

**THE WOMEN'S HEALTH PROJECT: A COMMUNITY INTERVENTION
FOR AIDS RISK REDUCTION IN WOMEN**

by

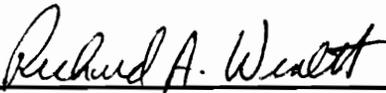
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in

Psychology

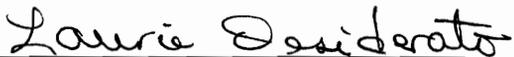
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ABSTRACT

Since early 1983, the incidence and prevalence of heterosexually transmitted AIDS among women have increased at an alarming rate. However, due to the conceptualization of AIDS as a "gay male" disease, little research attention has been devoted to the prevention of HIV infection among women. The purpose of the current intervention was to test the utility of extending a behavioral social influence/diffusion of innovation approach to a group of heterosexual women. A randomized experimental field design was used to compare a community intervention (AIDS education materials plus the training of individuals identified as key opinion leaders to serve as peer behavior change agents) with a comparison intervention (AIDS education materials alone). The study was conducted at a small liberal arts college for women.

Two dormitories were randomly assigned to either an intervention or comparison condition. Twenty-four women, living in

the intervention dormitory, were identified as key opinion leaders among their female peers. These key opinion leaders then received information concerning the basic epidemiology of AIDS and other STDs, misconceptions about the transmission of AIDS/STDs among heterosexual women, gender constraints that impact health behavior change among women, and practical risk reduction strategies. Opinion leaders also received training in specific conversation skills to endorse HIV-protective behavior and to convey a change in normative sexual behavior to women living in the intervention dormitory.

At pre- and postintervention, 580 surveys were collected from both the intervention and comparison dormitories. Using an anonymous identification code, survey data were matched for 192 comparison and intervention participants. The major dependent variables included (a) AIDS/STD risk behavior knowledge, (b) perceived risk, (c) perception of peer norms for HIV-risky and HIV-protective behaviors, (d) stage of health behavior change, (e) intentions to practice safer sex, (f) socially and sexually assertive behavior, (g) HIV-risky sexual behavior, and (h) alcohol and drug use. Condom-taking behavior provided a nonreactive measure of behavioral intentions.

A number of direct training effects were found for the key opinion leaders, including an increase in AIDS/STD risk behavior knowledge, conversation skills, and empathic assertion. However, there was no change in behavioral intentions, stage of change,

perceptions of peer norms for HIV-protective behavior, or reported HIV-risky behavior.

Analysis of covariance on posttest scores, using pretest scores as covariates, showed that, relative to the comparison participants, the intervention participants increased their AIDS/STD risk behavior knowledge and the number of AIDS/STD related peer conversations. No other treatment effects due to diffusion of innovation were found. The rate of risky sexual behavior for the intervention period was relatively low. However, descriptive statistics revealed a pattern of HIV-risky behavior in the current sample suggesting that HIV/STD risk may increase over time as a function of unprotected vaginal and oral intercourse and serial monogamy. The implication of these findings are discussed in terms of future interventions targeting heterosexual women.

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Introduction

As of June, 1992, 230,179 persons in the United States were diagnosed with Acquired Immune Deficiency Syndrome or AIDS (Centers for Disease Control; CDC, 1992). When the human immunodeficiency virus (HIV) was first isolated in 1984, Margaret Heckler, then Secretary of Health and Human Services, predicted that a discovery of a treatment was forthcoming. In 1988, the chair and chief executive of Merck, one of the world's leading pharmaceutical companies and a preeminent discoverer of drugs, announced that a safe and effective AIDS treatment would be available in five years (Waldholz, 1992). Yet, despite the early optimism expressed by these promises and a decade of intensive biomedical research, a vaccine or cure for AIDS remains, at best, a distant hope for the future (Anderson & May, 1992). In the absence of an effective biomedical intervention, behavior change strategies offer the only option.

Background

Currently, women comprise a small percentage (approximately 10.6%) of reported AIDS cases in the United States — 24,323 females as compared to 210,956 males. In addition, 75% of reported AIDS cases continue to occur among gay or bisexual males or among male intravenous (IV) drug users (CDC, 1992). However, the incidence of

HIV attributable to heterosexual contact is increasing while the incidence of HIV attributable to gay/bisexual contact appears to be gradually decreasing.

Since 1986, the number of AIDS cases among women has increased 600%, with a current growth rate of infection two and one-half times faster than for men (Rodin & Ickovics, 1990). At present, there are an estimated 100,000 women who are HIV positive, and it is expected that a majority of these women will eventually develop full-blown AIDS, the end stage of HIV infection. In 1987, AIDS was the eighth leading cause of death for women under the age of 45; at the end of 1991, AIDS became the fifth leading cause of death for women in this age group, with 85% of women with AIDS between the ages of 15 and 44 years (CDC, 1992). This pattern of infection raises complex problems pertaining to fertility and reproduction. For example, the rise in the number of women with AIDS is paralleled by an increase in the number of pediatric AIDS cases (Guinan & Hardy, 1987). This increase in pediatric AIDS has led to widespread public debate over mandatory sterilization and/or mandatory abortions for HIV-seropositive women (Campbell, 1990; Murphy, 1988).

Epidemiological analyses indicate that women of color are disproportionately represented among women with AIDS: Fifty-two percent are Black, 20% are Hispanic, and 27% are White (CDC, 1992). However, MacDonald (1986) has suggested that estimates of AIDS among non-ethnic women have been more difficult to assess due to a lack of research on the prevalence of AIDS outside of established high-

risk groups. In addition, gender differences in the clinical manifestation of AIDS may result in a misdiagnosis of AIDS (Ickovics & Rodin, 1992), further obscuring the epidemiological patterns of the disease. The CDC (1991) is currently working to expand the definition of AIDS to include often-overlooked gynecological problems, which are typically the first sign of AIDS in women. Consequently, the reported number of women with AIDS has the potential to increase dramatically.

The transmission of AIDS among women (Figure 1) depends heavily upon two primary risk behaviors: IV drug use (50%) and heterosexual contact with an infected partner (34.4%). In approximately seven percent of AIDS cases among women, the transmission route is “undetermined,” with the individual reporting “no known risk factors” (CDC, 1992). Mondanaro (1987) has asserted that some portion of the women in this subcategory represents

Insert Figure 1 about here

second-generation transmission (i.e., having had sex with men who were themselves not in a high-risk category but who had had sex with others who were). Thus, heterosexual contact may account for as much as 42% of the AIDS cases among women. With roughly two percent of HIV-positive males currently infected via heterosexual contact, this pattern of transmission differentiates infected women from infected men (Rodin & Ickovics, 1990).

Guinan and Hardy (1987) have proposed two factors that may account for a larger number of heterosexually contracted HIV cases among women: (a) The greater proportion of infected males in the population increases the likelihood that a woman may encounter an infected partner, and (b) male-to-female transmission of HIV may be more efficient than female-to-male transmission. Padian, Shiboski, and Jewell (1990) reported that male-to-female transmission of HIV infection is 12 times more efficient than female-to-male transmission. In addition, both anal intercourse and vaginal intercourse have been shown to allow for viral transmission of HIV infection (European Study Group, 1989; Fischl et al., 1987).

Patterns of HIV-Risky Sexual Behavior

Gay and Bisexual men

A number of studies involving gay men in AIDS epicenters have demonstrated substantial reductions in high-risk behavior since the early 1980s (Coates, Stall, & Hoff, 1990; Martin, 1987; McCusker et al., 1988). However, long-term maintenance of risk reduction has been more elusive with a substantial portion of gay and bisexual men relapsing to HIV-risky sexual behavior (Ekstrand & Coates, 1990; Kelly, St. Lawrence, & Brasfield, 1991).

Heterosexuals

Because of the longer-term tracking and greater incidence and prevalence of AIDS cases in the gay and bisexual male community, the majority of HIV prevention studies has focused on these so-called "high-risk groups," with little attention to HIV-infected women

(Murphy, 1988). Heterosexually active women, however, who engage in high-risk behaviors, are at significant risk of HIV infection (Gagnon et al., 1989). For example, HIV is primarily a heterosexually contracted disease in the countries of sub-Saharan Africa, with a similar number of infected women and men (Anderson & May, 1992). In the United States, a study of blood samples collected at college health centers found that one in 500 students tested positive for HIV (Gayle et al., 1990). While generalization of these data indicates that approximately 60 students out of 30,000 may be infected, Cline and Engel (1991) have proposed that the traditional college-age population may actually be in the midst of an age group which is at very high risk for HIV infection due to the average latency period for AIDS (eight to ten years). Thus, the 600% increase, from 8,911 reported AIDS cases among 20- to 24-year-olds to 54,713 reported AIDS cases among 30- to 34-year-olds (CDC, 1992), may represent cases of AIDS that were acquired by college-age individuals.

The increase in other sexually transmitted diseases (STDs) provides further evidence that patterns of HIV-risky sexual behavior exist among heterosexuals: Congenital syphilis virtually tripled between 1983 and 1985 (CDC, 1988); in 1988, an estimated 12 million new cases of STDs occurred in the United States with three diseases--chlamydia (4 million cases), trichomoniasis (3 million), and gonorrhea (1.8 million)--accounting for nearly three-quarters of the total cases. It is estimated that 2.5 million adolescents between the ages of 13 and 19 are infected with an STD each year (CDC, 1990).

The health consequences of bacterial STDs include pelvic inflammatory disease, cervical cancer, ectopic pregnancy, and infertility (Rosenberg, Davidson, Chen, Judson, and Douglas, 1992). Additionally, research indicates that certain STDs facilitate the transmission of HIV. For example, cross-sectional studies of both gay and bisexual men and male and female heterosexuals have found a strong correlation between a history of syphilis and HIV infection. Herpes simplex virus also may place an individual at a greater risk for HIV infection (Piot & Laga, 1985).

Despite the epidemic increase in syphilis and gonorrhea and the emergence of herpes simplex, chlamydia, and HIV in the past two decades (CDC, 1990), heterosexual adolescents and adults have made little change in their risky sexual behavior (Becker & Joseph, 1988). For example, in a study of women utilizing gynecological services at a university health clinic for the years 1975, 1986, and 1989, DeBuono, Zinner, Daamen, and McCormack (1990) found that the proportion of women who had three or more male sexual partners or six or more male sexual partners remained unchanged; the proportion of women who engaged in unprotected oral and anal intercourse also remained unchanged. The use of condoms as a primary means of birth control increased from six percent in 1975 to 14% in 1986 to 25% in 1989 and the "regular" use of condoms during sexual intercourse increased from 12% in 1975 to 21% in 1986 to 41% in 1989. Yet, 58% of the women surveyed in 1989 reported seldom or never using condoms. Additionally, when asked about changes in their sexual practices,

respondents in 1989 noted that they engaged in risky sexual behavior more often, at that time, than they had in the past.

In a survey of 5,514 college students (aged 16-24 years), MacDonald et al. (1990) found that only 15.6% of coitally active women reported always using condoms; in comparison, nearly 25% of coitally active men reported always using condoms. Among women and men with ten or more sexual partners, 7.5% of the women, compared to 21.3% of the men, reported regular condom use, even though over twice as many women as men in this subcategory reported a history of STDs. Similarly, Butcher, Manning, and O'Neal (1991) found that 61% of college students reported never or only infrequently using condoms during sexual intercourse.

In a more recent study of 300 women (13 to 51 years of age) attending county and urban health centers, 91% of the participants indicated that they believed that the use of condoms could reduce a woman's risk of HIV infection. However, only 17.1% reported regular condom use, with 71.7% of the respondents over 30 years of age reporting that they had never used condoms (Richter, Sy, Mukhtar, Addy, & Macera, 1992). At inner-city STD clinics, the percentage has been found to be even lower, with only three percent of the men and four percent of the women reporting consistent use of condoms (Quinn et al., 1988).

A number of barriers to the use of condoms have been identified: the belief that condoms reduce pleasurable sensation during intercourse, the perception that condoms are primarily a

contraceptive device rather than protection against STDs, a perception of low vulnerability to disease, the belief that the use of a condom is unacceptable to one's partner, the use of alcohol and/or drugs during sex, the embarrassment of purchasing condoms, and the belief that using condoms compromises the spontaneity of sex (Siegel & Gibson, 1988; Strader & Beaman, 1989). The failure to anticipate and prepare for sexual activity has also been associated with a lack of condom use. For example, Frost and McCluskey-Fawcett (1988) found that a majority of 232 college students surveyed rarely planned ahead for birth control: Sixty-five percent of the men and nearly 75% of the women reported discussing birth control either immediately before or immediately after having sexual intercourse or not at all. As well as reflecting a lack of anticipation and preparation for sexual activity, these findings suggest miscommunication or a lack of communication within the heterosexual dyad.

For example, Goldsmith, Gabrielson, and Gabrielson (1972) reported that 70% of sexually active teenaged women endorsed the statement, "I feel I shouldn't have intercourse at all, so I won't plan ahead or use birth control." Yet, Hale (as cited by Ingersoll, 1981) reported that adolescent males typically believe that birth control is a female responsibility. Similarly, Kegeles, Adler, and Irwin (1988) found that both male and female adolescents acknowledged that using condoms is a valuable defense against STDs, but females reported that they had little or no intention of using them. Males indicated that they intended to use condoms in the future, but the strength of this

intention decreased over the course of a year. The young women in the study also endorsed statements indicating that they were uncertain about whether males wanted to use condoms. In contrast, males in the study endorsed the belief that their partners wished them to use condoms, despite the fact that the women reported feeling mildly negative about their partners using condoms.

This apparent lack of communication concerning birth control methods may be attributed, in part, to the discomfort many individuals experience in acknowledging the intention to have sex (Frost, McCluskey-Fawcett, & Sharp, 1989). For women in particular, there are powerful social and cultural sanctions against planning to have sexual intercourse. For example, when young women 16 to 17 years of age, attending an informal focus group, were asked to discuss the circumstances surrounding their participation in sexual intercourse, many of them expressed the opinion that it is unacceptable for a woman to plan to have sexual intercourse and reported that they regularly use alcohol as a means of allowing themselves to “get carried away” (i.e., have sex) (Winett, Anderson, Sikkema, Hook, & Webster, 1990). Thus, it would be unlikely that these women would be willing or able to initiate a discussion concerning the use of safer-sex measures such as condoms. McKusick, Hoff, Stall, and Coates (1991) found that when heterosexual females do use HIV risk-reduction strategies, they frequently use passive strategies, such as looking for good hygiene or drunkenness or listening for sexist attitudes, rather than active strategies, such as requesting condom use.

Several factors that facilitate condom use have been identified. For example, Valdiseri, Arena, Proctor, and Bonati (1989) found that women who were most likely to use condoms believed that condoms could facilitate sexual enjoyment, that male partners and peers advocated condom use, and that condoms should be advertised more. Similarly, Solomon and DeJong (1989) found that clients at an STD clinic who viewed an educational videotape, depicting a woman successfully persuading her boyfriend to use a condom, were more knowledgeable and more tolerant about condom use. The clients were also more likely to redeem coupons for free condoms at the clinic. Thus, perceptions about the social acceptability of condom use appear to facilitate risk-reduction behaviors and more positive attitudes toward condom use. Table 1 presents a summary of factors that are potential barriers and facilitators for condom use among heterosexual men and women.

Insert Table 1 about here

Current Psychological Interventions

Cognitive/behavioral interventions involving training in assertion, behavioral self-management, and social support development have been implemented and evaluated for both gay men (Kelly, St. Lawrence, Hood, & Brasfield, 1989) and for heterosexuals (Franzini, Sideman, & Dexter, 1988; Sikkema, 1991). Based primarily on social learning theory (Bandura, 1977), behavioral interventions for

HIV prevention are innovative and distinct from more general health education programs in that they focus on explicit training of the behavioral skills necessary to effect health behavior change. However, the results from studies employing cognitive/behavioral strategies have been mixed, with significant behavior change occurring among gay men (Kelly et al., 1989; Kelly, St. Lawrence, Betts, Brasfield, & Hood, 1990) but little change occurring among heterosexual men and women (Becker & Joseph, 1988).

For example, Franzini et al. (1988) utilized behavioral strategies (i.e., modeling, role-playing, corrective feedback, and reinforcement) to promote safer-sex behaviors (e.g., the use of condoms, avoidance of risky sexual behaviors) in a study involving 41 female and 38 male heterosexuals. The study used random assignment of participants to either a control or an experimental group. While both the control and experimental groups increased their knowledge of safer-sex behaviors, there was no difference in the participants' self-report of the implementation of safer-sex behaviors. Thus, knowledge change was not predictive of health behavior change. The authors posited that a perception of low personal vulnerability, despite the recognition that HIV is a public health threat, might account for the lack of behavior change among heterosexuals.

Sikkema (1991) conducted a more recent intervention that specifically attempted to decrease HIV-risky sexual behavior and to increase sexual assertion skills among a sample of heterosexual females. Experimental group participants, who received a

cognitive/behavioral skills training program, were found to increase their specific knowledge of HIV infection, sexual assertion skills, and self-efficacy to perform lower-risk sexual behaviors. They also reported reduction in the frequency of drug use and unprotected oral sex. However, other high-risk sexual behavior (i.e., unprotected vaginal intercourse) was unaffected by the intervention and the reduction of high-risk behaviors was not maintained at a one-month followup.

A potential weakness of Sikkema's (1991) intervention might have been insufficient attention to the impact of female assertion on the heterosexual dyad. For example, it is not clear that the presence and degree of negative male affect (e.g., anger, annoyance), a potential consequence of a woman's request for safer sex, was adequately evaluated and addressed. Consideration of female distress, which has been associated with role-inconsistent sexual behavior (Cochran & Mays, 1989; Frost et al., 1989; Winett et al., 1990), would have been useful in tailoring the intervention strategy. An equally important question involves the components of the training process itself. It is unclear whether goal setting, repeated performance of the appropriate behaviors, and the degree of positive feedback and reinforcement were sufficiently accruable for the acquisition, maintenance, and stability of the appropriate behaviors. (For a more comprehensive discussion of these training components see Winett, King, & Altman, 1989.)

Psychological and Behavioral Predictors of Health Behavior Change

Gay and bisexual men. In an effort to identify the predictors of health behavior change, several studies have examined the characteristics of gay men who have, and those who have not, altered their risky sexual behavior. For example, Stall, McKusick, Wiley, Coates, and Ostrow (1986) investigated the association between alcohol and drug use during sexual activity and the adoption of safer-sex behaviors in a three-year prospective study of gay men in San Francisco. These authors found that the quantity of drugs and alcohol used during sexual activity, the number of drugs used, and the frequency of combining drugs and sex were all positively associated with HIV-risky sexual behavior. Thus, an important antecedent to risky sexual behavior might be behavioral disinhibition or impairment in judgement due to intoxication. However, as noted above (Winett et al., 1990), individuals also may use alcohol in an apparently rational manner to give themselves permission to engage in risky sexual behavior.

McCusker, Zapka, Stoddard, and Mayer (1989) found that significant behavior change was most frequently associated with greater perceived susceptibility to and severity of AIDS, involvement with informational activities, and the beliefs of friends and sexual partners. Similarly, McKusick, Coates, Morin, Pollack, and Hoff (1990) found that the psychological and behavioral predictors for risk reduction among gay men included the ability to hold vivid visual images of the physical deterioration caused by AIDS, a high degree of

self-efficacy regarding health behavior change, agreement with safer-sex guidelines, and perceived social/emotional support.

Heterosexuals. Among heterosexuals, there is evidence that predictors of change in HIV-risky behavior may differ for males and females. For example, Cochran and Peplau (as cited by Cochran & Mays, 1989) compared the factors that led to risk reduction for a sample of coitally active women and men. Women who were more sexually experienced were more likely to alter their sexual behavior than those who were not, with previous treatment for an STD the best predictor of change in risky sexual behavior. Thus, for women, personal experience appeared to serve as a basis for a perception of high personal vulnerability and, consequently, a change in behavior. For men, the extent and degree of sexual experience did not appear to be predictive of behavior change; rather, cognitive factors (i.e., a perception of being at risk and homophobic attitudes) were more predictive of behavior change. These findings suggest that future interventions might facilitate behavior change among women by assisting them in evaluating the extent and degree that their sexual behaviors increase their personal risk for HIV infection.

Relapse Prevention

Miller, Turner, and Moses (1990) proposed that relapse prevention is a key component of any HIV prevention program since maintaining risk reduction is often more of a challenge than initiating it. Stall, Ekstrand, Pollack, McKusick, and Coates (1990) reported a number of factors predictive of relapse among gay men, including a

preference for unprotected anal intercourse and social support for high-risk sexual behavior. Additional factors reported retrospectively by the participants in the study included being in love, knowledge of a partner's seronegative status, a request from a partner for unprotected sex, drug and alcohol use, and the unavailability of condoms. Relapse has also been associated with higher levels of HIV-risky behaviors at baseline and a perception of low response efficacy (Saltzman, Stoddard, McCusker, & Mayer, 1989).

In an exemplary program, Kelly et al. (1989) attempted to address the problem of behavioral maintenance by altering the social context for low-risk and high-risk sexual behavior. The intervention involved the recruitment of socially influential gay men who were provided with social skills training to communicate HIV risk-reduction information effectively to their social contacts. Thus, behavioral maintenance was fostered by establishing normative peer influences within the social network of the gay male community for safer-sex behavior.

To further maintain health behavior change, participants were trained to examine lifestyle choices and goals for interpersonal relationships within the context of potential vulnerability to HIV and to develop low-risk sexual activities. Peer models were used to foster self-esteem and personal responsibility for physical health; behavioral skills were rehearsed, with immediate feedback and correction, to enable participants to manage future high-risk situations that might result in relapse. The data indicated that participants in the

intervention group decreased the frequency of unprotected anal intercourse to near-zero levels at long-term followup.

Community Outreach and Diffusion Strategies

One promising area of research to promote reduction of high-risk sexual behavior among gay and bisexual men has involved the use of behavioral social influence/diffusion of innovation principles. According to Rogers (1983), individual attitudes, values, and behaviors are greatly influenced by social norms, peer influence, and peer models: Innovations introduced, modeled, and endorsed by key opinion leaders within a community are most likely to result in widespread behavior change. The resulting behavior change represents a shift in social norms, which, in turn, further supports dissemination of innovation.

Informally based on diffusion of innovation models, extensive grass roots AIDS prevention efforts have been implemented among gay and bisexual men in large urban locations, particularly in the San Francisco Bay Area. These community-based, peer-supported AIDS prevention programs have worked to foster powerful community sanctions among gay men against risky sexual behavior and have provided widespread and readily available practical information and social support concerning health behavior change (Coates & Greenblatt, 1988). One such community-based program, the STOP AIDS Project, was developed in response to the conflict experienced by gay men caught between the AIDS epidemic and the sexual norms and practices of the gay community. By recruiting people from the

community to receive and disseminate knowledge about the transmission of AIDS and practical information for making health behavior changes (e.g., “always carry condoms”), the program successfully altered reference group norms, built peer support for safer-sexual behavior, and provided peer sanctions against HIV-risky behavior (Coates, 1990).

In a more empirically based application of social influence/diffusion of innovation strategies, Kelly, St. Lawrence, Diaz, et al. (1991) recruited and trained socially influential opinion leaders within a peer group of gay men to endorse behavioral norms for safer sex in an effort to produce or accelerate behavior change. Results demonstrated significant HIV risk reduction at post-intervention. For example, the proportion of men who engaged in unprotected anal intercourse dropped by 25% from baseline. There was also a 16% increase in condom use during anal intercourse and an 18% decrease in the proportion of men with more than one sexual partner. The authors noted that, since general AIDS risk knowledge was high even before intervention, knowledge may have been less critical for HIV risk reduction than was the contextual or social support provided by credible peers.

Conclusions and Implications

Byrne (1971) proposed that individuals strive to conform to group norms out of a strong motivation to be liked and accepted by others. Thus, an individual’s perception of his or her reference group’s norm for sexual behavior can be a powerful predictor of his or

her behavior. For example, Fisher and Misovich (as cited by Fisher & Misovich, 1990) found that both male and female college undergraduates avoided initiating conversation about AIDS prevention for fear of being rejected by their sexual partners.

In addition to an absence of reference group norms for safer sex, already existing normative values may impede an individual's decision and attempts to practice AIDS protective behaviors. For example, college is typically a time for sexual exploration and risk-taking (DeBuono et al., 1990; DeLamater & MacCorquodale, 1979); social gatherings frequently involve alcohol consumption and unplanned or spontaneous sexual activities (Butcher et al., 1991; MacDonald et al., 1990; Winett et al., 1990), both of which are negatively correlated with condom use (Stall et al., 1986; Siegel & Gibson, 1988). According to Fisher and Misovich (1990), until the prevailing reference group norms for HIV-risky behavior, such as casual and unprotected sex (MacDonald et al., 1990), are replaced by reference group norms for safer-sexual behavior, health behavior change is unlikely.

Given the lack of perceived vulnerability to HIV and the general absence of developed norms for safer-sexual behavior among heterosexual women (Butcher et al., 1991; MacDonald et al., 1990; Richter et al., 1992), it is reasonable to conclude that prevention intervention efforts must create normative support for behavior change. Therefore, the purpose of the current study was to test the utility of extending a behavioral social influence/diffusion of innovation approach to a group of heterosexual college women. Since little AIDS

research has focused on the special needs and characteristics of the selected population, an empirically based, graduated approach to the development of both assessment and intervention procedures appeared to be warranted. Efforts to improve both internal and external validity of the intervention were made by the use of such methods; however, due to logistical problems and the community-based nature of the project, an actual pilot test of the intervention was not feasible.

The current study consisted essentially of three research phases. Phase I involved formative research focusing on the examination of the behaviors, settings, interpersonal influences, and intimate choices of college women as they relate to HIV infection. The knowledge and understanding derived from this phase was then used to tailor the assessment instruments and peer training intervention to a sample of college women. Phase II involved the identification and recruitment of socially influential key opinion leaders within the reference group of the target population.

Phase III consisted of an experimental field study at a small liberal arts college for women. Approximately 300 undergraduate women (freshmen through seniors), residing in two campus dormitories, participated. One dormitory received an experimental peer influence intervention; a comparison dormitory received standard AIDS/STD education materials only. Behavioral surveys used to assess alcohol and drug use, personal salience of the AIDS threat, personal HIV-risk estimates, STD/HIV testing history, HIV-risky

sexual behavior, behavioral intentions, socially and sexually assertive behavior, social norm perception, and general AIDS risk behavior knowledge were completed in each dormitory. Condom-taking behavior provided a non-reactive measure of the behavioral intention to practice safer sex. The formative research is presented below followed by a description of the overall project (see Appendix A for project timeline).

Formative Research

In order to increase intervention efficacy, an empirically based, graduated approach to the development of assessment and intervention procedures was employed. Thus, research techniques derived from consumer marketing principles, involving small discussion groups known as “focus groups” (Winett et al., 1989), were used to examine the behaviors, settings, interpersonal influences, and intimate choices of college women as they relate to HIV/STD infection. The knowledge and understanding gained from the initial research were then used to tailor the assessment instruments and peer training intervention to the personal, interpersonal, and contextual demands of the target population. Additionally, the use of a focus group model or social marketing approach was an attempt to ensure that the intervention would be acceptable to, and thus maintained by, the college community at large. Figure 2 presents the flow of activities during the formative research phase.

Insert Figure 2 about here

Phase I, the formative research phase of the current project, included five focus group sessions and a survey pretest, conducted at the intervention site over a two-month period by four master’s level psychologists and six undergraduate psychology research assistants. Two of the focus groups involved the development of assessment instruments and three involved the development of intervention

methods (see Appendix B focus group protocols). Women participating in the focus groups ranged in age from 17 to 22 years, with a mean age of 19 years. The participants were residents of three mid-size dormitories that were geographically separate from both the intervention and comparison dormitories. In addition, participants typically attended only one of the five focus groups.

Participants were informed of the sexually explicit nature of the materials and apprised that group discussions would entail sexual topics that might create embarrassment or discomfort. Participants were assured that participation was completely anonymous and voluntary (see Appendix C for consent forms for focus groups). (Note: Surveys were destroyed by focus group participants at the end of each focus group session to ensure confidentiality.)

Discussion of the importance for confidentiality among focus group participants was conducted, and participants verbally pledged not to share personal information learned from others in the group. It was emphasized that participants could discontinue participation at any time and/or refuse to complete any written materials. Participants were paid \$10 for attending each focus group session.

Assessment Focus Groups

The purpose of the assessment focus groups was to explore the saliency and acceptability of the survey materials. Assessment Focus

Group I, led by two master's level psychologists (one male and one female), involved six women who were asked to discuss their knowledge of AIDS, their understanding of HIV/STD risk behavior,

and their perception of social norms concerning women and AIDS prevention. Participants were also asked to complete self-report measures of risk knowledge, risk behavior, and social norm perception concerning safer sex in an effort to determine the relevancy and accuracy of the survey questions and the degree of comfort or discomfort associated with the sexually explicit language.

Results from Focus Group I indicated that participants felt a high degree of personal comfort with the sexually explicit language of the survey questions; however, respondents recommended that non-sexually active women be routed through the questions at an earlier point to avoid fatigue and possible embarrassment and to facilitate survey completion. Suggestions concerning the specific content of the questions were also made. For example, group participants remarked that “ecstasy,” a drug described as an “aphrodisiac,” was missing from the drug assessment questions.

Following a revision of the survey, a second focus group of eight women was conducted in a similar manner to address further the saliency and acceptability of the assessment instrument: Focus Group II participants completed the survey and provided comments and suggestions for clarification of directions and greater acceptability of assessment materials. Assessment Focus Group II participants reported that the sexually explicit language of the written materials was non-offensive and acceptable. Rather, suggestions for changes in the survey tended to center on clarifying instructions and modifying language to facilitate greater understanding of the questions.

Survey Pretest

Following a second revision of the survey, a pretest of the survey was conducted with 62 undergraduate women who completed the survey utilizing a survey identification code (described below) known only to them to ensure anonymity (see Appendix D for pretest survey). These data were then collected and analyzed in terms of the respondents' knowledge, social norm perceptions, and high-risk sexual behaviors. (Note: Due to routing, rounding, and missing responses, frequencies, percentages, and number of subjects may vary.) Data analyses indicated that 83% (n = 51) of the respondents were between the ages of 18 and 19, with a mean age of 18.4 years; 90% (n = 56) were Caucasian, and 77.4% (n = 48) were freshmen.

Eighty-two percent (n = 50) of the respondents reported the use of alcohol in the past 12 months, with the greatest number of drinks consumed on weekends. Forty percent (n = 25) reported marijuana use in the past 12 months; 8.1% (n = 5) reported LSD use. Twenty-seven percent (n = 17) reported that they knew at least one person with HIV; of those, 19.4% (n = 3) knew someone with AIDS; 30% (n = 5) reported knowing someone who had died as a result of AIDS. Forty percent (n = 25) reported that their past behavior had put them at some risk for being infected with AIDS ; 30% (n = 19) reported that their current sexual partner's (or partners') behavior had placed them at risk for being infected with AIDS. Yet, only 22.6% (n = 14) reported ever being tested for an STD, and only 14.8% (n = 9) reported ever being tested specifically for HIV.

More than 85% (n = 53) of the respondents reported engaging in some form of sexual activity in the past 12 months (i.e., any behavior involving genital contact such as “heavy petting,” hand-genital contact, mutual masturbation, oral sex, or sexual intercourse). Of those that were heterosexually active, 46.5% (n = 20) reported inconsistent or no use of condoms (see Table 2). Over 33% (n = 16) of the respondents reported engaging in unprotected vaginal intercourse in the past four weeks; 40.5% (n = 17) reported engaging in unprotected vaginal intercourse in the past 12 months (see Table 3). Of those engaging in unprotected vaginal intercourse, 28% (n = 5) reported two or more sexual partners. Forty-one percent (n = 19) reported engaging in unprotected female-to-male oral-genital contact in the past four weeks. Seven percent (n = 4) of the sample reported sexual activity with another woman.

Insert Tables 2 and 3 about here

Thirty-two percent (n = 16) of the respondents reported engaging in sexual intercourse over the past 12 months with men who were also involved in sexual relationships with other women, and 38% (n = 19) reported engaging in sexual behavior with a male partner whom they saw one time and did not see again. Forty-nine percent (n = 21) reported engaging in sexual intercourse while drinking alcohol and 10.6% (n = 5) reported engaging in sexual intercourse while using drugs in the past 12 months.

In terms of norm perceptions for safer-sexual behavior, 55.7% (n = 34) of the respondents disagreed or strongly disagreed that their female friends always ask their male sexual partners to use condoms during intercourse. Forty-three percent (n = 26) indicated that they believe that their female friends say they have safe sex much more than they actually do. Ninety-seven percent (n = 60) reported that they believe it is acceptable for a woman to ask a man to use a condom; however, 29% (n = 18) believed that their female friends would agree to have unprotected sexual intercourse if their partners objected to using condoms. Eighty-three percent (n = 50) indicated that their female friends respect a woman who makes sure her partner uses a condom, but 22.5% (n = 14) noted that they believe that a woman who plans to have sex is perceived as "sleazy."

A high level of AIDS knowledge was indicated by the survey. Seventy-seven percent of the questions were answered correctly by at least 80% (n = 50) of the respondents. For example, 91.9% (n = 57) of the respondents correctly indicated that, for women, unprotected anal intercourse with a male partner is a potentially high-risk activity for contracting the AIDS virus. Ninety-three percent (n = 58) disagreed that condoms make sexual intercourse with a male partner completely safe from AIDS, and 100% (n = 62) disagreed that male withdrawal immediately before orgasm makes intercourse safe from AIDS.

However, 55.7% (n = 34), 45% (n = 27), and 31.7% (n = 19), respectively, believed that a positive result for the AIDS virus antibody

test cannot occur for people who do not carry the virus, that most of the current AIDS cases are due to blood transfusions that took place before 1984, and that not much is known concerning how the AIDS virus is transmitted. Twenty-two percent (n = 14) believed that sharing a bathroom with a person with AIDS poses a health risk to others, and 23.3% (n = 14) indicated that IV drug users become exposed to the AIDS virus because the virus is often contained in the injected drug itself. Thus, while overall AIDS information and knowledge appeared to be high, some striking misconceptions were exhibited by the respondents.

