1 and 4 rated more highly than other weeks. A main effect for Intervention was revealed by MANOVA ($F(5,223) = 2.43, p < .03$), and follow-up ANOVAs located it in the DV "leader style." Tukey tests indicated that, leader style in week four was rated significantly higher than week three, with leader style rated lowest at week three. No week by intervention interaction was revealed.

Using the same four evaluation items as DVs, a 4x2 (week by leader) MANOVA was conducted on data for all weeks. No main effect for leader was observed. Main effects for week were consistent with those reported above. No leader by week interaction was revealed.

A space was provided on every evaluation form for comments of participants. One hundred fifty three comments were written by participants (65% of evaluations included comments). Of these, 132 were positive in nature, eight were negative, and 13 were neutral (Appendix 6).

Psychometric Properties and Performance of the Measures

The ten dependent variables were scores on measures of self-reported sexual assertiveness (5 measures), self-reported recent sexual assertiveness behaviors (3 measures), perceived self-efficacy in AIDS prevention (1 measure), and general assertiveness (1 measure). Each measure was psychometrically assessed on this sample before results of the study were analyzed using the scales.

Internal consistencies reported for the measures in this study reflect the range of Coefficient Alphas calculated from Time 1 (Pre-Test), Time 2 (Post-Test) and Time 3 (Follow-Up) data. Reliability over time is based on Time 2 (Post-Test) to Time 3 (Follow-Up) reliability, because scores across these times were not the subject of intervention, as were scores from Time 1 to Time 2. Where proportion of variance accounted for is reported, it reflects proportion of variance accounted for by these items in the total items space (the scale). The proportion is reported as a range, and this reflects the proportion accounted for across three assessment times (some proportion at Time 1, at Time 2 and at Time 3). All factor analyses were run in BMDP 4M, with Principal Components Analysis (PCA) as the initial extraction, and an oblique rotation. All PCAs began with all items pooled, and the number of components left unspecified. Mean scores and standard deviations for all scales at Time 1 (Pre-test), Time 2 (Post-Test), and Time 3 (Follow-Up) appear in Table 5, with score collapsed across groups.

Original Sexual Assertiveness Scale (DV1, DV2, DV3)

The three subscale structure of these 18 items was validated through factor analysis of all items pooled (BMDP 4M). The initial extraction was Principal Components Analysis, and the rotation was oblique. The subscales assess assertiveness beliefs for Refusal (DV #1), Initiation (DV #2), and Birth Control (DV #3).

The Refusal subscale showed adequate internal consistency with alphas of .67 - .79. Reliability from Time 2 -Time 3 for Refusal was very low, at .22. The Refusal subscale factor accounted for 63-73% of the total variance in the six pertinent items.

The Initiation subscale showed excellent internal consistency with alphas of .83 - .90. Reliability from Time 2 -Time 3 for Initiation was moderately low, at .52. The Initiation subscale factor accounted for 59-64% of the total variance in the six pertinent items.

The Birth Control subscale had internal consistency alphas of .83 -.90. Reliability from Time 2 - Time 3 was extremely low, at only .09. Reliability from Time 1 - Time 2, was slightly better, with a reliability coefficient of .24. From Time 1 - Time 3 the reliability coefficient was .13. The Birth Control factor subscale accounted for 66-70% of the total variance in the six pertinent items.

As a full scale, the 18 items functioned acceptably, with internal consistencies of .66 -.75., and reliability coefficient of .84 from Time 2 - Time 3.

Patterns of correlations in the correlation matrix of all dependent variables and covariates provides evidence for the construct validity of the subscales and the full scale (Table 6). Correlations reported were measured with Pearson's r , $p < .05$). The full scale (18 items) was significantly positively correlated at more than one assessment time with General Assertiveness, with the Communication subscales described below, and with AIDS Self-Efficacy. It was negatively correlated with History of Victimization at more than one assessment time. The Initiation Subscale was significantly positively correlated at more than one assessment time with Initiation Behavior, and the Sex Communication subscale described below. The Birth Control Subscale was significantly positively correlated with Initiation Behavior at more than one assessment time.

Communication Subscales (DV 4 and DV 5)

Subscales for communicating about sexual and AIDS related issues were designed and piloted as part of this study. Sixteen items included in the questionnaire were subjected to Principal Components Analysis (BMDP 4M). Twelve items emerged as 2 new factors, with factor loadings above .70 (Table 1). The items constitute DV #4 (Sex Communication) and DV#5 (AIDS Communication).

Sex Communication, a six - item subscale, showed internal consistencies of .86 -.87, and reliability from Time 2 -Time 3 was .76. The Sex Communication factor

accounted for 31% of the total item variance.

AIDS Communication showed internal consistency of .96 - .97, and reliability of .82 from Time 2 to Time 3. The AIDS Communication factor accounted for 35-42% of the total item variance.

The addition of these two communication factors improved the performance of the Full Sexual Assertiveness Scale. Internal consistencies for the five-subscale Sexual Assertiveness Scale were steady at .86. Reliability from Time 2 - Time 3 was .85.

Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of these measures. AIDS Communication was significantly positively correlated at both possible assessment times with the 18 Item Sexual Assertiveness Scale, and with Sex Communication. Sex Communication was correlated at both times with General Assertiveness, the 18 Item Sexual Assertiveness Scale, the Initiation Beliefs subscale, Initiation Behavior, and AIDS Communication. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

Self-Efficacy in AIDS Prevention (DV#6)

Confirmatory factor analysis adequately supported the single factor structure of these items. The three items accounted for 55-67% of the variance. Internal consistency was acceptable, with Cronbach's alpha ranging from .58 - .75 across times. The reliability coefficient for Time 2 - Time

3 was good, at .77.

Patterns of correlations in the correlation matrix of all dependent variables and covariates provide evidence for the construct validity of this measure. Positive correlations were observed at two or more assessment times with the Full Scale Sexual Assertiveness Scale (30 items), including the AIDS Communication subscale. Negative correlations were observed with History of Victimization. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

DV#7, Refusal Behavior

The Refusal Behavior scale that emerged from a PCA is made up of seven items. For the full scale, internal consistency was acceptable at all times points, with Cronbach's alpha of .73 -.79. The single full-scale factor accounted for 63-73% of the total item variance. The reliability from Time 2 - Time 3 was low, at .41. The 3-item subscale, Refusal Only, includes those items reflecting assertive refusal of unwanted activity. Internal consistency was high at all time points, with Cronbach's Alpha ranging from .79 -.91. A single factor with these items accounted for 38 - 50% of the total variance. The reliability coefficient calculated for Time 2 - Time 3 was moderate, at .61. The 3 - item subscale Non-Refusal includes those items reflecting non-assertive strategies for refusing unwanted sexual activity. Internal consistency was acceptable, with Cronbach's Alphas of .55-.72. A single factor for this

subscale accounted for 23-27% of the item variance. Time 2 - Time 3 reliability was not significant, at .02. Because of the low reliability of the Non-Refusal subscale, it was not used independently in this study.

Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of the full scale and subscales. The full Refusal Behavior scale was correlated at two or more assessment times with Contraceptive Use and Initiation Behavior. The Refusal Only and Non-Refusal subscales correlate with each other. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

Sex Initiation Behavior (DV# 8)

A PCA confirmed the single factor structure for seven of the nine items. Internal consistency was high, with Cronbach's Alphas of .89 -.90. The single factor accounted for 59 - 64% of the total variance. Time 2 - Time 3 reliability coefficient was .91.

Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of this measure, with the scale positively correlated at two or more assessment times with the 18-item and 30 item versions of the Sexual Assertiveness Scale, the Birth Control Beliefs subscale, the Initiation Beliefs subscale, Refusal Behavior, and the Refusal Only subscale of the Refusal Behavior scale. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

Contraceptive Behavior (DV#9)

From eleven original items, a nine item scale was confirmed with a PCA. Internal consistency was acceptable, with Cronbach's Alpha of .76 - .78. The single factor for this scale accounted for 66-70% of the item variance. The reliability coefficient for Time 2 - Time 3 was moderate, at .61. The measure was significantly positively correlated at two assessment times with Anticipated Partner Negative Response to Initiation (Table 6).

General Assertiveness (DV#10)

A PCA confirmed the acceptability of a single factor solution for the 30-item Rathus Assertiveness Inventory (Rathus, 1973) scale. Internal consistency was excellent, with Cronbach's Alphas of .88 -.90. The reliability coefficient from Time 2 - Time 3 was also excellent, at .92. Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of this measure. General Assertiveness was positively correlated at two or more times with Sex Communication, the 18-item Sexual Assertiveness Scale, and the 30-item Sexual Assertiveness scale. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

Anticipated Partner Negative Response (Covariates 1-3)

For the full 9-item scale, internal consistency is acceptable, with Cronbach's Alphas of .62-.87. A single factor for the full scale accounted for 75-82% of the total

variance. The Time 2 - Time 3 reliability coefficient is good, at .77. In this study, the two Response to Condoms items were used as a separate Response to Condoms subscale of the Anticipated Partner Negative Response scale.

Internal consistency for the Anticipated Partner Negative Response to Condoms subscale was good, with Coefficient alphas of .84-.88. A single factor for this subscale accounted for 22-25% of the total item variance.

Reliability from Time 2 to Time 3 was .58.

Anticipated Partner Negative Response to Refusal is a 3-item subscale designed in this study. Internal consistency alphas were good, at .80-.87. A single factor for the Refusal subscale accounted for 31-36% of the total item variance. The reliability coefficient from Time 2 - Time 3 was stable, at .72.

Finally, a 2-item Anticipated Partner Negative Response to Initiation subscale was also designed in this study. It is less strong than the other subscales, but it adds to the value of the full scale. Internal consistency ranges from alpha .34 to .73. A single factor for the Initiation subscale accounted for 18-22 % of the total item variance. The reliability coefficient for Time 2 - Time 3 is .53.

Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of this scale and subscales (Table 6). The full APNR scale is positively correlated with the APNR subscales at all assessment times, and with victimization history and

AIDS Prevention Self Efficacy at one assessment time. APNR to condoms is positively correlated with AIDS Prevention Self-Efficacy at all times, and with Victimization History at two times. APNR to Initiation is positively correlated with Contraceptive Behavior at two times. Correlations reported were measured with Pearson's r , $p < .05$) (Table 6).

Sexual Victimization History (Covariate #4)

A PCA supported a single factor of 5 items, explaining 49-59% of the total variance. Internal consistencies ranged from .70-.90. Time 2 - Time 3 reliability was stable, at .72. Patterns of correlations in the correlation matrix of all dependent variables and covariates support the construct validity of this measure. Victimization history is negatively correlated at all assessment times with AIDS Prevention Self-Efficacy, and the 18 and 30-item Sexual Assertiveness Scales. It was positively correlated at two times with Anticipated Partner Negative Response to condom use (Table 6).

Hypothesis Testing

Analysis categories are addressed separately below.

Assertiveness Beliefs and Self Efficacy -- The Primary Analyses

The primary statistics used in this design were:

A. A 3x3 (group by time) Repeated Measures MANOVA with one between-groups IV (type of intervention: sexual assertiveness, general assertiveness, or none) and one

repeated measures IV (time: pre-test, post-test, follow-up), and 4 DVs (sex refusal beliefs, sex initiation beliefs, birth control beliefs, and AIDS prevention self-efficacy); and

B. A 3x2 (group by time) Repeated Measures MANOVA with 1 between-groups IV (type of intervention: sexual assertiveness, general assertiveness, or none) and one repeated measures IV (time: post-test, follow-up), and 2 DVs (sex communication beliefs, and AIDS communication beliefs. (The second MANOVA includes only two times because Time 1 versions of the new subscales Sex Communication and AIDS Communication were revised after Time 1 data collection. In response to feedback from participants regarding the original items piloted at Time 1, changes were made for Time 2 and Time 3 questionnaires.)

Before performing MANOVAS, data were reviewed to ensure that assumptions for MANOVA were met. Linearity of the inter-relationships of the DVs was assessed using scatterplots. Marked curvilinearity in the dependent variables was not revealed. Because MANOVA is sensitive to outliers, the data were examined for outliers, but no changes were required. Finally, correlation among the DVs was generally low to moderate ($<.6$), as assessed by reviewing correlation matrices within and between levels of the IV Time. Cell sizes are of concern when using MANOVAS to analyze data. For the Repeated Measures MANOVAS reported here, cell sizes ranged from 27 to 33. Minimum required

cell size is calculated by Tabachnik and Fidell (1983) as 5 subjects per cell, per DV. For MANOVA A, with 4 DVs, this suggests a minimum cell size of 20. For MANOVA B, with 2 DVs, this suggests a minimum cell size of 10. For both analyses, cell sizes exceeded the minimum required size.

The MANOVAs were performed to look for significant differences between levels of the two IVs (group and time) and for interactions between the IVs. MANOVAs included omnibus significance tests. Results were assessed using Pillai's Criterion, which is robust to violations of the homogeneity of the variance-covariance matrix assumption. In the case of significant main effects, follow-up ANOVAs were reviewed, and multiple Tukey tests were performed to locate mean differences. Effect sizes were assessed with Eta-Squared. Both MANOVAs and all follow-up ANOVAs were analyzed with the BMDP statistical program 4V.

In the 3x3 Repeated Measures MANOVA on four DVs (1,2,3, and 6), a main effect for Time was revealed (Pillai's Trace = 3.15, $p < .0001$). No main effect for Treatment (intervention condition) was revealed, and interactions were not significant (Table 7). Follow-up ANOVAs indicated significance for Time with all four DVs (Sex Refusal Beliefs, Sex Initiation Beliefs, Birth Control Beliefs, and AIDS Prevention Self-Efficacy) ($p < .0001$) (Table 7).

Tukey tests indicated that mean scores on these DVs decreased significantly over time. For the DVs Sex Refusal Beliefs, Sex Initiation Beliefs, and AIDS Prevention Self

Efficacy, these means decreased significantly from Time 1 to Time 2, and Time 1 to Time 3, in all three groups.

Effect sizes for this MANOVA were small, (Eta Squared of .04) for treatment, moderate (Eta Squared of .13) for treatment by group interaction, and very large (Eta squared of .76) for time (Table 7).

A power analysis was conducted to learn more about non-significant results (Rossi, 1993). Given the effect size of .04 revealed for the Treatment (Intervention Condition) in this study with a sample of 90, the power to detect significant differences was only .21. In other words, a study with this intervention and sample size might be able detect significance one out of five times it was conducted. To achieve significance with a hypothesized effect size of .15 and 80% accuracy, a sample size of about 200 subjects would have been required. To achieve 95% accuracy, 450-500 subjects would be required. (The program used for this Power Analysis was designed for non-repeated measures MANOVAs, so conclusions regarding power must be viewed as tentative).

In the 3x2 (group by time) Repeated Measures MANOVA on DVs #4 and 5, main effects were noted for both Treatment (Pillai's Trace (4,172) = .12, $p < .03$) and Time ($F(2,86) = 37$, $p < .0001$). No interaction of the IVs was revealed. (Table 8). For the main effect Treatment, follow-up ANOVAs showed an approach toward significance for the DV AIDS Communication ($p < .08$). Because follow-up ANOVAs were not

significant, Tukey tests were not performed on means. Examination of the means suggests that mean scores between treatment groups differed non-significantly in the following pattern: Mean scores on Sex Communication (DV#4) were highest for the GA group (3.8 at Time 2 and 4.6 at Time 3), followed by the NI group (3.8 and 4.4 for Times 2 and 3, respectively). Participants in the SA group revealed the lowest mean scores (3.5 and 4.1). Mean scores on AIDS Communication (DV#5), were highest for the NI group (3.9 and 4.6 at Time 2 and Time 3, respectively), followed by the GA group (3.6 and 4.4), and, finally, by the SA group (3.5 and 4.0). For the main effect Time, follow-up ANOVAs revealed significant change in scores on both DVs ($p < .0001$). These scores increased over time, from Time 2 to Time 3, in all conditions (Table 8). Scores on DVs 4 and 5 (communication subscales) increased from Time 2 to Time 3 in all groups. Mean scores on DVS 1-6 for the Treatment condition (SA) are presented in Table 9.

Effect sizes for this MANOVA were small (Eta Squared of .03) for treatment by group interaction, moderate (Eta Squared of .11) for treatment, and very large (Eta squared of .67) for time (Table 8).

Power analysis was not repeated for this MANOVA. Conclusions from the analysis reported for the 3X3 MANOVA (above) may be extrapolated to the results of this statistic.

For General Assertiveness, DV #10, a 3X2 ANOVA (with

treatment and time as the IVs) was conducted to determine whether scores differed between groups on this measure at Time 2 or Time 3. No significant differences between the SA, GA and NI conditions was revealed at either time. ANOVA was used instead of including this measure in a MANOVA because changes in this measure were not central concerns of the study. The ratio of DVs to the number of subjects in a MANOVA has implications for the power of the statistic, and it is desirable to keep the number of DVs to a minimum, especially when working with a relatively small sample size.

2. Behavior Change -- Secondary Analyses

The secondary analysis in this study was a series of six one-way ANOVAs (BMDP 4V) with Treatment condition as the 3-level IV, to compare groups after intervention. Separate ANOVAs were performed for Time 2 and Time 3 on four dependent variables (Refusal Behavior, Initiation Behavior, Contraceptive Behavior and General Assertiveness). There were no significant group differences at post-test or follow up, as revealed by the ANOVAs. Because other DVs showed change over time, these ANOVAs were analyzed again with Time as the IV, to examine the 3 DVs for changes over time. No significant main effect for time was observed.

Participants for these ANOVAs were a subsample of the study sample. These participants indicated on Time 2 and Time 3 questionnaires that they had acted out sex refusal (44 participants), sex initiation (55 participants) or birth control use (53 subjects) "in the past four weeks." As

predicted, based on frequency of refusal and initiation behavior in a similar sample (Gallagher, 1991), this subsample was not sufficiently large to support a 3X3 Repeated Measures Manova. ANOVAs with Treatment as the IV were performed with cell sizes ranging from 9 to 25. ANOVAs with Time as the IV were analyzed with cell sizes of 39.

3. Covariate Analyses

Primary analyses were conducted initially without a covariate. They were then analyzed again as MANCOVAs and ANCOVAs with Covariates 1-3 (Anticipated Partner Negative Response [APNR] full scale, APNR to Condom Use subscale, APNR to Refusal subscale). In addition, Covariate 4, History of Victimization, was included in analyses.

There are four conditions (besides the assumptions for MANOVA and ANOVA) required for adequate analysis of covariance (Tabachnik & Fidell, 1989). The covariate must be reliable, as evidenced through a test of reliability over time, or through internal consistency; the covariate must be correlated .5 or higher with the DV; if multiple covariates are used, they must not be correlated with each other; and, most important, the covariate must be uncorrelated with the IVs. Covariates 1-4 were examined to determine whether they met these criteria to act as covariates in analysis of DV 1-6. Covariates #1-4 met all the necessary criteria except one: the requirement that DVs and Covariates be correlated at .5 or higher could not be satisfied except in the following cases.

Covariate #4, History of Victimization, proved to be fully acceptable as a covariate to AIDS Self Efficacy. A 3x3 (group by time) Repeated Measures MANCOVA, though, did not indicate significant main effects or interaction.

Covariate #1, Anticipated Partner Negative Response, proved to be acceptable as a covariate to the Sex Initiation Beliefs subscale of the Sexual Assertiveness Scale. When this covariate was included in a 3X3 (group by time) MANCOVA with three subscales of the Sexual Assertiveness Scale, significance was noted for the overall MANCOVA ($P < .05$). Follow-up ANCOVAs revealed that the Initiation subscale showed a main effect for time, with $p < .01$. Tukey tests indicate significant decreases in mean scores over time. This covariate adds no unique or new information to the study, because such decreases were indicated in the 3X3 Repeated Measures MANOVA previously performed on this DV (Table 8).

Communication Subscale Analysis

A Principal Components Analysis (BMDP4M) was used to examine the items piloted for the new Sexual Assertiveness subscale concerning communication in a sexual situation. Items piloted for the subscale were included in all three data collections (Pre-Test at Time 1, Post-Test at Time 2, and Follow-Up at Time 3). Based on participants' feedback about the difficulty of responding to questions that included double-negative sentence structure, some items were revised for Time 2 and Time 3. These revised items were

added to the end of the intact Time 1 questionnaire. Thus, the original 16 items were piloted at three time points; the revised items at two time points.

A Principal Components Analysis was conducted, followed by an oblique rotation (BMDP 4M). Factor structure was analyzed initially to determine if three or more items constituted a single factor. Examination of the patterns of the cumulative proportion of variance accounted for and the eigenvalues (scree plotting), indicated that a two factor solution was appropriate. The sixteen items constituted two factors of eight items each. Items grouped themselves by content regarding a) communicating to a partner about sexual issues including sexual behavior that is experienced as liked or disliked by the subject, and, b) communicating to a partner about AIDS risks, including requesting information about past partners and behavior. In order to best match the structure of the 18-item Sexual Assertiveness Scale, these factors were each trimmed to six-item subscales. Items were chosen to balance subjective judgement of best content, and best statistical fit (Appendix 3).

The subscales for Communication constitute DV #4 (Sex Communication) and DV#5 (AIDS Communication) in this study. Sex Communication showed good internal consistencies of .86 -.87, and reliability from Time 2 -Time 3 was .76. The Sex Communication factor accounted for 31% of the total item variance. AIDS Communication showed excellent internal consistency of .96 -.97, and reliability of .82 from Time 2

to Time 3. The AIDS Communication factor accounted for 35-42% of the total variance.

A PCA on the thirty items from all five Sexual Assertiveness Scale subscales was conducted, using PCA extraction and an oblique rotation. Examination of the scree plot confirmed a five-factor solution. Internal consistencies for the five-subscale Sexual Assertiveness Scale were steady at .86. Reliability from Time 2 - Time 3 was .85. Factors were intercorrelated as indicated in Table 10. AIDS Communication and Sex Communication were showed strong negative intercorrelations with the two Sexual Assertiveness Subscales, Initiation and Birth Control.

As presented in Table 6, Sex Communication was significantly correlated ($p < .05$) at one or more assessment times with the following measures: General Assertiveness (the Rathus Assertiveness Inventory); the combined 3-subscale version of the Sexual Assertiveness Scale; the separate subscales of the Sexual Assertiveness Scale Refusal, Initiation and Birth Control, and with the AIDS Communication subscale. This pattern of correlations supports the construct validity of the measure.

AIDS Communication was significantly correlated with the subscales of the Sexual Assertiveness Scale, as listed above. It was also significantly positively correlated with AIDS Prevention Self Efficacy, and negatively correlated with Anticipated Partner Negative Response. Finally, it was correlated with Sex Communication, but not with General

Assertiveness. Again, this pattern supports the construct validity of the measure.

History of Sexual Victimization

Twenty-five percent of participants (21 individuals) reported some history of victimization. Examination of correlations among all DVs and covariates at Time 1, at Time 2, and at Time 3, reveals significant correlations between scores on History of Victimization and the scales used in the primary analyses of this study. History of Victimization was significantly negatively correlated with AIDS Prevention Self Efficacy (Pearson's r ranging from $-.46$ to $-.25$ over time), and was negatively correlated with all Sexual Assertiveness Scale subscales combined as a full scale (for Pearson's r ranging from $-.21$ to $-.26$ over time). It was positively correlated with the Anticipated Partner Negative Response scale (Pearson's $r=.23$ at one assessment time), and with Anticipated Partner Negative Response to Condoms subscale (Table 6). As noted in reporting of Sample Characteristics, Victimization is also positively correlated with number of partners in lifetime, and with ever having had intercourse.

DISCUSSION

Hypotheses and Outcome of Hypothesis Testing: Overview

Six major hypotheses were tested in this study. A summary of major hypotheses is included as Appendix 1 of this document. The hypotheses are listed below, with a brief review of the outcome of hypothesis testing.

1. It was predicted that participants in the Sexual Assertiveness group would show, from pre-test to post-test and from pre-test to follow-up, an increase in scores on:
 - a. the Sexual Assertiveness Scale subscale "Refusal;"
 - b. the Sexual Assertiveness Scale subscale "Initiation;"
 - c. the Sexual Assertiveness Scale subscale "Birth Control Use;"
 - d. the Sexual Assertiveness Scale subscale "Sex Communication;"
 - e. the Sexual Assertiveness Scale subscale "AIDS Communication;"
 - f. the AIDS Prevention Self Efficacy scale

This hypothesis was not supported for most variables. Participants in the both conditions showed significant decreases in mean scores on four of the DVs listed above (DVs 1-3, Sexual Assertiveness Subscales Initiation, Refusal and Birth Control; DV 6, AIDS Prevention Self Efficacy), from pre-test to post test, and from pre-test to follow up.

Participants in both conditions showed significant increases in scores for DVs 4 and 5 (Sexual Assertiveness Scale subscales Sex Communication and AIDS Communication). However, caution must be applied in interpreting these results. The changes observed over time for the SA intervention condition were also observed for the other two conditions, including the No Intervention control condition.

The predicted pattern of change in mean scores over time was observed in three of those DVs that were assessed

at all three assessment times (DV1, Sexual Assertiveness subscale Refusal in all conditions, DV2, Sexual Assertiveness subscale Initiation in two conditions, DV#6, AIDS Prevention Self Efficacy, in all conditions). Changes in mean scores over time were significant from Pre-Test to Post-Test, and Pre-Test to Follow-Up. Changes over time were not significant from Post-test to Follow-Up. This suggests that initial contact with the study materials had some effect on scores. That effect was more dramatic in the first four weeks, between pre-test and post-test, than in the following four weeks, from post-test to follow up, but changes were sustained for eight weeks. The exception to this pattern is for DV#3 (Sexual Assertiveness Subscale Birth Control), which showed significant decrease in scores only from Time 1 to Time 3, and only in the GA condition. Of course, those DVs that showed no change over time (DV#7-10) did not reflect the predicted pattern of change.

2. It was predicted that participants in the Sexual Assertiveness intervention condition would have higher scores, at post test and at follow up, on

- a. the Sexual Assertiveness Scale sub-scale "Refusal;"
- b. the Sexual Assertiveness Scale subscale "Initiation;"
- c. the Sexual Assertiveness Scale subscale "Birth Control Use;"
- d. the Sexual Assertiveness Scale subscale "Sex Communication;"
- e. the Sexual Assertiveness Scale subscale "AIDS

Communication;"

f. the AIDS Prevention Self Efficacy scale

than would participants in the General Assertiveness or the No Intervention conditions.

This hypothesis was not supported. No significant mean differences in scores on any of the six DVs were evidenced among the three intervention conditions at post-test or at follow-up. Although non-significant, the direction of the differences among groups was also counter to the hypothesis for five DVs. Three DVs (DV#1, Sexual Assertiveness Scale Refusal subscale, DV#4, Sex Communication, and DV#6, AIDS Prevention Self Efficacy), had highest mean scores in the GA condition, followed by the NI condition, with the SA condition showing the lowest mean scores. For DV#5 (AIDS Communication), the mean scores were highest in the NI condition, followed by the GA and SA conditions, in that order. For DV#3 (Sexual Assertiveness Scale Birth Control subscale), the mean scores were highest in the GA condition, followed by SA and NI conditions, in that order. Only for DV#2, (Sexual Assertiveness Scale Initiation subscale), was the pattern of non-significant differences among group means as predicted, with the SA condition showing highest means, followed by the GA and NI conditions.

Power analysis for the statistics used to test Hypotheses 1 and 2 suggest that non-significant results regarding Treatment (Intervention Condition), and Interaction, were a result of a small treatment effects with

relatively small cell sizes. This reduces concern that issues like error prevented significance from being detected. The results suggest that a stronger treatment intervention, providing a larger effect size or using many more participants, could have increased the significance of findings.

3. It was predicted that participants in the Sexual Assertiveness group who reported refusal situations, would have higher scores on self-reported Refusal Experience after completion of the intervention, than would participants in the General Assertiveness group and the no-intervention group who report refusal situations.

This hypothesis was not supported. Mean scores on the Refusal Behavior measure for participants in the Sexual Assertiveness intervention group were not significantly different than mean scores of participants in other conditions at post test, or at follow up.

4. It was predicted that participants in the Sexual Assertiveness group who reported initiation situations, would have higher scores on self-reported Initiation Experience after completion of the intervention, than would participants in the General Assertiveness group and the no-intervention group who report initiation.

This hypothesis was not supported. Mean scores on the Initiation Behavior measure for participants in the Sexual Assertiveness intervention group were not significantly different than mean scores of participants in other

conditions at post test, or at follow up.

5. It was predicted that participants in the Sexual Assertiveness group would have higher scores on self-reported Contraceptive Use after completion of the intervention, than would participants in the General Assertiveness group and the no-intervention group.