Intervention Focus Groups

The purpose of the intervention focus groups was twofold. First, based on the principle that interventions are best developed from the perspective of those they serve, efforts were made to determine under what conditions women would become participants in an ongoing training group that would ask them to talk about the potentially frightening subject of AIDS and to share information concerning their sexual behavior with others. Second, since little is known concerning the cognitive, behavioral, and social components of high-risk sexual behavior among women, AIDS/STD attitudes and knowledge, as well as sexual assertion skills, norm perception, and barriers to safer-sexual behaviors for women, were explored. For example, participants were asked the following questions: "What is your basic understanding of AIDS?...Of STDs?" ; "Do you view AIDS/STDs as a personal health threat?" ; "Have you ever known someone with AIDS?" ; "What

HIV/STD prevention measures do you currently use?" In addition, the costs and benefits for requesting safer sex were investigated, and sexual assertion skills were assessed.

Respondents revealed a relatively high degree of AIDS information and knowledge (e.g., that condoms offer good protection from the AIDS virus during sexual intercourse; that reducing the number of sexual partners does not completely eliminate the risk of HIV/STD infection). However, misinformation (e.g., the belief that both latex and animal skin condoms offer similar protection from the AIDS virus) was also evident. In terms of condom use, participants indicated that they use condoms for birth control, not for AIDS/STD prevention. The women also noted that they did not like the condoms available in the dormitory dispensers, because the condoms were "too flimsy" and often "broke" during use. Other participants indicated that they were in monogamous relationships or dated only "college men" and, thus, felt safe. However, the longest duration for an ongoing relationship reported by the focus group participants was three months.

Participants stated that the use of alcohol during sex was widespread, with many women becoming intoxicated as a way of giving themselves permission "to get carried away and have sex." This finding is consistent with an earlier study by Winett et al. (1990). Discussants indicated that they believed that "one-night stands," as well as an increase in "involuntary" sexual activity for women, occurred more often after alcohol use. While marijuana and "ecstasy"

were noted as drugs that are somewhat common on campus, other drugs (e.g., cocaine and LSD) were said to be used infrequently or not at all.

When asked to respond to role-play situations requiring sexual assertion skills, the respondents were not able to demonstrate the skills necessary for requesting safer sex. For example, when asked to generate a response to a role-play of a male partner who refuses to use a condom, none of the women was able to respond. Further, the participants indicated that they were very uncomfortable asking their male sexual partners to use condoms, since planning sexual activity has the potential to make women appear to be sexually promiscuous or “loose.”

Approaches for changing group norms via conversations with peers were also explored. Participants stated that they would not feel comfortable “hassling” others about their sexual behavior but agreed that empathic, endorsement-style conversations involving personal testimony (i.e., “I” statements) might be more acceptable and better received by peers.

Conclusions

Based on the results from the assessment and intervention focus groups and the survey pretest, the following changes were instituted in the overall training program:

1. Both STD and HIV knowledge and information were presented with an emphasis on the physical, mental, and social

consequences of STDs for women (e.g., the stigma of having an STD and infertility problems).

2. More intensive sexual assertion skills training, including modeling and feedback from peers and group leaders, was incorporated.

3. Cognitions that were incompatible with health behavior changes (e.g., “Women who carry condoms are sexually promiscuous”) were addressed and restructured to foster HIV/STD protective behavior (e.g., “Women who carry condoms are sexually responsible”).

4. Communication skills training was structured to emphasize empathic, nonjudgemental “I” statements.

In addition, the following changes were made to the assessment instruments and methods:

1. The survey was revised to more specifically and accurately assess HIV-risky and HIV-protective behaviors.

2. Condoms were placed in dormitory bathrooms in easily accessible but discrete locations.

Experimental Design and Method

General Experimental Design

The current project used a randomized experimental field design to compare a community intervention (AIDS education materials plus the training of individuals identified as key opinion leaders to serve as peer behavior change agents) with a comparison intervention (AIDS education materials alone). The study was conducted at a small liberal arts college for women in Virginia. Located on 450 acres, the college is primarily residential with approximately 825 undergraduate women. An additional 175 female and male commuter students are enrolled in various graduate programs. Roughly 80% of the student body is between the ages of 18 and 22 years; approximately 10% are minority students.

There are five residential dormitories on the campus, ranging in capacity from 25 to 220 students at any given time. Two dormitories, encompassing the largest and most heterogeneous campus samples, were randomly assigned to either the intervention ($n = 200$) or comparison condition ($n = 180$). At baseline, data were collected in both the intervention and comparison dormitories to determine alcohol and drug use, personal salience of the AIDS threat, stages of change as related to HIV prevention, personal risk estimates, STD/HIV serostatus testing history, HIV-risky sexual behavior, behavioral intentions, socially and sexually assertive behavior, social norm perception, number and social validity of AIDS/STD prevention

conversations, general AIDS/STD risk knowledge, and condom-taking behavior. Assessments were repeated for all dependent measures in both dormitories at postintervention. This was a completely anonymous study; all survey and assessment data included only a self-generated code (described below).

Setting

Criteria used to select the intervention site were (a) a college with a relatively large female population and (b) a large number of residential women living in separate dormitories on campus. Dormitories were found to be matched on population, age, educational level, and racial makeup. While there was some risk of contamination of results because of the comparatively small geographical size of the campus, this risk was minimized by selecting key opinion leaders who were the most influential within their own dormitories. In addition, discussions with college personnel indicated that each dormitory had a relatively cohesive residential population with a strong sense of identity (e.g., particular events [parties] are often restricted to specific dormitories). Appendix E summarizes demographic characteristics of the intervention site.

Measures and Data Collection

All measures, data collection, and intervention procedures were standardized for both dormitories. This standardization was accomplished through the use of common protocols and materials.

Baseline data were collected in each dormitory to assess a number of variables related to AIDS risk behavior patterns. The self-

report questionnaire employed in the study was closely modeled after assessment instruments used by Kelly et al. (1989) and D. Murphy (personal communication, August 26, 1991) with gay men and inner-city women, respectively. Items were eliminated, added, and altered as described above in an attempt to create a fit more appropriate to the target population.

In order to determine (a) whether the norms changed and then the behaviors changed or vice versa and (b) whether individuals who reported high levels of risk behavior exhibited greater or lower rates of behavior change in relation to other groups, it was important to track individual data across all phases of the study. Therefore, a self-generated code that has been used in other studies of AIDS behavior change (Roffman, P. I.; NIMH Grant #5RO1MH44099) was employed. Each participant was asked to create a code consisting of her first initial, her mother's first initial, the last two numbers in her social security number, and the day of her birth. This procedure allowed for the tracking of individual data while protecting the anonymity of the participants. Thus, the potential for anyone involved with the project or the campus personally identifying a participant was greatly reduced or eliminated.

Dependent Measures

Over five consecutive days, preintervention survey data were collected for each dormitory. Women were asked to complete a paper-and-pencil questionnaire with a self-generated code as the only identification used (see Appendixes F and G for survey table of

contents and a copy of the survey). Surveys were placed in unsealed manila envelopes and distributed door-to-door within the intervention and comparison dormitories by project staff members. If a dormitory resident were not in her room, a second attempt to hand deliver the survey was made within the next 24 hours. After two unsuccessful attempts, a survey was left either under or immediately outside the dormitory room door, along with a written request to complete the survey. Additionally, project staff members approached dormitory residents, as they entered and exited the building, with a request to complete a survey. Survey collection involved pickup of surveys, sealed in manila envelopes, door-to-door and from designated drop-off points within the dormitories. Project staff members also prompted residents, via numerous verbal reminders and appeals, to complete and hand in surveys.

The proportion of the sample completing the measure was calculated based on the number of dormitory residents ($N = 380$). Thus, based on a return of 309 surveys, it was estimated that preintervention data were collected from approximately 81.3% of the dormitory residents over the total five days. At postintervention, 71.3% ($n = 271$) completed the survey measures. However, due to respondent coding errors and omissions, as well as the fact that some number of individuals who completed a survey at pre- or postintervention may not have completed a second survey, only 192 surveys could be matched. Attempts were made to manually match those codes that were similar (e.g., those codes at pre- and

postintervention that were identical except for one or two digits). However, it was possible to match only four participants in this fashion, which did not allow analyses on these data. Thus, data analyses were based on responses from approximately 50% of the total sample. Additionally, separate analyses were performed to determine whether there were pretreatment and/or posttreatment differences between individuals represented by matched (i.e., both pre- and posttreatment data) versus those represented by unmatched codes (pretreatment or posttreatment data only).

The assessment instrument took approximately 25 minutes to complete and included the following subscales:

1. demographic information (survey items 1 - 4);
2. alcohol and drug use (items 5 - 40);
3. personal salience or perceived "closeness" of AIDS threat (items 41 - 44);
4. stages of change for HIV/STD prevention (items 46 - 52);
5. perceived risk (items 53 - 56);
6. STD/HIV serostatus testing history (items 57 - 66);
7. HIV-risky sexual behavior (items 68 - 118);
8. behavioral intention to practice safer sex (items 119 - 121);
9. socially and sexually assertive behavior (items 122 - 131);
10. perception of peer norms concerning the acceptability of safer-sex practices and risk avoidance (items 132 - 141);
11. a manipulation check (number and acceptability of peer conversations concerning safer sex; items 142 - 146); and

12. AIDS/STD risk behavior knowledge (item 147 - 180).

Items 45 and 67 served as routing questions for non-sexually active participants. Where appropriate, Cronbach's (1951) coefficient alpha estimate of internal consistency was used to assess reliability (see Table 4).

Insert Table 4 about here

Alcohol and drug use. Respondents were asked to indicate the number of alcoholic drinks, the frequency and pattern of alcohol consumption, and the settings and occasions of alcohol consumption for the past four weeks and twelve months. Respondents were also asked to indicate the frequency of non-prescription drug use (i.e., marijuana, cocaine, hallucinogens, "ecstasy," amphetamines, and I.V. drugs) over the past four weeks and twelve months. The period of four weeks was selected to allow for greater accuracy in recall of behavior, as well as to serve as a preintervention baseline. The twelve-month period was selected to allow for assessment of behavioral patterns. These time periods have been used successfully in previous AIDS research (Kelly et al., 1989; D. Murphy, personal communication, August 26, 1991).

Personal salience of AIDS threat. Respondents were asked to indicate the number of their friends or acquaintances who are HIV-seropositive, who have been diagnosed with AIDS, or who have died as a result of AIDS. These items were directed at assessing the personal

salience or closeness of the perceived threat of AIDS. Based on this subscale, the strength of a fear level was inferred for each participant. The alpha reliability estimate for the personal salience of AIDS subscale was .84.

Stages of change. Respondents were asked to indicate, via five true/false items, their stage of HIV health-behavior change: precontemplation, contemplation, action, and maintenance. Additionally, respondents were asked to list changes that they had made in their behavior over the past four weeks and twelve months as an indicator of stage of change. These four stages of health behavior change have been validated in studies involving cigarette use (DiClemente & Prochaska, 1982; DiClemente, Prochaska, & Gilbertini, 1985; Prochaska, Velicer, DiClemente, & Fava, 1988) and alcohol abuse (Norcross, Prochaska, & Hambrecht, 1991).

Perceived risk. Respondents were asked to assess the behavior of their sexual partners for the past four weeks and twelve months and to indicate the extent to which they believed that their partners' behaviors had placed them at risk of AIDS. A 6-point categorization, from 1 (no risk at all) to 6 (extremely at risk), was used. The respondents' accuracy of personal risk appraisal was examined in relation to their reported behavior. The alpha reliability estimate of internal consistency for the personal risk estimation subscale was .88.

Reported STD/HIV serostatus testing history. Respondents were asked whether they had ever been tested for an STD. If a respondent reported having been tested, she was then asked to

indicate whether the results were negative or positive and, if positive, what type of STD was diagnosed. In addition, each respondent was asked specifically whether she had ever been tested for HIV antibodies and, if so, whether the results were positive or negative or whether she had ever returned for the results. Finally, respondents were asked whether they had ever wished to be tested for AIDS or other STDs but did not receive testing and, if so, why not.

HIV-risky sexual behavior. Participants were asked to recall their sexual behavior for the past four weeks and twelve months and to indicate their number of male and female sexual partners. Women who reported engaging in sexual behavior with female partners exclusively were asked to complete questions pertaining to female-to-female sexual behavior only, including the frequency of protected and unprotected oral-genital contact and number of partners for each activity. Women who reported engaging in sexual behavior with male sexual partners exclusively were asked to complete questions pertaining to heterosexual activities only, including the frequency of protected and unprotected vaginal, anal, and oral intercourse and number of partners for each activity. Women who reported engaging in sexual behavior with both male and female partners were asked to complete questions pertaining to both male-female and female-female sexual behavior. To determine the degree to which unprotected sexual intercourse was a function of the duration of a relationship, the respondents were asked to indicate how long they had been involved

in their most recent sexual relationship, ranging from one night to longer than twelve months.

The items used to evaluate sexual behavior were closely based on those successfully used in other AIDS behavior research (Kelly et al., 1989; D. Murphy, personal communication, August 26, 1991). The four-week and twelve-month time periods were selected to assess both recent and longer-term sexual behavior patterns.

Behavioral intention. Three items were employed to assess the respondents' intentions to practice safer sex in the future. Item 119 asked participants to indicate, via a 5-point scale ranging from "definitely would" to "definitely would not," how likely they were to ask a male partner to use a condom the next time they had sex. Items 120 and 121 asked respondents to indicate future intentions to use condoms when they had been drinking or using drugs, respectively. These items were designed to be an indication of the respondents' expectations and commitment to precaution-taking in the future.

Participants who indicated that they were not sexually active were asked to respond to behavioral intention items in terms of what they thought they would do when they became sexually active. Since it was expected that some women might intend to have female sexual partners only, item 119 included this option. To allow for participants who might not drink or use drugs, a not-applicable option was supplied for items 120 and 121. An alpha reliability estimate of .82 was obtained for the behavioral intention subscale.

Socially and sexually assertive behavior. Degree of emotional comfort or discomfort has been reported to impact on the practice of assertive behavior (Chandler, 1986). Therefore, social assertiveness was assessed by asking participants to indicate how comfortable they would feel if they declined the use of alcohol and drugs when friends were engaging in these behaviors. Respondents were also asked how often they had joined their friends in alcohol or drug use when they “really” did not want to.

Sexual assertiveness was assessed by asking respondents to indicate how comfortable they would feel declining sex (a) when they did not want to have sex and (b) when their sexual partners refused to use a condom. Respondents were also asked how often they had declined to engage in sexual behavior in similar situations. Finally, participants were asked to indicate the degree of emotional comfort associated with discussing condom use with a male sexual partner and how often they had discussed condom use with a partner. The assertiveness subscale had an alpha reliability estimate of .63 for total assertiveness and .66 for sexual assertiveness.

Social norm perception. The perception of peer acceptability of safer-sex practices and HIV-risk avoidance was measured via ten survey items. These items were selected to assess the participants' beliefs concerning their peers' HIV-risky behaviors and attitudes and the social consequences of insistence on safer sex. Each item consisted of a statement (e.g., “I think that my female friends always ask their male sexual partners to use condoms during intercourse” ; “I

think that my female friends believe that it is 'sleazy' for a woman to plan to have sex") and a 5-point Likert Scale to indicate level of agreement (1 = strongly disagree; 5 = strongly agree). This measure was adapted from prior HIV behavioral research, which has established validity in predicting risk change (Kelly, St. Lawrence, Diaz, et al., 1991). The social norm perception subscale had an alpha reliability estimate of .75.

Manipulation check. In order to assess whether the number of peer conversations concerning safer sex increased during the intervention and the degree to which these conversations had social validity, a five-item manipulation check was included. Respondents were asked to (a) report the number of conversations they had had with female peers living in their dormitory concerning AIDS/STD prevention for the past two months, (b) evaluate the relevancy of the conversations, (c) note their overall emotional reaction to the conversations, and (d) indicate the effect that the conversations had had on their behavior. The period of two months was selected based on the duration of the intervention.

AIDS/STD risk behavior knowledge. A 34-item true/false measure was constructed to assess the respondents' practical knowledge about HIV/STD risk reduction (sample items: "People carrying the AIDS virus generally feel quite ill" ; "Shared toothbrushes transmit the AIDS virus" ; "Genital warts are strongly associated with cervical cancer" ; "Thanks to penicillin, syphilis is almost a disease of the past"). These items were adapted from a measure used by D.

Murphy (personal communication, August 26, 1991) to assess general HIV knowledge among a group of inner-city women. While the AIDS knowledge subscale used in this study was somewhat longer than those used in previous studies involving gay/bisexual men, it was believed that more extensive assessment was warranted since relatively little was known concerning the level of AIDS knowledge among the target population. Correct responses were tabulated to yield a knowledge summary score ranging from 0 to 34. The internal consistency using coefficient alpha was .63 for the knowledge subscale.

Condom-taking behavior. In addition to the self-report data described above, condom-taking behavior was monitored to provide a nonreactive measure of behavioral intention. Based on information collected via formative research focus groups, it appeared that women on campus typically did not use the available sources for condoms (i.e., the student health services; dormitory condom dispensers) because of (a) misconceptions concerning the efficacy of condoms as disease protection (for example, one individual reported that her mother had told her that "AIDS can penetrate any condom"), (b) embarrassment about asking student health service personnel for condoms, and (c) the belief that condoms provided in the dormitory dispensers were "old" and "too flimsy."

Women participating in the focus groups indicated that they would like condoms to be available in a non-visible but easily accessible location. Possible locations suggested included on a shelf in the dormitory laundry room or in the bathrooms located on each floor.

Therefore, one week following the collection of survey data at pre-intervention, condoms were made available in an inconspicuous but convenient location in each bathroom within the intervention and comparison dormitories. A plain brown paper bag was mounted in each bathroom with a sign directing individuals to take only as many condoms as they needed (see Appendix H for condom sign). The condoms were monitored and replenished each week during the intervention.

Intervention Procedures

Comparison Condition

AIDS educational/informational materials are the most widely used method of behavior change promotion on college campuses (D'Augelli & Kennedy, 1989; Keeling, 1986). Methods employed typically consist of the dissemination of brochures and posters through the student health services. Therefore, AIDS educational posters and brochures were placed in the comparison dormitory following the collection of all baseline data. Educational materials remained available, were monitored for continued presence, and were replenished, as needed, throughout the full term of the study. The materials used were those developed by national AIDS education programs that target young, heterosexual females.

Intervention Condition

Because this study represented an extension of an ongoing large-scale field trial study (Kelly et al., 1992), the intervention was closely based on that work. Key opinion leaders, socially influential with the

sample of women in the intervention dormitory, were identified and recruited. These individuals were then trained to serve as behavior change endorsers within their peer groups and contracted to engage in specific peer conversational activities. Since the educational materials described above were widely available on campus and since the study attempted to assess the additive impact of the intervention to the usual and standard health education materials, the same brochures and posters that were maintained in the comparison dormitory were also maintained in the intervention dormitory.

Identification and recruitment of key opinion leaders. The dormitory resident director and resident assistants employed by the college were trained to identify individuals who met criteria of popularity within the intervention dormitory. Kelly, St. Lawrence, Diaz, et al. (1991) have reported substantial reliability between independent judges when each is trained in specific behavioral criteria for assessing popularity (frequency of conversations, frequency of greetings received, and affective responses of others) and when judges use standard nomination sheets.

At least two judges made independent unobtrusive ratings for each of the intervention dormitory floors (see Appendix I for nomination and rating forms). The judges recorded nominees by first name and last initial only. Individuals who appeared on at least two judges' independent rating forms were targeted for recruitment. Raters also could nominate themselves and, if nominated by at least one other rater, were targeted for recruitment. Based on innovation

diffusion theory, approximately 12% of the population which met criteria for popularity/peer influence was recruited for training. Allowing for a 20% attrition rate, 30 participants were recruited from the intervention dormitory. Of these 30 original participants, 24 completed at least four training sessions, and 22 completed all five training sessions.

A “second wave” of key opinion leaders were recruited by asking each original participant to discuss the project with one woman whom she considered to be well liked by the other dormitory residents and to invite her to the fourth training session. Of the 22 original participants, seven invited a “second wave” opinion leader. The women identified by the initial key opinion leaders as influential with their peers were provided with information concerning the project and their potential role in it and given the option to participate by having conversations with their dormitory peers.

A written introductory description of the project (see Appendix J) was delivered via the resident director and resident assistants to each original opinion leader targeted for recruitment. Individuals who were interested in participating were asked to contact the Project Director by telephone. This procedure helped to protect the privacy of nominees without prior consent. Contact information (e.g., telephone numbers) and preferred times to attend training sessions were obtained from each participant. The training sessions were scheduled once contact had been made with all available opinion

leaders. All training sessions were conducted in the conference/social room of the intervention dormitory to ensure a private, comfortable, and familiar environment.

Intervention format and content. In an effort to provide sufficient time for the training of the necessary skills but to minimize attrition rates, the experimental intervention consisted of four weekly sessions (each lasting approximately 90 minutes) followed by a later booster session (see Appendix K for complete training manual).

An incentive payment of \$10 for attending each training session and \$5 for returning postintervention data was made to each participant. An additional incentive payment of \$25 was made to participants who attended all five training sessions. Immediately prior to each week's scheduled session, individuals unable to attend a prior training session were able to participate in a makeup session conducted by the Project Director and an undergraduate research assistant and, thus, be maintained in the intervention. (Makeup sessions were conducted for two participants who missed Session 1, for one participant who missed Session 3, and for two participants who missed Session 5.)

Regularly scheduled sessions were conducted by two master's level graduate researchers (one female and one male) who had received extensive clinical practicum training in a psychology doctoral program. The Project Director and four undergraduate research assistants also attended all five training sessions; the undergraduate research assistants served as community liaisons for the project.

Introductory meeting. In addition to the five training sessions, women nominated as key opinion leaders attended an introductory meeting. During the introductory meeting, participants received detailed information concerning the purpose of the intervention and their role in the project. Participants were encouraged to ask questions, which were then answered, concerning the project and their involvement in it. Consent forms were distributed to, read by, and signed by each participant (see Appendix L for consent form). Discussion of the importance for confidentiality among focus group participants was also conducted, and participants signed a pledge (see Appendix M) agreeing not to share personal information learned from others in the group. Finally, pretraining data (described below) were collected from each training participant and served as an internal validity check.

Session 1. Participants received information concerning the characteristics of AIDS and other STDs (i.e., chlamydia, genital warts), the basic epidemiology of AIDS/STDs, and risk behaviors. Misconceptions concerning HIV risk for heterosexual women were addressed. Based on the work of Kelly et al. (1989), risk behaviors were conceptualized using a traffic light scheme from highest risk (red light) to moderate risk (yellow light) to lowest risk (green light). See Appendix N for traffic light handout.

Practical strategies for initiating risk-reduction changes were also presented. These strategies included clearly determining in which behaviors one will or will not participate, avoiding sex if

intoxicated, discussing plans for safer sex in advance with a potential sexual partner, utilizing persuasive assertion skills to avoid risky sexual behavior, and keeping condoms readily available if sexually active. Group discussion was encouraged in order to familiarize participants with safer-sex strategies and methods of implementing them, which could then be conveyed to their peers. Take-home contact-monitoring logs (see Appendix O) were distributed to each training participant with instructions to have safer-sex endorsement conversations with two peers over the next week; the logs were collected the following week.

Session 2. The second session began with a brief review of the previous session and a discussion of the influence of social norms on HIV-risky sexual behaviors. Participants received information concerning how their status as key opinion leaders help to shape social norms through everyday social interactions.

Optimum conversation strategies for disseminating AIDS risk-reduction methods to peers were then explored. These strategies included the following:

1. discussing the benefits of health behavior change;
2. emphasizing how to make relevant behavioral changes;
3. conveying a personal commitment to health behavior change;
4. using “I” statements rather than “you” statements to foster egalitarian “non-preachy” communication;

5. using empathy to foster rapport (e.g., “You really feel worried about not asking John to use a condom last night”); and
6. offering to answer any questions in detail.

Effective strategies for endorsing safer sex were modeled and rehearsed via role-plays with feedback given to the participants. Participants were asked to generate conversations that included these endorsement strategies in a way that was most likely to “feel natural to them” and to be well received by others. At the end of the session, each participant was provided with take-home contact-monitoring logs and asked to have educational/endorsement conversations with two other women living in their dormitory over the next week; completed logs were collected the following week.

Session 3. Participants were presented with a variety of role-plays involving the discussion of AIDS risk reduction with a peer. After viewing modeling of the desirable conversational skills, participants were instructed to behaviorally rehearse while receiving coaching, corrective feedback, and verbal reinforcement from project staff members and peers. Next, participants were asked to generate examples of real-life persons, settings, and times when conversations might take place. Sexual assertion skills were introduced and modeled via role-plays, with rehearsals to allow the participants to practice these behaviors. Training involved three types of sexual assertiveness skills (i.e., empathic assertion, escalating assertion, and confrontational assertion).

At the end of the third session, each participant was provided with take-home contact-monitoring logs and asked to have educational/endorsement conversations with two women living in their dormitory over the next week. Completed logs were collected the following week. Each participant was also asked to discuss the program with one woman whom she considered to be influential with other women living in the intervention dormitory and to invite that person to the next meeting. This technique (“snowballing”) provided the second wave of the intervention.

Session 4. The fourth session served as the final training session for the participants. Session four also provided an opportunity to “snowball” the intervention by presenting an abbreviated introduction and training session for the newly recruited participants in order to extend, amplify, and reinforce the intervention with a second wave of opinion leaders. While these second-wave opinion leaders did not receive the full four training sessions, they were invited to participate by having at least two conversations with peers over the next four weeks.

Session four for the original participants involved a review of the assignment to have peer conversations in the past week. Participants were encouraged to share the strategies they had used to initiate peer conversations and successful experiences and problems encountered. As expected, perhaps due to the selection criteria (popularity and social skills), few problems were reported. Participants were presented with the total number of educational/endorsement

conversation that took place in one week (2 x 24). The potential impact of these conversations on creating behavior change to prevent AIDS and other STDs and the importance of continued conversations for the maintenance of group norms for behavior change were addressed. The original opinion leaders received new contact-monitoring logs and were asked to have four peer conversations over the next four weeks.

During the four weeks following the end of the formal intervention, telephone contact was maintained with all participants to follow up on peer conversations, to discuss any problems that arose, and to prompt continued efforts. At the end of four weeks, participants were invited to attend a booster session to encourage further the continued use of peer conversations. In addition to the above training, intervention efforts involved the use of environmental cues to create naturalistic opportunities for conversations; for example, posters, as described above, with a traffic light designating high, medium, and low HIV-risky sexual behavior were placed in prominent locations throughout the dormitory.

Manipulation checks

In order to determine the effectiveness of skills training for the key opinion leaders, a variety of assessment instruments were used. These measures were administered to the 24 key opinion leaders one week prior to the first training session and immediately following the fourth training session. In order to preserve the confidentiality of the key opinion leaders, a self-generated code (described above) was used.

Survey data. Survey data (described above) consisting of questions concerning HIV risk knowledge, behavior, and social norm perceptions were completed by each of the original key opinion leaders to determine whether these variables changed over the course of the intervention. It was expected that the HIV/STD risk knowledge, behavior, and social norm perceptions of the key opinion leaders would reflect changes within the larger sample of dormitory residents.

Interpersonal orientation. The 15-item Filsinger Liking People Scale (LPS; Filsinger, 1981) (see Appendix P) and a self-rating measure of popularity and peer influence (see Appendix Q) were completed by each of the key opinion leaders to provide a reliability check of interpersonal orientation. Each item on the LPS consisted of a statement (e.g., “Sometimes when people are talking to me, I find myself wishing that they would leave” ; “My need for people is quite low” ; ‘My happiest experiences involve other people”) and a five-point Likert Scale to indicate level of agreement (1 = strongly agree; 5 = strongly disagree). A total score with a range of 15 to 75 was tabulated for each respondent. The LPS has been demonstrated to have good criterion validity, correlating with social self-esteem and number of close friends. The LPS has a Cronbach’s alpha coefficient of .85 and .78 for college students and adults, respectively.

The self-rating measure of popularity/peer influence consisted of ten statements involving relations with peers, the ability to listen and understand others, and involvement in social activities. Participants

were asked to rate themselves along each of these dimensions using a five-point Likert Scale (5 = outstanding [top 1%]; 1 = poor [bottom third]). A score from 10 to 50 was tabulated for each participant.

Conversation skills. Each participant completed a written measure of conversation skills (Appendix R) adapted from a communication skills exercise developed by Tindall (1991). This instrument consisted of five statements, each paired with four peer responses, which the respondents were asked to rate as either extremely helpful, moderately helpful, or unhelpful. For example:

I've tried to ask Paul to use a condom when we have sex, but I'm just too embarrassed.

A. Sometimes you just have to face the idea that you're not the kind of person to bring up something like that.

B. Sometimes it's hard to want to ask someone something and not be able to do it.

C. Why don't you find someone else?

D. Have you practiced asking Paul to use a condom?

In addition, respondents were given five statements and asked to write responses that would be helpful to a peer. For example: "I wish that Mark wouldn't keep putting pressure on me to have sex. It's not like I'm some kind of naive virgin, it's just that I'm not sure if I like him that much. But if I don't sleep with him soon, I'm afraid I'm going to lose him." Scoring of the conversation skills test was based on a rating scale of 0 to 100 provided by Tindall (1989).

Sexual assertiveness role-plays. Each participant individually role-played simulations (see Appendix S) of three conversations involving the use of social and sexual assertion. The role-plays consisted of a narrated scene followed by three prompts of increasing difficulty from a project staff member. Modeled after instruments used in other AIDS prevention behavioral intervention strategies (Kelly et al., 1989; Sikkema, 1991; Winett et al., 1992), the role-play situations involved social and sexual situations in which the respondent is pressured to engage in undesired and/or risky behaviors. For example:

Scenario III: You're at a really great party. You've had a little bit too much wine to drink, and the guy you're with is really sexy. You've gone out with him before, but you've never slept together. Tonight's the night! Things get really heavy, and you bring out a condom you always carry "just in case."

Guy: Wow! Miss Everready! You must have quite a love life!

You: _____

Guy: Well, you don't need to use a condom with me -- I'm clean!

You: _____

Guy: What is it? Do you have some kind of disease?

You: _____

An audiotape recording of each respondent's role-play was independently rated by two trained research assistants blind to whether role-plays were from pre- or postintervention assessments (see Appendix T for rating criteria and rating forms). Participant

responses were rated on a criterion of overall social skill and effectiveness from 0 (nonassertive) to 3 (extremely assertive). The overall or global rating reflects communicating in an assertive, nonaggressive fashion. Assertion was defined as behaviors in which one stands up for one's rights and says directly what one believes, wants, and feels in an appropriate and honest fashion while respecting the rights of others; the assertive person speaks up in her own defense but does so without any effort to harm or degrade another person. Aggression was defined as behavior aimed at hurting or dominating (Jakubowski-Spector, 1973).

The participants' responses were also rated for the presence or absence of the following specific components of sexual assertion skills: (a) empathic assertion in which the respondent asserts herself by first acknowledging the other person's feelings (e.g., "I know you feel like making love, Carl, but I'm not ready for that."); (b) escalating assertion in which the respondent begins by mildly expressing herself, but, because her partner does not respond, she intensifies the strength of her statement (e.g., "I really get angry when you talk to me like that! I said I'm not ready, and I don't appreciate being put down."); and (c) confrontational assertion in which the respondent confronts a partner when he does or says something that contradicts what he has agreed to do (e.g., "Rick, what's going on here? We talked about using condoms and you agreed that it was a good idea for us, but now you're asking me to have sex without using a condom. I'm really upset--don't you remember what we agreed?").

All of the assertiveness rating data from both independent raters were used to calculate the interrater reliabilities. The Point-by-Point Agreement Ratio (Kazdin, 1982) was used to assess percent agreement. For global assertiveness ratings, the percent agreement between the two raters was 75.8%. For the specific components, the results were as follows: 85.2% (total components); 85.6% (empathic assertiveness); 94.7% (escalating assertiveness); 89.4% (confrontational assertiveness); and 94.7% (aggression).

Overall assertiveness scale. To determine an overall level of assertiveness, the Assertiveness Self-Report Inventory (ASRI; Herzberger, Chan, & Katz, 1984) was administered at pretest only. The ASRI is a 25-item true/false scale consisting of statements that focus on the behavioral and affective dimensions of assertiveness (e.g., “When my date has acted rudely at a party, I don’t hesitate to let him or her know I don’t like it”). See Appendix U for a copy of the ASRI.

A summary score for each participant was derived by adding up the total number of “true” responses for items 1, 3, 4, 9, 13, 15, 16, 18-20, 22, and 24 and “false” responses for the remaining items. The ASRI has been demonstrated to have good concurrent validity, correlating with the Rathus Assertiveness Schedule (Rathus, 1973) and with peer-rated assertiveness. Test-retest reliability has been calculated to have a correlation of .81.

Behavioral compliance measures. Compliance with contracted peer conversation assignments was assessed by (a) an analysis of contact-monitoring records following all four training sessions to

determine the number of reported conversations, (b) an analysis of the key opinion leaders' self-report of the number of peer conversations endorsing safer sex for the two months prior to the first training session and for the two months prior to the booster session, and (c) population survey measures that asked respondents to indicate how often someone initiated a conversation with them in their dormitory about AIDS/STD risk reduction. These measures served as corroborating data of participant behavioral compliance and manipulation of the independent variable.

Postintervention and Followup Data Collection Procedures

Data were collected concurrently in both the intervention and comparison dormitories three weeks after the completion of all training activities to evaluate the impact of the opinion leaders on the behavior, knowledge, intentions, and norm perceptions of dormitory residents. AIDS risk behavior, risk knowledge, and perceived peer norm data for the sample were obtained by administering behavioral survey measures (described above) to the residents of the intervention and comparison dormitories. Data were collected over five consecutive days in each dormitory in the same manner as at preintervention. Condom-taking behavior continued to be monitored for an additional week until the formal ending of classes.

Hypotheses

It was hypothesized that intervention dormitory residents would increase their perception of reference group norms for HIV/STD protective behavior, increase their intention to practice safer-sexual

behavior, and increase their practice of safer-sexual behavior. Safer-sexual behaviors were defined as abstinence, using condoms during sexual intercourse, and engaging in non-coital sexual behaviors such as massage. Specifically, it was hypothesized that relative to the residents of the education-only comparison dormitory, residents of the experimental peer influence intervention dormitory would (a) experience a positive shift in their stage of change for HIV/STD protective behavior, (b) increase their perceived risk for HIV/STDs, (c) increase their perception of reference group norms for HIV/STD prevention, (d) report increased behavioral intentions to reduce HIV/STD-risky behavior, (e) report a decrease in HIV/STD high-risk behavior, (f) report an increase in socially and sexually assertive behavior, (g) increase their HIV/STD risk behavior knowledge, and (h) exhibit a greater frequency of condom-taking behavior.