This hypothesis was not supported. Mean scores on the Contraceptive Behavior measure for participants in the Sexual Assertiveness intervention group were not significantly different than mean scores of participants in other conditions at post test, or at follow up.

6. It was predicted that participants in the General Assertiveness (control) group would have higher scores on a measure of General Assertiveness after completion of the intervention, than would participants in the Sexual Assertiveness group and the no-intervention group.

This hypothesis was not supported. Mean scores on the General Assertiveness measure for participants in the General Assertiveness intervention group were not significantly different than mean scores of participants in other conditions at post test, or at follow up.

These are interesting and unexpected findings. They suggest important conclusions regarding this study and similar research.

Explanations of Hypothesis Testing Outcome

Theoretical issues

Although the study's outcomes were not those predicted

by the researcher, there is an undeniable pattern in the results. Participant scores went down over time on four of the ten DVs (related to sex beliefs), and up over time on two (related to communication beliefs), regardless of treatment intervention. There were no significant changes over time, and no significant differences between groups, on DVs assessing behavior "in the past four weeks." No significant differences were detected between intervention conditions on eight of the DVs (sex-related beliefs and behaviors). On the two DVs (communication scales) for which intervention conditions had significantly different means, the mean scores of those participants in the SA group were actually the lowest scores, counter to the study's hypotheses.

There are four theoretical constructs which can help explain these findings: initial response bias, gender role appropriateness of content, stage of change, and demoralization. Each will be discussed in turn.

Initial Response Bias

The fact that all intervention groups, including the NI control group, showed similar changes over time indicates that merely repeating the assessment process had an effect on participants' scores, regardless of the experimental intervention. On four DVs, this change was counter to the hypothesis, with decreases in self-reported sexual assertiveness (Sexual Assertiveness Scale) and AIDS Prevention Self Efficacy.

This suggests that single assessment times, or in this case, initial pre-test assessment, might capture an inflated self-assessment of young women's sexual assertiveness and AIDS Prevention Self Efficacy. On these variables, which tap areas of women's lives not often assessed in other ways, the first assessment may reflect an initial response bias. Repeatedly filling out survey items on these issues may of itself decrease this initial bias in reporting self-capacities.

One explanation for this is that women became engaged in a process of critical self-reevaluation brought about by repeatedly raising the same issues over time. The stimulation of critical self-reevaluation could lead to more conservative reporting. This could occur as women recognize the extent to which they behave (or do not behave) consistent with their beliefs, or as women incorporate more potentially difficult situations into their awareness, or as women become aware of the difficulty of actually initiating real behavior change, which in turn decreases their optimism and alter their responses. Thus, a decrease in initial optimistic response bias could be an effect of consciousness-raising. Consciousness-raising was one of the primary intentions of this study.

An "optimistic bias" in estimating one's own AIDS risk, as opposed to estimating the AIDS risk of peers, has been noted in previous research (Kalichman, Hunter & Kelly, 1992; Weinstein, 1984). The problem of perceived invulnerability

to AIDS is addressed in the literature (Manning, Balson, Barenberg, Mizell-Moore, 1989; Weinstein, 1984). Overconfidence in one's own abilities to avoid the AIDS virus, while still taking part in risky behavior, has been noted by Harlow, Quina, Morokoff, Rose, & Grimley (1993). She observed significant differences in women's self-assessment of risk, and their actual level of risky behavior, with the risky behavior exceeding the perceived risk. In this research, the effects of decreasing an initial response bias, or decreasing inflated evaluation of self-capacities, may be responsible for the decline in mean scores over time. If this is so, the primary cause for such a decline, based on the fact that mean scores did not differ among groups on most variables, may be exposure to repeated measures.

There is some indirect evidence that participation in the Sexual Assertiveness intervention may have been the most effective in setting this trend toward realistic self-evaluation. Mean scores were lowest for the SA condition on five of the six measures included in the primary analyses (MANOVAs). Even on the two communication measures, on which all groups showed an increase of mean scores over time, participants in the SA group had the lowest mean scores. This suggests that participants in the SA condition were less likely to highly endorse communication assertiveness beliefs than participants in the other intervention conditions. Thus, their scores may be the most realistic, or least inflated by response bias or idealized perception

of their own capacities for assertiveness.

Gender Role Appropriateness of Content

The two DVs for which mean scores increased over time were related to sexual and AIDS-related Communication beliefs. These two DVs are also the only ones for which treatment group means were significantly different. This suggests that communication beliefs are more amenable to change than are other sex-related beliefs.

The fact that increases in scores were evident only in scores on the DVs related to Communication (Sex Communication Assertiveness, AIDS Communication Assertiveness) is consistent with gender and sexual role behaviors which may help shape the lives of women in the study. Perhaps women can more easily imagine changing communication behaviors and attitudes than changing sex-specific behaviors and attitudes. Communication is within the realm of gender-typed behavior for women, but sexual assertion is outside this realm (Graurholz & Serpe, 1985; Meuhlenhard, 1983; Rakos, 1991). If women are going to make changes in assertiveness behaviors and attitudes, it is reasonable that the changes would be in an area in which women are encouraged to be competent and assertive, like communication, rather than in an area in which women are expected to be more passive, like sexual relations. In addition, there are many opportunities in daily life to practice communication, and to receive feedback from others regarding the success of communication changes.

Opportunities to practice sexual behavior and sexual interacting are fewer, and it may be much more difficult to assess others' responses and judge the success of efforts. A sample of a more sexually experienced population, or a sample similar to this one measured over a much longer time period, could demonstrate the result of more opportunities to practice sexual interacting. It would be interesting to see if results with such a sample would show a pattern of change similar to the pattern noted in communication variables.

It is also important to note that changes in communication fit with the ongoing college training to be verbally effective. Thus, training for these skills may be more easily integrated and polished by students than is training in less familiar areas (like sexual behavior). Communication changes are especially appropriate to these women's roles as college students. This suggests that the results reported here may be population-specific (college students), but raises a question about whether they are gender-specific (would male college students show similar patterns of change?).

Stages of Change

As discussed in the Introduction of this study, interventions used here were intended to target the three domains of learning identified by Dale (1956), and the processes of change identified in the Transtheoretical Model of Change developed by Prochaska (Prochaska, Velicer,

DiClemente, & Fava, 1988). Cognitive, behavioral, and affective interventions were included in the workshops designed for this study.

A mix of strategies was necessary at the time of this study's design and implementation, because the Transtheoretical model had not yet been tested for its applicability to AIDS risk behavior in students, and students could not yet be assessed by stage of change for AIDS risk behavior. Such a mix is probably not ideal, though, based on results of research conducted with the Transtheoretical Model of Change (Prochaska, in press). Application of this model includes stage-targeted interventions to facilitate and accelerate self-change. At the time of this writing, the Transtheoretical Model of Change has been applied to AIDS risk behavior by Redding (1993). Redding found that the model adequately fit and described the processes reported by students in her sample.

Critical self-reevaluation, possibly indicated in this study by declining scores on self-assessments across groups, over time, for most DVs, is consistent with processes of early stages of change, according to the Stages of Change Model (Prochaska et al, 1988). Decreasing mean scores across groups, over time, on most DVs, may be viewed as evidence in these data of participant self-reevaluation. This suggests that interventions targeting precontemplation and contemplation tasks might have been most appropriate for these participants. Because Stage of Change was not

assessed in this study, this cannot be stated with certainty. In fact, such a stage distribution is made questionable when the staging of a similar sample at the same University by Redding (1993) is considered. The majority of students in her sample could be described as in the Maintenance (or Pseudo-maintenance) stage of change (the fourth stage).

Nevertheless, an assessment of stage of change in the sample, and the use of a stage-targeted intervention, may have yielded different results from the intervention used in this study.

Demoralization

It is possible that mean scores decreased as women became less confident and self-efficacious regarding their responses. Such feelings could be related to a demoralizing effect of the measures. It may be that confronting the same difficult questions three times in ten weeks undermined the confidence or hopefulness of women. This may or may not be related to a realistic self-assessment, or to the decrease of an initial response bias. It is reasonable to assume that repeated confrontation with such issues could be fatiguing, anxiety-provoking, tedious, or depressing for women. Inclusion of scales to assess demoralization (Harlow, Quina et al., 1993) could evaluate this possibility in future research.

Subject and Design Factors

Subject factors might have influenced the outcome of

this study in a number of ways. Several aspects of the design should also be reviewed in terms of influence on the results.

Subjects: The sample was made up of women aged 19-30, with a mean age of 20. Most subjects were Caucasian, in their first year of college, unmarried, heterosexual, sexually active, and involved in a relationship of six months or longer.

Most of the sample (76%) reported having had oral sex, and almost the same proportion reported ever having had intercourse (75%). Almost sixty percent of the sample reported 1-5 sex partners in their lifetimes.

In the four weeks preceding, and then during the study, sexual activity was somewhat more limited. Sixty one percent of subjects reported one partner; 2% reported 2-5 partners. Thirty six percent of the sample reported no sex before and during the study; the next most endorsed interval was 2-5 times, with 30% choosing this interval.

The reported sexual experience of this sample is comparable to those of similar samples (Harlow, in press; Grimley, 1991; Redding, 1993), and is well within the range of experience anticipated for this study. The age of subjects was restricted intentionally to age 18 - 30 years. It is possible, though, that a sample made up of older women, or women with more sexual experience, would respond differently to repeated measurement of sexual issues, and to interventions around assertiveness. The women in this

sample are young, and they reported relatively limited sexual experience in the weeks before and during the study. Just a small proportion of the sample was highly sexually active. It is possible that these women had never before confronted measures like those used in this study, assessed their own sexual histories with paper and pencil, or thoughtfully considered their own views and behaviors regarding sexual assertiveness. Thus, repeated measures of this kind may well have stimulated for the first time, awareness and internal processing of these issues.

In addition, the women in this age and experience group may be more heavily influenced by the demands of peer relationships, sex roles, and idealized views of sexuality and gender than older, and/or more sexually experienced women. It is possible that a sample of older and/or more experienced women would show different results to these same measures and interventions.

Design

Time factor: This study lasted ten weeks from Time 1 to Time 3. Attitude and behavior were assessed twice within four weeks of completed interventions. It is possible that, while this length of time is sufficient for self-re-evaluation, as reflected in the declining scores for four of the DVs, it is not sufficient for positive change in behavior and attitude. Scores did not change significantly over time on four behavior-only DVs. This is not an unexpected result, since behavior changes much more slowly

than attitudes in general (Ajzen & Fischbaum, 1988). The fact that scores increased on two DVs (the Communication subscales) is encouraging. Perhaps communication-related behaviors and attitudes are more amenable to change in the short-term than others.

It is possible that behavior and attitude change was, or will be, adopted after a longer post-intervention interval.

Treatment Factor: In this study, every effort was made to hold all workshop variables constant except content. When only content varied, in this study, groups did not differ. The lack of significant differences between interventions may be a reflection of the similarities between workshops. More distinctly different treatments could yield different results.

It is important to note, though, that these intervention groups not only did not differ from each other -- they did not differ from the No Intervention condition. Thus, the content and style of workshops was less an issue than the repeated measures effect. Still, it is possible that a much stronger treatment and/or a much more sexually active population would show more significant changes post intervention. Power analysis supports the idea of a stronger treatment, which could take the form of refined workshop content, more workshop sessions, or workshops with homework or other activities assigned for practice between sessions.

Social Desirability: A measure of social desirability

should have been included in this study. It is possible that participants felt in some way judged or self-critical about their survey responses, and so modified their responses to please, or even to antagonize, the researcher. Unfortunately, no such measure was included, and no other evidence of this is outstanding in the results.

History: It is possible that events outside the realm of the study affected participants during the course of the study. For example, these students were enrolled in one of two psychology courses. It is possible that discussion of material in these courses may have had some impact on the students that was not planned as part of the study. In addition, AIDS and sexual assertiveness issues were in the public eye during the months of this study. The popular professional basketball player Magic (Earvin) Johnson was appointed to a presidential commission on AIDS shortly before the study began. He had announced his HIV positive status three months prior to the first intervention, and the issue received a great deal of mass media coverage. In the course of the study, Johnson (1992) published and released the book Safer Sex: What you can do to avoid AIDS, which was widely available in local bookstores. Also in the fall months immediately preceding the study, female law professor Anita Hill testified before a U.S. Senate Judiciary Committee regarding allegations of sexual harassment by her former supervisor Judge Clarence Thomas, who was in the process of appointment to the U.S. Supreme Court. Again,

these events were televised and widely covered by media. Finally, rape charges were being considered in court against two well known male public figures (one athlete, one member of a visible New England political family) during the study. The charges were brought by young women. One of the women was a college freshman from the same state in which this study took place. Proceedings were widely covered in the media. What effect, if any, these events might have had on women's views of themselves, their personal power, and their rights, was not measured.

Instrumentation: Repeatedly requesting subjects to complete a paper and pencil questionnaire assessing very personal information is a delicate matter. The content, tone, readability and visual construction of the instrument may have a great deal of impact on the ability and willingness of women to respond truthfully and accurately. These instrumentation issues also have impact on subjects' emotional responses to the survey experience (Deiter, Lang, Johnsen, Rose, Harlow, Morokoff, & Quina, 1993). Reactivity to instrumentation may be a factor related to outcome in this study, either through its own impact, or in interaction with any other subject or design factor listed above. It should be noted that feedback was requested from women as they completed their surveys. In this way, the Communication items which women found difficult to respond to were identified after Time 1 assessment. Except for similar objections to the double-negative construction on

the original 3 Sexual Assertiveness Subscales, no other items were consistently identified as problematic by women, and women reported no other strong reactions to the measures.

Repeated Measures: As noted above, the repeated use of these measures may have affected the study's outcome. Practice effects, emotional responses to repeatedly confronting the same content, fatigue, and other effects of repeated measures may be reflected in the data. One possible effect of repeating these particular measures is demoralization of the subjects, as discussed above. In addition, such an experience could be antagonizing or irritating for women, and such feelings might be reflected in responses. Again, these effects may be direct, or through interaction with other factors.

Development and Validation of Scales

Four scales were developed for and piloted in this study. They are: Sexual Assertiveness Subscales Sex Communication and AIDS Communication; Refusal Behavior (full scale and three subscales), and Initiation Behavior. Two measures, Anticipated Partner Negative Response (full scale and three subscales), and the Sexual Assertiveness Scale (3 subscales), were validated and extended in this study. In addition, four scales were validated through use in this study. They are the AIDS Self-Efficacy Scale, Victimization History, Birth Control Use, and the Rathus Assertiveness Inventory. All scales performed adequately for use in this

study. Particularly when supported by further assessment and analysis, these scales will be appropriate for use by other researchers with similar populations.

Six item AIDS Communication and Sex Communication scales with good psychometric properties were successfully developed. They correlate properly with other subscales of the Sexual Assertiveness Scale, and increase the power of that scale when it is used as five-subscale measure.

Construct validity was examined through correlations between the Sex Communication Scale, AIDS Communication scales, and the other DVs and covariates. Results support that the Sex Communication scale reflects more general communication about sex, while the AIDS Communication reflects communication about AIDS-specific issues. Both of these subjects, and communication about them, are important aspects of Sexual Assertiveness. The subscales add valuable data to the ongoing process of defining the concept of "sexual assertiveness" in young women.

Relationships among the measures in this study also provide greater understanding of the concept of "sexual assertiveness." Variables such as general assertiveness, perceived AIDS prevention self-efficacy, and reported assertive initiation and contraceptive behaviors "in the past four weeks" were positively correlated with scores on the Sexual Assertiveness Scale. Experience of sexual victimization, anticipated partner negative response to assertion, and refusal-only behavior are negatively

correlated with the full Sexual Assertiveness scale. Behavioral measures of initiation correlated with subscales regarding attitudes and beliefs.

Other Findings

Victimization

The most startling feature of this sample is reporting of victimization history. Twenty five percent (21 individuals) is a large percentage of a sample to report victimization, although it is certainly within the proportion of the general population which has been victimized, according to many researchers (Koss, 1985, Russel & Howell, 1983).

Arguably the most important, and certainly the most poignant findings of this study concern patterns of correlation between DVs, descriptive items, and the History of Victimization scale. Positive correlations existed with Anticipated Negative Partner Response, indicating that victimized women expect more negative interpersonal consequences to their own sexual assertion than do women who have (at the time of the study) been spared sexual victimization. Not surprisingly, correlations with all the scales of the Sexual Assertiveness Scale are negative; that is, women who were victimized, endorsed less assertive beliefs regarding sex refusal, sex initiation, birth control use, communicating about AIDS and communicating about sex. History of victimization was positively correlated with both number of lifetime partners and ever having intercourse.

It is clear from these data that women in this sample with a history of sexual abuse are at continued risk for negative health effects, and for repeated patterns of lack of power in sexual relationships (Harlow, Morokoff, Quina & Grimley, 1991). Anticipating a negative response to assertion, endorsing less assertive beliefs and behaviors, and having a larger number of sexual partners, suggests sexual risk and relationship problems for these women. Such increased risk among women with a history of victimization has been observed elsewhere (Johnsen, 1992; Loferski, Quina, Harlow & Morokoff, 1992; Zierler, Feingold, Laufer, Velentgas, Kantrowitz-Gordon, & Mayer, 1991). It has been proposed that sexual victimization history is a major public health issue, and a significant predictor of AIDS risk in adults (Corea, 1993; Zierler et al., 1991).

In the course of the study, one woman reported to her group leader that she was raped in one of the eight weeks which the research spanned. The group leader assisted the student in reporting the rape, initiating medical care and psychological counseling, and eventually testified for the student at a hearing regarding the rape. One other student reported a history of sexual victimization to the other group leader, and was assisted in beginning psychological counseling. Finally, a third student sought assistance in initiating counseling for sexual issues from her childhood that she chose not to disclose to the group leader.

These contacts reinforce the immediacy of issues of

sexual victimization in the lives of these female college freshman. In addition, they call attention to the isolation of college women who are sexually victimized. Group leaders were known to these women for a short time, in a limited relationship context. The women chose to seek assistance from these leaders, though, suggesting a lack of other people to whom they felt more able to reveal this material. Of course, the leaders were young, female psychologists who seemed to talk freely about power and personal rights, and these may have been powerful cues that the leaders could be trusted. It does raise the question, though, of who college aged women choose to tell if they are not in contact with such a figure. In addition, the kind of assistance offered by the group leaders is different in nature than that which would perhaps be ideal for these women -- advocacy from the legal system, the comforting support of parents, outrage and solidarity from peers, and so forth.

Evaluations of Workshops

Mean scores on evaluations were very high, at about 4.2 and above on a five point scale. As noted in the results, some weeks were better-liked than others, and there was some disparity between the ratings of "explanation of material" by group. Generally, though, the evaluations indicate positive assessment of the experience by participants.

Comments on the evaluation forms (158 comments; 65% of evaluations included a comment) support this impression. Comments are lively, supportive, and often self-disclosing.

Many women reported changing behaviors, watching themselves during the week, thinking about things a new way, enjoyment of the group dynamics, and their wish that other women they know could take the workshops. Women frequently remarked that they were learning things in a fun and easy way, and that they liked the leaders' use of humor in the groups. The critical remarks (eight) stated that the writers were already familiar with the material, or that a particular week was not as fun as other weeks.

Groups were marked by progressive intimacy among the participants. The use of stable small groups that met in the same place each week promoted group cohesion. Comments suggest that this was valued by the women.

The use of matched workshop modules between intervention conditions, with only content varying, was positive. In both intervention conditions participants were actively involved in private self-evaluation, skill development in dyads, practicing of skills before the group, and other group activities.

Women were conscientious about workshop involvement. They almost always came to groups, and arrived on time. When a group member had to miss, she readily "made up" the session with another group. Participants made use of leaders' home phone numbers to discuss schedule changes or other issues related to the study. Leaders obtained participants' permission to call them about schedule changes or missed sessions, so the contact by phone was two-way

throughout the study. Women usually greeted the leaders' calls with familiarity and openness. Again, this attests to the intimacy of the groups, and the women's willingness to create a positive working relationship with leaders.

Such group and relationship dynamics are desirable for consciousness raising experiences. Comments suggest changing self-evaluations by participants, and changing opinions about personal rights and the rights of others. Women seemed to use the modeling of the leaders and other group to make changes in their own lives. Problems from their everyday relationships were frequently brought into the groups and used as practice examples, or the women would ask for feedback from the leader and group about how to handle an issue.

The experience of the leaders, the evaluation item ratings, and the comments received from participants, all suggest that goals for providing a positive, supportive, and interactive learning environment for participants, were achieved.

Summary and Conclusions

A number of conclusions about young women's lives, and about change and intervention in sexual beliefs and behavior, can be drawn from this study.

It appears that the area of communication sexual assertiveness is more amenable to change over time than other areas of sexual assertiveness. This may be an appropriate starting point for interventions. More

information regarding the impact of changing communication in young women's sexual relationships is desirable.

It is possible that change in sexual assertiveness might take much longer than ten weeks to be achieved. In light of social norms, this is a reasonable hypothesis. If sexual assertiveness is a slowly changing arena of belief and behavior, more information about the appropriate manner to intervene and measure is highly desirable.

The results reported here suggest that one-time assessments, or pre-test scores, may reflect initial response bias not only in subject reports of personal risk for AIDS, but also in reports of sexual assertiveness.

Victimization history was common in women from this sample, and this is consistent with the estimates of victimization in the population of young women made by other researchers (Koss, 1985; Russell, 1983). A history of sexual victimization should be considered as a possible variable for young college women in sexually-related studies.

Women in this sample with a history of victimization showed evidence of increased risk for physical and relationship problems relevant to sexual assertiveness and AIDS. This population should be considered at higher risk than non-victimized women, and intervention and assistance should be considered. The opportunity to establish a relationship with young female psychology graduate students who promoted personal rights and assertiveness may have been

useful for women struggling with victimization issues.

Measures validated and piloted in this study were adequate and useful. Their correlations to each other increase understanding of "sexual assertiveness" and related concepts. Measures used here can contribute important information for assessment of sexual assertiveness, sexual behavior, and AIDS Prevention issues.

Finally, behavior and attitude change around sexual and assertiveness issues is complex, not simple. Although this statement is a truism, it is an important one for researchers to keep in mind. Changes over time, and differences among groups demonstrated in these results, were not as anticipated. However, they may reflect processes and beliefs that are descriptive of the experience of young women. Other well-designed and competently implemented interventions regarding sexual interactions in young adults at the same university as this study, have shown similarly unexpected results (Gallagher, 1991; Gibson, 1990). The process of change in sexual beliefs and behavior, so critical to health and safety in these times, clearly bears much more research. Some suggestions regarding future research follow.

Future Research

The findings of this research reveal important areas for future work, both prediction and intervention - oriented. These include:

Repeated Measures

More work needs to be done on the possibility of inflated self-reports on single assessments, and the possibility that repeated measures decrease initial response bias through a Hawthorne effect, or by raising consciousness about behavior, or in other ways. Repeated measures before intervention (i.e. two pre-tests) may be necessary to gain an accurate baseline measure regarding sexual assertiveness and related issues. Although this is an alarming and unusual idea, a study comparing groups who receive two pre-tests (four weeks apart), and one pretest (immediately before intervention) could yield interesting confirmatory or contradictory results. Practice effects and reactivity to measures could be assessed through a varying schedule design. Elaborating on the current design, additional No Intervention groups could be included. These groups would fill out measures on schedules different than those of the core Sexual Assertiveness, General Assertiveness and No Intervention groups. Results of the schedules could be compared to explore practice and reactivity issues.

Sample size

Research on change over time may require a larger sample size than the one here. Power analysis suggests a larger sample size could have been useful in this study. Practical considerations make intervention studies with large samples difficult, but an awareness that large samples may be required to demonstrate treatment effect is important

for future research.

Length of Treatment

Similar to large samples, long treatments create practical problems. However, sexual assertiveness involves a complex set of behaviors and beliefs, governed by strong social norms. More treatments, a' longer overall intervention, and longer measurement intervals, could provide an opportunity to examine changes that may not be evident in the course of a short longitudinal study. Ideally, a group of female students could be followed through the course of two or more years of college, with multiple yearly interventions of the two types described here, and a no intervention control group. Rich data could be acquired through such research.

Stages of change

Stages of change should be assessed to inform the design of interventions. At the time this study was designed and data were collected, the Stages of Change Model had not yet been tested on AIDS Risking Behaviors. At the time of this writing, such a study has been carried out and data have been analyzed (Redding, 1993). The results suggest that the Stages of Change model is useful in gauging the readiness of students for change in AIDS risking behavior. The model can be applied to intervention design through use processes most salient to the stages of change characterizing a group. It is likely, based on Redding's results, that students will be in the Maintenance (or

pseudo-maintenance) stage, suggesting that processes associated with that stage would be most effectively used by them to change their behavior.

A design focused on Stage of Change could be highly useful in adding information about change in sexual assertiveness beliefs and behaviors. Assessment of Stage of Change and Process in use by each group of women would be required. A stage by process interaction could be analyzed through MANOVAs to determine whether treatments had differential impact by stage or process. Relevant questions would include: Do participants in preparation and action stages benefit more from intervention? Do participants in precontemplation and contemplation stages benefit more? Which processes are associated with change?

Additional Measures

The use of a social desirability measure in sexual assertiveness research is desirable to learn more about a possible initial response bias, and to explore differential score patterns among participants with greater and lesser social desirability needs. Other measures might also reflect a treatment effect that was not revealed in this study. For example, measures of self esteem, stages of change, processes of change, or meaning in life might reveal treatment effect.

Use of partners

Workshops for women and men together, or workshops for dating or other coupled partners, might be desirable. This

design seems most likely to promote behavior change, by sharing responsibility for behavioral choices between members of both genders, rather than promoting the myth that women are or should be able to control men's sexual choices. The sacrifice in this design is the intimacy and supportiveness of all-women groups. Great effort would have to go into the establishment and maintenance of a setting in which young women could voice beliefs, opinions, wishes and complaints regarding sexual assertiveness, in the presence of young men, and vice-versa. Such a design would produce interesting data.

Community-level vs. Individual Level Intervention

As noted above, the small groups that met for these workshops provided a place for women to meet and work together to assert their rights, sexual and general. In addition, the workshops provided women with access to supportive female role models who were directly confronting some of the myths that guide all our lives, and sharing the struggle and worth of that ongoing confrontation. The participants showed evidence of valuing the opportunity to talk openly about their own rights, fears, wishes and concerns regarding assertiveness in all kinds of relationships. The experience of a supportive group focused on these issues seemed beneficial, based on observation of group dynamics, evaluation scores, and comments on evaluations, as well as comments by former participants to the researcher since the end of the study. All this

suggests that young female undergraduates desire, benefit from, and lack supportive groups of women concerned with personal rights and relationships. Interventions that promote discussion of these issues, and support women in working together, are most desirable on campuses. In addition, interventions that promote a social environment that values women's assertiveness, encourages safer sex, addresses male responsibility for these issues, and provides positive group settings and role models for women, may be far more important than individual level interventions.