Results

Pretest Findings

Characteristics and Patterns of HIV-Risky Behavior

Demographics. The participants ranged in age from 17 to 22 years: $M = 19.8$ years for the comparison group (CG) and $M = 18.9$ years for the intervention group (IG). Eighty-eight percent (88.8%, $n = 79$) of the CG participants and 95.3% ($n = 81$) of the IG participants were Caucasian. Most of the participants were either freshmen or sophomores, with slightly more juniors and seniors in the CG (see Table 5).

Insert Table 5 about here

Alcohol use. Ninety-nine percent (98.9%, $n = 90$) of the CG and 84.5% ($n = 71$) of the IG reported alcohol use during the past 12 months. Twenty-six percent (26.4%, $n = 24$) of the CG and 29.4% ($n = 25$) of the IG reported using alcohol, on the average, once a month or less; 62.7% ($n = 57$) of the CG and 44.7% ($n = 38$) of the IG reported using alcohol between 2 and 8 times per month; 9% ($n = 9$) of the CG and 11.8% ($n = 10$) of the IG reported using alcohol 3 or more times per week.

For the four-week time period, 48.4% ($n = 44$) of the CG and 49.4% ($n = 42$) of the IG indicated that they consumed alcohol, on the average, less than once a week; 33% ($n = 30$) of the CG and 22.4% ($n = 19$) of the IG reported drinking between 1 and 2 times per week;

14.3% ($n = 13$) of the CG and 10.6% ($n = 9$) of the IG reported drinking between 3 and 4 times per week.

When asked to indicate the number of drinks they consumed on the one occasion they drank the most in the past 12 months, 47.3% ($n = 43$) of the CG and 37.6% ($n = 32$) of the IG reported consuming between 7 and 12 drinks; 11% ($n = 10$) of the CG and 21.2% ($n = 18$) of the IG reported consuming 13 or more drinks (see Table 6).

Insert Table 6 about here

For the four-week time period, 41.8% ($n = 38$) of the CG and 28.2% ($n = 24$) of the IG reported consuming between 5 and 8 drinks; 12.1% ($n = 11$) of the CG and 14.1% ($n = 12$) of the IG reported consuming between 9 and 12 drinks (see Table 7).

Insert Table 7 about here

Both the CG and IG participants reported that they consumed, on the average, the greatest number of drinks Friday and/or Saturday for both the 12-month and four-week time periods. For example, 60.5% ($n = 55$) of the CG and 52.4% ($n = 44$) of the IG reported consuming 3 or more drinks Friday, and 63.8% ($n = 58$) of the CG and 54.8% ($n = 46$) of the IG reported consuming 3 or more drinks Saturday, over the prior 12 months. In contrast, 91.1% ($n = 82$) of the CG and 92.7% ($n = 76$) of the IG reported consuming

no drinks Monday, and 74.4% ($n = 67$) of the CG and 86.6% ($n = 71$) of the IG reported consuming no drinks Tuesday.

The setting in which the greatest number of alcoholic beverages were consumed varied: at another campus (43.3%, $n = 39$ of the CG; 42.4%, $n = 36$ of the IG); at a fraternity house (42.2%, $n = 38$ of the CG; 32.9%, $n = 28$ of the IG); on their own campus (46.7%, $n = 42$ of the CG; 32.9%, $n = 28$ of the IG). Respondents tended to drink more with groups of friends (75.8%, $n = 69$ of the CG; 61.2%, $n = 52$ of the IG) and at parties (67%, $n = 61$ of the CG; 58.8%, $n = 50$ of the IG). The two most frequently cited occasions on which the greatest amount of alcohol was consumed were summer break (52.3%, $n = 45$ of the CG; 45.8%, $n = 38$ of the IG) and New Years Eve (47.7%, $n = 41$ of the CG; 38.6%, $n = 32$ of the IG).

Drug use. Marijuana was the most frequently reported drug used by the respondents: 38.2% ($n = 34$) of the CG and 32.1% ($n = 27$) of the IG reported using marijuana at least once in the past 12 months. Of those reporting marijuana use, 46.2% ($n = 18$) of the CG and 38.2% ($n = 13$) of the IG reported using marijuana once or twice in the past four-week time period.

Amphetamines and hallucinogens were the second most frequently reported drugs used. Ten percent ($n = 9$) of the CG and 8.3% ($n = 7$) of the IG reported using amphetamines at least once in the past 12 months. Of those, 55.5% ($n = 5$) of the CG and 57.1% ($n = 4$) of the IG reported no use for the past four weeks. Similarly, 7.8% ($n = 7$) of the CG and 9.5% ($n = 8$) of the IG reported using

hallucinogens at least once in the past 12 months; of those, 71.4% ($n = 5$) of the CG and 50% ($n = 4$) of the IG reported no hallucinogen use in the past four weeks.

The percentage of respondents reporting other drug use in the past 12 months included the following: 5.6% ($n = 5$) of the CG and 3.6% ($n = 3$) of the IG reported cocaine use; 2.2% ($n = 2$) of the CG and 3.5% ($n = 3$) of the IG reported the use of “ecstasy.” None of the participants reported intravenous (IV) drug use for either the 12-month or four-week time period.

Personal salience of the AIDS threat. Of the CG and IG, 17.6% ($n = 16$) and 12.9% ($n = 11$), respectively, reported they had personally known someone with HIV; 16.5% ($n = 15$) and 8.2% ($n = 7$), respectively, reported they had personally known someone with AIDS. Fifteen (15.4%, $n = 14$) of the CG and 8.2% ($n = 7$) of the IG reported they had personally known someone who had died of AIDS; of those respondents, 78.6% ($n = 11$) of the CG and 57.2% ($n = 4$) of the IG reported that the individuals who had died of AIDS were either acquaintances or distant acquaintances.

Stages of change. Approximately 58% ($n = 53$) of the CG and 48.2% ($n = 41$) of the IG reported they believed AIDS/STDs were a serious personal health threat; 50.5% ($n = 46$) of the CG and 33.3% ($n = 28$) of the IG reported they were thinking of making changes in their sexual behavior to protect themselves from AIDS/STDs. Forty percent (39.6%, $n = 36$) of the CG and 38.8% ($n = 33$) of the IG reported they had made significant changes in their sexual behavior to

avoid AIDS/STDs. Seventy-one percent (70.8% $n = 63$) of the CG and 61.9% ($n = 52$) of the IG reported they had been practicing safer sex for 12 months or longer.

Personal risk estimation. Of the CG and IG, 74.7% ($n = 68$) and 61.2% ($n = 52$), respectively, reported that their behavior for the past four weeks had placed them at no risk for HIV infection. Seventeen percent (16.5%, $n = 15$) of the CG and 12.9% ($n = 11$) of the IG indicated that their behavior had placed them slightly at risk. For the 12-month time period, 49.5% ($n = 45$) and 28.6% ($n = 26$) of the CG and 45.9% ($n = 39$) and 20% ($n = 17$) of the IG reported that their behavior had put them at no risk or only slightly at risk, respectively (see Table 8).

Insert Table 8 about here

Forty-three percent (42.9%, $n = 39$) of the CG and 34.5% ($n = 29$) of the IG indicated that their sexual partners' behavior for the past four weeks had put them at no risk (see Table 9). For the 12 - month time period, 44.4% ($n = 40$) of the CG and 34.1% ($n = 29$) of the IG indicated that their sexual partners' behavior had placed them at no risk, and 22.2% ($n = 20$) of the CG and 22.4% ($n = 19$) of the IG indicated that their sexual partners' behavior had placed them slightly at risk (see Table 10).

Insert Tables 9 and 10 about here

STD history. Eighteen percent (17.6%, $n = 16$) of the CG and 17.6% ($n = 15$) of the IG reported that they had been tested for an STD other than AIDS. Six percent (5.5%, $n = 5$) of the CG and 3.5% ($n = 3$) of the IG reported a positive STD test result: syphilis (1.1%, $n = 1$ of the CG); genital herpes (1.1%, $n = 1$ of the CG); vaginal warts (2.2%, $n = 2$ of the CG); pubic lice (2.2%, $n = 2$ of the CG); chlamydia (2.4%, $n = 2$ of the IG); trichomoniasis (1.1%, $n = 1$ of the CG); type unknown (1.2%, $n = 1$ of the IG). However, 23.3% ($n = 21$) of the CG and 19% ($n = 16$) of the IG reported they had wanted to get tested for an STD but had not. The most frequently endorsed reasons for not having been tested for an STD included feelings of embarrassment, not knowing how to go about getting tested, inconvenience of being tested, and fear of finding out the test results.

A somewhat smaller proportion of the respondents reported they had been tested for AIDS: 13.2% ($n = 22$) of the CG and 16.5% ($n = 14$) of the IG. None of the participants reported receiving a positive result for an AIDS test. Twenty-eight percent (27.9%, $n = 31$) of the CG and 19.3% ($n = 16$) of the IG reported they had wanted to get an AIDS test but had not. The most frequently cited reasons for not having been tested for AIDS included not knowing how to go about getting tested, inconvenience of being tested, and fear of finding out the test results.

Sexual activity. Eighty-two percent (82.4%, $n = 75$) of the CG and 70.6% ($n = 60$) of the IG reported engaging in some form of sexual activity (i.e., any behavior involving genital contact such as heavy petting, hand-genital contact, mutual masturbation, oral sex, or sexual intercourse) in the past 12 months. For the four-week time period, 45.1% ($n = 41$) of the CG and 50% ($n = 42$) of the IG reported they had had no sexual partners; 51.6% ($n = 47$) and 41.7% ($n = 35$) of the CG and IG, respectively, reported they had had only one sexual partner.

However, for the 12-month time period, the reported number of sexual partners was more varied (see Table 11). Eighty-two percent

Insert Table 11 about here

(82.2%, $n = 74$) of the CG and 69.5% ($n = 57$) of the IG reported they had had one or more sexual partners, and 40% ($n = 36$) and 34.2% ($n = 28$), respectively, reported they had had two or more sexual partners. The average number of partners reported for the past 12 months was 1.78 for the CG and 1.72 for the IG, with a range of zero to 12 partners. None of the respondents reported engaging in lesbian sexual behavior during the past 12 months.

When asked to indicate the length of their most recent sexual relationship, the participants endorsed a wide range of time periods (see Table 12). Thirty-two percent (31.9%, $n = 29$) of the CG and

Insert Table 12 about here

29.8% ($n = 25$) of the IG reported they had been involved in their most recent sexual relationship for one year or longer. However, 13.2% ($n = 12$) of the CG and 13.1% ($n = 11$) of the IG reported they had been involved in their most recent sexual relationship for less than one month; 7.7% ($n = 7$) of the CG and 8.3% ($n = 7$) of the IG reported that their most recent sexual relationship was for one night only. The average length of the CG and IG participants' most recent sexual relationship was 4 to 6 months.

Of those respondents reporting sexual activity for the past twelve months, 29.6% ($n = 19$) of the CG and 41.2% ($n = 21$) of the IG reported always using a condom during sexual intercourse. The use of oral contraceptives was the most frequently endorsed reason for not always using a condom (39.1%, $n = 25$ of the CG; 37.2% $n = 19$ of the IG).

Thirty-six percent (36%, $n = 27$) of the CG and 33.3% ($n = 26$) of the IG reported engaging in unprotected vaginal intercourse over the past 12 months, with an average of 16.45 and 13.04 occurrences of unprotected vaginal intercourse for the CG and IG, respectively (see Table 13). Twenty-three percent (22.6%, $n = 19$) of the CG and

Insert Table 13 about here

23.8% ($\underline{n} = 20$) of the IG reported engaging in unprotected vaginal intercourse over the past four weeks, with an average of 2.10 occurrences for the CG and 1.95 occurrences for the IG.

Fifty percent (50%, $\underline{n} = 40$) of the CG and 45.5% ($\underline{n} = 35$) of the IG reported engaging in unprotected female-to-male oral intercourse in the past 12 months, with an average of 5 occurrences for the CG and 11.64 occurrences for the IG. None of the CG participants and only one IG participants reported using condoms during female-to-male oral intercourse. Four percent (4.4%, $\underline{n} = 4$) of the CG and 3.7% ($\underline{n} = 3$) of the IG reported engaging in unprotected anal intercourse over the past 12 months; none of the CG nor the IG participants reported engaging in protected anal intercourse over the past 12 months.

Twenty-four percent (23.6, $\underline{n} = 21$) of the CG and 13.4% ($\underline{n} = 11$) of the IG reported engaging in sexual intercourse in the past 12 months with a man who was having a sexual relationship with another woman. Sixteen percent (15.7%, $\underline{n} = 14$) of the CG and 15.9% ($\underline{n} = 13$) of the IG reported they had had sexual intercourse in the past 12 months with a man whom they saw once and did not see again.

The vast majority of the respondents denied that they had ever had sexual intercourse with a man who was having a sexual relationship with another man (98.1%, $\underline{n} = 88$ of the CG; 100%, $\underline{n} = 82$ of the IG) or with a man who had had a sexual relationship with another man (97.8%, $\underline{n} = 87$ of the CG; 100%, $n = 82$ of the IG). Sexual intercourse in the past 12 months with an IV drug user was

reported by 2.2% ($n = 2$) of the CG and 1.2% ($n = 1$) of the IG. Sexual activity while using alcohol was reported by 53.2% ($n = 41$) of the CG and 43.2% ($n = 35$) of the IG for the 12-month time period; sexual activity while using drugs was reported by 10.2% ($n = 9$) of the CG and 9.9% ($n = 8$) of the IG.

Behavioral intentions. Seventy-nine percent (79.1%, $n = 72$) of the CG and 82.6 % ($n = 66$) of the IG indicated that they definitely or probably would ask a male sexual partner to use a condom to reduce the risk of an STD. However the percentage of women who reported that they definitely or probably would ask a male sexual partner to use a condom decreased when the situation involved the use of alcohol (71.6%, $n = 63$ of the CG; 71.6%, $n = 48$ of the IG) or drugs (58.5%, $n = 24$ of the CG; 62.5%, $n = 20$ of the IG).

Norm perception. Eighty-six percent (85.7%, $n = 78$) of the CG and 91.3% ($n = 74$) of the IG indicated that their female friends believe it is acceptable for a woman to ask a man to wear a condom, and 77% ($n = 70$) of the CG and 79% ($n = 64$) of the IG indicated that their female friends respect a woman who makes sure that her date uses a condom. Yet, only 17.6% ($n = 16$) of the CG and 39.5% ($n = 32$) of the IG agreed or strongly agreed that their female friends always ask their male sexual partners to use a condom during intercourse (see Table 14), and 30.8% ($n = 28$) of the CG and 19.8% ($n = 16$) of the IG agreed or strongly agreed that their female friends consider it “sleazy” for a woman to carry a condom in her purse.

Insert Table 14 about here

Further, 27.5% (n = 25) of the CG and 21% (n = 17) of the IG believed that their female friends would agree to have unprotected sexual intercourse if their partners objected to using a condom, and 33.4% (n = 30) of the CG and 29.6% (n = 24) of the IG believed that their female friends try to practice safer sex by having their male sexual partners withdraw before ejaculation. Finally, 40.7% (n = 37) of the CG and 38.3% (n = 31) of the IG agreed or strongly agreed that their female friends say that they have safer sex much more frequently than they actually do, and 69.3% (n = 63) of the CG and 81.5% (n = 66) of the IG believed that even among their female friends who do practice safer sex, sexual intercourse without a condom is more likely to occur after drinking alcohol.

AIDS/STD knowledge. A wide range of scores was obtained by the respondents on the AIDS/STD knowledge summary score (see Table 15). Fifty-nine percent (59.4%, n = 54) of the CG and 60.9%

Insert Table 15 about here

(n = 48) of the IG scored above 80% correct; 27.5% (n = 25) of the CG and 20.2% (n = 16) of the IG scored between 72% and 78% correct; 13.2% (n = 12) of the CG and 19.1% (n = 15) of the IG scored at or

below 69% correct. Mean total knowledge score was 26.22 for the CG and 25.59 for the IG, with a range from 14 to 32.

Opinion Leader Characteristics and Patterns of HIV-Risky Behavior

Overall, the key opinion leaders (KOLs) appeared to be similar to the general group of survey respondents. Thus, the attitudes, beliefs, and behaviors reported by the KOLs basically reflect those of the larger sample. Twenty-four KOLs completed survey measures at preintervention; however, due to respondent coding errors and/or omissions, only 16 KOL surveys were matched at postintervention.

Demographics. The KOLs ranged in age from 18 to 21 years ($M = 22.06$ years). Ninety-four percent (93.8%, $n = 15$) of the KOLs were Caucasian. Percentage of KOLs for each year in college was as follows: freshman (18.8%, $n = 3$); sophomore (50%, $n = 8$); junior (18.8%, $n = 3$); senior (12.5%, $n = 2$).

Alcohol use. One hundred percent ($n = 17$) of the KOLs reported using alcohol during the past 12 months: 62.5% ($n = 10$) reported using alcohol, on the average, of once a month or less; 31.3% ($n = 5$) reported using alcohol between 2 and 8 times per month; 6.3% ($n = 1$) reported using alcohol 3 more times per week. For the four-week time period, 62.6% ($n = 10$) reported drinking alcohol less than once a week; 25% ($n = 4$) reported drinking 1 to 2 times per week; 12.5% ($n = 2$) reported drinking 3 to 4 times per week.

When asked to indicate the number of drinks they consumed on the one occasion that they drank the most in the past 12 months, 43.8% ($n = 7$) reported consuming between 5 and 6 drinks (see Table

16). For the four-week time period, 25% ($n = 4$) reported consuming 3 to 4 drinks, 12.5% ($n = 2$) reported consuming 5 to 6 drinks, and 12.5% ($n = 2$) reported consuming 9 to 12 drinks (see Table 17).

Insert Tables 16 and 17 about here

The KOLs reported they consumed, on the average, the greatest number of drinks Friday and/or Saturday for both the 12-month and four-week time periods. For example, 37.6% ($n = 6$) reported consuming 3 or more drinks Friday, and 50% ($n = 8$) reported consuming 3 or more drinks Saturday over the past 12 months. In contrast, 93.8% ($n = 15$) reported consuming no drinks on either Monday or Tuesday. Sixty-nine percent (68.8%, $n = 11$) reported that they tended to drink the greatest amount of alcohol with groups of friends and at parties. The setting in which the greatest amount of alcohol was consumed varied: at another campus (43.8%, $n = 7$); at a fraternity house (43.8%, $n = 7$); on their own campus (50%, $n = 8$)

Drug use. Marijuana was the most frequently reported drug used by the KOLs, with 18.8% ($n = 3$) reporting at least one use in the past 12 months. However, of those, 66.7% ($n = 2$) reported no marijuana use for the past four-week time period. One KOL reported hallucinogen use in the past 12 months, with no use reported for the past four weeks. The use of “ecstasy” in the past 12 months was also reported by one KOL, with no use reported for the past four weeks.

None of the participants reported the use of cocaine, amphetamines, or IV drugs for either the 12-month or four-week time period.

Personal salience of the AIDS threat. Thirteen percent of the KOLs (12.5%, $n = 2$) reported they had personally known someone with HIV; 18.8% ($n = 3$) reported they had personally known someone with full-blown AIDS. Thirteen percent (12.5%, $n = 2$) reported they had personally known someone who had died of AIDS. Of the individuals who died of AIDS, one was reportedly a distant acquaintance, the other a family member.

Stages of change. Forty-four percent (43.8%, $n = 7$) of the KOLs reported that they believed AIDS/STDs were a serious personal health threat, and 43.8% ($n = 7$) reported that they were thinking of making changes in their sexual behavior to protect themselves from AIDS/STDs. Thirty-eight percent (37.5%, $n = 6$) reported they had made significant changes in their sexual behavior to avoid AIDS/STDs; 87.5% ($n = 14$) noted that they had been practicing safer sex for 12 months or longer.

Personal risk estimation. Eighty-eight percent (87.5%, $n = 14$) of the KOLs reported that their behavior for the past four weeks had placed them at no risk for HIV infection. Eighty-eight percent (87.5%, $n = 14$) reported that their behavior in the past 12 months had put them at no risk or only slightly at risk.

For the four-week time period, 43.8% ($n = 7$) indicated that their sexual partners' behavior had put them at no risk. When asked to evaluate to what extent their partners' behavior had placed them at

risk during the past 12 months, 43.8% ($n = 7$) indicated no risk, and 18.8% ($n = 3$) indicated slightly at risk (see Table 18). Only one participant estimated that her partner's behavior had placed her somewhat at risk.

Insert Table 18 about here

STD history. Thirteen percent (12.5%, $n = 2$) of the KOLs reported ever being tested for an STD other than AIDS; none reported receiving a positive test result for an STD. One KOL reported that she had wanted to get tested for an STD but had not due to feelings of embarrassment, not knowing how to go about being tested, and the inconvenience of being tested. None of the KOLs reported ever being tested for AIDS; however, 25% ($n = 4$) reported they had wanted to get an AIDS test but had not. Reasons most frequently endorsed for not being tested for AIDS included not knowing how to go about getting tested, inconvenience of being tested, and fear of finding out the test results.

Sexual activity. Seventy-five percent (75%, $n = 12$) reported engaging in some form of sexual activity during the past 12 months. For the four-week time period, 56.3% ($n = 9$) reported they had had no sexual partners, and 43.8% ($n = 7$) reported they had had only one sexual partner. For the 12-month time period, a somewhat wider range in the number of sexual partners was reported (see Table 19). Seventy-five percent (75.1%, $n = 12$) of the KOLs reported they

Insert Table 19 about here

had had one or more sexual partners, and 18.8% ($n = 3$) reported they had had two or more sexual partners. The average number of male sexual partners for the 12-month time period was one partner, with a range of zero to three partners. None of the KOLs reported engaging in lesbian sexual behavior in the past 12 months.

Forty-four percent (43.8%, $n = 7$) indicated that they had been involved in their most recent sexual relationship for more than one year. However, 25.1% ($n = 4$) reported that their most recent sexual relationship was three months or less in length, with an average length of 4 to 6 months (see Table 20).

Insert Table 20 about here

Of the KOLs reporting sexual activity for the past 12 months, 50% ($n = 5$) indicated that they had always used condoms during sexual intercourse. The most frequently endorsed reason for not always using a condom was the use of oral contraceptives (40%, $n = 4$). Twenty-one percent (21.3%, $n = 3$) of the KOLs reported engaging in unprotected vaginal intercourse over the past 12 months, with an average of 24.3 occurrences; 20.1% ($n = 3$) reported engaging in unprotected vaginal intercourse over the past four weeks, with an

average of 6.33 occurrences. Fifty percent (50%, $n = 7$) reported engaging in unprotected female-to-male oral genital contact in the past 12 months, with an average of 12 occurrences. None of the KOLs reported engaging in protected female-to-male oral genital intercourse nor in either protected or unprotected anal intercourse for the 12-month or four-week time period.

Thirteen percent (13.4%, $n = 2$) reported engaging in sexual activity over the past 12 months with a man who was also having a sexual relationship with another woman. One KOL reported having sex in the past 12 months with a man whom she saw once and did not see again. None of the KOLs reported engaging in sexual intercourse with a man who was having, or who had had, a sexual relationship with another man or with an IV drug user in the past 12 months. Sexual activity while using alcohol was reported by 28.5% ($n = 4$) of the KOLs; sexual activity while using drugs was reported by none of the KOLs.

Behavioral intentions. Eighty-one percent (81.3%, $n = 13$) of the KOLs noted that they definitely or probably would ask a male sexual partner to use a condom to prevent an STD. The intention to request condom use actually increased somewhat when the situation involved the use of alcohol (84.6%, $n=11$) but decreased when the situation involved the use of drugs (60%, $n = 3$).

Norm perception. The perception of reference group norms among the KOLs for HIV protective and HIV-risky attitudes and behaviors was consistent with the perception of reference group norms reported by the general survey respondents. For example,

93.3% (n = 14) of the KOLs indicated that their female friends believe that it is acceptable for a woman to ask a man to wear a condom, and 86.6% (n = 13) indicated that their female friends respect a woman who makes sure that her date uses a condom. However, only 46.7% (n = 7) agreed or strongly agreed that their female friends always ask their male partners to use a condom during sexual intercourse (see Table 21), and 20% (n = 3) believed that their female friends consider it “sleazy” for a woman to carry a condom in her purse.

Insert Table 21 about here

Thirteen percent (13.3%, n = 2) believed that their female friends would agree to have unprotected sexual intercourse if their partners objected to using condoms, and 20% (n = 3) believed that their female friends try to practice safer sex by having their male sexual partners withdraw before ejaculation. Finally, 26.7%, (n = 4) agreed or strongly agreed that their female friends say that they have safer sex much more frequently than they actually do, and 80% (n = 12) believed that even among their female friends who do practice safer sex, sexual intercourse without a condom is more likely to occur after drinking alcohol.

AIDS/STD knowledge. On the AIDS/STD preintervention knowledge summary score, 66.7% (n = 10) scored above 81% correct, 26.7% (n = 4) scored between 72% and 78% correct, and 6.7%

(n = 1) scored 69% correct. Mean total score was 26.66, with a range of 22 to 31 correct (see Table 22).

Insert Table 22 about here

Outcome Findings

Representativeness of Sampling

A series of two-way ANOVAs were performed on code-matched and code-unmatched data for both the CG and the IG at pre- and postintervention to examine a potential threat to external validity. For most of the major dependent measures, there were no significant differences between those respondents with both pre- and postintervention data (code-matched) and those with pre- or postintervention data only (code-unmatched). For example, there was no difference between the code-matched CG and the noncode-matched CG at pre- or postintervention on perceived risk $F(1, 280) = 0.68$, ns, intentions $F(1, 274) = 0.36$, ns, or perceived norms $F(1, 270) = 0.79$, ns.

Significant differences between matched and unmatched respondents were found for pretreatment knowledge scores. The main effect for condition was not significant, $F(1, 275) = 1.13$, ns. The main effect for MATCPRE (those participants whose data could not be matched at postintervention) was significant, $F(1, 275) = 13.81$, $p < .001$. This indicates that those participants whose data could not be matched at postintervention had significantly lower

knowledge scores than those participants whose data were tracked from pre- to postintervention.

A significant interaction effect for intervention condition by MATCPRE was also found. This indicated that CG participants whose data could not be matched at postintervention had significantly lower knowledge scores than any other group. Further, IG participants whose data could not be matched at posttreatment had significantly lower knowledge scores than CG participants whose data could be matched at posttreatment.

The main effect for MATCHPST (data available at postintervention only/no preintervention data) was also significant, $F(1,275) = 5.16, p < .05$. This finding indicates that those participants for whom posttreatment data could not be matched with pretreatment data had significantly lower posttreatment knowledge scores than those whose data could be tracked at both pre- and posttreatment.

The interaction effect for condition by MATCHPST status could not be tested due to missing cells. Specifically, the cell for missing pretest data (MATCPST) for the IG was absent. All IG participants with posttreatment data also had pretreatment data. Thus, any meaningful omnibus interaction tests could not be performed. However, the between cells t-tests indicated that those IG participants whose pretreatment data could be matched at posttreatment had significantly higher posttreatment knowledge scores than CG participants matched at pre and posttreatment. Moreover, the CG participants with data matched at pre and posttreatment had

significantly higher scores than the CG whose data could not be matched at posttreatment. The differences between the IG pre-posttreatment matched participants and the CG unmatched participants were not statistically significant.

Data Analysis

The data analysis process involved a series of steps beginning with the raw data and progressing to a set of specific questions and analytical procedures based on the initial hypotheses generated for the study. Figure 3 presents a schematic representation of the procedures that guided the analyses.

Insert Figure 3 about here

The first step of the analysis began with the raw data from which frequencies, means, and standard deviations were derived for all 280 pre- and posttreatment survey items for both the CG and IG. Chi-squares were performed on the categorical data (i.e., individual stages of change items) and on frequencies for alcohol items 7 (frequency of alcohol use/past 4 weeks) and 8 (most alcohol consumed on one occasion/past 4 weeks) and sexual behavior items 75A (frequency of unprotected vaginal intercourse/past 4 weeks) and 77 (frequency of protected vaginal intercourse/past 4 weeks). Next the means and frequencies were compared for the CG and IG, focusing primarily on the dependent variables where change was predicted by

the initial hypotheses. Composite scores were then created for the following dependent variables:

1. HIV/AIDS knowledge. A summary score was based on the number of correct responses to survey items 147 to 180. Summary scores ranged from 0 to 32.

2. Perceived risk. Since those items relating to personal risk estimates used a Likert scale, a perceived risk composite score was calculated by summing the responses for questions 53 to 56. The minimum possible score was 4 and the maximum was 22.

3. Norm perception. The norm perception summary score was based on survey items 132 to 141. Scoring for items 225 through 228 and for items 230 and 231 was reversed. Possible scores ranged from 10 (low norm perception for HIV protective behaviors) to 50 (high norm perception for HIV protective behaviors).

4. Behavioral intentions. Responses on questions 119 to 121 were tabulated to yield a composite score ranging from 6 (definitely would ask partner to use a condom) to 18 (definitely would not ask a partner to use a condom).

5. Stages of change. A composite score was computed for the stages of change survey items based on true/false responses for items 46 to 50. One point was assigned for an appropriate response to each item (positive score in parentheses) as follows: 46 (false); 47 (true); 48 (true); 49 (false); and 50 (true). The total possible score for the Stages of change composite was 5 points.

6. Assertiveness. A composite score was derived for general assertiveness. This included social assertiveness (e.g., refusing alcohol use), as well as sexual assertiveness (e.g., requesting condom use). Since survey items 123, 125, 127, 129, and 131 used a Likert-type scale, the assertiveness composite score was derived by summing these items. Items 123 and 125 were reverse scored. Possible scores ranged from 5 (very unassertive) to 25 (very assertive). In addition, a separate composite score for sexual assertiveness was calculated based on responses to survey items 127, 129, and 131. Summary scores ranged from 6 (very unassertive) to 15 (very assertive).

7. Sexual behavior. Two survey items were used to analyze change in risky sexual behavior. Responses to survey item 75 (“In the past four weeks, I had vaginal intercourse without my partner wearing a condom ____ times”) were used to track changes in risky sexual behavior. Responses to item 77 (“In the past four weeks, I had vaginal intercourse with my partner wearing a condom ____ times”) were used to track changes in safer-sexual behavior.

The second stage of data analyses involved a detailed consideration of the means and frequencies for the composite scores described above. In addition, a series of ANOVAs were conducted to test for pretreatment differences, with Intervention status as the independent variable and the appropriate composite score as the dependent variables. Moreover, a series of chi-square analyses on several of the pretreatment alcohol related items were also conducted.

The third step of the analyses involved a series of ANCOVAs and repeated measures ANOVAs to determine if there were any treatment differences on the major dependent variables. For the ANCOVAs, intervention status served as the independent variable, the appropriate pretest composite was the covariate, and the posttreatment score served as the dependent variable. For the repeated measures ANOVAs, intervention status was the independent and the the appropriate pre- and posttreatment measures were the dependent variables.

ANCOVAs and repeated measures ANOVAs were conducted also for the major dependent composite variables by different grouping variables. These grouping variables included number of conversations from pre- to posttreatment and individual level of risk. Number of conversations (pre- to post) was based on responses to item 142 ("How many different conversations have you had in the past two months in which someone living in your dorm has endorsed safe sex [AIDS prevention] to you?). Possible responses included 0 to 6 or more conversations. Grouping was based on a change score (post minus pre).

Individual level of risk was estimated in three ways. First, risk level was calculated based on responses for pretreatment survey item 68b ("How many different sexual partners have you had in the past 12 months?"). The following risk levels were statistically derived to approximate a normal distribution. These risk levels were based on

the frequency with which respondents indicated a given number of sexual partners:

Risk Level 0	No Partners
Risk Level 1	1 Partner
Risk Level 2	2 Partners
Risk Level 3	3 - 4 Partners
Risk Level 4	> 4 Partners

Second, risk level was defined by the frequency of unprotected vaginal intercourse over the past 12 months (“In the past twelve months I had vaginal intercourse without my partner wearing a condom ____ times”). The following risk levels were derived based on the frequency of responses for each response choice to approximate a normal distribution:

Risk Level 0	No unprotected vaginal intercourse
Risk Level 1	1 to 3 occurrences
Risk Level 2	4 to 16 occurrences
Risk Level 3	> 16 occurrences

Finally, risk level was based on responses to item 73: “How long were you involved in your most recent sexual relationship?” Based on information obtained from focus groups and pretest data, the following time periods were deemed to be representative of relationship status, including potentially progressive levels of emotional commitment and sexual intimacy.

Risk Level 1	Less than one week
Risk Level 2	Less than one month

Risk Level 3	Between 1-3 months
Risk Level 4	Between 4-6 months
Risk Level 5	Between 7-12 months
Risk Level 6	Longer than 12 months

Analyses also involved a series of multiple regressions based on those grouping variables that showed statistical significance.

Pretreatment Differences

Table 23 shows the pretreatment mean scores for the composite variables by intervention status. To summarize, no significant pretreatment differences on any of the composite scores were found.

Insert Table 23 about here

For example, the CG ($\underline{M} = 6.34$) was not significantly different from the IG ($\underline{M} = 5.80$) on risk perception ($\underline{F} (1,168) = 1.04$, ns), knowledge (CG $\underline{M} = 26.22$, IG $\underline{M} = 25.60$; $\underline{F} (1,168) = 1.68$, ns), sexual assertiveness (CG $\underline{M} = 8.15$, IG $\underline{M} = 7.81$; $\underline{F} (1,162) = 0.40$, ns), and frequency of unprotected vaginal intercourse over the previous four weeks (CG $\underline{M} = 2.10$, IG $\underline{M} = 1.95$; $\underline{F} (1,169) = 0.03$, ns).

In terms of the Intervention status differences on the pretreatment alcohol related items, several significant differences were found. While a series of nonparametric One Way ANOVAs were calculated on the data, for the sake of brevity only the associated $\underline{\chi}^2$, with one degree of freedom, will be reported.

The CG were more likely than the IG to report “Yes” than the IG to item 5 “Have you used alcohol in the past twelve months?”, $\chi^2 = 12.192$, $p < .001$. On item 6 (“How often, on the average, in the past 12 months, did you use alcohol?”) significant differences between the CG and IG were also found. The CG had significantly more people in category 4 (4 to 8 times per month) than the IG. Similar results were found when the question was phrased in terms of the past four weeks, the CG were more likely to have more individuals in category 4 than did the IG, $\chi^2 = 5.48$, $p < .05$.

Correlational Analyses

The pretreatment alcohol use questions were correlated with several of the HIV-risky sexual behavior items. Two biserial correlations between survey item 5 (alcohol use in the past 12 months) and number of partners for unprotected vaginal intercourse over the last four weeks ($r(170) = .16$, $p < .05$) and over the last 12 months ($r(170) = .17$, $p < .05$) were significant. Similar results were found for survey item 8 (most alcohol consumed on one occasion — past four weeks) and frequency of unprotected vaginal intercourse over the past four weeks ($r(168) = .17$, $p < .05$), and over the past 12 months ($r(153) = .22$, $p < .01$). Additionally, survey item 8 also was significantly related to the number of partners for unprotected vaginal intercourse over the last four weeks ($r(173) = .25$, $p < .01$) and over the last 12 months ($r(171) = .34$, $p < .001$).

The most alcohol consumed on one occasion (past 12 months) was found to be significantly related to several of the HIV-risky

behavior questions. The frequency of unprotected vaginal intercourse over the past four weeks ($r(168) = .17, p < .05$) and 12 months ($r(171) = .22, p < .01$) were significantly related to the reported amount of alcohol consumed on one occasion over the past 12 months. Additionally, survey item 9 also was significantly related to the number of partners for unprotected vaginal intercourse over the last four weeks ($r(173) = .23, p < .01$) and over the last 12 months ($r(171) = .37, p < .05$). Finally, the amount consumed on one occasion over the past 12 months) was also significantly related to the number of partners for protected vaginal intercourse over the last 12 months ($r(173) = .28, p < .001$).

Correlations were calculated using alcohol consumption (frequency of alcohol consumption and the most alcohol consumed on one occasion) and engaging in sexual activity while drinking. Significant correlations were found between the most alcohol consumed on one occasion over the past four weeks and sexual activity while drinking in terms of both frequency ($r(166) = .33, p < .001$), and number of partners ($r(168) = .37, p < .001$).

The pretreatment perceived risk composite score was also related to several of the HIV-risky sexual behavior items. The frequency of unprotected vaginal intercourse over the past four weeks ($r(166) = .27, p < .001$) and 12 months ($r(151) = .33, p < .001$) were found to be significantly related to perceived risk. The number of partners for unprotected vaginal intercourse for the past 4 weeks ($r(171) = .48, p < .001$) and the past 12 months ($r(169) = .63,$

$p < .001$) were also significantly related to perceived risk. The length of relationship was also found to be related to perceived risk ($r(169) = .49, p < .001$).

Posttreatment Differences

Chi-squares were performed for individual stages of change items. No significant differences were found between groups.

Table 24 shows the means and standard deviations for the composite variables of interest. It also shows the F -ratio results and its associated error degrees of freedom for a series of ANCOVAs. For

Insert Table 24 about here

most of the variables, the differences between groups were not statistically significant. For example, there were no significant differences between the CG ($M = 3.40$) and the IG ($M = 3.07$) for the stages of change composite, $F(1,135) = 1.91, ns$. Similarly, differences between the CG ($M = 8.16$) and the IG ($M = 7.25$) for behavioral intentions was not significant, $F(1,167) = 1.05, ns$. Treatment effects were found for two variables, AIDS/STD knowledge score and the number of AIDS/STD related conversations with peers, as shown in Tables 25 and 26. The CG ($M = 26.39$) had significantly

Insert Tables 25 and 26 about here

lower knowledge scores than did the IG ($M = 28.89$), $F(1,167) = 36.78$, $p < .001$. Differences were also found for the number of peer conversations. The CG ($M = 2.91$) had significantly fewer conversations with peers about STDs/AIDS than did the IG ($M = 3.38$), $F(1,167) = 4.12$, $p < .05$.

In addition to analyzing the data by intervention groups, the participants were also assigned to categories based on their pretreatment scores for several variables. Further, ANCOVAs were calculated within each category using the appropriate pretreatment composite score as the covariate.

Participants were categorized by the number of sexual partners. Most of the ANCOVAs using the composite scores were not statistically significant. However, significant differences between groups were found for those individuals who had no sexual partners over the prior 12 months and number of conversations. The CG ($M = 0.99$) in this category had significantly fewer conversations with peers about STD/AIDS than did the IG ($M = 2.55$), $F(1,36) = 7.62$, $p < .01$. Table 27 shows these results.

Insert Table 27 about here

Participants were also categorized by the number of posttreatment STD/AIDS peer conversations. Most of the within category comparisons were not significant. The comparison between

the CG and IG using those individuals who had one STD/AIDS peer conversation and perceived risk as the dependent variable found significant differences between groups (see Table 28). The CG

Insert Table 28 about here

participants ($M = 6.44$) who had one peer conversation had significantly lower perceived risk scores than did the IG ($M = 8.46$;) $F(1,14) = 5.16, p < .05$.

Risk level (frequency of unprotected vaginal intercourse/past 12 months) was also used to differentiate subjects. While most of the within category analyses were not significant, moderate risk level participants could be differentiated by Intervention condition based on their behavioral intention scores (see Table 29). CG subjects

Insert Table 29 about here

($M = 9.40$) in the moderate risk group (Risk Level = 1) were more likely not to ask their male sexual partner to use a condom than the IG ($M = 5.50$), $F(1,8) = 9.97, p < .05$.

Repeated Measures ANOVAs. Repeated measures ANOVAs were conducted for the major dependent variables. For most of the variables, there was no significance between the CG and the IG. For example, for intentions, there was no significant difference between

the CG and the IG, $F(1,168) = 0.16$, ns, nor was the time by condition interaction significant, $F(1,168) = 0.09$, ns. Nor was there a significant difference for norm perception between the CG and IG, $F(1,167) = 0.18$, ns, or for the time by condition interaction, $F(1,167) = 0.05$, ns. Also, there was no significant difference in unprotected vaginal intercourse between the CG and IG, $F(1,163) = 0.00$, ns, nor time by condition, $F(1,163) = 0.00$, ns.

The repeated measures ANOVA using total knowledge scores indicated that while the CG and IG did not differ at pretreatment ($F(1,168) = 1.68$, ns); the IG had significantly higher posttreatment scores ($F(1,168) = 17.90$, $p < .001$) than the CG. The within subjects factor of time was also significant $F(1,168) = 57.67$, $p < .001$, which indicated that there were significant changes from pre- to post treatment. There was also a significant condition by time interaction, $F(1,168) = 37.03$, $p < .001$. This showed that the IG demonstrated significantly greater changes over time than the CG.

While no significant differences were found for condition for perceived risk, a significant increase in risk perception over time was found, $F(1,169) = 17.38$, $p < .001$. The time by condition interaction effect for risk perception approached but was not statistically significant, $F(1,169) = 3.00$, ns.

Finally, protected vaginal intercourse tended to increase over time for both the CG and IG, but this increase was not statistically significant, $F(1,162) = 3.43$, $p < .07$. To further examine the increase in protected vaginal intercourse, a series of t-tests were conducted.

While there was a net increase for the IG, CG, and the total sample, none of the pre-post differences were statistically significant (see Table 30). The total sample showed a mean positive change of 0.500

Insert Table 30 about here

or 67% in the frequency of protected vaginal intercourse from pre- to posttreatment. However, this pre- to posttreatment difference was not significant ($p > .05$). While not significant ($p > .05$), similar results were found for the CG, with a change in frequency of .738 or 76%. The IG also showed no significant change ($p > .20$) in the pre- to posttreatment frequency of protected vaginal intercourse ($M = .250$ or 50%).

Additionally, of those students in the total sample who reported having sex, there was a 5% reduction in the ratio of protected to unprotected sex from pre-to postintervention. However, CG participants showed a 17% decrease in the ratio of protected to unprotected sex, while IG participants showed a 13% increase in the same measure.

Repeated measures ANOVAs were also performed using the various grouping variables described above (i.e., number of partners, length of relationship, and frequency of unprotected vaginal intercourse/past 12 months) as independent variables. In general, no significant difference was found between groups based on length of relationship. For example, there was no difference in intentions, F

(11,158) = 2.13, ns, or norms, $F(11,157) = 0.70$, ns. While the frequency of unprotected vaginal intercourse tended to increase as the duration of the relationship increased, this increase was not statistically significant $F(11,153) = 2.22$, ns.

Similarly, using the reported number of partners as an independent variable, only one significant difference between groups was found: As the number of partners increased, the frequency of unprotected vaginal intercourse increased, $F(4,151) = 3.48$, $p < 0.01$, for both the CG and IG. However, the condition by number of partner interaction was not statistically significant, $F(4,151) = 1.07$, ns.

Multiple regression analysis. A multiple regression analysis was calculated on the knowledge data. To assess how the level of knowledge changed as a result of the intervention, a difference score was calculated:

$$\begin{array}{ccccc} \text{Posttreatment} & & \text{Pretreatment} & & \text{Change in} \\ \text{Knowledge} & - & \text{Knowledge} & = & \text{Level of} \\ \text{Score} & & \text{Score} & & \text{Knowledge} \end{array}$$

The knowledge change score served as the dependent variable. The independent variables were Intervention condition, change in the number of STD/AIDS peer conversations (post - pre), and risk level. As shown in Table 31 this regression equation explained 30.24% of the

Insert Table 31 about here

variation in the change in knowledge scores from pre- to posttreatment. The final equation is as follows: change in the level of knowledge = 1.10 + 2.82*(Intervention status) + 0.18*(change in the number of conversations) + - 0.56*(risk level).

A series of stepwise multiple regressions were calculated with several other dependent variables as well: Intentions, HIV-risky sexual behavior (frequency of unprotected vaginal intercourse/4 weeks), HIV-protective behavior (frequency of protected vaginal intercourse/ 4 weeks), and assertiveness. Intervention condition, change in the number of STD/AIDS peer conversations (post - pre), and risk level served as the independent variables. However, none of the independent variables met the .15 significance level for entry into the model. The above regressions also were performed using alcohol consumption as an independent variable. None met a .15 level of significance criterion for entry into the model.

Condom taking behavior. Figure 4 shows the weekly condom count for both dormitories, as a function of the number of persons per dormitory (i.e., number of condoms replaced per week/number of persons per dorm). There were no apparent treatment differences

Insert Figure 4 about here

in condom taking behavior for the CG and the IG. As seen in Figure 4, there was a notable discrepancy between the two groups in week 5; however, the CG participants had a large party in their dormitory at this point, and according to the participants' reports, most of the condoms were taken by male guests.

Manipulation Checks

Interpersonal orientation. The KOLs' mean score on the Liking People Scale (Filsinger, 1981) was compared to the college norms. While higher than the college norms (KOLs \underline{M} = 61.17, μ = 59.86) this difference was not statistically significant (\underline{t} (23) = 1.10, \underline{p} > .10).

The peer- and self-ratings of popularity were significantly related (\underline{r} (22) = .40, \underline{p} < .05). It should also be noted that the peer-ratings were significantly higher than the self-ratings of popularity (mean difference = 5.0, \underline{t} (23) = 3.90, \underline{p} < .001).

Survey data. Table 32 shows the pre-post differences on the composite variables for the KOLS. For most of the composite variables

Insert Table 32 about here

there were no significant changes. However, significant increases were found for knowledge and number of conversations. The KOLS had an average of 3.28 conversations before treatment, with an average of 4.90 peer conversations following training, \underline{t} (17) = 4.90, \underline{p} < .05. Similarly, the KOLS had significantly higher scores on the knowledge questionnaire from pre- (\underline{M} = 26.67) to posttreatment (\underline{M} = 30.10),

$t(17) = 5.98, p < .001$). No other pre-posttreatment difference was significant.

Conversation skills. There were significant changes from pre- to postintervention regarding conversation skills (pre $M = 30.42$, post $M = 78.67$), $t(21) = 14.16, p < .001$. These results indicated that the KOLs were more likely to discriminate successfully between helpful and non-helpful responses to peer statements and to use a greater number of "I" statements in the endorsement of health behavior change with peers.

Sexual assertiveness role-plays. Table 33 shows the pre- and posttreatment ratings of sexual assertiveness. There were no

Insert Table 33 about here

significant differences pre- to postintervention for most of the sexual assertiveness role-play measures. For example, the global ratings of assertion for pre- and posttreatment were not significantly different (pre $M = 2.02$, post $M = 2.05$), $t(21) = 0.19$. Similar results were found for escalating assertion (pre $M = 0.58$, post $M = 0.61$), $t(21) = 0.28$, for confrontational assertion (pre $M = 0.27$, post $M = 0.19$) $t(21) = 1.21$, and for aggression (pre $M = 0.10$, post $M = 0.05$) $t(21) = 1.23$. However, there was a significant increase in empathic assertion (pre $M = 0.24$, post $M = 0.43$), $t(21) = 2.24, p < .05$. The KOLS ($M = 17.71$) had significantly higher mean scores

on the Assertiveness Self-Report Inventory (Herzberger et al. 1984) as compared to the college norms ($\mu = 10.26$), $t = 7.68$, $p < .001$.

Behavioral compliance measures. The survey data indicated that the KOLs significantly increased the number of peer conversations pre- to postintervention (see Table 34). They reported significantly

Insert Table 34 about here

more conversations at postintervention than preintervention (pre $M = 2.11$, post $M = 3.70$) $t(21) = 2.55$, $p < .05$. The KOLs also reported talking to significantly more women at postintervention than at preintervention (pre $M = 3.28$, post $M = 4.90$) $t(21) = 2.85$, $p < .05$.

Moreover, the KOLs indicated that the conversations were significantly more relevant at postintervention than at preintervention (pre $M = 1.72$, post $M = 2.90$), $t(21) = 3.61$, $p < .01$. The KOLs also reported a significantly more positive affective reaction to these conversations (pre $M = 2.94$, post $M = 4.30$), $t(21) = 2.95$, $p < .05$. They noted that the conversations increased their knowledge about the transmission of AIDS/STDs (pre $M = 0.17$, post $M = 0.50$), $t(21) = 2.82$, $p < .05$ and about how to prevent the transmission of AIDS/STDs (pre $M = 0.17$, post $M = 0.40$), $t(21) = 2.09$, $p < .05$. Finally, the KOLs acknowledged feeling significantly more confident about protecting their sexual health from pre- to postintervention (pre $M = 0.30$, post $M = 0.50$) $t(21) = 2.65$, $p < .05$.

On an independent self-report measure, there was a significant increase in the reported number of conversations pre- to postintervention, ($t = 15.74, p < .001$). An analysis of the contact take-home monitoring logs revealed that the KOLs reported 173 conversations for the duration of the study. Mean number of conversations was 9.61, with a median of 10 per person. Percent compliance with log completion was 88% for week 1, 75% for week 2, 71% for week 3, and 67% for week 4.

Discussion

A randomized experimental field design was used to compare a community intervention (AIDS education materials plus the training of individuals identified as key opinion leaders to serve as peer behavior change agents) with a comparison intervention (AIDS education materials alone). Formative research, including assessment and intervention focus groups and a pretest of the dependent measures, was employed in an attempt to increase the efficacy of the experimental procedure. The actual intervention involved two levels of behavior change strategies: direct cognitive-behavioral skills training of key opinion leaders and social influence/diffusion of innovation. While a number of direct training effects were found for the key opinion leaders and an increase in AIDS/STD risk behavior knowledge and the number of AIDS/STD related conversations were found for the intervention participants, no other attitudinal or behavioral changes due to diffusion of innovation effects were found.

Key Opinion Leaders

Crucial to the success of the intervention design was the selection of key opinion leaders with the ability to discuss AIDS/STD information and knowledge with their peers. Optimally, key opinion leaders would also possess the ability to express and exchange attitudes, opinions, and feelings concerning HIV-protective behavior with their peers. During the formative research phase, participants indicated that they would feel offended if peers gave them advice or “tried to tell (them) what to do” concerning their sexual behavior.

Focus group discussants also acknowledged that it would be uncomfortable for them to initiate conversations with their peers about HIV-protective behavior. Specifically, the women had noted that they did not want to seem “pushy” or “preachy” or appear to be a “know-it-all” to their friends.

Therefore, selection and training of opinion leaders focused on recruiting women with well developed social skills and an established social network within the intervention dormitory. Selection criteria included frequent participation in dormitory activities, being well liked and trusted by peers, the ability to listen to and understand others, the ability to keep confidences, and a good sense of humor. Opinion leaders were nominated and rated along these dimensions by at least two judges; nominees were also asked to rate themselves using the same criteria. Peer ratings and self-ratings were found to be significantly correlated.

Moreover, nominees completed a separate measure of interpersonal orientation involving social affiliation (i.e., having close personal friendships, engaging in conversations with others, and seeking out the company of others). The nominees’ mean scores on the interpersonal orientation measure were higher than the college population mean for women (Filsinger, 1981). Although this difference was not statistically significant, taken along with peer and self-ratings of social ascendancy, the measure suggests that the individuals recruited as key opinion leaders were well liked and influential with their peers, had high levels of self-esteem, and a high

degree of interpersonal orientation. Thus, it would seem reasonable to suggest that the opinion leaders possessed good social skills prior to training. However, in order to maximize the effectiveness of the intervention and to minimize potentially aversive social consequences (e.g., embarrassment, anger, or feelings of alienation), opinion leaders received training in specific conversation skills emphasizing empathic, “non-preachy” “I” statements.

Following training, the opinion leaders demonstrated significant increases in empathic and endorsement conversation skills and the ability to differentiate helpful from nonhelpful responses. For example, prior to training, a typical response to a written scenario of a peer expressing concern about her boyfriend’s refusal to use a condom might be, “You really should use a condom. If he won’t use a condom, then why don’t you date someone else?” Following behavioral skills training, a response to the same scenario might be, “You’re really worried about not using a condom when you have sex (empathy). I used to feel really embarrassed bring up the subject with my boyfriend (sharing personal experience), but now I always carry a condom with me just in case. I told my boyfriend that I made a promise to my girlfriends to keep myself safe (personal endorsement).”

The opinion leaders significantly increased the number of peer conversations involving AIDS/STDs and talked to a greater number of women living in their dormitory about AIDS/STDs. Contact-monitoring logs revealed that the opinion leaders had 173 conversations with an average of five different women over the four

weeks of training. Therefore, based on the intervention dormitory population (n = 200), it would appear that approximately 60% of the women received peer health-behavior change endorsements. While it is possible that the opinion leaders had conversations with some of the same women, it is also likely that some number of the opinion leaders' peers generated conversations with other women living in the intervention dormitory.

In addition to increasing the number of AIDS/STD conversations with a greater number of peers, the opinion leaders characterized the conversations as significantly more relevant and reported a significantly more positive reaction to the conversations. They indicated that the conversations increased their knowledge about the transmission of AIDS/STDs and about how to prevent the transmission of AIDS/STDs. Moreover, the opinion leaders acknowledged feeling significantly more confident about protecting their sexual health.

Deficits involving sexual assertion skills, for example requesting that a male partner use a condom, were observed during formative research. As a consequence, instruction in sexual assertion skills was incorporated into the four-week training program for the opinion leaders. While a role-play measure of assertion demonstrated a significant increase in empathic assertion, there was no increase in escalating or confrontational assertion nor in ratings of global assertion. For example, when presented with a role-play involving pressure from a potential partner to have unprotected sexual intercourse, the opinion leaders increased responses such as, "I know

you would rather make love without using a condom, but I feel a lot more comfortable using safe sex” (empathic assertion) rather than, “I’m really serious about using condoms--I’m not going any further unless we go get some condoms” (escalating assertion), or “Come on! You and I have already talked about this and we both agreed we would always use condoms” (confrontational assertion).

The lack of change in the opinion leaders’ global assertion skills may be attributed, in part, to the fact that opinion leaders were chosen based on some number of pre-existing social skills. For example, on a separate measure of assertiveness, the opinion leaders scored significantly above the college population mean (Herzberger et al., 1984), suggesting an already high level of social and sexual assertion skills. However, the specific increase in empathic, rather than escalating or confrontational, assertion may reflect the increasing social costs associated with role-inconsistent behavior. Traditionally, the feminine role has entailed submissiveness, self-subordinating emotionality, and nurturant characteristics (Lips, 1989; Mantell, Schinke, & Akabas, 1988; Mays & Cochran, 1988; Snow & Parsons, 1983). Thus, empathic assertion may be more compatible with a woman’s self-concept and elicit fewer negative interpersonal consequences than escalating or confrontational assertion.

Specific AIDS/STD risk behavior knowledge increased for the key opinion leaders. Formative research indicated that the target population had a high degree of general AIDS information and knowledge (e.g., that condoms can reduce the risk of AIDS) but held a

number of misconceptions concerning the epidemiology and transmission of HIV infection (e.g., that the majority of current AIDS cases are due to blood transfusions). Moreover, focus group participants acknowledged feelings of invulnerability to AIDS. Thus, more specific HIV risk behavior knowledge, along with information concerning the transmission of other STDs (i.e., genital herpes, chlamydia), was included for intervention and assessment. The opinion leaders' postintervention data revealed significant increases in specific AIDS/STD information, including the transmission and epidemiology of HIV-infection among women and the impact of STDs, such as chlamydia, on female fertility.

No change was found in the opinion leaders' perception of reference group norms for HIV protective attitudes. The opinion leaders believed at pre- and postintervention that their female peers respect a woman who makes sure that her date uses a condom. However, the opinion leaders also held the perception that their female peers consider it "sleazy" for a woman to carry a condom in her purse. Thus, the data revealed the presence of conflicting attitudinal norms that might have retarded the development of HIV protective attitudes and behavior. Additionally, reference group norms appeared to support HIV-risky sexual behavior. For example, the opinion leaders believed that their female peers would agree to have unprotected sexual intercourse if their partners objected to using condoms and that their peers try to practice safer sex by having their partners withdraw before ejaculating.

However, two notable changes did occur in the opinion leaders' norm perception for HIV-risky sexual behavior: They were more likely to report that their female peers practice safer sex less often than they claim and less likely to report that their female friends believe that it is okay to ask a male sexual partner to use a condom. The most obvious explanation for this unexpected shift in norm perception involves information shared with female peers during the training sessions and during endorsement conversations. Discussion throughout training frequently involved personal disclosures detailing feelings of embarrassment over requesting that male partners use condoms. Thus, the shift in the opinion leaders' perception for the presence of HIV-risky behavior and attitudes among their peers potentially reflects a more accurate appraisal of reference group norms.

The opinion leaders did not increase their personal AIDS/STD risk estimations, increase their intentions to practice safer sex, nor report a decrease in risky sexual behaviors. These findings will be discussed below in terms of the overall project.

Intervention Group Participants

The hypothesis that the intervention group participants would increase their AIDS/STD risk behavior knowledge and the reported number of peer conversations about AIDS/STD prevention, relative to the comparison participants, was supported by the results. However, the present results did not support the hypotheses that, relative to the comparison group, the intervention group would increase their

perception of reference group norms for AIDS/STD prevention, increase their personal AIDS/STD risk estimation, increase their behavioral intention to practice safer sex, report a decrease in risky sexual behavior and an increase in socially and sexually assertive behavior, and exhibit an increase in condom taking behavior.

Issues Influencing Adoption of HIV Preventative Behavior

The consideration of a number of factors regarding the adoption of HIV preventative behavior are important for more clearly understanding the results from the current study. These issues may be broadly defined as methodological, individual, contextual, and theoretical factors.

Methodological Issues. The brevity of the intervention period, which was necessitated by the academic calendar, was perhaps the methodological factor which most compromised the outcome of the current study. Additionally, while the four week period was selected to facilitate more accurate recall of risky sexual behavior, it was found to be insufficient for tracking health behavior change in this sample. Unlike the gay/bisexual male population for which the four-week time period has been useful (Kelly et al., 1989), the relatively younger, female sample in the current study reported a low base rate of HIV-risky sexual behavior during this time. For example, participants in the current study reported approximately two occurrences of unprotected vaginal intercourse over a four-week period. Thus, a “floor” effect may have prevented detection of behavior change.

Furthermore, the eight-week time period allowed for the diffusion of health behavior-change strategies may have been inadequate to create a perception of norm change among the participants. As noted above, strong evidence was found for the presence of norms for HIV-risky sexual behavior (e.g., the use of alcohol to “allow” women to have sex; the perception that it is inappropriate for a woman to carry a condom in her purse), as well as the absence of norms for HIV protective behavior (e.g., a lack of regular condom use by roughly 60% of the sexually active respondents). Thus, a longer period may have been needed to create normative support for HIV protective behavior, especially since HIV-risky behaviors and beliefs have been practiced and reinforced presumably for an extended time.

Moreover, it is not clear that norm change and health behavior change were emphasized in the peer conversations. No assessment of the content and quality of the peer conversations in real time was made. Given the fact that AIDS/STD risk behavior knowledge increased significantly for the intervention group, it is a reasonable conjecture that this was the focus of the peer conversations. The training of the key opinion leaders stressed the importance of conveying a change in norms to peers, but it is possible that this message was diluted by other training components. For example, opinion leaders also received training in social and sexual assertion, since formative research had detected an absence of these skills in the target population. In retrospect, a simpler and more focused training

approach that emphasized one specific safer-sex strategy (e.g., contracting with female peers to always carry and use condoms during sexual intercourse) may have been more successful.

Multiple regression analyses indicated that a change in knowledge could be accounted for by intervention status and risk level. Individuals in the intervention condition increased their level of knowledge significantly more than did individuals in the comparison group. Risk level, as defined by the frequency of unprotected intercourse in the past 12 months, was found to have an inverse effect on change in knowledge: As risk level increased, change in knowledge decreased. Thus, it would appear that those at highest risk were least likely to benefit from the intervention. Mondanaro (1989) proposed that individuals whose behaviors place them at higher HIV risk may deny or reject AIDS prevention message as a defense against feelings of vulnerability and fear. Another possibility is that those engaging in more risky sexual behavior may have been outside the social network of the key opinion leaders and thus, may not have received adequate exposure to the peer conversations.

A problem observed in both the current project and the Sixteen-City Community Intervention for Reducing HIV-Risky Behavior among Gay Men (Kelly, et al., ongoing NIMH funded project), on which the current project was modeled, was a lack of change in the behavioral intentions and risky sexual behavior of the key opinion leaders. This lack of change among the opinion leaders may have compromised the impact of the endorsement message. It is possible that opinion

leaders who had experienced a change in their own HIV-risky sexual behavior may have been more convincing behavior change agents.

According to Bandura (1976) and Kazdin (1974) , “coping models” (i.e., individuals who have successfully dealt with a problem) offer a potentially powerful source of social influence. The use of coping models in a diffusion of innovation model of HIV prevention might be accomplished in two ways. First, individuals who have successfully changed their HIV-risky sexual behavior could be recruited to disseminate practical information and knowledge concerning health behavior change. Alternatively, individuals at high risk for HIV might be recruited to receive an intensive small-group behavior change intervention, such as the one used successfully by Kelly et al. (1989). Following personal behavior change, these individual could then serve as behavior change endorser among their peers.

The use of alcohol has been positively associated with HIV-risky sexual behavior for gay and bisexual men (Stall et al., 1986; Stall et al., 1990) and for heterosexual women and men (Butcher et al., 1991; Hingson, Strunin, Berlin & Heeren, 1990). For example, in the Sixteen-City Community Intervention for Reducing HIV-Risky Behavior among Gay Men (Kelly, et al., ongoing NIMH funded project), a strong relationship was found between alcohol use and risky sexual behavior.

In the current study, women reported fairly high rates of alcohol use: 91% reported alcohol use in the past year; 54% reported using alcohol between two and eight times a month; and 42% reported

consuming between seven and 12 drinks on one occasion. Moderate relationships were found between alcohol use and risky sexual behavior. For most of these, the magnitude of the correlations were typically very small, most often below .25. Moreover, a series of multiple regressions indicated that alcohol use was not predictive of intentions, HIV-risky sexual behavior, HIV-protective sexual behavior, nor assertiveness.

This discrepancy concerning the influence of alcohol on risky sexual behavior may be attributed in part to sample differences: Participants in the Sixteen-City Community Intervention (Kelly, et al., ongoing NIMH funded project) were recruited from local bars; participants in the the current project were recruited from a women's college. Accordingly, the immediate availability of alcohol in the Sixteen-City Community Intervention (Kelly, et al., ongoing NIMH funded project) and the self-selection of individuals who frequent bars may have resulted in the more pivotal role of alcohol in the practice of risky behavior. Another potential reason for the discrepancy between the current study and other AIDS research concerning the role of alcohol and risky behavior is the abbreviated time period. As noted above, the low rate of sexual behavior for the four-week period may have obscured the predictive relationship of situational variables, such as alcohol use. Finally, survey items that assessed more directly the occurrence of unplanned or unwanted sexual intercourse while drinking and condom use while drinking may have revealed a different trend. The fact that 75% of the respondents believed that even among

their female friends who do practice safer sex, unprotected sexual intercourse is more likely to occur after drinking indicates that more sensitive assessment items may have been needed.

Of particular methodological concern was the problem of attrition suggested by the low rate (50%) of pre- to postintervention code-matched surveys. Yet, data analysis indicated no significant differences at pre- or postintervention between those respondents represented by matched versus unmatched surveys. The exception was the significantly greater AIDS/STD knowledge score for both the CG and IG respondents represented by matched data.

Interestingly, the rate of matched survey data was only 66% among the key opinion leaders, who received both written and verbal coding instructions. This would suggest that confidentiality concerns, rather than coding errors, contributed most heavily to the low rate of code matched data. When one considers the sensitive and personal nature of the survey items (i.e., sexual behavior) and the small community nature of the intervention site, the issue of privacy becomes even more salient for the participant. However, further testing of the coding procedure would be necessary to fully explore the variables which impacted on this finding.

Individual Factors. Certain characteristics of the individual have been implicated in the lack of HIV health behavior change among heterosexuals, chiefly, a perception of invulnerability (Becker & Joseph, 1988; Edgar, Freimuth, & Hammond; Gottlieb, Vacalis, Palmer, & Conlon, 1988). According to Becker and Joseph (1988),

HIV health-behavior change is a result of an individual's knowledge and attitudes concerning AIDS, including perception of risk.

However, the empirical support for predicting HIV health-behavior change based on risk perception has been mixed, with risk perception both negatively and positively correlated with behavior change (Kirscht & Joseph, 1989). Mondanaro (1989) has proposed that for women perceptions of risk must be balanced by feelings of empowerment to avoid a learned-helplessness response.

In terms of the current intervention, perception of risk was positively correlated with frequency of vaginal intercourse, number of sexual partners, and length of relationship. As the frequency of either protected or unprotected vaginal intercourse increased or the number of sexual partners increased, personal risk estimation increased. Curiously, as length of relationship increased, perceived risk also increased. Since relationships tend to become more sexual over time, the frequency of intercourse may also become more likely, perhaps explaining the respondents' increase in perceived risk.

The reported rates of HIV-risky sexual behavior for the current sample of heterosexual females were relatively low. For example, 35% of the sexually active respondents reported regular condom use compared to only 17.1% of the women surveyed by Richter et al. (1992) and 15.6% of the women surveyed by MacDonald et al. (1990). Additionally, the average occurrence of unprotected vaginal intercourse over the past year for the present sample was 14.74 or approximately one occurrence per month. At first glance, it would

appear that a low perception of AIDS/STD risk might indeed be justified by the women in the current study.

However, participants reported an average of two sexual partners in the past year, with an average duration of four to six months for their most recent sexual relationship. Moreover, roughly 65% of those who were sexually active reported that they do not always use condoms during intercourse. Almost half of the respondents reported engaging in unprotected female-to-male oral intercourse in the past year, and approximately 16% reported engaging in sexual intercourse with a partner whom they saw only one time and did not see again. By projecting the participants' sexual behavior over four years of college and for perhaps several more years until the development of a longer term, monogamous relationship (e.g., marriage), a pattern of HIV/STD risky behavior becomes even more apparent.

The respondents' interpretation of safer sex may further compromised a perception of personal HIV risk. For example, formative research revealed that many women feel that they are practicing safer sex by dating only "nice men" and by having unprotected intercourse within a long term monogamous relationship. However, as noted, the average duration for a sexual relationship in the current study was four to six months. Furthermore, approximately 19% of the respondents reported that they had engaged in sexual intercourse in the past 12 months with a man who was also having a sexual relationship with another woman.

It is likely that the number of respondents involved in a nonmonogamous sexual relationship is even higher, given the fact that approximately 37% of married men have reported having at least one additional sexual partner during marriage (Reinisch, Hill, Sanders, & Ziemba-Davis, 1990) and that college is often a time for sexual exploration (DeBuono et al., 1990; DeLamater & MacCorquodale, 1979; MacDonald et al., 1990). Thus, a woman's interpretation of what constitutes a monogamous relationship may seriously skew her personal risk estimation. A relationship may be seen as sexually exclusive when it may not be, and serial monogamy may be erroneously viewed as practicing safer sex by "limiting the number of sexual partners."

Additionally, employing passive strategies, such as dating only "safe" men, may be complicated by the fact that individuals may intentionally misrepresent the nature of their past sexual behavior. Cochran and Mays (1990) reported that more than a third of college men surveyed acknowledged that they had lied about their past sexual behavior in order to obtain sex. Women may also falsely assume that they can recognize HIV-risky sexual partners. In a survey of 61,299 men, Lever, Kanouse, Rogers, Carson, and Hertz (1992) found that one in eight men had had one or more adult homosexual experiences, although only one in 22 identified himself as bisexual. The authors of the study also found that, compared with heterosexuals, bisexual men were more likely to be dating more than one person, more likely to report having additional sexual partners while in a committed

relationship, and almost twice as likely to have had an STD in the past five years. Therefore, a woman may unknowingly be sexually active with an individual who is practicing HIV-risky behavior.

Contextual Issues. The aim of the present intervention was to change and/or to establish reference group norms among a sample of college women for HIV protective behavior. According to the theory of reasoned action (Ajzen & Fishbein, 1980), AIDS preventive behavior, such as requesting that a partner use a condom, is a result of the specific intention to use condoms on all occasions of sexual intercourse, which is a function, in part, of the perception of reference group norms for the behavior. Based on diffusion of innovation strategies used among gay/bisexual men, which typically recruit same-sex friends and peers (Kelly, St Lawrence, Diaz, et al., 1991), and empowerment approaches (Rappaport, 1986), the current study focused on the female peers of the target population. However, the results suggests that interventions that seek to effect norms change among heterosexual women may need to identify and recruit other significant referents which influence health behavior.

For example, studies involving contraceptive behavior have found that a woman's decision to use birth control is influenced by peer encouragement (Milan & Kilmann, 1987). However, Zabin and Clark (1981) reported that a male sexual partner's reluctance or opposition to the use of oral contraceptives negatively impact on a woman's decision to use birth control. Similarly, a study conducted by Hogan, Astone, and Kitagawa (1985) indicated that a woman's parents

influence her decision concerning whether or not to use birth control. In a more recent study, Strader and Beaman (1989) reported that a woman's decision about condom use was most influenced by her mother and her sexual partner.