Table 1

Maximum likelihood factor loadings for sex communication subscale and AIDS communication subscale

Items	Time 3	Time 2
<u>Sex Communication</u>		
I would tell my partner what feels good	.90	.86
If I wanted my partner to continue something I would say so	.88	.86
I would ask my partner to touch or stimulate me	.87	.82
If I wanted to tell my partner what I do not like, I would	.72	.79
If my partner touched or stimulated me in an unpleasant way, I would tell my partner	.65	.68
If my partner did not please me, I would say it	.59	.67
<u>AIDS Communication</u>		
I would ask a partner if he or she ever had a HIV test	.98	.96
I would ask about HIV risk status of past partners	.97	.96
I would ask my partner if he or she ever had STD	.96	.97
I would ask my partner if he or she ever used a needle to take drugs	.90	.76
I would ask my partner if he or she had sex with a needle drug user	.89	.77
I would ask my partner if he ever has sex with a man	.80	.79

Note: N = 90 at Time 3; N = 90 at Time 2

Table 2

Overview of workshop content

Sexual Assertiveness	General Assertiveness
<u>Week 1</u> A Introduction B Define "Sexual Assertion" C Communication Style D Assertive communication E Effective listening F Wrap up and evaluation	<u>Week 1</u> A Introduction B Define " Assertiveness" C Communication Style D Assertive communication E Effective listening F Wrap up and evaluation
<u>Week 2</u> A Review B AIDS and safer sex C Using condoms D Other birth control E Asserting condom use F Wrap up and evaluation	<u>Week 2</u> A Review B Academic assertiveness C Assessing the situation D Learning rights E Asserting in academia F Wrap up and evaluation
<u>Week 3</u> A Review B Refusal rights & barriers C Self-talk D Decisions about intimacy E Conflict management F Wrap up and evaluation	<u>Week 3</u> A Review B Refusal rights & barriers C Self-talk D Anger and rights E Conflict management F Wrap up and evaluation
<u>Week 4</u> A Review B Requests; initiating C Feel deserving of rights D Action plan E Wrap up "Myths & Rights" F Evaluation	<u>Week 4</u> A Review B Requests; initiating C Feel deserving of rights D Action plan E Wrap up "Myths & Rights" F Evaluation

Table 3

Means and standard deviations for sample descriptive items
(groups collapsed at Time 1, Time 2, and Time 3)

Variable	Time 1		Time 2		Time 3	
	mean	sd	mean	sd	mean	sd
Age	20		20		20	
Year in College (1-4)	1.64	.84	1.66	.85	1.67	.86
Race or Cultural group*	1.17	.75	1.20	.85	1.21	.85
Living Arrangement*	1.04	.30	1.04	.30	1.04	.30
Ever had oral sex (y=1,n=2)	1.16	.37	1.14	.35	1.21	.33
Ever had intercourse (y=1,n=2)**	1.24	.43	1.23	.45	1.87	.39
Sex of partner in past year (male=1-female=2)	3.62	.82	3.24	.90	3.15	.84
Steady male partner (y=1-n=2)	2.75	.16	2.70	1.60	2.78	1.61
Number of partners in past 4 weeks	1.66	.52	1.74	.57	1.69	.58
Frequency of sex in past 4 weeks	2.57	1.39	2.71	1.52	2.46	1.40
Alcohol/drug with sex past 4 weeks	4.37	1.16	4.5	.93	4.36	1.16
Number of partners in past year	2.26	.84	2.55	1.32	2.52	1.24
Frequency of sex in past year	2.45	1.34	2.24	.81	2.52	1.24
Alcohol/drugs with sex past year	4.09	1.05	4.04	1.76	4.01	1.07
Number of partners in lifetime	2.74	1.10	2.80	1.07	2.80	1.05

Note: * Shown as number in order to demonstrate temporal consistency; ** Significant mean differences between Time 1 and Time 3; Response scale of 1-5 except where noted in parentheses; N=90 at each assessment time

Table 4

Mean scores for evaluation DVs collapsed over 4 weeks

	Mean	Standard deviation
Leader style	4.70	.55
Explanation	4.66	.55
Usefulness	4.63	.66
Enjoyment	4.21	.74

Note: Responses on a scale of 1-5; N=235

Table 5

Means and standard deviations for scales (collapsed across groups at Time 1, Time 2, and Time 3)

	Time 1		Time 2		Time 3	
	mean	sd	mean	sd	mean	sd
<u>DVs</u>						
1 SAS Refusal	4.39	.88	2.32	.43	2.95	.35
2 SAS Initiation	4.37	.79	3.01	.46	2.87	.36
3 SAS Birth control	3.18	.54	2.94	.38	2.93	.26
4 Sex Communication	-----	-----	3.03	.38	4.63	.65
5 AIDS Communication	-----	-----	3.17	.39	4.45	.88
6 AIDS Prevention	4.32	.87	4.37	.79	4.41	.88
7 Refusal Behavior	2.27	.53	2.18	.51	2.23	.57
8 Initiation Behavior	2.85	.87	2.23	.84	2.37	.85
9 Contraceptive Behavior	1.73	1.85	1.73	.19	1.73	.20
10 General Assertiveness	3.66	.76	3.68	.68	3.71	.71
<u>COVS</u>						
1 Anticipate Partner Negative Response (APNR)	1.65	.34	1.64	.40	1.59	.36
2 APNR to Refusal	2.42	.65	2.18	.69	2.16	.67
3 APNR to Condoms	1.39	.62	1.39	.62	1.32	.54
4 Victimization	2.64	.75	2.63	.83	2.66	.79
<u>Other Scales</u>						
1 APNR to Initiation	1.03	.15	1.08	.28	1.05	1.98
2 Refusal only Behavior	2.32	.74	2.21	.76	2.31	.87
3 Non Refusal Behavior	2.40	.64	2.23	.63	2.35	.68
4 18 item SAS	3.72	.47	3.84	.49	3.88	.52
5 30 item SAS	-----	-----	3.86	.49	3.86	.53

Note: Scale of 1-5; * 6-point scale; N = 90 at all assessment times; DV 1-5 means calculated in MANOVA; other DV means calculated in BMDP descriptives program

Table 6

Scale Correlations at Time1, Time 2, Time 3 for all scales

	DV1 SAS Refusal	DV2 SAS Initiation	DV3 SAS Birth Control	DV4 Sex Communication
<u>DVs</u>				
1 SAS Refusal	-----	-ns-	.24,ns,ns	x, .25,ns
2 SAS Initiation	-ns-	-ns-	-ns-	x, .37, .50
3 SAS Birth Control	.24,ns,ns	-ns-	-----	x, .33,ns
4 Sex Communication	x, .25,ns	x, .37, .50	x, .33,ns	-----
5 AIDS Communication	x,ns, .22	-ns-	x, .29,ns	x, .32, .26
6 AIDS Prevention	-ns-	-ns-	-ns-	-ns-
7 Refusal Behavior	-ns-	-ns-	-ns-	x, ns, .32
8 Initiation Behavior	.28,ns,ns	.33, .34, .47	ns, .34, .32	x, .50, .50
9 Contraception Behavior	-ns-	-ns-	.35,ns,ns	-ns-
10 General Assertiveness	-ns-	-ns-	.27,ns,ns	x, .28, .41
<u>COVS</u>				
1 APNR	-ns-	-ns-	-ns-	-ns-
2 APNR Refusal	-ns-	-ns-	-ns-	-ns-
3 APNR Condoms	ns, -.21,ns	-ns-	-ns-	x, .37,ns
4 Victimization	-ns-	-ns-	-ns-	-ns-
<u>Other Scales</u>				
APNR Initiation	-ns-	ns, -.24,ns	-ns-	-ns-
Refusal Only Behavior	-ns-	-ns-	-ns-	-ns-
Non-refusal Behavior	-ns-	-ns-	ns,ns, -.36	x,ns, .32
18 Items SAS	(ns.34,ns)	(ns, .3, .2)	(.33.22, .24)	(x, .41, .52)
30 Items SAS	(ns.36,ns)	(x, .26, .30)	(x, .35, .30)	(x,ns, .58)

Note: Scores are collapsed across groups; Pearson r significant at .05; ns - indicates r not significant; () - indicates scale - subscale intercorrelations; x - indicates not tested at Time 1; N = 90 at each assessment time

Table 6 continued

Scale Correlations at Time1, Time 2, Time 3 for all scales

	DV5 AIDS Communication	DV6 AIDS Prevention	DV7 Refusal Behavior	DV8 Initiation Behavior
<u>DVs</u>				
1 SAS Refusal	x, ns, .22	-ns-	-ns-	-ns-
2 SAS Initiation	-ns-	-ns-	-ns-	.33, .34, .47
3 SAS Birth Control	x, .29, ns	-ns-	-ns-	ns, .34, .32
4 Sex Communication	x, .32, .26	-ns-	-ns-	x, .50, .50
5 AIDS Communication	-----	x, .21, ns	-ns-	-ns-
6 AIDS Prevention	x, .21, ns	-----	-ns-	-ns-
7 Refusal Behavior		-ns-	-----	.35, .35, .51
8 Initiation Behavior	-ns-	-ns-	.35, .35, .51	-----
9 Contraception Behavior	-ns-	-ns-	ns, .30, ns	.71, ns, ns
10 General Assertiveness	-ns-	-ns-	-ns-	-ns-
<u>COVS</u>				
1 APNR	-ns-	ns, ns, -.2	-ns-	-ns-
2 APNR Refusal	-ns-	-ns-	-ns-	.41, .54, .59
3 APNR Condoms	-ns-	-.30-.30-.26	-ns-	ns, .34, ns
4 Victimization	-ns-	-.45-.26-.26	-ns-	-ns-
<u>Other Scales</u>				
APNR Initiation	-ns-	-ns-	-ns-	
Refusal Only Behavior	-ns-	-ns-	(.92, .9, .91)	.41, .54, .5
Non-refusal Behavior	x, ns, -.37	-ns-	(.41.46.43)	-ns-
18 Items SAS	x, .34, .30	x, .34, .30	-ns-	-ns-
30 Items SAS	(x, .44, .38)	(x, .32, .38)	-ns-	-ns-

Note: Scores are collapsed across groups; Pearson r significant at .05; ns - indicates r not significant; () - indicates scale - subscale intercorrelations; x - indicates not tested at Time 1; N = 90 at each assessment time

Table 6 continued

Scale Correlations at Time1, Time 2, Time 3 for all scales

	DV9 Contracept* Behavior	DV10 General Assertive**	COV1 APNR	COV2 APNR Refusal
<u>DVs</u>				
1 SAS Refusal	.28,ns,ns	-ns-	-ns-	-ns-
2 SAS Initiation	-ns-	-ns-	-ns-	-ns-
3 SAS Birth Control	-.35,ns,ns	.27,ns,ns	-ns-	-ns-
4 Sex Communication	-ns-	x, .28, .41	-ns-	-ns-
5 AIDS Communication	-ns-	-ns-	-ns-	-ns-
6 AIDS Prevention	-ns-	-ns-	ns,ns,.2	-ns-
7 Refusal Behavior	ns, .30,ns	-ns-	-ns-	-ns-
8 Initiation Behavior	.71,ns,ns	-ns-	-ns-	-ns-
9 Contraception Behavior	-----	-ns-	-ns-	.2,ns,ns
10 General Assertiveness	-ns-	-----	-ns-	ns,ns, .19
<u>COVS</u>				
1 APNR	-ns-	-ns-	-----	(.88,.88,.91)
2 APNR Refusal	-ns-	ns,ns,-.2	(.88.88.91)	-----
3 APNR Condoms	-ns-	-ns-	(.57.63.53)	-ns-
4 Victimization	-ns-	-ns-	ns,.23,ns	ns,-.24,ns
<u>Other Scales</u>				
APNR Initiation	ns,.24,.3	ns,-.23,ns	(ns,.32,.25)	-ns-
Refusal Only Behavior	ns,.29,ns	-ns-	-ns-	-ns-
Non-refusal Behavior	ns,.40,ns	.38,.41,.49	-ns-	-ns-
18 Items SAS	-ns-	.38,.41,.49	ns,-.24,ns	-ns-
30 Items SAS	-ns-	x,.42,.52	-ns-	-ns-

Note: Scores are collapsed across groups; Pearson r significant at .05; ns - indicates r not significant; () - indicates scale - subscale intercorrelations; x - indicates not tested at Time 1; N = 90 at each assessment time; * = Contraceptive. ** = Assertiveness

Table 6 continued

Scale Correlations at Time1, Time 2, Time 3 for all scales

	COV3 APNR Condoms	COV4 Victimizat*	APNR Initiation	Refusal Only
<u>DVs</u>				
1 SAS Refusal	ns, ns, -.2	-ns-	-ns-	-ns-
2 SAS Initiation	-ns-	-ns-	ns, -.24, ns	-ns-
3 SAS Birth Control	-ns-	-ns-	-ns-	-ns-
4 Sex Communication	x, .37, ns	-ns-	-ns-	x, ns, .32
5 AIDS Communication	-ns-	-ns-	-ns-	-ns-
6 AIDS Prevention	-.30-.30-.26	-.45-.26-.26	-ns-	-ns-
7 Refusal Behavior	-ns-	.30, ns, ns	-ns-	(.92.90.91)
8 Initiation Behavior	ns, .34, ns	-ns-	-ns-	.41, .54, .59
9 Contraception Behavior	-ns-	-ns-	ns, .24, .30	ns, .29, ns
10 General Assertiveness	-ns-	-ns-	ns, -.23, ns	-ns-
<u>COVS</u>				
1 APNR	(.57.63.53)	-ns-	(ns.32.25)	-ns-
2 APNR Refusal	(.57, .24)	-ns-	-ns-	-ns-
3 APNR Condoms	-----	ns, .25, .21	-ns-	-ns-
4 Victimization	ns, .25, .21	-----	-ns-	.30, ns, ns
<u>Other Scales</u>				
APNR Initiation	(.32, ns, ns)	-ns-	-----	-ns-
Refusal Only Behavior	-ns-	-ns-	-ns-	-----
Non-refusal Behavior	-ns-	-ns-	-ns-	ns, .26, ns
18 Items SAS	x, .26, ns	-.23-.21-.23	-ns-	-ns
30 Items SAS	-ns-	x, -.21, -.20	-ns-	-ns-

Note: Scores are collapsed across groups; Pearson r significant at .05; ns - indicates r not significant; () - indicates scale - subscale intercorrelations; x - indicates not tested at Time 1 ; N = 90 at each assessment time; * = Victimization

Table 6 continued

Scale Correlations at Time1, Time 2, Time 3 for all scales

	Non-Refusal Behavior	18 Item SAS	30 Item SAS
<u>DVs</u>			
1 SAS Refusal	-ns-	(ns, .34, ns)	(x, .36, ns)
2 SAS Initiation	-ns-	(ns, .30, .20)	(x, .26, .29)
3 SAS Birth Control	ns, ns, -.36	(.33, .22, .24)	(x, .35, .30)
4 Sex Communication	x, ns, -.32	x, .41, .52	x, .50, .58
5 AIDS Communication	x, ns, -.37	x, .34, .30	x, .32, .38
6 AIDS Prevention	-ns-	.41, ns, .23	x, ns, .2
7 Refusal Behavior	(.41, .46, .43)	ns, .26, ns	-ns-
8 Initiation Behavior	-ns-	.27, .44, .47	x, .47, .52
9 Contraception Behavior	ns, .40, ns	-ns-	-ns-
10 General Assertiveness	.38, .41, .49	.38, .41, .49	x, .42, .52
<u>COVS</u>			
1 APNR	-ns-	-ns-	-ns-
2 APNR Refusal	-ns-	-ns-	-ns-
3 APNR Condoms	-ns-	-ns-	x, -.26, ns
4 Victimization	-ns-	-.23, -.21, ns	x, -.21, ns
<u>Other Scales</u>			
APNR Initiation	-ns-	-ns-	-ns-
Refusal Only Behavior	ns, .26, ns	-ns-	-ns-
Non-refusal Behavior	-----	ns, -.24, ns	-ns-
18 Items SAS	ns, -.24, ns	-----	(x, .98, .98)
30 Items SAS	-ns-	(x, .98, .98)	-----

Note: Scores are collapsed across groups; Pearson r significant at .05; ns - indicates r not significant; () - indicates scale - subscale intercorrelations; x - indicates not tested at Time 1; N = 90 at each assessment time