Given that the gender-role socialization process most often identifies the man as the initiator of sexual activity within the heterosexual dyad, women may view premeditated sexual intercourse as incompatible with the female role (Lips, 1989). This "feminine" passivity may dictate that a woman leave decisions about condom use up to her male sexual partner. For some number of women, gender-role expectations may necessitate the use of alcohol to "excuse" or explain their sexual behavior (Winett et al., 1990).

Currently, the most effective HIV prevention measure for coitally active women is condom use. Since condom use depends on the cooperation of male sexual partners, this further complicates the ability of women to guard their sexual health. In a study of over 4,000 women at an STD clinic, women who relied on male condom use had higher rates of gonorrhea and trichomoniasis than did women who used female controlled methods (i.e., the diaphragm and contraceptive sponge) (Rosenberg et al., 1992). Therefore, until an acceptable female controlled method of HIV prevention is readily and economically available, women must depend on their partners' cooperation to protect their sexual health.

Another major referent which influences the health behavior choices of women is the mass media. For example, in an examination

of data from a large diffusion of innovation study of birth control practices in Asia, Winett (as cited by Winett et al., 1989) found that mass media campaigns had a greater influence on an individual's decision to utilize birth control than did interpersonal influences. While even casual observation of the American media reveals a societal norm for HIV-risky sexual behavior (e.g., unplanned or "spontaneous" sexual behavior; the use of alcohol prior to casual sex; sexual activity outside of a committed relationship), few, if any, norms for HIV protective behavior are evident. For example, the discussion of health protective measures, such as the use of condoms, is virtually absent from sexual encounters depicted by the media. Moreover, the ongoing controversy concerning television condom advertisements, especially those which emphasize STD protection benefits, suggests that political, rather than public health, considerations are involved. This conclusion is strengthened by the widespread use of sexually provocative ads to sell a vast array of commercial products.

Related to negative societal attitudes toward the discussion of sexual behavior are societal barriers which limit condom distribution (Winett et al. 1989). Prior to the current study, condoms were made available to students by the campus health clinic via plain white condom dispensers, marked by a red cross, centrally located in each dormitory. However, only 63 condoms were sold in both the comparison and intervention dormitories during the semester prior to the onset of the current intervention. Focus group participants noted that the condoms were "old" and "flimsy." This perception was

perpetuated perhaps less by the actual quality of the product than by the presentation or marketing of the product. During the intervention, latex condoms of assorted colors and other novelty types were made available via a plain paper container located in each bathroom of the participating dormitories. Over 2,800 condoms were taken over an eleven-week period, which is approximately equivalent to seven condoms per participant. Additionally, there was an increase in protected vaginal intercourse that approached, but did not meet, statistical significance: The frequency of protected vaginal intercourse increased 67% for the total sample, 76% for the comparison group, and 50% for the intervention group. Conversely, there was a seven percent decrease in unprotected vaginal intercourse for the intervention group and only a seven percent increase in unprotected vaginal intercourse for the comparison group.

These findings suggest that the greater availability of condoms, especially those seen as “fun,” could enhance condom taking behavior, as well as, the acceptability of condom use, the intention to use condoms, and the use of condoms. From a public health perspective, the placement of condoms in dormitories offers an inexpensive but potentially effective method of preventing HIV/STDs on a wide scale basis. However, among those women who reported having sex, comparison group participants showed a decrease in the ratio of protected to unprotected vaginal intercourse, while intervention group participants demonstrated an increase in this measure. This observation suggests that an intervention similar to that employed in

the present study (i.e., cognitive/behavioral, diffusion of innovation) might potentiate condom use.

Theoretical issues. The diffusion of innovation model (Rogers, 1983), as applied to HIV prevention, has three underlying assumptions: (a) that the target audience is part of a “closed system”; (b) that socially influential individuals can be identified and recruited; and (c) that condom use is an innovation (i.e., a new idea or method). However, it is not clear that these assumptions are met. First, as noted above, there are numerous sources of influence that determine not only what type of birth control a woman will select but whether she elects to use birth control at all. Secondly, significant referents for normative female sexual behavior appear to be diverse and, in the case of parents, male sexual partners, and the media, typically in a position of greater social and/or economic power than the woman. Thus, effecting health behavior change among women may necessitate looking beyond the immediate peer group of popular people. Finally, condom use is considered by many as not only not an innovation, but as a hindrance to sexual pleasure (Siegel & Gibson, 1988; Strader & Beaman, 1989). While calls have been made to eroticize condom use, more research is needed to better define these efforts.

The Health Belief Model (Becker, 1974) provides one potentially useful framework for conceptualizing the current findings. According to the model, the extent that individuals adopt preventive health behavior in the absence of disease symptoms is influenced by three factors. First, preventive health action is affected by the belief that

one is or is not personally vulnerable to a particular disease. Women in the present study who reported engaging in high risk behavior demonstrated a low perception of personal susceptibility to AIDS. Similar results have been found among urban minority women (Kalichman, Hunter, & Kelly, 1992) and at-risk gay men (Bauman & Siegel, 1987; Kelly, et al. in press).

Efforts were made in the current study to address the low perception of susceptibility to HIV by encouraging the participants to accurately appraise personal risk. Future interventions might facilitate the development of this skill with the use of individual risk estimation checklists that would allow women to evaluate their behavior. However, Weinstein (1983) found that increasing individuals' awareness of their personal risk can actually increase unrealistic optimism: Individuals who were asked to compare their own behaviors to a list of risk behaviors tended to lower their risk estimates. Thus, efforts must be made to ensure that the checklists are tailored to the sexual behavior of the target audience. For example, anal intercourse was reported by only a small percentage of the current sample of women. However, a much larger percentage reported having two or more sexual partners in the past year. Therefore, a risk appraisal checklist for this group should place a greater emphasis on risk associated with serial relationships over the past year and projected over time.

Second, the Health Belief Model proposes that an individual's perception that a disease is severe and that its occurrence will result

in serious and unpleasant consequences influences whether reductions in risk-taking behavior will or will not occur. While women in the present study acknowledged that HIV is a serious health threat with a severe outcome, there was, as noted, a failure to personalize the perception of risk. Therefore, it is important that educational efforts involve models that are salient for the target population. In the current intervention, one attempt to address the need for relevant role models was the use of project staff and trainers 20 to 26 years of age. Intervention efficacy might have been enhanced further by the selection of opinion leaders who had recently changed or was in the process of changing their behavior.

Finally, according to the Health Belief Model, individuals weigh the psychological and physical costs associated with preventive action against the perceived efficacy of the recommended health behavior. From formative research, as well as the training sessions, it was clear that there are a number of costs associated with practicing safer sex. These costs (i.e., embarrassment over requesting condom use; the belief that condoms reduce spontaneity and pleasure; distress associated with gender inconsistent behavior; partner resistance), which tend to be proximal, may be experienced as more relevant and compelling than the potential and distal benefits (i.e., HIV/STD prevention) associated with preventive health change.

More broadly, social learning theory (Bandura, 1977) provides a theoretical framework for identifying the motivational components of health behavior change. According to the model, behavioral responses

are influenced by not only external events (i.e., rewards and punishers) but by beliefs about self-efficacy, outcome expectancies, and social/contextual variables. Winett, et al. (1989) developed a process of change schema which presents a delineation of contextual determinants, including prevailing beliefs and values, the availability of alternative behaviors and settings, obstacles and barriers, and the extent of positive feedback and reinforcers accruable for initiating and maintaining behavior change.

In the present study, attempts were made to increase self-efficacy via roleplays of HIV preventive behavior. Thus, direct training participants were afforded the opportunity to practice the target behavior and to experience a degree of performance success. Modeling of desirable behavior and peer accounts of successfully performing risk-reductive behavior were also used to increase self-efficacy. However, changes in self-efficacy beliefs were not specifically assessed, and the extent to which the participants increased their belief in their ability to perform preventive responses is not clear. Several factors may have diluted the effects of self-efficacy training: The large group size may have prevented sufficient practice of preventive behavior by all participants equally; training may have been too diffuse, with attempts made to affect behavior over too great a range; models may have inadvertently provided an "expert" rather than a "coping" model.

The process of change schema presented by Winett, et al. (1989) also presents a clear definition of incentive procedures. For

example, incentives should be salient, with delivery made according to the most effective schedules of reinforcement. The current project successfully employed a number of incentive strategies to increase direct training participation: (a) Participants received monetary rewards for attendance at training sessions; (b) a small, weekly lotteries, end-of-training bonus payments, and refreshments created interest among participants; (c) participants received verbal and written reinforcement for attendance and group participation; and (d) participants reported receiving nontangible reinforcement from involvement in a “worthwhile” cause.

While the use of incentives appeared to have increased regular participation in training, it is questionable how well these incentives served to reinforce other target behaviors. For example, incentives were not made contingent on the acquisition of conversation skills, the use of safe sex strategies, nor the quality or quantity of peer conversations. Logistical problems and the essentially private nature of many of the behaviors of interest (e.g., peer conversations reportedly took place spontaneously) presented two major obstacles to the use of direct and contingent incentives. However, a functional analysis would have been helpful to determine what type of reinforcers (e.g., individual, interpersonal) might have more directly influenced the target behaviors.

Finally, for behavior change to occur and be maintained, individuals must also hold strong outcome expectancies (i.e., the private belief in and commitment to the benefits associated with the

health behavior). Individuals must also have a clear sense of self-efficacy or the confidence that they possess the abilities necessary for making the behavior change (Winett, et al 1989). While participants reported a firm commitment to the health benefits associated with the project and appeared to have a high degree of self-efficacy (as demonstrated by responses to survey items measuring treatment outcome), these self-efficacy expectancies were not directly assessed. As suggested previously, the recruitment of opinion leaders who had themselves made changes in their HIV-risky behavior may have impacted positively on initial levels of outcome expectancy and self-efficacy. These beliefs and values might therefore have been transmitted or diffused to peers along with basic HIV/STD information and recommendations for health behavior change (e.g., always use a condom).

Conclusions

The current research might be best viewed as an exploratory effort in an area which has, until recently, attracted little attention or resources. It is evident that merely applying the same behavior change strategies employed among gay/bisexual men to heterosexual women is unlikely to be effective. Given the growing threat of heterosexually transmitted AIDS and that women, as the receptive partner, appear to be particularly at risk, it is urgent that biomedical and psychosocial research continue to be expanded to include this subgroup. However, effective prevention intervention programs will

require a multidisciplinary approach that integrates personal, interpersonal, community, and societal levels of change.

Personal approaches. Where appropriate (i.e., in more equalitarian and/or nonabusive relationships), assertion skills training, using instruction, modeling, role-play, and feedback, is a potentially powerful method to empower women to request safer-sex practices. Training in personal HIV risk estimation, problem-solving, and decision making skills may also enhance a woman's self-esteem and her ability to make health behavior change. This outcome may be strengthened by the involvement of peer behavior change agents. In addition, the use of peer training videos, such as those employed by Solomon and DeJong (1989) which increased behavioral intentions to use condoms by increasing favorable attitudes toward condom use, are recommended on a more comprehensive scale. However, systematic identification of the variables which influence HIV protective behavior change among women, including nonobvious factors within the heterosexual dyad, is urgently required to increase intervention efficacy.

Interpersonal approaches. Prevention interventions which increase greater social support for active HIV protective measures among women are indicated. For example, elementary, middle, and high schools might offer education classes for parents that would encourage open communication with their children about human sexuality, birth control methods and choices, and health protection. On a parallel bases, small group discussion among female and male

adolescents concerning gender role expectations for sexuality are recommended to dispel misperceptions and to enhance communication and understanding within the heterosexual dyad.

Community approaches. For HIV prevention programs to be effective, structural support must be comprehensive and integrated on a community level. For example, condoms must be widely and freely or inexpensively distributed. As indicated from the current study, condoms which are seen as “fun” and are easily obtained will be taken by sexually active women. While it is unclear how many of the condoms were actually used, it would seem apparent that the probability of condom use increased as a result of availability.

Roughly 22% of the respondents from the current study reported that they had wanted to be tested for AIDS or other STDs but were not. Two of the most frequently cited reasons were not knowing how to go about being tested and inconvenience of being tested. In response to these deterrents, communities might actively promote HIV/STD testing via television ad campaigns. Additionally, physicians within the community might be encouraged to provide testing services at a reduced fee several times a year as a public service. To eliminate the stigma often attached to STD testing, well known personalities within the community could be recruited to endorse testing as responsible health-behavior.

Societal approaches. Perhaps the most serious obstacle in the path of HIV prevention interventions is the politicalization of a public health problem. Large scale studies of human sexuality have been

delayed or cancelled on the basis of “morality.” Public service announcements concerning HIV prevention have been slow in coming and are rarely explicit, focused, and targeted for various audiences. Thus, it is urgent that public policy concerning all facets of AIDS research be guided not by election-year politics but by proven public health strategies. Media campaigns must be systematic and draw on existing marketing approaches to create messages which are informative, attractive, and dynamic, as well as tailored for a wide variety of at risk individuals. As the number of women and children with AIDS continue to expand, the pressure on society to respond will be enormous. It will be the role of psychology to work with professional from a wide spectrum of disciplines, as well as communities, to answer this call.

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Table 1

Summary of Factors Which Impede and/or Facilitate the Use of Condoms for Heterosexual Men and Women

	Men	Women
Barriers	<p>Decreased sensation for some men</p> <p>Perception that condoms are a contraceptive device vs STD protection</p> <p>Perception of low vulnerability to HIV/STDs</p> <p>Belief birth control is for women only</p> <p>Use of alcohol or drugs during sex</p> <p>Embarrassment purchasing condoms</p> <p>Belief condoms compromise sexual spontaneity</p> <p>Interfere with reproduction/threat to manhood</p>	<p>Belief condoms are unacceptable to one's partner</p> <p>Perception that condoms are a contraceptive device vs STD protection</p> <p>Perception of low vulnerability to HIV/STDs</p> <p>Belief it is inappropriate for women to plan for sex</p> <p>Use of alcohol or drugs during sex</p> <p>Embarrassment purchasing condoms</p> <p>Belief condoms compromise sexual spontaneity</p> <p>Interfere with reproduction/threat to female role</p> <p>Male dependent method</p> <p>Potential interpersonal cost</p>
Facilitators	<p>Belief condoms can facilitate sexual enjoyment</p> <p>Belief peers and sexual partners advocate condom use</p> <p>Exposure to female model depicted successfully persuading partner to use a condom</p> <p>Widespread availability at little or no cost</p> <p>Provision of information concerning the effective use of condoms for STD/HIV prevention</p>	<p>Belief condoms can facilitate sexual enjoyment</p> <p>Belief peers and sexual partners advocate condom use</p> <p>Exposure to female model depicted successfully persuading partner to use a condom</p> <p>Widespread availability at little or no cost</p> <p>Provision of information concerning the effective use of condoms for STD/HIV prevention</p>

Table 2

Reasons for not Using Condoms as STD/HIV Protection if not the Primary Method of Contraception

	Frequency	%
Use condoms as birth control	16	37.2
Always use condoms	7	16.3
Sometimes use condoms	11	25.6
Never use condoms	9	20.9
Missing Frequencies	19	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 3

Percentage of Respondents Engaging in Unprotected Vaginal Intercourse Over the Past 12 Months

<u>Instances of Unprotected Sex</u>	<u>Frequency</u>	<u>%</u>
0	25	59.5
1	3	7.1
2	2	4.8
3	1	2.4
4	3	7.1
6	1	2.4
7	1	2.4
14	1	2.4
15	1	2.4
20	1	2.4
50	2	4.8
52	1	2.4
Missing Frequencies	20	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 4

Cronbach's Alpha Coefficient of Reliability for Selected Composite Outcome Variables

<u>Composite Variable</u>	<u># of Items</u>	<u>Alpha</u>
Personal Salience	4	.84
Perception of Risk	4	.88
Behavioral Intentions	3	.82
Assertiveness	10	.63
Sexual Assertiveness	6	.66
Perception of Norms	10	.75
Knowledge Score	34	.63

Table 5

Frequencies and Percentages of the Sample for Year in College by Intervention Condition

Year in College	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
Freshman	17	18.7	44	51.8
Sophomore	43	47.3	31	36.5
Junior	16	17.6	7	8.2
Senior	15	16.5	3	3.5

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 6

Frequencies and Percentages of the Most Alcohol Consumed on One Occasion Over the Previous 12 Months

	<u>Comparison Group</u>		<u>Intervention Group</u>	
	<u>Frequency</u>	<u>%</u>	<u>Frequency</u>	<u>%</u>
Routed Out	1	1.1	12	14.1
1 - 2 drinks	6	6.6	7	8.2
3 - 4 drinks	9	9.9	7	8.2
5 - 6 drinks	22	24.2	9	10.6
7 - 8 drinks	31	34.1	12	14.1
9 - 12 drinks	12	13.2	20	23.5
13 - 16 drinks	6	6.6	14	16.5
> 17 drinks	4	4.4	4	4.7

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 7

Frequencies and Percentages of the Most Alcohol Consumed on One Occasion Over the Past Four Weeks

	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
Routed Out	6	6.6	20	23.5
1 - 2 drinks	14	15.4	14	16.5
3 - 4 drinks	16	17.6	10	11.8
5 - 6 drinks	30	33.0	11	12.9
7 - 8 drinks	8	8.8	13	15.3
9 - 12 drinks	11	12.1	12	14.1
13 - 16 drinks	6	6.6	3	3.5
> 17 drinks	0	0	2	2.4

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 8

Frequencies and Percentages of Personal HIV Risk Estimates Over the Previous 12 Months

	<u>Comparison Group</u>		<u>Intervention Group</u>	
	<u>Frequency</u>	<u>%</u>	<u>Frequency</u>	<u>%</u>
Routed Out	8	8.8	17	20.0
No risk at all	45	49.5	39	45.9
Slightly at risk	26	28.6	17	20.0
Somewhat at risk	8	8.8	8	9.4
Good deal at risk	3	3.3	4	4.7
Extremely at risk	1	1.1	0	—

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 9

Frequencies and Percentages of the Respondents' Personal Risk Estimates due to their Partners' Behavior Over the Previous Four Weeks

	<u>Comparison Group</u>		<u>Intervention Group</u>	
	<u>Frequency</u>	<u>%</u>	<u>Frequency</u>	<u>%</u>
Routed Out	8	8.8	16	19.0
No sexual partner	35	38.5	31	36.9
No risk at all	39	42.9	29	34.5
Slightly at risk	9	9.9	4	4.8
Somewhat at risk	—	—	3	3.6
Good deal at risk	—	—	1	1.2
Missing Frequencies	0		1	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 10

Frequencies and Percentages of the Respondents' Personal Risk Estimates due to Their Partners' Behavior over the Previous 12 Months

	<u>Comparison Group</u>		<u>Intervention Group</u>	
	<u>Frequency</u>	<u>%</u>	<u>Frequency</u>	<u>%</u>
Routed Out	8	8.9	17	20.0
No sexual partner	12	13.3	11	12.9
No risk at all	40	44.4	29	34.1
Slightly at risk	20	22.2	19	22.4
Somewhat at risk	5	5.6	6	7.1
Good deal at risk	2	2.2	3	3.5
Extremely at risk	3	3.3	—	—
Missing frequencies	1			

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 11

Number of Sexual Partners for the Previous 12 Months

# of Sexual Partners	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
0	16	17.8	25	30.5
1	38	42.2	29	35.4
2	10	11.1	9	11.0
3	12	13.3	5	6.1
4	6	6.7	4	4.9
5	7	7.8	6	7.3
6	—	—	3	3.7
7	—	—	1	1.2
8	1	1.1	—	—
Missing frequencies	1		3	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 12

Length of Most Recent Sexual Relationship

Length of Relationship	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
Routed Out	16	17.6	24	28.6
1 Night	7	7.7	7	8.3
< 1 Week	1	1.1	1	1.2
1 Week	1	1.1	—	—
< 1 Month	3	3.3	3	3.6
1 to 3 Months	10	11.0	9	10.7
4 to 6 Months	12	13.2	8	9.5
7 to 12 Months	12	13.2	7	8.3
> 12 Months	29	31.9	25	29.8
Missing frequencies	0		1	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 13

Frequency of Unprotected Vaginal Intercourse Over the Past 12 Months by Intervention Condition

Frequency of Unprotected Intercourse	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
0	48	64.0	52	66.7
1	2	2.7	4	5.1
2	3	4.0	2	2.6
4	1	1.3	3	3.8
5	1	1.3	—	—
9	—	—	2	2.6
10	3	4.0	—	—
12	1	1.3	—	—
13	—	—	1	1.3
20	2	2.7	—	—
21	1	1.3	—	—
22	—	—	1	1.3
24	1	1.3	—	—
25	2	2.7	—	—
30	1	1.3	3	3.8
≥ 50	9	12.0	10	12.8
Missing frequencies	16		7	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 14

Frequencies and Percentages of the Respondents Who Believed that their Female Friends Always Ask their Male Partners to use Condoms

Response	<u>Comparison Group</u>		<u>Intervention Group</u>	
	Frequency	%	Frequency	%
Strongly Disagree	11	12.1	4	4.9
Disagree	34	37.4	31	38.3
Neutral	30	33.0	14	17.3
Agree	11	12.1	21	25.9
Strongly Agree	5	5.5	11	13.6
Missing frequencies	0		4	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 15

Distributions of the Knowledge Summary Score by Intervention Group

Score	% Correct	<u>Comparison Group</u>		<u>Intervention Group</u>	
		Frequency	%	Frequency	%
14	44	—	—	1	1.3
18	56	—	—	1	1.3
19	59	2	2.2	—	—
20	63	2	2.2	4	5.1
21	65	3	3.3	3	3.8
22	69	5	5.5	6	7.6
23	72	2	2.2	5	6.3
24	75	12	13.2	3	3.8
25	78	11	12.1	8	10.1
26	81	12	13.2	13	16.5
27	84	7	7.7	10	12.7
28	88	12	13.2	16	20.3
29	91	9	9.9	3	3.8
30	94	8	8.8	3	3.8
31	97	4	4.4	1	1.3
32	100	2	2.2	2	2.5

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses.

Table 16

Frequencies and Percentages for the Most Alcohol Consumed on One Occasion over the Previous 12 Months for the Key Opinion Leaders

	Frequency	%
1 - 2 drinks	1	6.3
3 - 4 drinks	4	25.0
5 - 6 drinks	7	43.8
7 - 8 drinks	1	6.3
9 - 12 drinks	2	12.5
13 - 16 drinks	1	6.3

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 17

Frequencies and Percentages of the Most Alcohol Consumed on One Occasion for the Previous Four Weeks by the Key Opinion Leaders

	Frequency	%
Routed Out	5	31.3
1 - 2 drinks	3	18.8
3 - 4 drinks	4	25.0
5 - 6 drinks	2	12.5
9 - 12 drinks	2	12.5

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 18

Frequencies and Percentages of the Key Opinion Leaders' Personal Risk Estimates due to Their Partners' Behavior over the Past Year

	Frequency	%
Routed Out	2	12.5
No sexual partners	3	18.8
No risk at all	7	43.8
Slightly at risk	3	18.8
Somewhat at risk	1	6.3

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 19

Number of Sexual Partners for the Past Year for the Key Opinion Leaders

# of Sexual Partners	Frequency	%
0	4	25.0
1	9	56.3
2	2	12.5
3	1	6.3

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 20

Length of Most Recent Sexual Relationship for the Key Opinion Leaders

<u>Length of Relationship</u>	<u>Frequency</u>	<u>%</u>
Routed Out	4	25.0
1 Night	1	6.3
< 1 Week	1	6.3
1 to 3 Months	2	12.5
7 to 12 Months	1	6.3
> 12 Months	7	43.8

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 21

Frequencies and Percentages of the Key Opinion Leaders' who Believed that Their Female Friends always ask their Male Partners to use Condoms

<u>Response</u>	<u>Frequency</u>	<u>%</u>
Disagree	5	33.3
Neutral	3	20.0
Agree	6	40.0
Strongly Agree	1	6.7

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 22

Distributions of the Knowledge Summary Score for the Key Opinion Leaders

Score	% Correct	Frequency	%
22	69	1	6.7
23	72	1	6.7
24	75	2	13.3
25	78	1	6.7
26	81	2	13.3
27	84	1	6.7
28	88	3	20.0
29	91	2	13.3
30	94	1	6.7
31	97	1	6.7
Missing frequencies		1	

Note. The percentages and frequencies may vary due to routing, rounding, and missing responses. Also while 24 Key Opinion Leaders completed the survey at pre- and postintervention, only 16 surveys could be matched due to respondent coding errors or omissions.

Table 23

**Pretreatment differences between Intervention and Comparison
Groups for the Composite Variables**

Composite Variable	Comparison Group			Intervention Group			df _e ^a	F
	N	M	S	N	M	S		
Stages of Change	80	3.40	1.06	66	3.20	1.27	144	1.10
Perception of Risk	90	6.34	3.06	84	5.80	3.87	172	1.04
Behavioral Intentions	91	7.98	4.07	80	7.34	3.72	169	1.14
Assertiveness	87	10.98	3.22	77	10.44	4.02	162	0.88
Sexual Assertiveness	87	8.15	3.09	77	7.81	3.85	162	0.40
Perception of Norms	90	33.00	5.97	81	33.85	5.20	169	0.98
Knowledge Score	91	26.22	3.04	79	25.60	3.24	168	1.68
Frequency of unprotected vaginal intercourse prior 4 weeks	84	2.10	6.06	84	1.95	5.64	166	0.03
Frequency of protected vaginal intercourse prior 4 weeks	89	0.97	3.38	82	0.50	1.68	169	1.27
Risk Level (frequency)	75	0.87	1.26	78	0.77	1.19	151	0.24
Risk Level (partners)	89	1.60	0.14	84	1.39	0.14	170	1.13
Number of AIDS/STD related conversations	91	2.91	2.14	80	2.63	1.86	1.69	0.86

^a Degrees of Freedom for the Error Term

Table 24

**Posttreatment Differences Between Intervention and Comparison
Groups for the Composite Variables**

Composite Variable	Comparison Group			Intervention Group			dfe ^a	F
	N	<u>M</u>	S	N	<u>M</u>	S		
Stages of Change	77	3.40	1.18	84	3.07	1.24	135	1.91
Perception of Risk	89	6.94	3.26	84	6.90	4.68	168	2.48
Behavioral Intentions	91	8.16	3.73	84	7.25	3.59	167	1.05
Assertiveness	87	11.16	3.30	81	11.14	3.94	166	0.13
Sexual Assertiveness	87	8.37	3.21	81	8.44	3.86	166	0.22
Perception of Norms	89	33.26	6.15	84	34.11	5.44	171	0.92
Knowledge Score	91	26.39	3.28	85	28.89	3.21	167	36.78 ***
Frequency unprotected vaginal intercourse prior 4 weeks	85	2.24	5.16	84	1.81	4.28	162	0.05
Frequency of protected vaginal intercourse prior 4 weeks	86	1.76	4.55	83	0.73	2.38	161	1.72
Risk Level (frequency)	75	0.87	1.26	78	0.77	1.19	156	0.25
Number of AIDS/STD related conversations	89	2.91	1.86	85	3.38	2.02	166	4.12 *

^a Degrees of Freedom for the Error Term

* $p < .05$ *** $p < .001$

Table 25

ANCOVA Summary Table of Posttreatment Differences Between the Intervention and Comparison Groups for Knowledge Scores

<u>ANCOVA Table</u>					
<u>Source</u>	<u>df</u>	<u>Sums of Squares</u>	<u>Mean Square</u>	<u>F</u>	<u>p</u>
Model	2	792.16	396.08	55.68	.001
Error	167	1187.97	7.11		
Adjusted Total	169	1980.12			

<u>ANOVA Table</u>					
<u>Source</u>	<u>df</u>	<u>Type III Sums of Squares</u>	<u>Mean Square</u>	<u>F</u>	<u>p</u>
Condition	1	261.66	261.66	36.78	.001
Knowledge Covariate	1	601.54	601.54	84.56	.001

<u>Composite Variable</u>	<u>Mean Scores</u>					
	<u>Comparison Group</u>			<u>Intervention Group</u>		
	<u>N</u>	<u>M</u>	<u>S</u>	<u>N</u>	<u>M</u>	<u>S</u>
Knowledge Score	91	26.39	3.28	85	28.89	3.21

Table 26

ANCOVA Summary Table of Posttreatment Differences Between the Intervention and Comparison Groups for the Number of Peer Conversations

<u>ANCOVA Table</u>					
Source	df	Sums of Squares	Mean Square	F	p
Model	2	122.30	61.15	19.74	.001
Error	166	514.09	3.10		
Adjusted Total	168	636.39			

<u>ANOVA Table</u>					
Source	df	Type III Sums of Squares	Mean Square	F	p
Condition	1	12.76	12.76	4.12	.04
# Conversations Covariate	1	113.68	113.68	36.71	.001

Composite Variable	<u>Mean Scores</u>					
	<u>Comparison Group</u>			<u>Intervention Group</u>		
	N	<u>M</u>	S	N	<u>M</u>	S
Number of AIDS/STD related conversations	89	2.91	1.86	85	3.38	2.02

Table 27

Posttreatment Conversation Differences Between the Intervention and Comparison Groups for Participants with no Sexual Partners

<u>ANCOVA Table</u>					
Source	df	Sums of Squares	Mean Square	<u>F</u>	<u>p</u>
Model	2	41.36	20.68	7.71	.01
Error	36	96.54	2.68		
Adjusted Total	38	137.90			

<u>ANOVA Table</u>					
Source	df	Type III Sums of Squares	Mean Square	<u>F</u>	<u>p</u>
Condition	1	20.44	20.44	7.62	.01
Knowledge Covariate	1	32.13	32.13	11.98	.01

Composite Variable	<u>Mean Scores</u>					
	<u>Comparison Group</u>			<u>Intervention Group</u>		
	N	<u>M</u>	S	N	<u>M</u>	S
# of Conversations	15	0.99	1.80	25	2.55	1.87

Table 28

Posttreatment Perceived Risk Differences Between the Intervention and Comparison Groups for Participants with One AIDS/STD Peer Conversation

ANCOVA Table					
Source	df	Sums of Squares	Mean Square	F	p
Model	2	367.77	183.89	40.38	.001
Error	14	63.76	4.55		
Adjusted Total	16	431.53			

ANOVA Table					
Source	df	Type III Sums of Squares	Mean Square	F	p
Condition	1	23.48	23.48	5.16	.04
Perceived Risk Covariate	1	353.96	353.96	77.72	.001

Composite Variable	Mean Scores					
	Comparison Group			Intervention Group		
	N	M	S	N	M	S
Perceived Risk	10	6.44	3.97	13	8.46	2.88

Table 29

Posttreatment Behavioral Intention Differences Between the Intervention and Comparison Groups for Low Risk Level Participants

<u>ANCOVA Table</u>					
Source	df	Sums of Squares	Mean Square	<u>F</u>	<u>p</u>
Model	2	42.43	21.21	5.34	.04
Error	8	31.75	3.97		
Adjusted Total	10	74.18			

<u>ANOVA Table</u>					
Source	df	Type III Sums of Squares	Mean Square	<u>F</u>	<u>p</u>
Condition	1	39.56	39.56	9.97	.02
Intentions Covariate	1	0.95	0.95	0.24	ns

Composite Variable	<u>Mean Scores</u>					
	<u>Comparison Group</u>			<u>Intervention Group</u>		
	N	<u>M</u>	S	N	<u>M</u>	S
Behavioral Intentions	5	9.40	1.30	6	5.50	1.38

Table 30

Change in the Frequency of Protected Vaginal Intercourse

Group	N	Pretreatment		Posttreatment		Change			
		M	S	M	S	M	S	t	p
Full	164	.743	2.702	1.254	3.678	.500	3.413	1.876	.062
CG	84	.966	3.375	1.756	4.553	.738	3.991	1.695	.093
IG	80	.500	1.680	0.735	2.384	.250	2.679	0.835	.406

Table 31

Multiple Regression Results for Changes in the Knowledge Questionnaire Scores using Intervention Status, Change in Conversations (Post — Pre), and Risk Level as Independent Variables

Regression Summary Table					
	R ²	.30			
Source	df	Sums of Squares	Mean Square	F	p
Regression	3	276.94	92.31	13.30	.001
Error	92	638.80	6.94		
Adjusted Total	95	915.74			

Parameter Estimates Table					
Parameter	Parameter Estimate	Standard Error	Type II Sums of Squares	t	p
Intercept	1.10	0.43	45.08	2.55	.010
Condition	2.82	0.55	185.15	5.16	.001
Change in Conversation	0.18	0.12	14.66	1.45	> .10
Risk Level	-0.56	0.20	51.70	2.73	.010

Table 32

Mean Pre- to Posttreatment Differences of the Composite Variables for the Key Opinion Leaders

Composite Variable	Pretreatment			Posttreatment			d ^a	t
	N	<u>M</u>	S	N	<u>M</u>	S		
Stages of Change	17	3.65	1.41	18	3.44	1.34	16	0.45
Perception of Risk	19	5.58	2.41	20	5.40	2.46	18	0.23
Behavioral Intentions	17	7.00	4.12	19	5.95	2.44	16	1.45
Assertiveness	17	10.71	3.79	19	9.63	4.44	16	0.80
Sexual Assertiveness	17	8.18	3.91	19	7.32	4.37	16	0.65
Perception of Norms	18	35.67	5.93	20	34.10	6.66	17	0.76
Knowledge Score	18	26.67	2.45	20	30.10	1.83	17	5.98 ***
Frequency unprotected vaginal intercourse prior 4 weeks	18	1.22	2.69	19	0.63	2.01	17	0.19
Frequency of protected vaginal intercourse prior 4 weeks	18	2.28	6.42	20	0.60	2.68	17	1.33
Number of AIDS/STD related conversations	18	3.28	2.49	20	4.90	2.31	17	2.55 *

Note. While 24 Key Opinion Leaders completed the survey at pre- and postintervention, only a portion of the surveys could be matched due to respondent coding errors or omissions.

^a Degrees of Freedom

* $p < .05$ *** $p < .001$

Table 33

Pre- to Posttreatment Differences Among the Key Opinion Leaders on Social and Sexual Assertiveness Role-Plays

Assertiveness Role Plays	<u>Pre-Treatment</u>		<u>Post-Treatment</u>		<u>t(21)</u>
	Mean	S	Mean	S	
Global	2.02	0.52	2.05	0.38	0.19
Empathy	0.24	0.25	0.43	0.26	2.24*
Escalation	0.58	0.24	0.61	0.28	0.28
Confrontation	0.27	0.28	0.19	0.20	1.21
Aggression	0.10	0.18	0.05	0.11	1.23

* $p < .05$

Table 34

**Pre- to Posttreatment Conversation Differences Among the Key
Opinion Leaders**

Survey Item	Pre Treatment		Post Treatment		t(21)
	Mean	S	Mean	S	
How many different conversations about safe sex	3.28	2.49	4.90	2.31	2.55*
How many different women have endorsed safe sex in a conversation	2.11	2.25	3.70	2.18	2.85*
Degree of relevance of the conversations	1.72	1.41	2.90	1.17	3.61**
Overall emotional reaction to the AIDS conversations	2.94	2.21	4.30	1.56	2.95*
Conversations had no effect on health behavior	0.22	0.43	0.20	0.41	1.00
Know more about how AIDS/STD is transmitted	0.17	0.38	0.50	0.51	2.82*
Know more about how AIDS/STD is prevented	0.17	0.38	0.40	0.5	2.09*
Feel more comfortable practicing Safe Sex	0.28	0.46	0.20	0.41	1.00
Feel more Worried about getting AIDS/STDs	0.11	0.32	0.05	0.22	1.00
Feel more confident regarding protection of sexual health	0.30	0.50	0.50	0.5	2.65*

* $p < .05$ ** $p < .01$

Figure Caption

Figure 1

HIV Infection Routes in Women

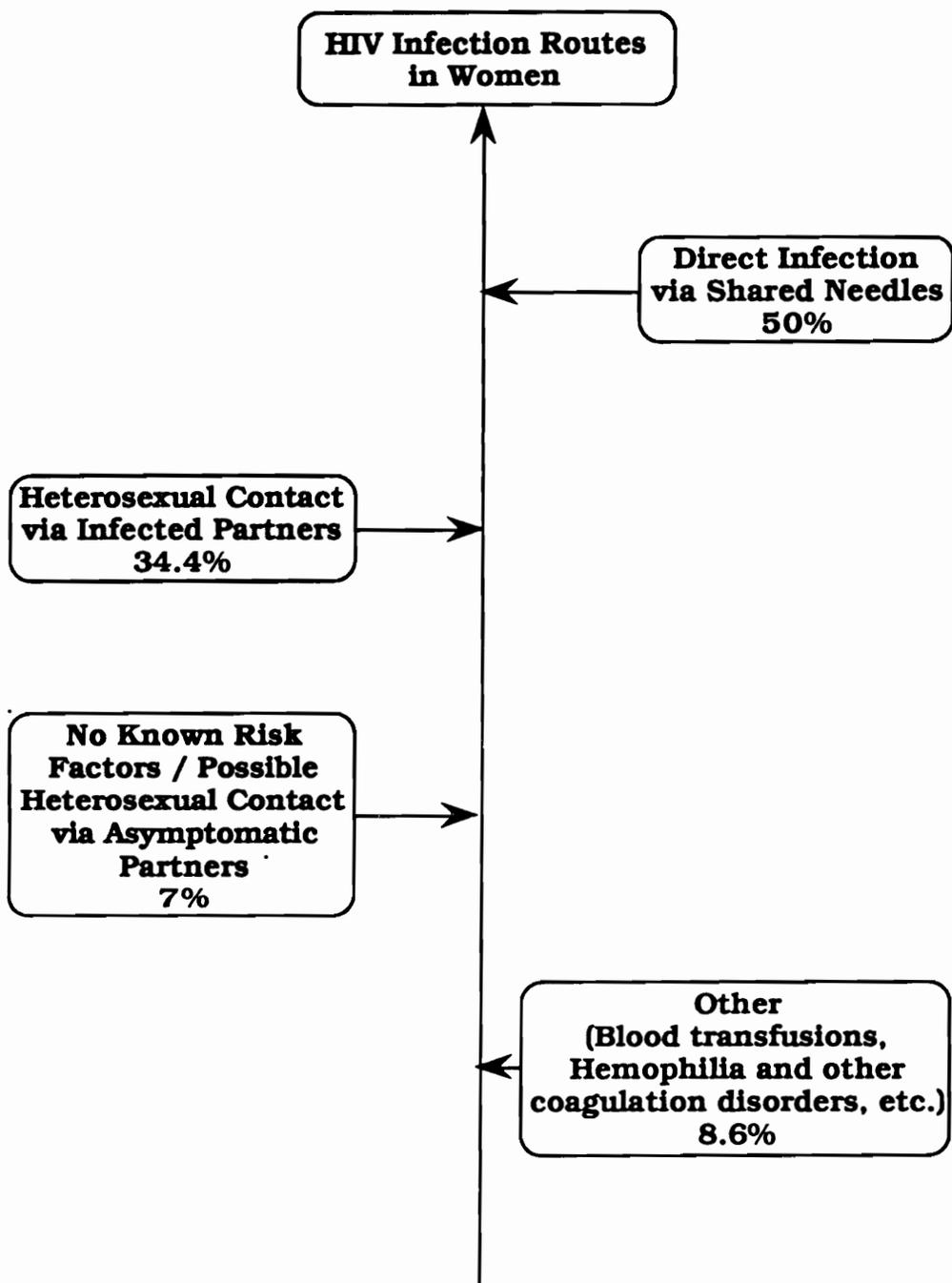


Figure Caption

Figure 2

Formative Research Flow chart

FORMATIVE RESEARCH FLOW CHART

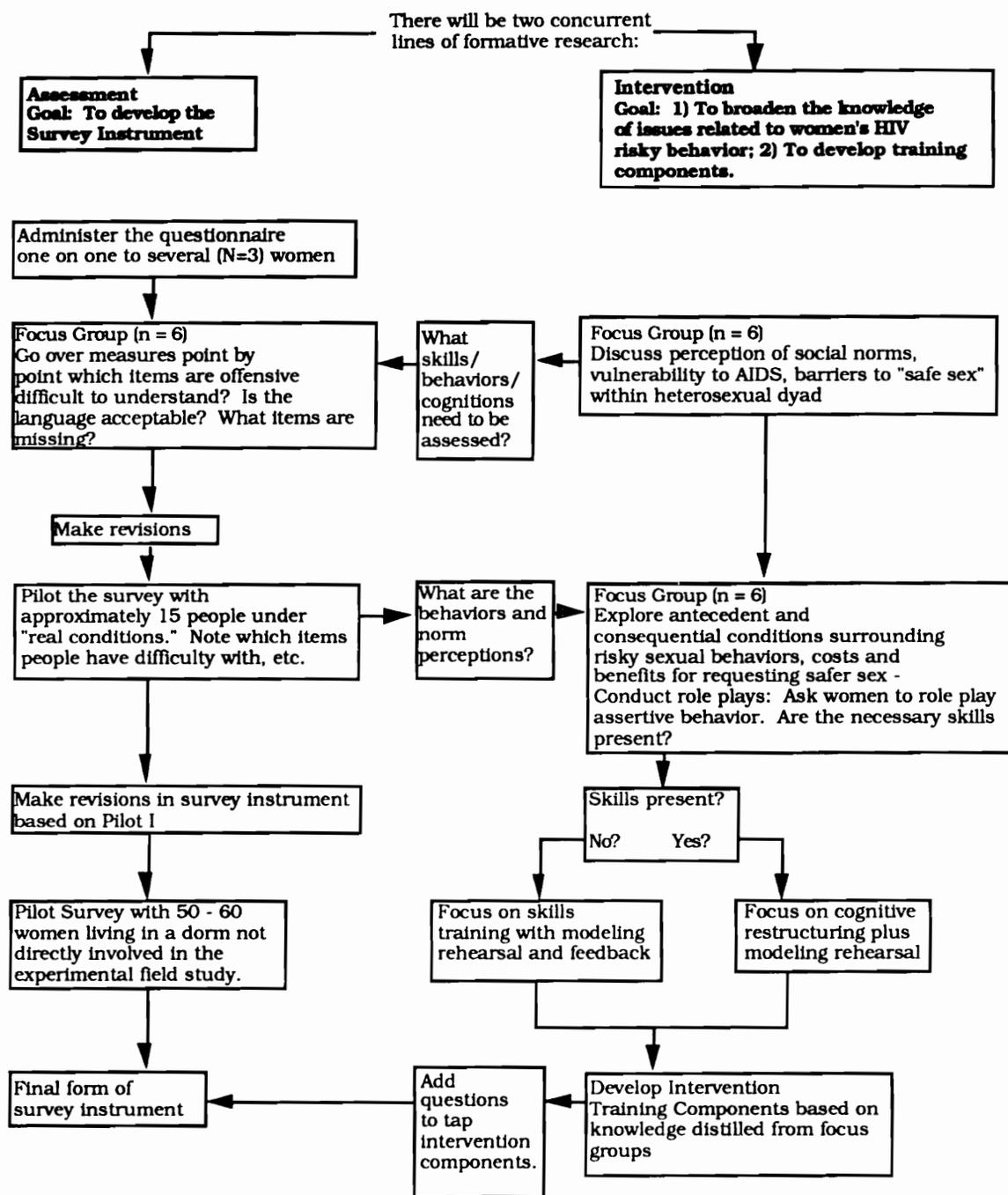


Figure Caption

Figure 3

Data Analysis Flow Chart

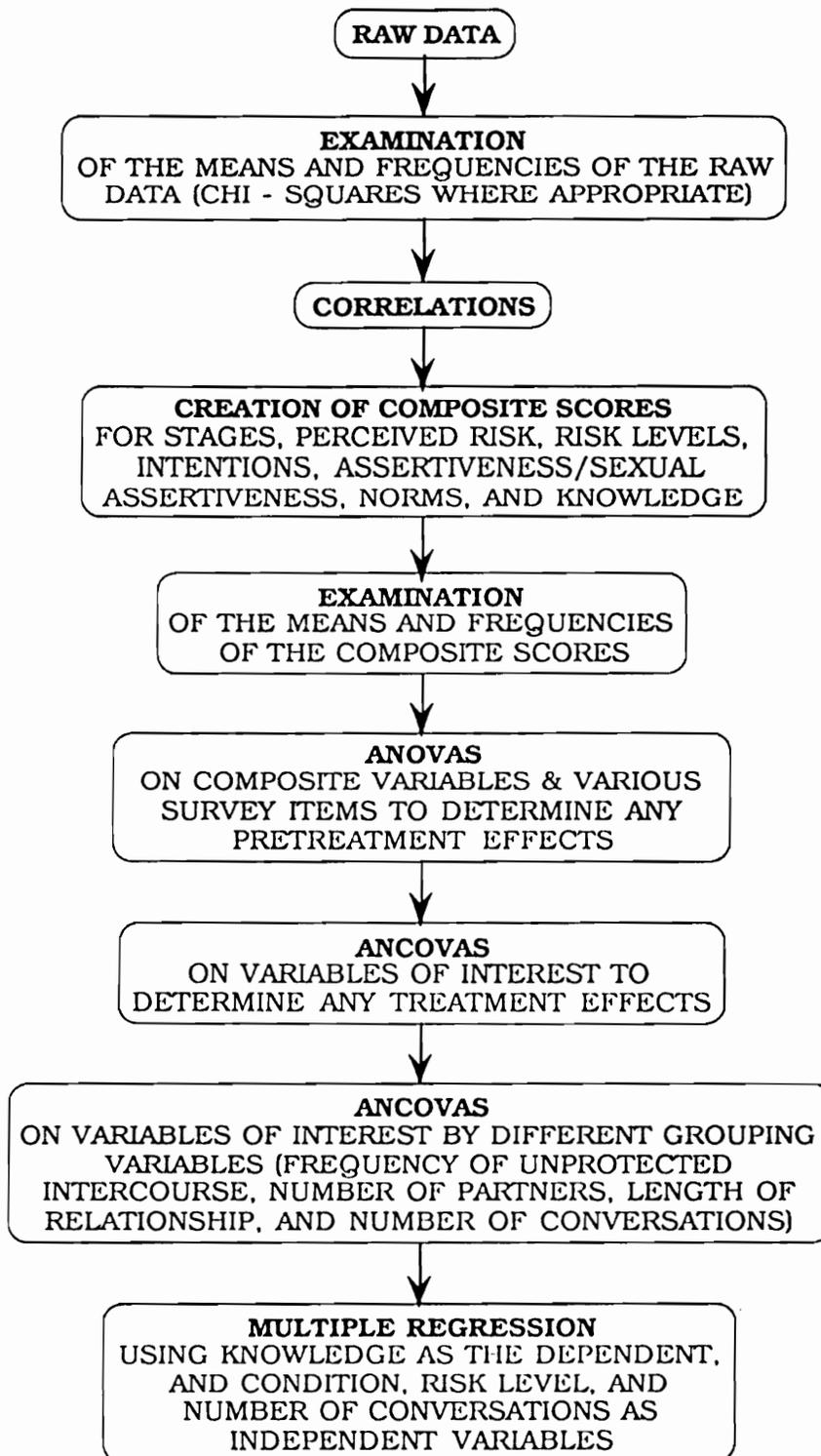
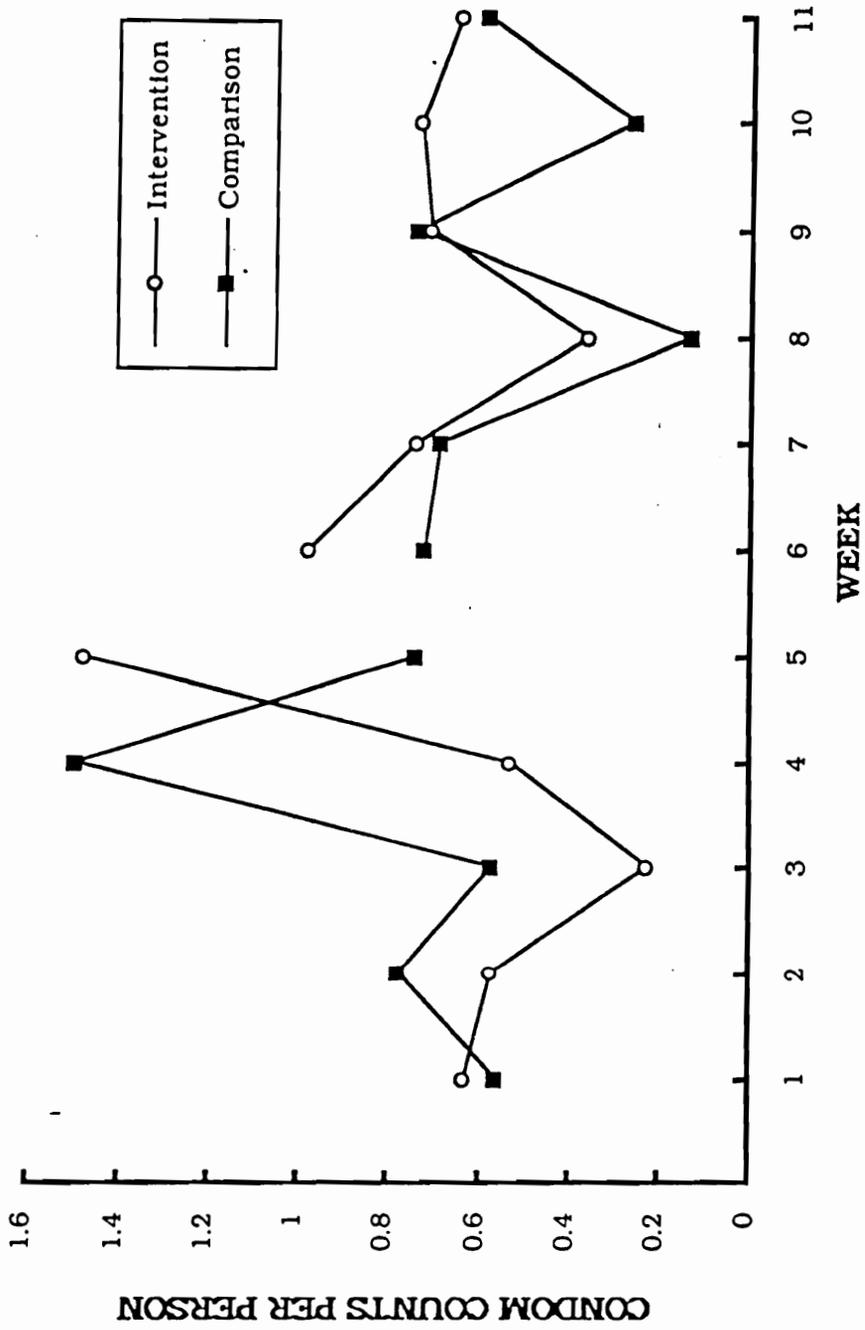


Figure Caption

Figure 4

Weekly Condom Counts by Intervention Condition



Appendix A
Project Timeline

THE WOMEN'S HEALTH PROJECT

Time Frame

September/October	Formative research: Intervention and assessment procedures
November/December	Continue revision of assessment and intervention procedures
February 5, 6, 7, (8)	Collect baseline data [Survey data (AIDS knowledge, norm perception, AIDS risk behaviors, perceived vulnerability & assessment of personal risk)]
February 9	Meet with RAs. Train in behavior criteria to identify popular opinion leaders (POLs). (Experimental dorm)
February 10	RA/Judges record names of POLs.
February 11	Recruit POLs: Send written introduction to POLs via the RAs who appear on at least 2 judge's lists (Experimental dorm). Target 10% total population: 10% of 210 = 21 + 5
February 12	Place condoms in experimental & comparison dorms; monitor weekly.
February 17	Introduction meeting (Collect pre-training data)
February 24	Training sessions begin. Place prompts in experimental dorm and educational materials in comparison & experimental dorms.
February 24	*Training session #1
March 2	Training session #2 (Ask POLs to bring a friend)
March 9	Training session #3
March 16	Training session #4 (Manipulation checks)
April 13	Booster session
April 28, 29, 30; May 1, 2, 3	Collect post-intervention data

* Make-up sessions will be conducted just prior to each new training session in order to retain POL participants.

Project Sponsor: Dick Winett, Ph.D.; Project Director: Deborah Webster, M.A.
 Research Assistants: David Lombard, M.A.; Donna Yaffe, M.A.; Tamara Neubauer, M.A.; Richard Hook, M.A.; Chris Livermore, Samantha Nielsen, Laurie McDowell

Appendix B
Focus Group and Pretest Protocols

Assessment Focus Group # 1 and # 2 (n = 6)
Protocol

1. Introduce the Women's Peer Educational Health Project.

The purpose of the Women's Peer Educational Health Project, conducted by the Department of Psychology at Virginia Tech, is to develop and assess the impact of an STD/AIDS prevention intervention which addresses the special needs and characteristics of college women

2. Introduce the participant's role in the project.

Participants will be asked to discuss their knowledge of AIDS, their understanding of risk behaviors, and their perception of social norms concerning AIDS prevention.

Participants will also be asked to complete self-report measures of risk knowledge, risk behavior and social norms perceptions concerning AIDS. However, completed questionnaires containing personal information will not be collected but will be destroyed at the end of the session. Information collected will be more general in nature. For example, how long does it take to complete the questionnaire? How acceptable and how understandable is the language?

3. Introduce videotape procedure.

We would like to videotape the discussion group in order to gather more comprehensive information. However, the videotapes are completely confidential and will be viewed only by the Project Director, Deborah Webster, and relevant research staff.

4. Review the consent form..

Ask participants to sign consent forms and collect them.
Participants retain the written description of the project.

5. Begin the focus group discussion.

6. At the end of the focus group, please pay each participant \$ 10 and ask for signature on receipt.

**Assessment Focus Group # 1 and #2 (n = 6)
Discussion Outline**

- I. Ask participants to complete the survey. Note time required.
- II Ask participants to complete a second copy of the survey and to make notes concerning problems with clarity of directions or language as well as acceptability of language and questions.
- III Conduct a discussion of the survey. What do the participants think of the survey? How acceptable was it to them? How relevant do they think a study like this is?

Intervention Focus Group Protocols (n =6)

1. Introduce the Women's Peer Educational Health Project.

The purpose of the Women's Peer Educational Health Project, conducted by the Department of Psychology at Virginia Tech, is to develop and assess the impact of an STD/AIDS prevention intervention which addresses the special needs and characteristics of college women.

2. Introduce the participant's role in the project.

Participants will be asked to discuss their knowledge of AIDS, their understanding of risk behaviors, and their perception of social norms concerning AIDS prevention.

3. Introduce videotape procedure.

We would like to videotape the discussion group in order to gather more comprehensive information. However, the videotapes are completely confidential and will be viewed only by the Project Director, Deborah Webster, and relevant research staff.

4. Review the consent form.

Ask participants to sign consent forms and collect them. Participants retain the written description of the project.

5. Begin focus group discussion.

6. At the end of the focus group, please pay each participant \$10 and ask for signature on receipt.

Intervention Focus Group Protocols (n =6)
Discussion Outline

I. Knowledge of AIDS and perception of risk.

Do participants have a basic understanding of AIDS? Do they know that AIDS is a sexually transmitted disease? Do they perceive STDs as a serious health threat? Do they perceive AIDS as a serious disease?

Do they feel vulnerable to AIDS? Have they ever known anyone with HIV? Do they believe that heterosexual men and women can contract AIDS? Do they feel at risk for STDs/AIDS given their social context and behaviors?

II. What STD/HIV prevention measures do they currently use? Do they feel that HIV and other STDs are preventable? Do they feel that they can prevent them?

III. What are the barriers to safe sex, especially condom use?

What are the costs and benefits for requesting safer sex (fear of rejection, loss of esteem in their partner's view, increased sexual pressure)?

How do they feel about condom use? Do they perceive decreased sexual pleasure? Do they think it lessens the male partner's sensation?

Do they have difficulty obtaining condoms? Where and how do they currently obtain condoms? Where and how would they like to get condoms? What about condom placement in the dorm?

IV. Sexual assertiveness.

Do they know what sexual assertiveness is?

Assertiveness is standing up for your rights and saying directly what you believe and want. Assertive people do this appropriately and honestly while respecting the rights and feelings of others.

Do they feel that it's okay for a woman to assert herself about safe sex?

How comfortable are they in discussing safe sex with their partner? Do they assert themselves for safe sex with their partners?

Do they think that their female friends ask their sexual partners to use condoms or other safe sex procedures?

Can they actually demonstrate assertiveness skills to you?

V. What are the effects of drugs and alcohol on the practice of safe sex?

How common are drugs and alcohol at campus parties?

How common are drugs and alcohol at off-campus parties?

Is drinking/drug use the norm at social gatherings?

Do they typically use drugs or alcohol on dates?

Do they typically use drugs or alcohol before having sex?

Pretest Protocol (N = 50)

1. Introduce the Women's Peer Educational Health Project.

The purpose of the Women's Peer Educational Health Project, conducted by the Department of Psychology at Virginia Tech, is to develop and assess the impact of an STD/AIDS prevention intervention which addresses the special needs and characteristics of college women

2. Explain the participant's role in the project.

Participants will also be asked to complete self-report measures of risk knowledge, risk behavior and social norms perceptions concerning AIDS.

3. Give the respondent the survey, a # 2 pencil, a clipboard, and a large envelope..
4. Instruct respondent to place the completed questionnaire in the envelope and seal it.
5. Remain available for questions.
6. Collect all surveys.

Appendix C
Consent Forms for the Focus Groups

**Women's Peer Educational Health Project
Intervention Focus Group
Consent Form**

Purpose of the Research and Procedures: The major purpose of the research, which is conducted at Virginia Polytechnic Institute and State University, is to develop an STD/AIDS prevention intervention for college women. In order to gain a better understanding of the special needs and characteristics of college women, extensive formative research will be conducted. This formative research will include focus groups consisting of five-fifteen women who will be asked to participate in the development of intervention methods and procedures.

As a participant in this project, you will be asked to discuss your knowledge of AIDS and other STDs, your sexual behavior, and your perception of social norms concerning the practice of safer sex.

At any point during the focus group, you may withdraw. You may also refuse to answer any questions during the focus group discussions.

Confidentiality: Neither your name nor the name of the college will appear on the videotape or any other materials from the focus group. All information from the focus group and the videotape is considered confidential and will be available only to the Project Director and research staff for this project.

Payment: You will receive \$10 for your participation. You will be paid in cash immediately following the focus group. You will be asked to sign a receipt for accounting purposes only. This receipt will not be identified with any information associated with the focus group. Even if you withdraw from the study, you will be paid for the session in which you participated.

Risk: It is possible that you may feel uncomfortable by the sexually explicit content of the focus group. While rare, during or after the focus group, psychological issues could be brought up that need attention. If that is the case, we request that you contact:

- 1) The Project Director, Deborah A. Webster, M.A. (366-4860);
- 2) Mikey Hayes, M.S.W. at the Student Counseling Services (362-6404);
- 3) Rita Foster, R. N. or Roberta Rodgers, R.N. at the student health services (362- 6404);
- 4) the Mental Health Services of the Roanoke Valley/24-hour Hotline (981-9351).

Benefits: By participating in this project, you may help us to develop an intervention that has potential benefit for women's health.

Sources of Information Concerning AIDS: If you should desire more information concerning AIDS prevention, you may contact the campus health center or your family physician.

If you have any questions about this project, please feel free to call the sponsor of this project, Dr. Richard Winett, at 1-800-752-4791 or the Project Director, Ms. Deborah Webster, at 366-4860. If you have any questions about the terms of your consent to participate in this project, you can call Dr. Ernest Stout, Chair of Virginia Tech's Institutional Review Board, at 703-231-5281 or Dr. Helen Crawford, Chair of the Human Subject's Committee, at 703-231-6581.

**Intervention Focus Group
Participant Consent**

1. I hereby acknowledge my voluntary participation in the Women's Peer Educational Health Project, conducted by Dr. Richard A. Winett (Project Sponsor) and Ms. Deborah Webster (Project Director) at Virginia Tech. I understand that I will be asked to participate in a small focus group and to discuss risk knowledge, risk behavior, and social norm perceptions concerning AIDS, other sexually transmitted diseases, and safer sexual practices. I understand that this information is of a sexually explicit nature. I realize that I may refuse to respond to any question during the discussion group or I may decide to withdraw from the study at any point without penalty to me.
2. I understand that the focus group discussion will be videotaped. However, this videotape will be viewed only by the project director, Ms. Webster, and relevant research staff. I understand that my name will not be associated with this information at any point, and the information will be kept confidential.
3. I have had the study described to me and have completely read the description of the project on the previous page. I have had all my questions answered, realizing that this research involves the development of an AIDS/STD prevention intervention for women.
4. The potential effects of my participation in this project have been explained to me. No guarantee of benefit has been made to me by anyone to induce me to participate.
5. The information accumulated by this research may be used for research and educational purposes and information relating to my responses may be presented at scientific meetings and/or published and republished in professional journals or books or used for any other purpose which Virginia Tech's Department of Psychology considers proper in the interest of education, knowledge, or research. However, it is specifically understood that in any such use or publication I shall not be identified by name but will remain completely anonymous.
6. I am participating freely, in full understanding that I need not participate if I do not wish to, and if I participate, I may withdraw at any time. I realize that I will be paid \$10 for my participation.
7. I understand that this research project has been approved by the Human Subjects Research Committee and the Institutional Review Board, and that if I should have any questions, I should contact the following:

Helen Crawford, Ph.D. - 703-231-6581
Chair, Virginia Tech's Human Subject Committee
Ernest Stout, Ph.D - 703-231-5281
Chair, Virginia Tech's Institutional Review Board
8. I understand that if I ever feel upset by the training sessions or my participation in the project, I am to call the Project Director, Deborah A. Webster, M.A. (366-4860); Roberta Rodgers, R.N. or Rita Foster at the Student Health Services (362-6404); or the Mental Health Services of the Roanoke Valley/24-hour Hotline (981-9351).
9. I hereby agree to participate voluntarily in the research project described above under the conditions described above and by the researcher.

Participant's Signature

Date

Project Director's Signature

Date

Women's Peer Educational Health Project
Survey Group
Consent Form

Purpose of the Research and Procedures: The major purpose of the research, which is conducted at Virginia Polytechnic Institute and State University is to develop an AIDS prevention intervention for college women. In order to assess the special needs of this population, a series of focus groups will be conducted and videotaped.

As a participant in this project, you will be asked to complete self-report measures of risk knowledge, risk behavior, and social norm perceptions concerning AIDS, sexually transmitted diseases, and safer sexual practices.

At any point during the focus group, you may withdraw from this project without penalty. You may also skip or refuse to answer any questions on the self-report measures.

Confidentiality: Neither your name nor the name of the college will appear on any of the information collected. All information on the forms and videotapes is considered confidential and will be available only to the Project Director and research staff for this project.

Payment: You will receive \$10 for your participation. Payment will be made in cash immediately following the training sessions. For accounting purposes, you will be asked to sign a receipt which will be kept separate from all confidential information. Even if you withdraw from the study, you will be paid for the session in which you participated.

Risk: It is possible that you may feel uncomfortable by the sexually explicit content of the questionnaire and discussion. While rare, during or after the training session, psychological issues could be brought up that need attention. If that is the case, we request that you contact:

- 1) The Project Director, Deborah A. Webster, M.A. (366-4860);
- 2) Mikey Hayes, M.S.W. at the Student Counseling Services (362-6404);
- 3) Rita Foster, R. N. or Roberta Rodgers, R.N. at the student health services (362-6404);
- 4) the Mental Health Services of the Roanoke Valley/24-hour Hotline (981-9351).

Benefits: By participating in this project, you can help us to develop an AIDS prevention program that has the potential to benefit many women.

Alternative Sources of Information: If you should desire more information on AIDS prevention, it is recommended that you contact the campus health center, or your family physician.

If you have any questions about this project, please feel free to call the sponsor of this project, Dr. Richard Winett, at 1-800-752-4791 or the Project Director, Ms. Deborah Webster, at 366-4860. If you have any questions about the terms of your consent to participate in this project, you can call Dr. Ernest Stout, Chair of Virginia Tech's Institutional Review Board, at 703-231-5281 or Dr. Helen Crawford, Chair of the Human Subject's Committee, at 703-231-6581.

**Survey Focus Group
Participant Consent**

1. I hereby acknowledge my voluntary participation in the Women's Peer Educational Health Project, conducted by Dr. Richard A. Winett (Project Sponsor) and Ms. Deborah Webster (Project Director) at Virginia Tech. I understand that I will be asked to fill out a series of self-report measures of risk knowledge, risk behavior, and social norm perceptions concerning AIDS, sexually transmitted diseases, and safer sexual practices. I understand that this information is of a sexually explicit nature. I realize that I may skip any question on the self-report questionnaire or decide to withdraw from the study at any point without penalty to me.

2. I have had the study described to me and have completely read the description of the project on the previous page. I have had all my questions answered, realizing that the purpose of this project is to design an AIDS prevention intervention.

3. The potential effects of my participation in this project have been explained to me. No guarantee of benefit has been made to me by anyone to induce me to participate.

4. I understand that I will be videotaped during the discussion of the survey. However, the videotape and other information gathered in the session will be strictly confidential. Only the Project Director, Ms. Webster, and other relevant research staff will review this videotape. At no time will my name be associated with the videotape or with other information collected from the focus group.

5. The information accumulated by this research may be used for research and educational purposes. Information relating to my responses may be presented at scientific meetings and/or published and republished in professional journals or books or used for any other purpose which Virginia Tech's Department of Psychology considers proper in the interest of education, knowledge, or research. However, it is specifically understood that in any such use or publication, I shall not be identified by name but will remain completely anonymous.

6. I am participating freely, in full understanding that I need not participate if I do not wish to, and if I participate, I may withdraw at any time. I realize that I will be paid \$10 for my participation.

7. I understand that this research project has been approved by the Human Subjects Research Committee and the Institutional Review Board, and that if I should have any questions, I should contact the following:

Helen Crawford, Ph.D. - 703-231-6581
Chair, Virginia Tech's Human Subject Committee
Ernest Stout, Ph.D - 703-231-5281
Chair, Virginia Tech's Institutional Review Board

8. I understand that if I ever feel upset by the focus group or my participation in the project, I am to call the Project Director, Deborah A. Webster, M.A. (366-4860); Roberta Rodgers, R.N. or Rita Foster at the Student Health Services (362-6404); or the Mental Health Services of the Roanoke Valley/24-hour Hotline (981-9351).

9. I hereby agree to participate voluntarily in the research project described above under the conditions described above and by the researcher.

Participant's Signature

Date

Project Director's Signature

Date

Appendix D
Pretest Survey

The Women's Peer Educational Health Project Survey

10/01/91

Twenty minutes of your time can contribute to the better understanding of women's health issues.

Thanks for taking time to fill out this Women's Peer Educational Health Project Survey. This project is being conducted by Deborah Webster, M.A. in fulfillment of a doctoral dissertation in the Department of Psychology at Virginia Tech. Your help may provide important new information that will lead to better ways to address women's health issues, in particular AIDS and other sexually transmitted diseases.

The survey content is of a very personal nature. You may stop filling in the survey at any time. If you have questions concerning the Women's Peer Educational Health Project, please call the Project Sponsor, Richard Winett, Ph.D. (1-800-752-4791); the Project Director, Deborah A. Webster, M.A. (366-4860); or Roberta Rodgers, R.N. and Rita Foster, R.N. at the Hollins Student Health Services (362-6404).

This survey is completely anonymous. However at some later date, we will ask you to complete a second questionnaire. In order for us to match up the two surveys, we need you to generate a code known only to you by filling in the following information:

- 1) Your **middle** initial _____
- 2) Your mother's **first** initial _____
- 3) The **last** two numbers in your social security number _____
- 4) The **day** of your birth _____

This survey is based on AIDS research conducted by Jeff Kelly, Ph.D. and Deborah Murphy, Ph.D.

Women's Peer Educational Health Project Survey

First we would like to ask you a few general questions about yourself. Please fill in the blank or circle the number of the answer that best applies to you.

1. What is your age? _____
2. Which of the following best describes your racial background?
 - 1 White
 - 2 African-American (Black)
 - 3 Hispanic
 - 4 Native American (American Indian)
 - 5 Asian American
 - 6 Other (please describe _____)
3. What year are you in college?
 - 1 Freshman
 - 2 Sophomore
 - 3 Junior
 - 4 Senior
4. In which dorm do you live?
 - 1 West/Starkie
 - 2 Tinker
 - 3 Randolph
 - 4 East
 - 5 Other (please specify _____)

The following questions apply to substance use (i.e., alcohol and drugs) over the past four weeks and twelve months. Please read each substance listed and circle the number that applies to you. Please be honest and as accurate as possible. Remember your name does not appear anywhere on this form.