Table 7

Summary of 3x3 (Groups x Time) Repeated Measures MANOVA and follow-up ANOVAs on DV 1,2,3,6

MANOVA

<u>DV</u>	<u>Effect Tested</u>	<u>Wilk's Lambda</u>	<u>df</u>	<u>p</u>	<u>η^2</u>
ALL 4 DV	Time	.237	8, 79	<.0001	.76
	Treatment	.967	8, 166	.9478	.04
	Inter-action	.871	16, 158	.7863	.13

ANOVAs

<u>DV</u>	<u>Effect Tested</u>	<u>F</u>	<u>df</u>	<u>p</u>
DV 1 SAS Refusal	Time	110.23	2, 85	<.0001
DV 2 SAS Initiation	Time	135.47	2, 85	<.0001
DV 3 SAS BC	Time	7.8	2, 85	<.001
DV 6 AIDS Prevention	Time	73.47	2, 85	<.0001
Self Efficacy				

Note: DV = dependent variable; df = degrees of freedom; p = p-value; η^2 = proportion of variance accounted for; F = F-value. N = 87

Table 8

Summary of 3x2 (Groups x Time) Repeated Measures MANOVA and follow-up ANOVAs on DV 4, 5

MANOVA

DV	Effect Tested	Wilk's Lambda	df	p	η^2
ALL 2 DV	Time	.380	2, 86	.0000	.62
	Treatment	.887	4, 172	.0357	.11
	Inter-action	.967	4, 172	.5843	.03

ANOVAs

DV	Effect Tested	F	df	p
DV 4 Sex Communication	Time	3.76	2, 87	.0000
DV 5 AIDS Communication	Time	31.77	2, 87	.0000
DV 4 Sex Communication	Treatment	1.89	2, 87	.1570
DV 5 AIDS Communication	Treatment	2.5	2, 87	.0883

Note: DV = dependent variable; df = degrees of freedom; p = p-value; η^2 = proportion of variance accounted for; F = F-value. N = 87

Table 9

MANOVA Mean scores on dependent variables 1-5 for sexual assertiveness intervention

	<u>Time 1</u>		<u>Time 2</u>		<u>Time 3</u>	
	<u>Mean</u>	<u>sd</u>	<u>Mean</u>	<u>sd</u>	<u>Mean</u>	<u>sd</u>
DV 1 SAS Refusal	3.78	.83	3.03	.40	3.01	.36
DV 2 SAS Initiation	4.44	.70	2.99	.42	2.91	.26
DV 3 SAS Birth Control	3.08	.59	3.08	.38	2.98	.22
DV 4 Sex Communication	----	----	3.03	.38	4.63	.65
DV 5 AIDS Communication	----	----	3.02	.39	4.45	.88

Note: Responses are on a scale of 1-5; N =90;

Table 10

Intercorrelations among factors for sexual assertiveness
scale at time 2 and time 3

Time 2

	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Factor 4</u>	<u>Factor 5</u>
Factor 1	1.00				
Factor 2	-.12	1.00			
Factor 3	-.08	-.04	1.00		
Factor 4	.07	-.26	-.08	1.00	
Factor 5	.10	-.25	-.16	.17	1.00

Time 3

	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Factor 4</u>	<u>Factor 5</u>
Factor 1	1.00				
Factor 2	-.12	1.00			
Factor 3	-.22	-.06	1.00		
Factor 4	.10	-.28	-.10	1.00	
Factor 5	.10	-.16	-.11	.25	1.00

Note: Factor 1 = SAS Refusal; Factor 2 = SAS Initiation;
Factor 3 = SAS Birth Control; Factor 4 = Sex Communication;
Factor 5 = AIDS Communication

APPENDIX 1

Study Design

	TIME 1	TIME 2	TIME 3
	(T1)	(T2)	(T3)
SEXUAL ASSERTIVENESS (SA)	equal (baseline)	tx effect: T2 > T1 SA > GA & NI	sustained tx effect T3 = T2 > T1 SA > GA & NI
GENERAL ASSERTIVENESS	equal (baseline)	no tx effect T2 = T1 GA = NI < SA	no tx effect T3 = T2 = T1 GA = NI < SA
NO INTERVENTION (NI)	equal (baseline)	no tx effect T2 = T1 NI = GA < SA	no tx effect T3 = T2 = T1 NI = GA < SA

note: tx = treatment (sexual assertiveness training)

APPENDIX 2

Sample Descriptive Items

1. Year in college:

- a. freshman b. sophomore c. junior d. senior

2. Age

- a. 18-20
b. 21-23
c. 24-26
d. 27-29
e. 29-30

3. Race or cultural group:

- a. white
b. Afro-American
c. Asian-American
d. Hispanic American
e. other

4. Current living arrangement

- a. single, not living with a sexual partner
b. single, living with a sexual partner
c. married
d. separated or divorced or widowed

5. Have you ever had penile-vaginal intercourse, or penile-anal intercourse?

- a. yes
b. no

6. During the past year, if you have had sexual contact, has it been:

- a. mainly with men
b. mainly with women
c. only with men
d. only with women
e. no sexual contact in past year

7. Do you have a steady male sexual partner?

- a. no
b. yes, for one month or less
c. yes, for 1-6 months
d. yes, for 6 months - 2 years
e. yes, for more than 2 years

8. In the past four weeks, how many sexual partners have you had?

- a. none
b. one
c. 2-5
d. 6-10
e. 11 or more

9. During the past four weeks, how often have you had sex (oral, vaginal or anal)?

- a. not at all
- b. once
- c. 2-5 times
- d. 6-10 times
- e. 11 or more times

10. During the past four weeks, when you have had sex, how often have you also used alcohol or drugs?

- a. every time
- b. more than half the time
- c. less than half the time
- d. once or twice
- e. never

11. In the past year, how many sexual partners have you had??

- a. none
- b. one
- c. 2-5
- d. 6-10
- e. 11 or more

12. During the past year, how often have you had sex (oral, vaginal or anal)?

- a. not at all
- b. once
- c. 2-5 times
- d. 6-10 times
- e. 11 or more times

13. During the past year, when you have had sex, how often have you also used alcohol or drugs?

- a. every time
- b. more than half the time
- c. less than half the time
- d. once or twice
- e. never

14. How many sexual partners have you had in your lifetime?

- a. none
- b. one
- c. 2-5
- d. 6-10
- e. 11 or more

APPENDIX 3

Dependent Measures and Subscale

DVs 1-3 Sexual Assertiveness Scale

- a = never: 0% of the time
- b = sometimes: about 25% of the time
- c = about 50% of the time
- d = usually: about 75% of the time
- e = always: 100% of the time

DV#1 Refusal subscale

1. If a partner wanted me to perform oral sex on him, and I didn't want to, I would refuse.
2. If I refused to kiss a partner, and he continued to pressure me, I would give in.*
3. If my partner pressured me to let him perform oral sex on me after I had refused, I would continue to refuse.
4. If a partner wanted me to, I would perform oral sex on him even if I didn't want to.*
5. If a partner wanted to perform oral sex on me, and I didn't want him to, I would agree to it anyway.*
6. If a partner wants to touch my breasts, and I don't want him to, I would refuse.

DV#2 Initiation subscale

1. If I wanted to have intercourse with my partner, I would initiate it.
2. If I would like a partner to fondle my genitals, I would initiate it.
3. I wait for my partner to be the one to start any breast fondling in our relationship.*
4. I wait for my partner to initiate any fondling of my genitals in our relationship.*
5. If I wanted a partner to do oral sex on me, I would let him know.
6. Women should wait for men to initiate physical contact like breast touching.*

DV#3 Birth Control Subscale

1. I would have sex without birth control if that's what my partner wanted.*
2. If I suggested using birth control and my partner refused, I would have sex without birth control.*
3. If I were to have intercourse, I would make sure we used birth control.
4. If I wanted a partner to use a condom and he didn't want to, I would agree to have intercourse without the condom.*
5. If I suggested using a condom, and my partner resisted, I would continue to insist on using it.
6. If I asked a partner to use birth control and he refused, then I would refuse to have intercourse.

*These items are reverse-scored. Higher scores indicate greater sexual assertiveness on a scale of 1 to 5.

DV#4 Sex Communication

1. If I wanted my partner to continue something that pleased me in sex, I would say it.
2. I would tell my partner what feels good to me in sex.
3. I would ask my partner to touch or stimulate me in a particular way.
4. If my partner had not pleased me in sex, I would say something.
5. If I wanted to tell my partner what I don't like in sex, I would say it.
6. If my partner touched or stimulated me in an unpleasant way, I would tell my partner to stop.

DV#5 AIDS Communication

1. I would ask a partner if he or she ever had a HIV test, if I wanted to know.
2. I would ask a partner about the HIV risk of his or her past partners, if I wanted to know.
3. I would ask a partner if he or she ever had a sexually transmitted disease, if I wanted to know.
4. I would ask a male partner if he ever had sex with a man, if I wanted to know.

5. I would ask a partner if he or she ever used needles to take drugs, if I wanted to know.

6. I would ask a partner if he or she ever had sex with a needle drug user, if I wanted to know.

DV#6 AIDS Prevention Self-Efficacy Measure

a = disagree strongly
b = disagree somewhat
c = undecided
d = agree somewhat
e = agree strongly

1. For me, safe sex is not always possible.*

2. I would find it difficult to take precautions against AIDS once my partner and I had begun sex.*

3. I would find it very difficult to limit myself to safe sex practices.

*These items are reverse-scored, so that higher scores reflect greater AIDS prevention self-efficacy.

DVs #7-9 Reported Assertiveness Behavior in the "Past Four Weeks"

DV#7 Refusal -- Full Scale

1. In the past four weeks, when a partner wanted to have sex that I did not want, I*

a. refused every time
b. refused more than half the time
c. refused less than half the time
d. never refused
e. the situation did not occur

(Subject does not continue if "e" was endorsed, above. If a-d was endorsed above, subject continues, using the following scale to complete the item sentences.)

a = no
b = yes, one time
c = yes, 2-4 times
d = yes, more than 5 times

In the past four weeks, when a partner wanted to have sex that I did not want,

2. I let the partner know I didn't want to
3. I did not indicate whether I wanted to or not*
4. I said I wanted to, even though I really didn't want to*
5. I stated clearly that I didn't want to
6. I told my partner why I didn't want to

7. I offered to do non-sexual activities

Refusal Items as Refusal Subscales (not used as DVs)

Refusal-Only Behavior Subscale

In the past four weeks, when a partner wanted to have sex that I did not want, I:

2. I let the partner know I didn't want to
3. I stated clearly that I didn't want to
4. I told my partner why I didn't want to
5. I offered to do non-sexual activities

*These items are reverse-scored, so that higher scores reflect greater assertiveness in refusal behavior.

Non-Refusal Behavior Subscale

1. In the past four weeks, when a partner wanted to have sex that I did not want, I*
 - a. refused every time
 - b. refused more than half the time
 - c. refused less than half the time
 - d. never refused
 - e. the situation did not occur

In the past four weeks, when a partner wanted to have sex that I did not want, I:

2. I did not indicate whether I wanted to or not*
3. I said I wanted to, even though I really didn't want to*

*These items are reverse-scored, so that higher scores reflect greater assertiveness in refusal behavior.

DV#8 Initiation Behavior

- a = no
b = yes, one time
c = yes, 2-4 times
d = yes, 5 times or more

In the past four weeks, when I wanted to have sex with a partner, I:

1. I let the partner know I wanted to
2. I asked the partner to touch my breasts
3. I initiated genital touching on my partner
4. I asked a partner to stimulate me in a particular way
5. I encouraged oral sex on me
6. I told a partner I would like to perform oral sex on him
7. I told the partner why I wanted to
8. I stated clearly that I wanted to

DV#9 Birth Control Use

In the past four weeks, when you have had sexual intercourse, how often have you used the following contraceptive measures?

- a = never
- b = less than half the time
- c = more than half the time
- d = always

1. Birth control pills
2. Diaphragm with spermicidal cream or jelly
3. Condom without spermicidal foam, cream or jelly
4. Condom with spermicidal foam, cream or jelly
5. Spermicidal foam, cream or jelly alone
6. Contraceptive sponge
7. Early withdrawal
8. Rhythm method
9. No birth control used*

* This item is reverse-scored, so that higher scores reflect more birth control use.

DV #10 General Assertiveness

- a = very characteristic of me, extremely descriptive
- b = rather characteristic of me, quite descriptive
- c = somewhat characteristic of me, slightly descriptive
- d = somewhat characteristic of me, slightly nondescriptive
- e = rather uncharacteristic of me, quite undescriptive
- f = very uncharacteristic of me, extremely nondescriptive

1. Most people seem to be more aggressive and assertive than I am.

2. I have hesitated to make or accept dates because of "shyness."

3. When food at a restaurant is not done to my satisfaction, I complain about it to the waiter or waitress.*

4. I am careful to avoid hurting other people's feelings, even when I feel that I have been injured.

5. If a salesperson has gone to considerable trouble to show me merchandise which is not quite suitable, I have a difficult time saying "no."

6. When I am asked to do something, I insist upon knowing why.*

7. There are times when I look for a good, vigorous argument.*

8. I strive to get ahead as much as most people in my position.*
9. To be honest, people often take advantage of me.
10. I enjoy starting conversations with new acquaintances and strangers.
11. I often don't know what to say to attractive persons of the opposite sex.
12. I will hesitate to make phone calls to business establishments and institutions.
13. I would rather apply for a job by writing letters, than by going through personal interviews.
14. I find it embarrassing to return merchandise.
15. If a close and respected relative were annoying me, I would smother my feelings rather than express my annoyance.
16. I have avoided asking questions for fear of sounding stupid.
17. During an argument I am sometimes afraid that I will get upset and shake all over.
18. If a famed and respected lecturer makes a statement that I think is incorrect, I will have the audience hear my point of view, as well.*
19. I avoid arguing over prices with clerks and salespeople.
20. When I have done something important or worthwhile, I manage to let others know about it.*
21. I am frank and open about my feelings.*
22. If someone has been spreading false and bad stories about me, I see him or her as soon as possible to talk about it.*
23. I have a hard time saying "no."
24. I tend to bottle up my emotions rather than make a scene.
25. I complain about poor service in a restaurant or elsewhere.*
26. When I am given a compliment, I just don't know what to say.