5. Have you used alcohol in the past twelve months (e.g., beer, wine, mixed drinks)?
 - 1 No (skip to question #15)
 - 2 Yes (continue with question #6)

6. How often in the past four weeks did you use alcohol (e.g., beer, wine, mixed drinks)?

- 1 I did not drink in the past four weeks
- 2 About once in the past four weeks
- 3 2 or 3 times in the past four weeks
- 4 Once or twice a week
- 5 3 or 4 times a week
- 6 Nearly everyday
- 7 Once a day or more

7. How often in the past twelve months did you use alcohol (e.g., beer, wine, mixed drinks)?

- 1 Less than once a month
- 2 About once a month
- 3 2 or 3 times a month
- 4 Once or twice a week
- 5 3 or 4 times a week
- 6 Nearly everyday
- 7 Once a day or more

8. Think of the one occasion you drank the most this past four weeks. How many drinks did you have on this occasion? (Reminder: One drink equals 12 oz. of beer or 4 oz. of wine or one standard cocktail.)

- 1 0 (I did not drink this month)
- 2 1-2 drinks
- 3 3-4 drinks
- 4 5-6 drinks
- 5 7-8 drinks
- 6 9-12 drinks
- 7 13-16 drinks
- 8 17 or more drinks

9. Think of the one occasion you drank the most this past twelve months. How many drinks did you have on this occasion? (Reminder: One drink equals 12 oz. of beer or 4 oz. of wine or one standard cocktail.)

- 1 0 (I did not drink this month)
- 2 1-2 drinks
- 3 3-4 drinks
- 4 5-6 drinks
- 5 7-8 drinks
- 6 9-12 drinks
- 7 13-16 drinks
- 8 17 or more drinks

10. Please circle the number for each day of the week indicating the average number of drinks you usually consume on that day. Please estimate over the past four weeks.

	No Drinks	1-2 Drinks	3-4 Drinks	5-6 Drinks	7 or more Drinks
Sunday	1	2	3	4	5
Monday	1	2	3	4	5
Tuesday	1	2	3	4	5
Wednesday	1	2	3	4	5
Thursday	1	2	3	4	5
Friday	1	2	3	4	5
Saturday	1	2	3	4	5

11. Please fill in a number for each day of the week indicating the average number of drinks you usually consume on that day. Please estimate over the past twelve months.

	No Drinks	1-2 Drinks	3-4 Drinks	5-6 Drinks	7 or more Drinks
Sunday	1	2	3	4	5
Monday	1	2	3	4	5
Tuesday	1	2	3	4	5
Wednesday	1	2	3	4	5
Thursday	1	2	3	4	5
Friday	1	2	3	4	5
Saturday	1	2	3	4	5

12. In the past twelve months, in which setting did you tend to consume the most number of drinks? (Circle all that apply.)

- 1 At my parent's house
- 2 In my dorm
- 3 At my boyfriend's apartment/dorm
- 4 On campus
- 5 In a bar
- 6 Other (please specify _____)

13. In the past twelve months, in which situations did you tend to consume the most number of drinks? (Circle all that apply.)

- 1 At dinner
- 2 On dates
- 3 With groups of friends
- 4 At on-campus parties
- 5 At off-campus parties
- 6 When I was alone
- 7 Other (please specify _____)

14. In the past twelve months, on which of the following occasions did you tend to consume the most number of drinks? (Circle all that apply.)

- 1 Spring break
- 2 Summer break
- 3 Thanksgiving holiday
- 4 Christmas holiday
- 5 New Years Eve
- 6 Other (please specify _____)

15. In the past four weeks, how often have you used marijuana (hash, THC)?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

16. In the past twelve months, how often have you used marijuana (hash, THC)?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

17. In the past four weeks, how often have you used cocaine?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

18. In the past twelve months, how often have you used cocaine?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

19. In the past four weeks, how often have you used hallucinogens (for example, LSD)?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

20. In the past twelve months, how often have you used hallucinogens (for example, LSD)?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

21. In the past four weeks, how often have you used barbiturates (for example, Ludes, downers, barbs)?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

22. In the past twelve months, how often have you used barbiturates (for example, Ludes, downers, barbs)?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

23. In the past four weeks, how often have you used amphetamines (for example, speed, uppers, crosses)?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

24. In the past twelve months, how often have you used amphetamines (for example, speed, uppers, crosses)?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

25. In the past four weeks, how often have you used any other drug, excluding alcohol, (please specify _____) for recreational purposes?

- 1 No use
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

26. In the past twelve months, how often have you used any other drug (please specify _____) for recreational purposes?

- 1 No use
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

27. In the past four weeks, how often have you used a needle to inject a recreational drug?

- 1 No use (skip to question #29)
- 2 Once/twice
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

28. In the past four weeks, have you shared a needle when injecting a recreational drug?

- 1 No
- 2 Yes

29. In the past twelve months, how often have you used a needle to inject a recreational drug?

- 1 No use (skip to question #31)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

30. In the past twelve months, have you shared a needle when injecting a recreational drug?

- 1 No
- 2 Yes

Now we are going to ask a few questions concerning your experience and the experiences of your friends with AIDS. Please circle the number which best describes your answer.

31. Have you ever personally known someone with the virus (HIV) that causes AIDS?

- 1 No
- 2 Yes

32. Have you ever personally known someone with full blown AIDS?

- 1 No
- 2 Yes

33. Have you ever known someone who died from AIDS?

- 1 No (skip to question #35)
- 2 Yes (If yes, how many people? _____)

34. If you answered yes, was the person closest to you who died:

- 1 A distant acquaintance
- 2 An acquaintance
- 3 A friend
- 4 A good friend
- 5 A very close friend
- 6 A family member
- 7 Other (please specify _____)

35. Based on what you know about AIDS and how it is transmitted, what is the extent to which your behavior over the past four weeks has put you at risk for being infected with the AIDS virus?

- 1 No risk at all
- 2 Slightly at risk
- 3 Somewhat at risk
- 4 Good deal at risk
- 5 Extremely at risk

36. Based on what you know about AIDS and how it is transmitted, what is the extent to which your behavior over the past twelve months has put you at risk for being infected with the AIDS virus?

- 1 No risk at all
- 2 Slightly at risk
- 3 Somewhat at risk
- 4 Good deal at risk
- 5 Extremely at risk

37. Based on what you know about AIDS and how it is transmitted, what is the extent to which your current partner's behavior over the past four weeks has put you at risk of being infected by the AIDS virus?

- 1 I do not currently have a sexual partner
- 2 No risk at all
- 3 Slightly at risk
- 4 Somewhat at risk
- 5 Good deal at risk
- 6 Extremely at risk

38. Based on what you know about AIDS and how it is transmitted, what is the extent to which your past partner's behavior over the past twelve months has put you at risk of being infected by the AIDS virus?

- 1 I have never had a sexual partner
- 2 No risk at all
- 3 Slightly at risk
- 4 Somewhat at risk
- 5 Good deal at risk
- 6 Extremely at risk

The next section asks about your health and sexual history. Circle the answer which best describes your behavior. Please be honest and accurate. Remember, your name does not appear anywhere on this form.

39. Have you ever been tested for a sexually transmitted disease?

- 1 No (skip to question #42)
- 2 Yes (continue with question #40)

40. If you answered "yes" to question #39, was the result positive (you were diagnosed as having a sexually transmitted disease)?

- 1 No (skip to question #42)
- 2 Yes (continue with question #41)

41. If you answered "yes" to question #39, please indicate below which type of sexually transmitted disease you have had (Circle all that apply):

- | | |
|------------------|---|
| 1 Syphilis | 6 Hepatitis |
| 2 Genital Herpes | 7 Gonorrhea (Clap) |
| 3 Vaginal Warts | 8 Chlamydia |
| 4 Pubic Lice | 9 Trichomoniasis |
| 5 The AIDS virus | 10 I've had an STD, but I don't know which type |

42. Have you been tested for the AIDS virus?

- 1 No, I have not been tested (skip to question #44)
- 2 Yes, I was told that my result was negative
- 3 Yes, I was told that my result was positive
- 4 Yes, but I never returned to learn the result

43. How long has it been since your most recent test for the AIDS virus?

- 1 Within the last 0 to 3 months
- 2 Within the last 4 to 6 months
- 3 Within the last 7 to 12 months
- 4 It has been longer than 12 months

44. Have you ever wanted to get an AIDS test but did not?

- 1 No (skip to question #46)
- 2 Yes

45. What were the reasons that you did not get an AIDS test? (Circle all that apply)

- 1 I was embarrassed
- 2 I did not know how to go about it
- 3 It was not convenient
- 4 I was afraid to find out the results
- 5 Other (please specify _____)

In order to learn more about women's health, it is important to ask about your sexual behavior. The next section asks about your sexual activities during the past four weeks and the past twelve months. Think back over this time; places you have been, things you have done, and people that you have dated. Please be honest and accurate. Remember, your name does not appear anywhere on this form.

46. Have you been sexually active in the last twelve months? By sexually active, we mean any behavior that includes genital contact such as heavy petting, hand-genital contact, mutual masturbation, oral sex, or sexual intercourse.

- 1 No (skip to question #83)
- 2 Yes (continue with question #47)

47. How many different sexual partners have you had:

In the past four weeks _____

In the past twelve months _____

48. Of your total number of sexual partners for the past four weeks, have your partners been:

- 1 All female sexual partners (skip to question #50)
- 2 All male sexual partners (skip to question #50)
- 3 Both female and male sexual partners (continue with question #49)

49. Of your total number of sexual partners for the past four weeks, how many have been:

1 Females _____

2 Males _____

50. Of your total number of sexual partners for the past twelve months, have your partners been:

- 1 All female sexual partners (skip to question #96)
- 2 All male sexual partners (skip to question #52)
- 3 Both female and male sexual partners (continue with question #51)

51. Of your total number of partners for the past twelve months, how many have been:

- 1 Females _____
- 2 Males _____

Please answer the following questions in reference to your male sexual partners only.

52. If you are currently involved in a sexual relationship, how long have you been in that relationship?

- 1 Less than one month
- 2 Between 1 - 3 months
- 3 Between 4 - 6 months
- 4 Between 7 - 12 months
- 5 Longer than 12 months

53. What type of birth control do you use most often?

- 1 I don't use birth control
- 2 Oral Contraceptives (birth control pills)
- 3 Diaphragm
- 4 "IUD"
- 5 Condoms (rubbers)
- 6 Foam or Jellies
- 7 Sponges
- 8 Rhythm method
- 9 Other (please specify _____)

54. If you do not use condoms as your primary form of birth control, how often do you use them as protection from sexually transmitted diseases?

- 1 I use condoms as my primary form of birth control
- 2 Always
- 3 Sometimes
- 4 Never

**If you had sex with a male partner during the past four weeks or the past twelve months, think about the activities that took place. Please mark your answer in the blanks below. If a number is "0", please write in "0".
Please be sure to mark an answer in every blank.**

55. In the past four weeks I had vaginal intercourse **without** my partner wearing a condom _____ times with _____ men.
56. In the past twelve months I had vaginal intercourse **without** my partner wearing a condom _____ times with _____ men.
57. In the past four weeks I had vaginal intercourse **with** my partner wearing a condom _____ times with _____ men.
58. In the past twelve months I had vaginal intercourse **with** my partner wearing a condom _____ times with _____ men.
59. In the past four weeks, I had oral-genital contact (my mouth on his genitals) when he was **not** wearing a condom _____ times with _____ number of men.
60. In the past twelve months, I had oral-genital contact (my mouth on his genitals) when he was **not** wearing a condom _____ times with _____ number of men.
61. In the past four weeks, I had oral-genital contact (my mouth on his genitals) when he **was** wearing a condom _____ times with _____ men.
62. In the past twelve months, I had oral-genital contact (my mouth on his genitals) when he **was** wearing a condom _____ times with _____ men.
63. In the past four weeks, _____ number of men had oral-genital contact with me (his mouth on my genitals) _____ number of times.
64. In the past twelve months, _____ number of men had oral-genital contact with me (his mouth on my genitals) _____ number of times.
65. In the past four weeks, I had anal intercourse **without** my partner wearing a condom _____ times with _____ men.

66. In the past twelve months, I had **anal intercourse** without my partner wearing a condom _____ times with _____ men.
67. In the past four weeks, I had **anal intercourse** when he was wearing a condom _____ times with _____ men.
68. In the past twelve months, I had **anal intercourse** when he was wearing a condom _____ times with _____ men.
69. In the past four weeks, I had sex _____ times with _____ men who I think or know had used intravenous drugs.
70. In the past twelve months, I had sex _____ times with _____ men who I think or know had used intravenous drugs.
71. In the past four weeks, I had sex _____ times with _____ men who I know or believe were also having sexual relations with other women.
72. In the past twelve months, I had sex _____ times with _____ men who I know or believe were also having sexual relations with other women.
73. In the past four weeks, I had sex _____ times with _____ men who I know or think were having sexual relations with another man.
74. In the past twelve months, I had sex _____ times with _____ men who I know or think were having sexual relations with another man.
75. In the past four weeks, I had sex _____ times with _____ men who I know or think had had sex in the past with another man.
76. In the past twelve months I had sex _____ times with _____ men who I know or think had had sex in the past with another man.
77. In the past four weeks, I had sex _____ times with _____ men whom I saw one time and did not have sex with again.
78. In the past twelve months, I had sex _____ times with _____ men whom I saw one time and did not have sex with again.

79. In the past four weeks, I had sex _____ times with _____ men when I had been drinking.
80. In the past twelve months, I had sex _____ times with _____ men when I had been drinking.
81. In the past four weeks, I had sex _____ times with _____ men when I had been using drugs.
82. In the past twelve months, I had sex _____ times with _____ men when I had been using drugs.

The following questions pertain to what you think you will do the next time that you have sex. If you have never been sexually active, please indicate what you think you will do in the event that you do become sexually active. Please circle the answer which best describes what you think you will do in the future.

83. The next time you have sex with a male partner, how likely are you to ask him to use a condom in order to reduce the risk of a sexually transmitted disease?

- 1 I do not intend to be sexually active (skip to question #96)
- 2 I plan to become sexually active but not with a male sexual partner (skip to question #96)
- 3 I definitely would ask him to use a condom
- 4 I probably would ask him to use a condom
- 5 I possibly would ask him to use a condom
- 6 I probably would not ask him to use a condom
- 7 I definitely would not ask him to use a condom

84. The next time you have sex with a male partner, if you have been drinking, how likely are you to ask him to use a condom in order to reduce the risk of a sexually transmitted disease?

- 1 This does not apply to me; I don't drink
- 2 I definitely would ask him to use a condom
- 3 I probably would ask him to use a condom
- 4 I possibly would ask him to use a condom
- 5 I probably would not ask him to use a condom
- 6 I definitely would not ask him to use a condom

85. The next time you have sex with a male partner, if you have been using drugs, how likely are you to ask him to use a condom in order to reduce the risk of a sexually transmitted disease?

1. This does not apply to me; I don't use drugs
2. I definitely would ask him to use a condom
3. I probably would ask him to use a condom
4. I possibly would ask him to use a condom
5. I probably would not ask him to use a condom
6. I definitely would not ask him to use a condom

How comfortable would you feel in the following situations? For each of the following questions, please indicate how comfortable you would be by circling the number of the answer that best describes your feelings or behaviors.

86. If you were with friends who were encouraging you to drink alcohol and you said no because you really did not want to drink, how would you feel?

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

87. How often have you said no because you did not feel like drinking to friends who were encouraging you to drink?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

88. If you were with friends who were encouraging you to use drugs with them, and you said no because you really did not want to use drugs, how would you feel?

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

89. How often have you said no because you did not want to use drugs when your friends were encouraging you to use them?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

90. If your partner wanted to have sex but you did not, how comfortable would you feel saying "no"?

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

91. When your partner wanted to have sex but you did not, how often have you said no to having sex ?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

92. If you were to discuss condom use with your partner before having sex, how would you feel?

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

93. How often do you discuss condom use with a new sexual partner before having sex?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

94. If you did not want to have sex with your partner because he would not wear a condom, how would you feel about saying "no"?

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

95. How often have you refused to have sex because your partner would not wear a condom?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

The next set of statements involves your opinion about how your female friends who have male sexual partners behave. We are going to be using the term "safe sex."

By safe sex, we mean always using a condom during anal and vaginal intercourse and during oral sex (fellatio). Safe sex also refers to activities that involve only skin to skin contact (for example, mutual masturbation and massage).

Even if you are not completely sure, please answer each question with your best guess or "hunch."

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
96. I think that my friends always ask their male sexual partners to use condoms during intercourse.	1	2	3	4	5
97. I think that my female friends say they have safe sex much more than they actually do.	1	2	3	4	5
98. I think that my female friends believe that if a woman insists on safe sex it implies that she doesn't trust her partner.	1	2	3	4	5
101. I think that my female friends believe it is okay for a woman to ask a man to wear a condom.	1	2	3	4	5
102. I think that my female friends are likely to agree to have sex without a condom if they think that their partners object to using condoms.	1	2	3	4	5
103. I think that my friends are more likely to have unsafe sex when they are feeling down about themselves.	1	2	3	4	5
104. I think that my friends respect a woman who makes sure her date uses a condom.	1	2	3	4	5
105. I think that my friends believe that it is "sleazy" for a woman to plan to have sex.	1	2	3	4	5

106. In the past two months, how many times has a friend or an acquaintance living in your dorm talked with you about the importance of safe sex?

_____ number of times

The following questions are true/false items. Some of the statements are true and accurate, while others are false and inaccurate. Please circle "T" for true and "F" for false. If you are not sure about an item, please answer to the best of your ability.

		True	False
107.	Most people who transmit the AIDS virus look unhealthy.	T	F
108.	For women, <u>unprotected anal intercourse</u> with a male partner is a high-risk activity for contracting the AIDS virus.	T	F
109.	<u>Oral sex</u> without the male partner wearing a condom is a high-risk activity for AIDS virus transmission.	T	F
110.	A person can contract the AIDS virus in one sexual contact.	T	F
111.	Keeping in good physical condition is the best way to prevent becoming infected with the AIDS virus.	T	F
112.	It is unwise to touch a person with AIDS.	T	F
113.	Condoms make sexual intercourse with a male partner completely safe from AIDS.	T	F
114.	Douching after sex greatly reduces the transmission of AIDS.	T	F
115.	When a couple becomes sexually exclusive with one another, they no longer need to follow "safe sex" guidelines.	T	F
116.	Oral sex with a male partner is safe if the woman "does not swallow."	T	F
117.	Most people who have been exposed to the AIDS virus quickly show symptoms of serious illness	T	F
118.	Reducing the number of different male sexual partners effectively protects one from infection with AIDS.	T	F
119.	The AIDS virus does not penetrate unbroken skin.	T	F
120.	Female-to-male transmission of the AIDS virus has not been documented.	T	F
121.	Shared toothbrushes transmit the AIDS virus.	T	F
122.	Pre-ejaculatory fluids carry the AIDS virus.	T	F

		True	False
		T	F
122.	Pre-ejaculatory fluids carry the AIDS virus.	T	F
123.	Intravenous drug users are at risk for AIDS when they share needles.	T	F
124.	A person must have many different sexual partners to be at risk for AIDS.	T	F
125.	People carrying the AIDS virus generally feel quite ill.	T	F
126.	Heterosexual vaginal intercourse carries a high risk for AIDS virus transmission.	T	F
127.	Withdrawal immediately before orgasm makes intercourse safe from AIDS.	T	F
128.	Persons who are exclusively heterosexual are not at risk for AIDS.	T	F
129.	Sharing a bathroom with a person with AIDS poses no risk.	T	F
130.	Intravenous drug users become exposed to the AIDS virus because the virus is often contained in the injected drugs (for example, heroin).	T	F
131.	Plenty of sleep will keep a person from becoming exposed to the AIDS virus.	T	F
132.	A cure for AIDS is expected within the next two years.	T	F
133.	It is more important to take precautions against AIDS in large cities than in small cities.	T	F
134.	A <u>negative</u> result for the AIDS virus antibody test can occur even for people who carry the virus.	T	F
135.	A <u>positive</u> result for the AIDS virus antibody test can occur even for people who do not carry the virus.	T	F
136.	Most present cases of AIDS are due to blood transfusions that took place before 1984.	T	F
137.	A great deal is now known about how the AIDS virus is transmitted.	T	F
138.	Donating blood carries no risk of AIDS for the donor.	T	F
139.	No cases of AIDS have ever been linked to social (dry) kissing.	T	F
140.	Mutual masturbation and body rubbing are low in risk unless the partners have cuts or scratches.	T	F
141.	People who become infected with the AIDS virus through needle-sharing can transmit the virus to others during sexual activities.	T	F
142.	The AIDS virus can be transmitted by mosquitoes.	T	F

THANK YOU FOR TAKING YOUR TIME TO HELP WITH THIS VERY IMPORTANT PROJECT. YOUR RESPONSES WILL ENABLE US TO LEARN MORE ABOUT BEHAVIOR AS IT RELATES TO WOMEN'S HEALTH ISSUES. PLEASE USE THE SPACE BELOW OR THE BACK OF THIS QUESTIONNAIRE FOR COMMENTS. YOUR INPUT IS VERY IMPORTANT TO US AND TO THE DEVELOPMENT OF THIS HEALTH PROJECT FOR WOMEN.

COMMENTS/SUGGESTIONS

Appendix E
Study Site Demographics

Site Demographics

- Four Year Liberal Arts College for women
- 450 Acre campus, near an urban area of approximately 250,000
- 200 coed commuter students enrolled in various graduate programs
- Approximately 850 undergraduate women residing on campus
- Eight residential hall and dormitories; 35 on campus apartments
- Approximately 90% are Caucasian, 10% from minority groups.

Appendix F
Survey Table of Contents

Survey Table of Contents

Survey Questions	Subscale
1-4	Demographics
5-26	Alcohol use
27-40	Drug use
41-44	Personal Salience of AIDS
45	Routing Question
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67	Routing Question
68-118	HIV-Risky Sexual Behavior
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122-131	Socially and Sexually Assertive Behavior
132-141	Social Norm Perception
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147-180	General AIDS/STD knowledge

Appendix G
The Women's Health Project Survey

The Women's Health Project Survey

Twenty-five minutes of your time can contribute to the better understanding of women's health issues.

Thanks for taking time to fill out the Women's Health Project Survey. This project is being conducted by Deborah Webster, M.A. in fulfillment of a doctoral dissertation in the Department of Psychology at Virginia Tech. Women are frequently left out of health research. Your help may provide important new information that will lead to better ways to address women's health issues, in particular AIDS and other sexually transmitted diseases.

The survey content is of a very personal nature. You may stop filling in the survey at any time. If you have questions concerning the Women's Health Project, please call the Project Sponsor, Richard Winett, Ph.D. (1-800-752-4791); the Project Director, Deborah A. Webster, M.A. (366-4860); or Roberta Rodgers, R.N. and Rita Foster, R.N. at the Hollins Student Health Services (362-6273).

This survey is completely anonymous. However, at some later date we will ask you to complete a second questionnaire. In order for us to match up the two surveys, we need you to generate a code known only to you by filling in the following information. Please carefully fill in the code so that we will be able to match your two surveys.
REMEMBER, WE WILL NOT BE ABLE, NOR WILL WE TRY, TO PERSONALLY IDENTIFY YOU.

- 1) Your **first** initial _____
- 2) Your mother's **first** initial _____
- 3) The **last** two numbers in your social security number _____
- 4) The **day** of your birth _____
(Example: 2/24/67 = 24)

This survey is based on AIDS research conducted by Jeff Kelly, Ph.D. and Deborah Murphy, Ph.D.
01/28/92

Women's Health Survey

First we would like to ask you a few general questions about yourself. Please fill in the blank or circle the number of the answer that best applies to you.

1. What is your age? _____

2. Which of the following best describes your racial background?

- 1 White
- 2 African-American (Black)
- 3 Hispanic
- 4 Native American (American Indian)
- 5 Asian American
- 6 Other (please describe _____)

3. What year are you in college?

- 1 Freshman
- 2 Sophomore
- 3 Junior
- 4 Senior

4. In which dorm do you live?

- 1 Starkie
- 2 West
- 3 Tinker
- 4 Randolph
- 5 East
- 6 Other (please specify _____)

The following questions apply to substance use (i.e., alcohol and drugs) over the past four weeks and twelve months. Please read each substance listed and circle the number that applies to you. Please be as honest and accurate as possible. **REMEMBER, YOUR NAME DOES NOT APPEAR ANYWHERE ON THIS FORM.**

5. Have you used alcohol in the past **twelve months** (e.g., beer, wine, mixed drinks)?

- 1 No (skip to question #27)
- 2 Yes (continue with question #6)

6. How often, on the average, in the past **twelve months** did you use alcohol (e.g., beer, wine, mixed drinks)?

- 1 Less than once a month
- 2 About once a month
- 3 2 or 3 times a month
- 4 Once or twice a week
- 5 3 or 4 times a week
- 6 Nearly everyday
- 7 Once a day or more

7. How often in the past **four weeks** did you use alcohol (e.g., beer, wine, mixed drinks)?

- 1 I did not drink in the past four weeks (skip to question #9)
- 2 About once in the past four weeks
- 3 2 or 3 times in the past four weeks
- 4 Once or twice a week
- 5 3 or 4 times a week
- 6 Nearly everyday
- 7 Once a day or more

8. Think of the **one occasion** you drank the **most** this past **four weeks**. How many drinks did you have on this occasion? (Reminder: One drink equals 12 oz. of beer or 4 oz. of wine or one standard cocktail.)

- 1 1-2 drinks
- 2 3-4 drinks
- 3 5-6 drinks
- 4 7-8 drinks
- 5 9-12 drinks
- 6 13-16 drinks
- 7 17 or more drinks

9. Think of the one occasion you drank the most this past twelve months. How many drinks did you have on this occasion? (Reminder: One drink equals 12 oz. of beer or 4 oz. of wine or one standard cocktail.)

- 1 1-2 drinks
- 2 3-4 drinks
- 3 5-6 drinks
- 4 7-8 drinks
- 5 9-12 drinks
- 6 13-16 drinks
- 7 17 or more drinks

For question #10 through #16, please circle the letter for each day of the week indicating the average number of drinks you usually consume on that day. Please estimate over the past four weeks.

	No drinks	1-2 drinks	3-4 drinks	5-6 drinks	7+ drinks
10. Sunday	a	b	c	d	e
11. Monday	a	b	c	d	e
12. Tuesday	a	b	c	d	e
13. Wednesday	a	b	c	d	e
14. Thursday	a	b	c	d	e
15. Friday	a	b	c	d	e
16. Saturday	a	b	c	d	e

For question #17 through #23, please circle the letter for each day of the week indicating the average number of drinks you usually consume on that day. Please estimate over the past twelve months.

	No drinks	1-2 drinks	3-4 drinks	5-6 drinks	7+ drinks
17. Sunday	a	b	c	d	e
18. Monday	a	b	c	d	e
19. Tuesday	a	b	c	d	e
20. Wednesday	a	b	c	d	e
21. Thursday	a	b	c	d	e
22. Friday	a	b	c	d	e
23. Saturday	a	b	c	d	e

24. In the past twelve months, in which setting did you tend to consume the most number of drinks? (Circle all that apply.)

- 1 At another campus
- 2 At a frat house
- 3 At my boyfriend's apartment/dorm
- 4 On my campus
- 5 In a bar
- 6 A friend's house
- 7 At my parent's house
- 8 Other (please specify _____)

25. In the past twelve months, in which situations did you tend to consume the most number of drinks? (Circle all that apply.)

- 1 At dinner
- 2 On dates
- 3 With groups of friends
- 4 At parties
- 5 Alone
- 6 At "mixers"
- 7 Other (please specify _____)

26. In the past **twelve months**, on which of the following occasions did you tend to consume the most number of drinks? (Circle all that apply.)
- 1 Spring break
 - 2 Summer break
 - 3 Thanksgiving holiday
 - 4 Christmas holiday
 - 5 New Years Eve
 - 6 Mardi Gras
 - 7 Other (please specify _____)
27. In the past **twelve months**, how often have you used marijuana (hash, THC)?
- 1 No use (skip to question #29)
 - 2 Once/twice in the past twelve months
 - 3 About once a month
 - 4 About once a week
 - 5 Several times a week
 - 6 About every day
 - 7 More than once a day
28. In the past **four weeks**, how often have you used marijuana (hash, THC)?
- 1 No use
 - 2 Once/twice in the past month
 - 3 About once a week
 - 4 Several times a week
 - 5 About every day
 - 6 More than once a day
29. In the past **twelve months**, how often have you used cocaine?
- 1 No use (skip to question #31)
 - 2 Once/twice in the past twelve months
 - 3 About once a month
 - 4 About once a week
 - 5 Several times a week
 - 6 About every day
 - 7 More than once a day
30. In the past **four weeks**, how often have you used cocaine?
- 1 No use
 - 2 Once/twice in the past month
 - 3 About once a week
 - 4 Several times a week
 - 5 About every day
 - 6 More than once a day

31. In the past **twelve months**, how often have you used hallucinogens (for example, Acid/LSD)?

- 1 No use (skip to question #33)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

32. In the past **four weeks**, how often have you used hallucinogens (for example, Acid/LSD)?

- 1 No use
- 2 Once/twice in the past month
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

33. In the past **twelve months**, how often have you used "ecstasy" (also known as "X")?

- 1 No use (skip to question #35)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

34. In the past **four weeks**, how often have you used "ecstasy" (also known as "X")?

- 1 No use
- 2 Once/twice in the past month
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

35. In the past **twelve months**, how often have you used amphetamines (for example, speed, uppers, crosses)?

- 1 No use (skip to question #37)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

36. In the past **four weeks**, how often have you used amphetamines (for example, speed, uppers, crosses)?

- 1 No use
- 2 Once/twice in the past month
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

37. In the past **twelve months**, how often have you used any other drug (please specify _____) for recreational purposes?

- 1 No use (skip to question #39)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

38. In the past **four weeks**, how often have you used any other drug, excluding alcohol, (please specify _____) for recreational purposes?

- 1 No use
- 2 Once/twice in the past month
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

39. In the past **twelve months**, how often have you used a needle to inject a recreational drug?

- 1 No use (skip to question #41)
- 2 Once/twice in the past twelve months
- 3 About once a month
- 4 About once a week
- 5 Several times a week
- 6 About every day
- 7 More than once a day

40. In the past **four weeks**, how often have you used a needle to inject a recreational drug?

- 1 No use
- 2 Once/twice in the past month
- 3 About once a week
- 4 Several times a week
- 5 About every day
- 6 More than once a day

Now we are going to ask a few questions concerning your experience and the experiences of your friends with AIDS. Please circle the number which best describes your answer.

41. Have you ever personally known someone with the HIV virus that causes AIDS?

- 1 No
- 2 Yes

42. Have you ever personally known someone with full blown AIDS?

- 1 No
- 2 Yes

43. Have you ever personally known someone who died from AIDS?

- 1 No (skip to question #45)
- 2 Yes (If yes, how many people? _____)

44. If you answered yes to question #43, was the person closest to you who died:

- 1 A distant acquaintance
- 2 An acquaintance
- 3 A friend
- 4 A good friend
- 5 A very close friend
- 6 A family member
- 7 Other (please specify _____)

In order to learn more about women's health, it is important to ask about your sexual behavior. The next section asks about your sexual activities during the past four weeks and the past twelve months. Think back over this time; places you have been, things you have done, and people that you have dated. Please be honest and accurate. REMEMBER, YOUR NAME DOES NOT APPEAR ANYWHERE ON THIS FORM, NOR WILL YOU BE PERSONALLY IDENTIFIED IN ANY WAY. THIS SURVEY IS COMPLETELY ANONYMOUS.

45. Have you been ever been sexually active? By sexually active, we mean any behavior that includes genital contact such as heavy petting, hand-genital contact, mutual masturbation, oral sex, or sexual intercourse.

- 1 No (skip to question #119)
- 2 Yes (continue with question #46)

Please answer the following true/false questions to reflect what is most true for you right now.

	True	False
46. I do not view AIDS/STDs as a serious health threat to me <u>personally</u>	T	F
47. Right now I am thinking of making changes in my sexual behavior to protect myself from AIDS/STDs.	T	F
48. I have made significant changes in my sexual behavior in an effort to avoid AIDS/STDs.	T	F
49. My attempts to practice safer sex have been unsuccessful.	T	F
50. I have been practicing safe sex for the last 12 months or longer.	T	F

51. In the last **four weeks**, what changes have you made in your behavior to be safer from AIDS and other STDs? (If you have made no changes, please circle #1.)

1 I have made no changes.

2 _____

3 _____

4 _____

5 _____

6 _____

52. In the last **twelve months**, what changes have you made in your behavior to be safer from AIDS and other STDs? (If you have made no changes, please circle #1.)

1 I have made no changes.

2 _____

3 _____

4 _____

5 _____

6 _____

53. Based on what you know about AIDS and how it is transmitted, to what extent has **your behavior** over the past **four weeks** put you at risk for being infected with the AIDS virus?

- 1 No risk at all**
- 2 Slightly at risk**
- 3 Somewhat at risk**
- 4 Good deal at risk**
- 5 Extremely at risk**

54. Based on what you know about AIDS and how it is transmitted, to what extent has your behavior over the past twelve months put you at risk for being infected with the AIDS virus?

- 1 No risk at all
- 2 Slightly at risk
- 3 Somewhat at risk
- 4 Good deal at risk
- 5 Extremely at risk

55. Based on what you know about AIDS and how it is transmitted, to what extent has your sexual partner's behavior over the past four weeks put you at risk of being infected by the AIDS virus?

- 1 I have not had a sexual partner in the past four weeks
- 2 No risk at all
- 3 Slightly at risk
- 4 Somewhat at risk
- 5 Good deal at risk
- 6 Extremely at risk

56. Based on what you know about AIDS and how it is transmitted, to what extent has your sexual partner's behavior over the past twelve months put you at risk of being infected by the AIDS virus?