27. If a couple near me in a theatre or at a lecture were conversing loudly, I would ask them to be quiet or take their conversation elsewhere.*

28. Anyone attempting to push in front of me in a line is in for a battle.*

29. I am quick to express an opinion.*

30. There are times when I just can't say anything.

* These items are reverse-scored, so that higher scores reflect greater assertiveness.

APPENDIX 4

Covariate Measures and Subscales

Covariates #1-3 Anticipated Partner's Negative Response

COV#1 Anticipated Partner's Negative Response Full Scale

The partner would...

- a = agree willingly
- b = agree reluctantly
- c = disagree, but do what you wanted anyway
- d = refuse and would not have sex
- e = become angry, physically violent or forceful

1. If you asked the partner to wear a condom during sex
2. If you insisted that the partner wear a condom during sex
3. If you said you wanted the partner to touch or stimulate you in a particular way
4. If you initiated sexual touching with the partner
5. If you refused sex when the partner initiated it
6. If you refused to perform oral sex when the partner requested it
7. If you refused to touch or stimulate the partner in a particular way

COV#2 APNR Subscale: Response to Condoms

1. If you asked the partner to wear a condom during sex
2. If you insisted that the partner wear a condom during sex

COV#3 APNR Subscale: Response to Refusal

1. If you refused sex when the partner initiated it
2. If you refused to perform oral sex when the partner requested it
3. If you refused to touch or stimulate the partner in a particular way

APNR Subscale Initiation (not used as a covariate)

4. If you initiated sexual touching with the partner
5. If you refused sex when the partner initiated it

COV #4 History of Victimization

a = definitely yes
b = probably yes or maybe
c = probably no or doubtful
d = definitely no

1. Did you ever experience unwanted sexual contact from an adult or older person when you were a child under age 16?
2. Have you ever had sex with someone when you didn't want to, because of physical threat or physical force?
3. Have you ever had sex with someone when you didn't want to, because they pressured you verbally?
4. Has anyone ever tried to force you to have sexual contact or intercourse, but didn't succeed?
5. Have you ever been raped?

APPENDIX 5

Evaluation Form

Workshop Evaluation

Circle week: 1 2 3 4

Group Time:

Please rate items 1-5 using this scale

1= very poor

2= poor

3= moderate

4= good

5= excellent

Leader style	1	2	3	4	5
Explanation of the material	1	2	3	4	5
Usefulness of the material	1	2	3	4	5
My enjoyment of the workshop	1	2	3	4	5

Please indicate how much information was covered his week:

___too much for the time

___about the right amount for the time

___too little for the time

Comments:

APPENDIX 6

Participant Comments from Sexual Assertiveness Group Evaluations

Week 4

Week 4: Sexual Assertiveness Condition

I really enjoyed this workshop. I feel I have learned a lot. I'm a very passive person but hopefully with a little experience and courage I can become assertive.

Thanks for being supportive and offering alternatives.

I enjoyed the whole workshop. I have learned a lot of how to be assertive. And I can find myself studying my behavior throughout the week seeing if I was being assertive. Thank you.

I really enjoyed the workshop. It taught me a lot and it will be very useful.

This assertiveness training has been very informative and I'm sure it will help me many, many times. It already has! And I feel like I can honestly state my feelings to my boyfriend, discuss problems with my boss, explain myself to friends, etc. Thanks!

I really got a lot out of this, especially about how to do things in a sexual relationship.

I enjoyed and benefitted from this workshop. I really wasn't aware of my rights as a woman. Thanks! And lots of luck on your Ph.D.

These workshops have been very helpful in confirming my rights of being assertive. I think these workshops were well-prepared and the material was presented very well.

This series was interesting and helpful. I feel I knew most of it but I didn't know how to USE what I knew. I'm sure it will come in useful!

I think I really learned how to be assertive. I am normally a passive person and I think these workshops have made me aware that I do have rights and I can speak up when I feel I need to.

I feel that these workshops will be very helpful to me with future experiences. I think that the leader was not only an instructor but a caring friend to all of us. I enjoyed working with her. Thank You!

I enjoyed the workshops. I learned that I was more assertive than I originally thought. The week that we discussed contraceptives has influenced me to try new things.

This has been a good experience. I liked hearing other women talk about their rights, and hearing them talk about how to deal with problems. I learned to talk about these things, and I met nice people, too.

It was helpful to see how other women feel about assertiveness and that many problems are common. The open and honest forum was great and made for a relaxing and effective workshop. I definitely picked up information I will use.

Overall, very useful information given in a fun learning environment. Will come in handy, I'm sure. Thank you. The extra credit just seems an added bonus.

The whole workshop was very organized and I am glad each week tied in with the others. It made it effective.

This workshop helped me a great deal. I have probably been more aggressive in the past but now I know how to be assertive instead.

Workshop was beneficial but somehow I don't think all the positive words can work all the time.

I like the action plan. I will do it.

I enjoyed the workshop because I thought it was important for me.

I'm going through a lot of negative things right now, and it felt good to say out loud something that I'm proud of myself for, like we did today. Overall, I enjoyed all the workshops. I thought the leader was funny and presented information very effectively.

This workshop taught me a lot about myself and made me want to change things positively for myself. It also broadened my knowledge.

The topic is something every woman should be aware of but the problem is that most are aware. A lot of the material that was presented was just common sense and it has already been drilled into our heads. But that's just my view.

I enjoyed the workshop. I found it informative -- a little depressing (AIDS).

I learned a lot about birth control methods. Also I learned it was important to understand the other person's

perspective. I wish we could have talked more about self-esteem. We only touched on it and it would have been nice to discuss it more.

I thought that some of the things we discussed, such as birth control (putting condoms on zucchinis) were already known.

These workshops were very interesting and somewhat helpful. Maybe it would help to tie in more everyday situations (friends and family).

I really enjoyed this session thoroughly, and I would recommend that everyone who had a chance to do this should. I got to know new people from my group and I really learned a lot about myself by both listening to other people and the information the leader gave us. I had a great time.

I feel as though I got a lot out of the workshop. I feel more willing to participate in groups now. I'm glad I attended.

This training was fun and yet educational and useful and I'm glad I was able to participate in it!

Totally informative! The discussion was led in a very productive way, yet still in a relaxed atmosphere. Thank you!

The information was very useful and interesting. It's nice to learn something and use it and I'm using it! Very effective teaching -- understanding, good listening, and pleasant.

APPENDIX 7

Workshop Outlines

WEEK: 1

SUBJECT: Introduction and Communication

CONDITION: Sexual Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-3	10m
1. Who's here	with leader	Group names	
2. Welcome			
B. Define "Sexual Assertiveness"	Interactive	F4-F9	10m
State training goal	with leader		
C. Identifying Communication Styles	Interactive	F10-F12	20m
Pros and Cons	role play	role play cards	
D. Assertiveness & Communication	Interactive	F13-F16	30m
1. Indirect	small group	scenario cards	
2. Expressing			
3. Direct			
4. Generate assertive statements			
E. Effective Listening	Interactive	F17-F18	10m
1. Basics	large group		
2. Reflecting			
F. Wrap Up	Interactive	Booklets:	5m
	with leader	"About Assertiveness"	

Individual

Evaluation forms

Envelope

WEEK: 1

SUBJECT: Introduction and Communication

CONDITION: General Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-3	10m
1.Who's here	with leader	Group names	
2.Welcome			
B. Define "General Assertiveness"	Interactive	F4-F9	10m
State training goal	with leader		
C. Identifying Communication Styles	Interactive	F5-F9	20m
Pros and Cons	role play	role play cards	
D. Assertiveness & Communication	Interactive	F15-F18	30m
1.Indirect	small group	scenario cards	
2.Expressing			
3.Direct			
4.Generate assertive statements			
E. Effective Listening	Interactive	F17-F18	10m
1.Basics	large group		
2.Reflecting			
F. Wrap Up	Interactive	Booklets:	5m

with leader

"About

Assertiveness"

Individual

Evaluation forms

Envelope

WEEK: 2

SUBJECT: Safer Sex and Birth Control

CONDITION: Sexual Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Review			
Who's Here	Interactive with leader	Name Cards F10-F12 F15-16	10m
B. About HIV/AIDS	Interactive	F19-F26	20m
1. Provide defs.	large group	continuum boards	
2. Transmission		behavior cards	
3. Risky Behaviors			
C. Using Condoms	Demonstration	F27-29	20m
1. Instruction	and practice	zuchinnis, jelly,	
2. Demonstration	dyads	foam, condoms,	
and practice		wipes	
D. About Birth	Interactive	F30-F34	20m
control	with leader "free play"	pills, sponges, diaphragm, jelly, foam	
E. Asserting About	Role Plays	F15-16	10m
Condom Use	small groups	Condom negotiation statement cards	

F. Wrap Up	Interactive	F35;Handouts 10m
	Individual	"Make Sex Safer"
		"Women & AIDS"
		"HIV Testing"
		"Abstain"
		"Contraception"
		Evaluation forms
		Envelope

WEEK: 2

SUBJECT: Situational Factors in Assertiveness

CONDITION: General Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-F3	10m
1.Who's here	with leader	Group names	
2.Review			
B. Situational factors	Interactive	F16-F18	10m
in assertiveness	with leader		
C. Preparing for	Interactive	F16-19	5m
Videotape	large group		
Pros/Cons			
D. Viewing Video	Interactive	F16-F19	40m
with discussion	large group	videotape	
		tape player	
		(VCR)	
E. Wrap Up	Interactive		10m
Evaluations	Individual	Evaluation forms	
		Envelope	

WEEK: 3

SUBJECT: Refusal Skills and Conflict Management

CONDITION: Sexual Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-F3	10m
1.Who's here	with leader	review referrals	
2.Review			
B. Refusal Rights	Interactive	F35-40	10m
1.Refusal Style	self-assess	Refusing Requests	
2.Barriers to Refusal			
C. Self Talk	Interactive	F41-43	20m
1.Minilecture	role play	role play cards	
2.Psychodrama			
D. Decisions about Intimacy	Interactive Dyads	"Progression of Intimacy" "Working Relationship"	10m
E. Conflict Management	Interactive Self-Assess	F44-50 "Dealing with Anger"	20m
F. Wrap Up	Interactive with leader Individual	 Evaluation forms Envelope	5m

WEEK: 3

SUBJECT: Refusal Skills and Conflict Management

CONDITION: General Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-F3	10m
1. Who's here	with leader	review referrals	
2. Review			
B. Refusal Rights	Interactive	F20-26	10m
1. Refusal Style	self-assess	"Refusing Requests"	
2. Barriers to Refusal	dyads	role play cards	
C. Self Talk	Interactive	F26-28	20m
1. Minilecture	role play	role play cards	
2. Psychodrama			
D. Anger and Conflict	Interactive	F29-30	10m
	Dyads	"Dealing with Anger"	
E. Conflict Management	Interactive	F30-32	20m
	self-assess	"Goals and Steps"	
F. Wrap Up	Interactive		5m
	with leader		
	Individual	Evaluation forms	
		Envelope	

WEEK: 4

SUBJECT: Making Requests and Initiating Contact

CONDITION: Sexual Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F51-52	5m
1. Who's here			

2.Review

B. Making Requests	Interactive	F52	10m
Initiating Contact	self-assess	"Styles of Request & Initiation"	
C. Practicing	dyads	F54	10m
requests	role play	role play cards	
& initiation			
D. Feeling	Interactive	F55-56	20m
Deserving	self-assess	"Satisfactions"	
1.Barriers to	full group	"10 Positives"	
Request & Initiate			
2.Self-esteem			
E. Rights	Interactive	F57-58	20m
Exercise			
F. Action Planning	Group and	scenarios	10m
	individual	"action plan"	
G. Wrap-Up	time reminders	F59-60	5m
Evaluation	individual	Evaluation forms	
		Envelope	
		"Self Esteem"	

WEEK: 4

SUBJECT: Requests, Self-Esteem and Action Planning

CONDITION: General Assertiveness

<u>SEGMENT</u>	<u>FORMAT</u>	<u>MATERIALS</u>	<u>TIME</u>
A. Introduction	Interactive	F1-2	5m
1.Who's here			
2.Review			

B. Making Requests	Interactive	F32	10m
Initiating Contact	self-assess	"Styles of Request & Initiation"	
C. Practicing	dyads	F32-36	10m
requests	role play	role play cards	
& initiation			
D. Feeling	Interactive	F36-42	20m
Deserving	self-assess	"Satisfactions"	
1.Barriers to	full group	"10 Positives"	
Request & Initiation			
2.Self-esteem			
E. Rights	Interactive	F42-46	20m
Exercise			
F. Action Planning	Group and	scenarios	10m
	individual	"action plan"	
G. Wrap-Up	time reminders	F46-50	5m
Evaluation	individual	Evaluation forms	
		Envelope	
		"Self Esteem"	

BIBLIOGRAPHY

- Ajzen, I., & Fishbaum, H. (1988). Understanding attitudes and predicting social behavior. Englewood Cliffs, N.J. Prentice Hall.
- Alberti, R.E. (1986). Making yourself heard: A guide to assertive relationships. New York: Guilford -- BMA Audio Cassettes.
- Arnstein, R.L. (1989). Sex and anxiety on the campus: Thirty-five years thereof. Journal of American College Health, 37(6), 247-253.
- Berach, E.F. (1981). Influence of scheduling variations on the effectiveness of a group assertion training program for women. Journal of Counseling Psychology, 28, 265-268.
- Bloom, L.Z., Coburn, K.L. & Pearlman, J. C. (1975). The new assertive woman. New York: Dell.
- Broverman, I.K., Broverman, D.M., Clarkson, F.E., Rosenkrantz, P.S. & Vogel, S.R. (1970). Sex role stereotypes and clinical judgments of mental health. Journal of Consulting and Clinical Psychology, 34, 1-7.
- Burger, J.M., & Inderbitzen, H. M. (1985). Predicting contraceptive behavior among college students: the role of communication, knowledge, sexual anxiety, and self-esteem. Archives of Sexual Behavior, 14(4), 343-350.
- Byron, P. (1991). HIV: The national scandal. Ms. Magazine, January/February, pp. 24-33.
- Catania, J.A., Dolcini, M.A., Coates, T.J., Kegeles, S.M.,

- Greenblatt, R.M., Puckett, S., Corman, M., & Miller, J. (1989). Predictors of condom use and multiple partnered sex among sexually active adolescent women: Implications for AIDS-related health interventions. The Journal of Sex Research, 26(4), 514-524.
- Catania, J.A., Gibson, D.R., Chitwood, D.D., & Coates, T.J., (1990). Methodological problems in AIDS behavioral research: Influences on measurement error and participation bias in studies of sexual behavior. Psychological Bulletin, 108(3), 339-362.
- Center for Disease Control (1990). HIV-related knowledge and behaviors among high school students - selected U.S. sites 1989. Morbidity and Mortality Weekly Report, 39(23), 386-397.
- Center for Disease Control (1991). Premarital sexual experience among adolescent women - United States 1970-1988. Morbidity and Mortality Weekly Report, 39(51-52), 930-933.
- Center for Disease Control (1991). Mortality Patterns -- Unit Statistics, 1988. Morbidity and Mortality Weekly Report, 40, 493-502.
- Centers for Disease Control (1993). HIV/AIDS Surveillance Report, October, 5(3).
- Chaissen, R.E., Moss, A.R., Onishis, R., Osmond, G., & Carlson, J.R. (1987). American Journal of Public Health, 77, 169-172.
- Corea, G. (1993). The invisible epidemic: The story of women

- and AIDS. New York. Harper Collins Publishers.
- Craighead, L.W. (1979). Self-instructional training for assertive refusal behavior. Behavior Therapy, 10, 529-542.
- Deaux, K. (1971). Honking at the intersection: A replication and extension. Journal of Social Psychology, 84, 159-160.
- Deiter, P., Lang, M., Johnsen, L., Rose, J., Morokoff, P., Harlow, L., & Quina, K. (1993). Feedback about an AIDS risk survey from women in diverse focus groups. Paper presented at the National Meeting of the Association of Women in Psychology, Atlanta, GA.
- Deluty, R.H. (1985) Consistency of assertive, aggressive, and submissive behavior for children. Journal of Personality and Social Psychology, 49, 1054-1065.
- Fiedler, D., & Bach, L.R. (1987). On the decision to be assertive. Journal of Consulting and Clinical Psychology, 46, 537-546.
- Fingler, L., (1981). Teenagers in survey condone forced sex. Ms. Magazine, 9, p.23.
- Foriet, K.G. & Foriet, J.R. (1978). Correlates of contraceptive behavior among unmarried college students. Studies in Family Planning, 9, 169-174.
- Frost, H.L., McCluskey-Fawcett, K., & Sharp, J.A. (1989). Adolescent sexual behavior: A model for behavioral strategies. Behavior Therapist 12, 10, 239-242.
- Gallagher, P.L. (1992). AIDS risk reduction training among

- college women. Unpublished Dissertation, University of Rhode Island, Kingston, R.I.
- Gallagher, P., Quina, K., Morokoff, P.J. & Harlow, L.L. (1991, August). AIDS risk reduction among college women. Paper presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- Galassi, M.D. & Galassi, J.P. (1978). Assertion: A critical review. Psychotherapy: Theory, Research and Practice, 15, 16-28.
- Gambrill, E.D. & Richey, C.A. (1975). An assertion inventory for use in assessment and research. Behavior Therapy, 6, 550-561.
- Gervasio, A.H. (1987). Assertiveness techniques as speech acts. Clinical Psychology Review, 7, 105-119.
- Gibson, P.J. (1990). An intervention designed to modify attitudes toward acquaintance rape in college students. Unpublished dissertation, University of Rhode Island, Kingston, R.I.
- Goffman, E. (1977). The arrangement between the sexes. Theory and Society, 4, 301-331.
- Gormally, J. (1982). Evaluation of assertiveness: Effects of gender, rater involvement and level of assertiveness. Behavior Therapy, 13, 219-225.
- Graurholz, E., & Serpe, R.T. (1985). Initiation and response: The dynamics of sexual interaction. Sex Roles, 12(9-10), 1041-1059.
- Grimley, D.M. (1991). Predicting sexual assertiveness in

college aged women: A model buiding approach.

Unpublished master's thesis, University of Rhode Island, Kingston, RI.

Haas, A. (1979). Male and female spoken language differences: Stereotypes and evidence. Journal of Abnormal Psychology, 84, 51-58.

Hammond, P.D., Oei, T.P. & Tian, P. (1982). Social skills training and cognitive restructuring with sexual unassertiveness in women. Journal of Sex and Marital Therapy, 8, 297-304.

Harlow, L.L., Quina, K., Morokoff, P.J. (1991). The U.R.I. Lifestyle Survey. Unpublished survey. University of Rhode Island, Kingston, R.I.

Harlow, L.L., Quina, K., Morokoff, P.J., Rose, J., & Grimley, D. (1993). HIV risk in women: A multi faceted model. Journal of Applied Bio-Behavioral Research, 1, 3-38.

Harlow, L.L., Morokoff, P., Quina, K. (1991, August). Predictors of AIDS-related risk taking in college women. Paper presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Herold, E.S. & McNamee, Jane.E. (1982). An explanatory model of contraceptive use among young single women. Journal of Sex Research, 18(4), 289-304.

Hester, N.R., & Macrina, D.M. (1985). The health belief model and the contraceptive behavior of college women: Implications for health education. Journal of American

- College Health, 33(6), 245-252.
- Hollandsworth, J.G. (1977). Differentiation of assertion and aggression: Some behavioral guidelines. Behavior Therapy, 8, 347-352.
- Hughes, J.O., & Sandler, B.R. (1988). Peer harassment hassles for women on campus. Project on the Status and Education of Women. Association of American Colleges. September, 1988.
- Hynes, M.J., & Bruch, M.A. (1985). Social skills and responses in simulated contraceptive problem situations. Journal of Sex Research, 21(4), 422-236.
- Jesser, C.J. (1978). Male responses to direct verbal sexual initiation of females. Journal of Sex Research, 14, 118-128.
- Johnsen, L.W. (1993). The relationship between childhood sexual abuse and reported HIV risk behavior: A structural equation model. Unpublished dissertation. University of Rhode Island, Kingston, RI.
- Johnson, Earvin (1992). Safer sex: What you can do to avoid AIDS. Sydney. Arrow Books.
- Kahn, S.E. (1981). Issues in the assessment and training of assertiveness with women. In J.D. Wine & M.S. Smye (Eds.) Social Competence. New York: Guilford Press.
- Kalichman, S.C., Hunter, T.L., & Kelly, J.A., (1992). Perceptions of AIDS susceptibility among minority and non-minority women at risk for HIV infection. Journal of Consulting and Clinical Psychology, 60, 725-732.

- Kamarovsky, M. (1976). Dilemmas of Masculinity: A study of college youth. New York: Norton.
- Kelley, C. (1979). Assertion training: A facilitator's guide. La Jolla, California: University Associates.
- Kegeles, S.M., Adler, N.E., & Irwin, C.E. (1988). Sexually active adolescents and condoms: Changes over one year in knowledge, attitudes and use. American Journal of Public Health, 78(4), 460-461.
- Kidder, L.H., Boell, J.L., & Moyer, M.M. (1983). Rights consciousness and victimization prevention: Personal defense and assertiveness training. Journal of Social Issues, 39, 153-168.
- Kirschner, S.M., & Galassi, J.P. (1983). Person, situational and interactional influences on assertive behavior. Journal of Counseling Psychiatry, 30(3), 355-360.
- Koss, M.P. (1985). The hidden rape victim: Personality, attitudinal, and situational correlates. Psychology of Women Quarterly, 9, 193-212.
- Lang, M., Gallagher, P., Morokoff, P., Harlow, L., & Quina, K., 1992. Alcohol use and AIDS risk among college students. Unpublished manuscript, University of Rhode Island, Kingston, R.I.
- Lange, A.J., & Jakubowski, P. (1976). Responsible assertive behavior. Champagne, IL: Research Press.
- Lao, R.C., Upchurch, W.H., Corwin, B.J., & Grossnickle, M. (1975). Biased attitudes toward females as indicated by ratings of intelligence and likability. Psychological

Reports, 37, 1315-1320.

Lazarus, A.A. (1971). Behavior therapy and beyond. New York: McGraw Hill.

Lazarus, A.A. (1973). On assertive behavior: A brief note. Behavior Therapy, 5, 549-554.

Lewin, M. (1979). Understanding psychological research. New York: Wiley.

Lewin, M. (1985). Unwanted intercourse: The difficulty of saying no. Psychology of Women Quarterly, 9, 184-192.

Linehan, M.M., (1984). Interpersonal effectiveness in assertive situations. In E.A. Blechman (Ed.), Behavior modification with women. New York: Guilford Press.

Loferski, S., Quina, K., Harlow, L., & Morokoff, P. (1992). Will the pain ever stop? Abuse and AIDS in women. Paper presented at the National Conference of the Association of Women in Psychology, Long Beach, CA.

MacCorquedale, P.L. (1984). Gender roles and premarital contraception. Journal of Marriage and Family, 46(1), 57-63.

MacDonald, M.L. (1982). Assertiveness training for women. In J.P. Curran and P.M. Monti (Eds.) Social skill training: a practical guide for assessment and treatment. New York: Guilford Press.

Manning, D., Balson, P.M., Barenberg, N., Mizell-Moore, T. (1989). Susceptibility to AIDS: What college students do and don't believe. College Health, 38, 67-73.

Meehan, E.F. & Goldkopf, D.A. (1982). Effects of attitudinal

- restructuring of multi-faceted assertiveness training for women. Journal of Urban Psychiatry, 2, 38-44.
- Muehlenhard, C.L. (1988). Do women say no when they mean yes? The prevalence and correlates of women's token resistance to sex. Journal of Social and Personality Psychology, 54, 872-879.
- Muehlenhard, C.L. & Hollabaugh, L.C. (1983). Women's assertion and the female sex-role stereotype. In V. Franks and E.D. Rothblum (Eds.), The stereotyping of women: Effects on mental health. New York: Springer.
- Muehlenhard, C.L., Julsonnet, S., Carlson, M.I. & Flarity-white, L.A. (1989). A cognitive-behavioral program for preventing sexual coercion. The Behavior Therapist, 12, 211-214.
- Muehlenhard, C.L., & McCoy, M.L. (1991). Double Standard, Double Bind. Psychology of Women Quarterly, 15, 447-461.
- Osborne, S.M., & Harris, G.G. (1975). Assertive training for women. Springfield, IL: Charles C. Thomas.
- Parlee, M.B. (1979). Conversational Politics. Psychology Today, 12, 48-56.
- Paxson, M.A., & Quina, K. (1989, August). Sexually active vs. inactive women's attitudes and knowledge concerning contraceptive use. Paper presented at the meeting of the American Psychological Association, New Orleans, LA.
- Phelps, S., & Austin, N. (1987). The assertive woman: A new

- look. San Luis Obispo, California: Impact.
- Prochaska, J.O., Velicer, W.F., DiClemente, C.C. & Fava, J. (1988). Measuring processes of change: Applications to the cessation of smoking. Journal of Consulting and Clinical Psychology, 56, 520-528.
- Quina, K., Harlow, L.L., Gibson, P., & Morokoff, P.J. (1990, August). Psychometric investigation of a sexual assertiveness scale. Paper presented at the annual meeting of the American Psychological Association, Boston, MA.
- Rakos, R.F. (1991). Assertive behavior: Theory, research and training. New York: Routledge.
- Rathus, S.A. (1973a). A 30 item schedule for assessing assertive behavior. Behavior Therapy, 4, 398-406.
- Rathus, S.A. (1973b). Instigation of assertive behavior through videotape mediated assertive models and directed practice. Behavior Research and Therapy, 11, 57-65.
- Redding, C. (1993). The transtheoretical model applied to safer sex behavior among university students, a cross-sectional investigation. Unpublished dissertation. University of Rhode Island, Kingston, R.I.
- Reilly, M.E., Lott, B. & Gallogly, S.M. (1986). Sexual harassment of university students. Sex Roles, 15(7/8), 333-358.
- Resick, P.A., Jordan, C.G., Girelli, S.A., Hutter, K.R., & Marhoefer-Dvora K,S. (1988). A comparative outcome

- study of behavioral group therapy for sexual assault victims. Behavior Therapy, 19, 385-401.
- Rodriguez, R., Nietzel, M.T., & Berzins, J.I. (1980). Sex role orientation and assertiveness among female college students. Behavior Therapy, 11, 353-366.
- Rossi, J. (1993). Personal communication and use of unpublished computer program MANPOWER. University of Rhode Island, Kingston, RI.
- Rudy, T.E., Merluzzi, T.V., Henahan, P.T. (1982). Construal of complex assertion situations: A multidimensional analysis. Journal of Consulting and Clinical Psychology, 50(1), 125- 137.
- Russell, D. & Howell, N. (1983). The prevalence of rape in the U.S. revisited. Signs, 8, 344-346.
- Sirkin, M.I., & Mosher, D.L. (1985). Guided imagery of female sexual assertiveness: Turn on or turn off? Journal of Sex and Marital Therapy, 11(1), 41-50.
- Spees, E.R. (1987). College students' sexual attitudes and beliefs, 1975-1985: A review of the literature. Journal of College Student Personnel, 28(2), 135-140.
- Strunin, L. & Hingson, R. (1987). AIDS and adolescents: Knowledge, beliefs, attitudes and behavior. Pediatrics, 79, 825-828.
- Taubman, B. (1976). How to become an assertive woman: The key to self-fulfillment. New York: Pocket Books.
- Thompson, L. & Spanier, G.B. (1978). Influence of parents, peers and partners on the contraceptive use of college

- men and women. Journal of Marriage and the Family, 40, 481-492.
- Waksman, S.A. (1984). A controlled evaluation of assertion training with adolescents. Adolescence, 74, 277-282.
- Weinstein, N.D. (1984). Why it won't happen to me: Perception of AIDS risk factors and susceptibility. Health Psychology, 3(5), 431-457.
- Wildman, B.G., & Clementz, B. (1986). Assertive, empathic assertive, and conversational behavior: Perception of likability, effectiveness and sex-role. Behavior Modification, 10, 472-486.
- Wolpe, J. (1958). Psychotherapy and reciprocal inhibition. Stanford, CA: Stanford University Press.
- Workman, J.F., Bloland, P.A., Grafton, C.L., & Donald, L. (1987). Changes in self-concept, locus of control, and anxiety among female college students as related to assertion training. Educational Research Quarterly, 11(2), 21-28.
- Young, E.R., Rimm, D.C. & Kennedy, T.D. (1973). An experimental investigation of modeling and reinforcement of assertive behavior. Behavior Research and Therapy, 11, 317-319.
- Zierler, S., Feingold, L., Laufer, D., Velentgas, P., Kantrowitz-Gordon, I., & Mayer, K. (1991). Adult survivors of childhood sexual abuse and subsequent risk of HIV infection. American Journal of Public Health, 81, 572-575.