- 1 I have had no sexual partner in the past year
- 2 No risk at all
- 3 Slightly at risk
- 4 Somewhat at risk
- 5 Good deal at risk
- 6 Extremely at risk

57. Have you ever been tested for a sexually transmitted disease (STD) other than AIDS?

- 1 No (skip to question #61)
- 2 Yes (continue with question #58)

58. If you answered "yes" to question #57, was the result positive (you were diagnosed as having an STD)?

- 1 No (skip to question #60)
- 2 Yes (continue with question #59)

59. If you answered "yes" to question #58, please indicate below which type of STD you have had (Circle all that apply):

- | | |
|-------------------------|--|
| 1 Syphilis | 6 Gonorrhea (Clap) |
| 2 Genital Herpes | 7 Chlamydia |
| 3 Vaginal Warts | 8 Trichomoniasis |
| 4 Pubic Lice | 9 I've had an STD, but I don't know/can't remember which type |
| 5 Hepatitis | |

60. How long has it been since your most recent test for an STD?

- 1 Within the last 0 to 3 months**
- 2 Within the last 4 to 6 months**
- 3 Within the last 7 to 12 months**
- 4 It has been longer than 12 months**

61. Have you ever wanted to get a test for an STD but did not?

- 1 No (skip to question #63)**
- 2 Yes (continue with question #62)**

62. If you wanted to get an STD test but did not, what were the reasons? (Circle all that apply)

- 1 I was embarrassed**
- 2 I did not know how to go about it**
- 3 It was not convenient**
- 4 I was afraid to find out the results**
- 5 It was too expensive**
- 6 My sexual partner discouraged it**
- 7 Other (please specify _____)**

63. Have you ever been tested for the AIDS virus?

- 1 No, I have not been tested (skip to question #65)**
- 2 Yes, I was told that my result was negative**
- 3 Yes, I was told that my result was positive**
- 4 Yes, but I never returned to learn the result**

64. How long has it been since your most recent test for the AIDS virus?
- 1 Within the last 0 to 3 months
 - 2 Within the last 4 to 6 months
 - 3 Within the last 7 to 12 months
 - 4 It has been longer than 12 months
65. Have you ever wanted to get an AIDS test but did not?
- 1 No (skip to question #67)
 - 2 Yes (continue with question #66)
66. If you wanted to get an AIDS test but did not, what were the reasons? (Circle all that apply)
- 1 I was embarrassed
 - 2 I did not know how to go about it
 - 3 It was not convenient
 - 4 I was afraid to find out the results
 - 5 It was too expensive
 - 6 My sexual partner discouraged it
 - 7 Other (please specify _____)
67. Have you been sexually active in the last twelve months? Remember, by sexually active, we mean any behavior that includes genital contact such as heavy petting, hand-genital contact, mutual masturbation, oral sex, or sexual intercourse.
- 1 No (skip to question #119)
 - 2 Yes (continue with question #68)
68. How many different sexual partners have you had:
- In the past four weeks _____
- In the past twelve months _____
69. Of your total number of sexual partners for the past four weeks, have your partners been: (Please circle one of the following.)
- 1 All female sexual partners (skip to question #71)
 - 2 All male sexual partners (skip to question #71)
 - 3 Both female and male sexual partners (continue with question #70)

70. If you have had both female and male sexual partners within the past **four weeks**, how many have been:

1 Females _____.

2 Males _____

71. Of your total number of sexual partners for the past **twelve months**, have your partners been: (Please circle one of the following.)

1 All female sexual partners (skip to question #103)

2 All male sexual partners (skip to question #73)

3 Both female and male sexual partners (continue with question #72)

72. If you have had both female and male sexual partners within the past **twelve months**, how many have been:

1 Females _____.

2 Males _____

Please answer the following questions in reference to your male sexual partners only.

73. How long were you involved in your most recent sexual relationship?

1 One night

2 Less than one week

3 One week

4 Less than one month

5 Between 1 - 3 months

6 Between 4 - 6 months

7 Between 7 - 12 months

8 Longer than 12 months

74. In the last **twelve months**, if you have not always used a condom when you had sex, please indicate why you did not by circling one of the following:

- 1 I always use condoms
- 2 I don't use any birth control
- 3 I use oral contraceptives (birth control pills)
- 4 Sex doesn't feel good with a condom
- 5 Not always sure when I'm going to have sex
- 6 Uncomfortable asking partner to use one
- 7 Other: _____
- 8 Other: _____
- 9 Other: _____

During the past twelve months, think about the activities that took place when you had sexual contact with your male partner. Please mark your answer in the blanks below. If a number is "0", please write in "0". Please be sure to mark an answer in every blank.

75. In the past **four weeks** I had vaginal intercourse **without** my partner wearing a condom _____ times with _____ men.

76. In the past **twelve months** I had vaginal intercourse **without** my partner wearing a condom _____ times with _____ men.

77. In the past **four weeks** I had vaginal intercourse **with** my partner wearing a condom _____ times with _____ men.

78. In the past **twelve months** I had vaginal intercourse **with** my partner wearing a condom _____ times with _____ men.

79. In the past **four weeks**, I had oral-genital contact (my mouth on his genitals) when he was **not** wearing a condom _____ times with _____ number of men.

80. In the past **twelve months**, I had oral-genital contact (my mouth on his genitals) when he was **not** wearing a condom _____ times with _____ number of men.

81. In the past **four weeks**, I had oral-genital contact (my mouth on his genitals) when he **was** wearing a condom _____ times with _____ men.

82. In the past **twelve months**, I had oral-genital contact (my mouth on his genitals) when he **was** wearing a condom _____ times with _____ men.
83. In the past **four weeks**, _____ number of men had oral-genital contact (his mouth on my genitals) with me _____ number of times.
84. In the past **twelve months**, _____ number of men had oral-genital contact (his mouth on my genitals) with me _____ number of times.
85. In the past **four weeks**, I had anal intercourse **without** my partner wearing a condom _____ times with _____ men.
86. In the past **twelve months**, I had anal intercourse **without** my partner wearing a condom _____ times with _____ men.
87. In the past **four weeks**, I had anal intercourse **with** my partner wearing a condom _____ times with _____ men.
88. In the past **twelve months**, I had anal intercourse **with** my partner wearing a condom _____ times with _____ men.
89. In the past **four weeks**, I had sex _____ times with _____ men who I think or know have used intravenous drugs.
90. In the past **twelve months**, I had sex _____ times with _____ men who I think or know have used intravenous drugs.
91. In the past **four weeks**, I had sex _____ times with _____ men who I know or believe were also having sexual relations with other women.
92. In the past **twelve months**, I had sex _____ times with _____ men who I know or believe were also having sexual relations with other women.
93. In the past **four weeks**, I had sex _____ times with _____ men who I know or think were at that time having sexual relations with another man.
94. In the past **twelve months**, I had sex _____ times with _____ men who I know or think were at that time having sexual relations with another man.

95. In the past **four weeks**, I had sex _____ times with _____ men who I know or think had had sex in the past with another man.
96. In the past **twelve months** I had sex _____ times with _____ men who I know or think had had sex in the past with another man.
97. In the past **four weeks**, I had sex _____ times with _____ men whom I saw one time and did not have sex with again.
98. In the past **twelve months**, I had sex _____ times with _____ men whom I saw one time and did not have sex with again.
99. In the past **four weeks**, I had sex _____ times with _____ men when I had been drinking.
100. In the past **twelve months**, I had sex _____ times with _____ men when I had been drinking.
101. In the past **four weeks**, I had sex _____ times with _____ men when I had been using drugs.
102. In the past **twelve months**, I had sex _____ times with _____ men when I had been using drugs.

IF YOU HAVE HAD ONLY MALE SEXUAL PARTNERS, SKIP TO QUESTION #119.

IF YOU HAVE HAD ONLY FEMALE PARTNERS, OR BOTH FEMALE AND MALE SEXUAL PARTNERS, CONTINUE WITH QUESTION #103.

Please answer the following questions in terms of your female sexual partners only

103. In the past **four weeks**, I had oral-genital contact (my mouth on her genitals) _____ times with _____ number of women.
104. In the past **twelve months**, I had oral-genital contact (my mouth on her genitals) _____ times with _____ number of women.

105. In the past **four weeks**, _____ number of women had **oral-genital contact (her mouth on my genitals)** with me _____ number of times.
106. In the past **twelve months**, _____ number of women had **oral-genital contact (her mouth on my genitals)** with me _____ number of times.
107. In the past **four weeks**, I had sex _____ times with _____ women who I think or know have used intravenous drugs.
108. In the past **twelve months**, I had sex _____ times with _____ women who I think or know have used intravenous drugs.
109. In the past **four weeks**, I had sex _____ times with _____ women who I know or believe were at that time having sexual relations with other women.
110. In the past **twelve months**, I had sex _____ times with _____ women who I know or believe were at that time having sexual relations with other women.
111. In the past **four weeks**, I had sex _____ times with _____ women who I know or think were having sexual relations with a man.
112. In the past **twelve months**, I had sex _____ times with _____ women who I know or think were having sexual relations with a man.
113. In the past **four weeks**, I had sex _____ times with _____ women whom I saw one time and did not have sexual contact with again.
114. In the past **twelve months**, I had sex _____ times with _____ women whom I saw one time and did not have sexual contact with again.
115. In the past **four weeks**, I had sex _____ times with _____ women when I had been drinking.
116. In the past **twelve months**, I had sex _____ times with _____ women when I had been drinking.
117. In the past **four weeks**, I had sex _____ times with _____ women when I had been using drugs.

118. In the past twelve months, I had sex _____ times with _____ women when I had been using drugs.

IF YOU HAVE HAD ONLY FEMALE SEXUAL PARTNERS, PLEASE SKIP TO QUESTION #132.

IF YOU HAVE HAD ONLY MALE SEXUAL PARTNERS, OR BOTH FEMALE AND MALE SEXUAL PARTNERS, PLEASE CONTINUE WITH QUESTION #119.

The following questions pertain to what you think you will do the next time that you have sex. If you have never been sexually active, please indicate what you think you will do in the event that you become sexually active. Please circle the answer which best describes what you think you really will do in the future.

119. If you have not been drinking or using drugs, how likely are you to ask your male sexual partner to use a condom in order to reduce the risk of an STD?

- 1 I plan to become sexually active with female partners only (skip to question #132)
- 2 I definitely would ask him to use a condom
- 3 I probably would ask him to use a condom
- 4 I possibly would ask him to use a condom
- 5 I probably would not ask him to use a condom
- 6 I definitely would not ask him to use a condom

120. If you have been drinking, how likely are you to ask your male sexual partner to use a condom in order to reduce the risk of an STD?

- 1 This does not apply to me; I don't drink
- 2 I definitely would ask him to use a condom
- 3 I probably would ask him to use a condom
- 4 I possibly would ask him to use a condom
- 5 I probably would not ask him to use a condom
- 6 I definitely would not ask him to use a condom

121. If you have been using drugs, how likely are you to ask your male sexual partner to use a condom in order to reduce the risk of an STD?

1. This does not apply to me; I don't use drugs
2. I definitely would ask him to use a condom
3. I probably would ask him to use a condom
4. I possibly would ask him to use a condom
5. I probably would not ask him to use a condom
6. I definitely would not ask him to use a condom

How comfortable would you feel in the following situations? For each of the following questions, please indicate how comfortable you think you would be by circling the number of the answer that best describes your feelings or behaviors.

122. If you were with friends who were drinking alcohol and you really did not want to drink, how would you feel? Please imagine how you would really feel in this situation.

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

123. How often have you joined your friends in drinking even when you really did not feel like it?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

124. If you were with friends who were using drugs, and you really did not want to get high, how would you feel? Please imagine how you would really feel in this situation.

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

125. How often have you joined your friends in using drugs even when you really did not feel like it?

- 1 Never
- 2 Occasionally
- 3 Usually
- 4 Always

126. If your partner wanted to have sex but you did not, how comfortable would you feel saying "no"? Please imagine how you would really feel in this situation.

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

127. How often have you said no when your partner wanted to have sex but you did not?

- 1 I have never had sex
- 2 Never
- 3 Occasionally
- 4 Usually
- 5 Always

128. How would you feel about discussing condom use with a sexual partner before having sex? Please imagine how you would really feel in this situation.

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

129. How often have you discussed condom use with a sexual partner before having sex?

- 1 I have never had sex
- 2 Never
- 3 Occasionally
- 4 Usually
- 5 Always

130. How would you feel about saying "no" to your sexual partner just because he would not wear a condom? Please imagine how you would really feel in this situation.

- 1 Very uncomfortable
- 2 Uncomfortable
- 3 Comfortable
- 4 Very comfortable

131. How often have you refused to have sex because your partner would not wear a condom?

- 1 I have never had sex
- 2 Never
- 3 Occasionally
- 4 Usually
- 5 Always

The next set of statements involves your opinion about how your female friends who have male sexual partners behave. We are going to be using the term "safe sex."

By safe sex, we mean always using a condom during anal and vaginal intercourse. Safe sex also refers to activities that involve only skin to skin contact (for example, mutual masturbation and massage).

Even if you are not completely sure, please circle the number for each question that reflects your best guess or "hunch."

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
132. I think that my female friends always ask their male sexual partners to use condoms during intercourse.	1	2	3	4	5
133. I think that my female friends say they have safe sex much more than they actually do.	1	2	3	4	5
134. I think that my female friends believe that if a woman insists on safe sex it implies that she doesn't trust her partner.	1	2	3	4	5
135. I think that my female friends try to practice safe sex by having their male sexual partners withdraw before ejaculation.	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
136. I think that even among my female friends who generally practice safe sex, sex without the use of a condom is more likely to occur after drinking alcohol.	1	2	3	4	5
137. I think that my female friends believe it is okay for a woman to ask a man to wear a condom.	1	2	3	4	5
138. I think that my female friends are likely to agree to have sex without a condom if they think that their partners object to using condoms.	1	2	3	4	5
139. I think that my female friends are more likely to have unsafe sex when they are feeling down about themselves.	1	2	3	4	5
140. I think that my female friends respect a woman who makes sure her date uses a condom.	1	2	3	4	5
141. I think that my female friends believe that it is kind of "sleazy" for a woman to actually carry a condom in her purse.	1	2	3	4	5

For questions #142 - #146, please think back over conversations you have had over the past two months with women living in your dorm. Please circle the number which best describes your answer.

142. How many different conversations have you had in the past two months in which someone living in your dorm has endorsed safe sex (AIDS prevention) to you?

- 1 No conversations (skip to question #147)
- 2 1 conversation
- 3 2 conversations
- 4 3 conversations
- 5 4 conversations
- 6 5 conversations
- 7 6 or more conversations

143. How many different women living in your dorm have endorsed safe sex (AIDS/STD prevention) to you in a conversation in the past two months?

- 1 1 woman
- 2 2 women
- 3 3 women
- 4 4 women
- 5 5 women
- 6 6 or more women

144. How relevant did these conversations about safe sex (AIDS/STD prevention) seem to you?

- 1 Not relevant at all
- 2 Somewhat relevant
- 3 Very relevant
- 4 Extremely relevant

145. What was your overall emotional reaction to the AIDS/STD prevention conversations?

- 1 Very negative
- 2 Somewhat negative
- 3 Neutral
- 4 Somewhat positive
- 5 Very positive

146. What effect did the conversations have on your health behavior? (Please circle all that apply.)

- 1 None
- 2 I know more about how AIDS/STDs are transmitted
- 3 I know more about how to prevent AIDS/STDs
- 4 I feel more comfortable about practicing safe sex
- 5 I feel more worried about getting AIDS/STDs
- 6 I feel more confident that I can protect my sexual health
- 7 Other (please specify) _____
- 8 Other (please specify) _____

The following questions are true/false items. Some of the statements are true and accurate, while others are false and inaccurate. Please circle "T" for true and "F" for false. If you are not sure about an item, please answer to the best of your ability.

	True	False
147. Women with AIDS have a longer life span than do men with AIDS.	T	F
148. AIDS can be spread by toilet seats.	T	F
149. AIDS is spreading among women at about the same rate as among men.	T	F
150. A person can contract the AIDS virus in one sexual contact.	T	F
151. STDs often have no noticeable symptoms.	T	F
152. Condoms make sexual intercourse with a male partner completely safe from AIDS.	T	F
153. Thanks to penicillin, syphilis is almost a disease of the past.	T	F
154. When a couple becomes sexually exclusive with one another, they no longer need to follow safe sex guidelines.	T	F
155. Oral sex with a male partner is safe if the woman "doesn't swallow."	T	F
156. Most people who have been exposed to the AIDS virus quickly show symptoms of serious illness.	T	F
157. Reducing the number of different sexual partners is effective protection from AIDS.	T	F
158. The AIDS virus does not penetrate unbroken skin.	T	F
159. Female-to-male transmission of the AIDS virus has not been documented.	T	F

	True	False
160. Shared toothbrushes transmit the AIDS virus.	T	F
161. Pre-ejaculatory fluids carry the AIDS virus.	T	F
162. Genital warts can be cured with the newer antibiotics.	T	F
163. Many women who contract chlamydia have no symptoms.	T	F
164. People carrying the AIDS virus generally feel quite ill.	T	F
165. Heterosexual vaginal intercourse carries a high risk for AIDS virus transmission.	T	F
166. Genital warts are strongly associated with cervical cancer	T	F
167. AIDS is not transmitted through female-to-male oral sex (fellatio).	T	F
168. Sharing a bathroom with a person with AIDS poses no risk.	T	F
169. Intravenous drug users become exposed to the AIDS virus because the virus is often contained in the injected drugs (for example, heroin).	T	F
170. The herpes virus establishes itself permanently in the nervous system unless treated with antibiotics.	T	F
171. Oral contraceptives such as birth control pills offer some protection against chlamydia.	T	F
172. A <u>negative</u> result for the AIDS virus antibody test can occur even for people who carry the virus.	T	F
173. A <u>positive</u> result for the AIDS virus antibody test can occur even for people who do not carry the virus.	T	F
174. Most present cases of AIDS are due to blood transfusions that took place before 1984.	T	F
175. A great deal is now known about how the AIDS virus is transmitted.	T	F
176. Donating blood carries no risk of AIDS for the donor.	T	F
177. All STDs can be prevented.	T	F
178. Mutual masturbation and body rubbing are low in risk unless the partners have cuts or scratches.	T	F
179. Genital warts may be spread by using a towel of an infected person.	T	F
180. The AIDS virus can be transmitted by mosquitoes.	T	F

THANK YOU FOR TAKING YOUR TIME TO HELP WITH THIS VERY IMPORTANT PROJECT. SO LITTLE HEALTH RESEARCH, ESPECIALLY AIDS RESEARCH, HAS FOCUSED EXCLUSIVELY ON WOMEN. YOUR RESPONSES WILL ENABLE US TO LEARN MORE ABOUT BEHAVIOR AS IT RELATES TO WOMEN'S HEALTH.

COMMENTS/SUGGESTIONS

PLEASE USE THE SPACE BELOW OR THE BACK OF THIS QUESTIONNAIRE FOR COMMENTS. YOUR INPUT IS VERY IMPORTANT TO US AND TO THE DEVELOPMENT OF THE WOMEN'S HEALTH PROJECT.

Appendix H
The Women's Health Project Condom Sign

THE WOMEN'S HEALTH PROJECT

**PLEASE HELP US TO KEEP
THIS SERVICE FREE FOR
YOU AND OTHER STUDENTS.**

**PLEASE TAKE ONLY 2
CONDOMS AT A TIME.**

For more information, please call the Project Director at 366-4860.

Appendix I
Nomination Forms
for Opinion Leaders

THE WOMEN'S PEER EDUCATIONAL HEALTH PROJECT

The Women's Health Project is being conducted by Deborah Webster, a doctoral student in the Department of Psychology at Virginia Tech.

For the Women's Health Project, we need to find 30 to 40 women who are well-liked by the other women in the dorm to participate in a special AIDS prevention seminar. The women we invite must be popular because our special program is intended to focus on the key "opinion leaders" who are liked by their peers and who are in a position to share what they learn with other women in their dorm. This "friends educating friends" approach is positive and can save lives.

In order to find out who the most well-liked or popular "key" people in this dorm are, we need the help of the R. A.'s. Because of your special functioning as an R. A., you know the women in your dorm, know how they interact with each other, and know whom we should plan to approach and invite.

To establish agreement about who is popular, we are asking each R. A. to make up a list independently. We will then compare the lists and invite those people whose names come up most often.

Here's what we would like you to do:

1. First, think carefully about all the women that you know who live in this dorm.

Who talks to others and socializes the most?

Who is most popular among the women who live in this dorm?

Who has a lot of friends and is well-regarded by their friends?

2. Second, as you are thinking about who is popular, remember that there are distinct "groups" or "crowds." We would like to invite women who are popular within their own crowd and those women who are more popular in general.

No one is popular with all people, so try to represent on your list people who are most popular perhaps with a certain segment or crowd of the dorm residents. We hope to achieve a balance across all these different groups by inviting key people from each circle of friends.

3. Third, please list the 30 people you think best meet this guideline of popularity. You should include yourself and other R. A.'s if you think that you or they meet the popularity objectives. Please try to generate a full list of 30 people.

MY NOMINATION FOR THE 30 PEOPLE WHO ARE MOST POPULAR (ORDER IS NOT IMPORTANT)

My first name is: _____

Person's First Name & Last Initial

1. _____ 16. _____

2. _____ 17. _____

3. _____ 18. _____

4. _____ 19. _____

5. _____ 20. _____

6. _____ 21. _____

7. _____ 22. _____

8. _____ 23. _____

9. _____ 24. _____

10. _____ 25. _____

11. _____ 26. _____

12. _____ 27. _____

13. _____ 28. _____

14. _____ 29. _____

15. _____ 30. _____

Appendix J
Recruitment Letter for the Key Opinion Leaders

The Women's Health Project

The Women's Health Project is a study being conducted by Deborah Webster, M.A. and sponsored by the Center for Research in Health Behavior at Virginia Tech. The project is recruiting women who are popular with their peers to participate as peer educators.

You have been nominated as a popular opinion leader by the RAs in your dorm. Your participation would involve attending five 90-minute training sessions and talking with women in your dorm about what you learn. You would be paid \$10-15 for each training session and a \$25 bonus if you attend all five training sessions. Thus, you would have the opportunity to earn a total of \$75-100. **If you would like to learn more about the project, please call Ms. Webster at 366-4860 by Wednesday, February 12.** Or, if you prefer, you may indicate your interest to your RA and someone from the project will contact you.

Appendix K
Training Manual

The Women's Health Project Training Manual

Project Director: Deborah A. Webster, M.A.
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This manual was developed for a dissertation project conducted by Deborah A. Webster, M.A. The manual was based on the research of Judith A. Tindall, Ph.D., Elizabeth Powell, M.A., and Jeffrey Kelley, Ph.D. and his colleagues.

Information concerning AIDS/STDs was obtained from the Centers for Disease Control.

THE WOMEN'S HEALTH PROJECT TRAINING MANUAL

Introduction

Trainer's Responsibility to the Popular Opinion Leaders (POLs)

1. Give good training
2. Provide explanation of ethical standards (esp. confidentiality)
3. Give proper supervision
4. Provide support

Goal of Training for POLs

1. Increase knowledge concerning AIDS/STD prevention.
2. Train POLs in the concepts and skills involved in improving interpersonal, affective, psychological behaviors and attitudes. Basic communication skills to be taught:
 - a. Attending
 - b. Empathy
 - c. Sexual Assertiveness

Benefits of Training for POLs

1. POLs will increase their knowledge concerning AIDS/STD prevention.
2. Basic communication skills will be integrated into POLs' lives thereby enabling POLs to develop behaviors and attitudes that are desirable.
3. POLs will feel empowered by the training.
4. POLs will be able to help women increase health protective behaviors.

POL Selection

Nomination will be made by the RAs using a behavioral criteria for popularity:

N=10% of dorm population
10% of 210 = 21 + 5 for attrition

Basic Training Procedures

Trainers will follow six essential behaviors with each training module:

1. Explanation of and need for skill
2. Modeling of skill to be taught
3. Practice of skill
4. Feedback to POLs from raters
5. Homework and discussion of experiences of doing and rating
6. Prepare for next behavior

Recruitment Session

Purpose

1. To inform interested persons of the peer counseling program
2. To generate interest in program
3. To gain commitment to participate
4. To obtain consent form signatures
5. To complete premeasures

Time

1 1/2 hours

Physical setting

Chairs arranged in circle

Materials

POL self-evaluation form
Consent forms

Procedures for Session

1. Explain how POLs were nominated
2. Explain the POLs' role in the program. (Avoid lengthy details for now.)
 - a. To increase your AIDS/STD knowledge; to learn about your attitudes and behavior as they relate to your sexual and reproductive health
 - b. To increase personal communication skills
 - c. To learn how to help peers with social concerns, especially relationship issues and how they relate to AIDS/STD prevention
3. Explain participant involvement
 - a. Attendance. Participants will be asked to attend 5 training sessions. Participants will receive information about AIDS/STD prevention and training in affective communication skills.
 - b. Benefits to participants include:
 1. Increasing affective communication skills
 2. Learning more about self
 3. Learning more about AIDS/STDs
 4. Reducing personal AIDS/STD risk
 5. Helping friends and peers reduce AIDS/STD risk
 - c. Risks to participants include:
 1. Potential embarrassment from discussion of sexual behavior
 2. Potential anxiety as a result of trying to help peers with difficult problems

- d. Payment. Participants will receive:
- 1) \$10 for attending each training session;
 - 2) \$5 for returning logs of conversations with peers;
 - 3) \$25 bonus for attending all 5 sessions and returning all conversation logs.
- Total possible payment = \$95-\$100.

4. Build trust among POLs/Set guidelines for confidentiality

- a. What is meant by confidentiality?
- b. Why is trust important to the group?
- c. Why is trust important as a peer leader?
- d. Can nonsexually active POLs serve as role models for AIDS/STDs prevention?

5. Answer POLs' questions

6. Complete Premeasures

- a. Get consent forms signed
- b. Self-rating of popularity
- c. Liking people scale
- d. Pretest of AIDS knowledge
- e. Written pretest of assertiveness skills
- f. Role play assessment of assertiveness
- g. Number of friends talked with in last 2 weeks about safe sex

The Women's Health Project

Training Session I

Purpose

1. To review purpose of project - Briefly
2. To educate POLs concerning the transmission and prevention of AIDS/STDs
3. To increase saliency of AIDS/STD threat for women
4. Train in basic peer communication skills

Training Procedure

1. Briefly review purpose of project
 - a. Review POLs nomination and involvement; Emphasize key role of POLs (i.e., helping role)
 - b. Meeting days, time and place
 - c. Attendance and make-up
 - d. Review confidentiality (Sign pledge to group members)
2. Introductions. Go around the group. Why did they choose to participate?
Exercise: Sexual Values (Handout). Collect and write the scales on the board to demonstrate the range of values in the group.
3. AIDS/STDs Education

The "Other" Sexual Diseases

Tonight we are going to be talking about AIDS, but let's start with some "other" STDs first. Because we hear so much about AIDS, it is easy to think that other sexually transmitted diseases (STDs) have vanished. However, millions of new cases of the "other" STDs are reported every year.

See if you know the answers to some basic questions:

True or False?

1. Thanks to penicillin, syphilis is almost a thing of the past.

False. Syphilis is on the rise. In fact, its occurrence is at a 40-year high. About 100,000 new cases are expected to occur each year.

2. STDs can be spread by toilet seats, towels, and insect bites.

False. STDs, including AIDS, are transmitted by sexual contact, usually sexual contact? Syphilis, like AIDS, can also be spread by infected blood and contaminated hypodermic needles. STDs are not spread by toilet seats, towels, dishes, or by ordinary contact such as shaking hands, sharing meals, or using the same telephone.

3. All STDs can be prevented.

True!

4. STDs are basically incurable.

False. Syphilis, gonorrhea, and chlamydia can be cured with antibiotics, Genital herpes, genital warts, and AIDS cannot be cured, but can be treated or managed.

STDs have been at epidemic levels among college women for the last several years, for example, about one in 10 college women will be infected at some point with chlamydia. Let's look at two of the most prevalent STDs among college women, Chlamydia and genital warts.

Chlamydia. Chlamydia is a micro-organism that infects both men and women. In adults it can damage the reproductive organs, sometimes causing sterility. It is a major cause of cervicitis, pelvic inflammatory disease (PID), and nongonococcal urethritis (NGU). (NGU is sometimes called nonspecific urethritis, or NSU.)

Transmission of Chlamydia Infections: Chlamydia infections are most often spread during vaginal or anal sexual contact. In some cases, they are spread by oral sex as well. In addition, babies can get chlamydia during birth if the mother has this infection. Chlamydia in newborns can lead to pneumonia or conjunctivitis.

Is it Easy to Recognize a Chlamydia Infection?

In many cases, it is very difficult to spot the symptoms of chlamydia. Some 75% of women will have no symptoms until complications set in. The same is true for an estimated 25% of men. Many people have no idea they might have a chlamydial infection until a partner is diagnosed and treated. The only sure way to know is to be tested.

The Symptoms of a Chlamydial Infection: When present (remember, 75% of women may not have symptoms), symptoms of chlamydial infections may appear within one to three weeks after exposure to an infected partner. Symptoms are often similar to those of gonorrhea and may include the following:

For women:

- unusual vaginal discharge or burning when urinating
- lower abdominal pain, pain during intercourse, bleeding between menstrual periods, or low grade fever (later symptoms)

For men:

- discharge from the penis and/or burning when urinating
- burning and itching around the opening of the penis
- pain and swelling in the testicles, or low-grade fever (associated with epididymitis)

Health Problems Associated with Chlamydial Infections: Even if no symptoms are present, chlamydial infections can create serious health problems. If left untreated, they can cause:

In men and women:

- a painful infection that can require hospitalization
- permanent damage to the reproductive organs, causing chronic pain and infertility (difficulty in getting pregnant)
- sterility (the inability to have children)

In women:

- ectopic or tubal pregnancy, a serious condition and major cause of maternal death

In babies:

- eye, ear, and lung infections

Treatment for Chlamydial Infections: Chlamydial infections can be treated with specific antibiotic drugs. Your partner(s) should also be treated (even if they have no signs or symptoms) in order to prevent reinfection and complications.

Genital Warts. Human papilloma virus (HPV) which causes genital warts is also at epidemic levels. HPV affects nearly 12% of college women. Of women who are sexually active, it has been estimated that up to 46% are infected. In the last 15 years, HPV infections have increased by 500%. Genital warts have been linked to cancer of the cervix and vagina. In women, the first evidence for HPV is an abnormal Pap smear. For others, HPV may remain dormant for 3-15 years, only to become evident during the hormonal changes of pregnancy.

Transmission: While sexual contact is the main mode of transmission, fingers, tanning salon benches, wet towels and yes, even toilet seats have been implicated. There is a direct correlation between the number of sexual partners and the chances of acquiring HPV. 68% of women who tested positive for HPV had more than 3 sexual partners. Having other vaginal infections (i.e., chlamydia and trichomoniasis) also predisposes a woman to acquiring HPV when exposed to it.

Treatment of HPV: Abnormal cells can be destroyed by freezing or using acid, laser, or other intravaginal chemotherapy. While 60% of genital warts may disappear over time (from several weeks to several years), the HPV genetic material becomes incorporated into the chromosomes of infected cells and can reactivate at anytime! Regular Pap smears are essential for diagnosis and treatment.

Prevention: Avoid having sex with partners who have obvious warts, avoid having casual sex with multiple partners, and use condoms with nonoxynol-9 to reduce risk. However, unlike AIDS, HPV may still be transmitted even with the use of condoms.

10-20% of college women's routine Pap smears show an abnormality, most often indicating an STD. That means that four of you in this room could be infected.

Despite the prevalence of STDs and the threat of the AIDS virus, 70% of college students have not made any changes to protect themselves. Women are even less likely than men to change their behavior. For example, only 23% of women report "using a condom more often" compared with 36% of men. Students who do use safe sex such as condoms are no different from those who don't in terms of sex, race, and socioeconomic class. However, those students who use seat belts are most likely to use condoms. Why do you think this may be?

Women & AIDS

As you can see, STDs are a very real problem for college age women. Sexually transmitted diseases such as Chlamydia, and genital warts are very serious infections that can affect your health, your life, your sexual relationships (imagine trying to tell a lover that you have genital warts), your fertility, and the health of any children you might have. By far, the most serious STD is the AIDS virus.

What is AIDS? (Ask POLs to explain what they know first) AIDS is the acquired immunodeficiency syndrome -- a serious illness that harms the body's ability to fight infection. A person with AIDS is unable to fight certain infections and cancers that are usually mild or rare in healthy people. There is no cure for AIDS at this time. AIDS is caused by a virus called HIV (human immunodeficiency virus). A person infected with HIV may: 1) pass the virus to others; 2) show no signs of infection; 3) develop symptoms of HIV infection; and/or 4) develop AIDS.

Right now women make up only a very small percentage (about 10%) of reported AIDS cases in the United States. However, since 1986, the number of AIDS cases among women has increased 600% with a current growth rate of infection among women 2 1/2 times faster than for men. At present, there are an estimated 100,000 women who are HIV positive. It is expected that a large majority of these women will eventually develop full blown AIDS, the end stages of HIV infection. In 1987, AIDS was the eighth leading cause of death for women under the age of 45 years. AIDS is now the fifth leading cause of death for women in this age group.

Eighty-five percent of women with AIDS are between 15 and 44 years of age. This means that as more women of reproductive age become infected with AIDS, more children will be born to these women that are HIV positive.

The transmission of AIDS among women depends upon two primary risk behaviors: 1) Intravenous drug use; and 2) heterosexual contact with an infected partner. Heterosexual contact with an infected partner may account for 42% of the AIDS cases among women. In comparison, only 2% of HIV positive males were currently infected via heterosexual contact.

Ask POLs: Why are women more likely to be infected by heterosexual contact than are men? 1) there are many more infected males in the population which increases the likelihood that a woman may encounter an infected partner. 2) male to female transmission of HIV may be more efficient than from female to male. In part this may be attributed to the physiological makeup of the vagina which offers an optimum route of transmission. Recent studies suggest that a woman having sexual intercourse with an AIDS infected partner is 10 times more likely to be infected than is a male having sex with an AIDS infected woman.

One of the most frightening aspects of AIDS is that once infected, an individual may not show any symptoms for several years. The AIDS virus may lay dormant in the individual's body for 3, 5, or even 10 years before symptoms appear. That means that he or she may unknowingly infect his or her sexual partners. For women, they often do not know they have AIDS until they become pregnant since the hormonal changes of pregnancy can trigger the development of the AIDS virus into full-blown AIDS.

A woman infected with HIV may pass the virus to her baby before birth, during the birth process, or to her infant through breast feeding. Many babies who have been infected with HIV have developed AIDS and died.

Ask POLs: How do you protect yourself from HIV infection? 1) Don't shoot drugs. If you can't stop using IV drugs, don't share any drug equipment. Sharing a needle or syringe passes blood from one person to another making infection likely. If you can't stop using drugs and you must share needles, make sure that you clean your "works." 2) Make low-risk sexual decisions (see below)

Ask POLs: What are some sexual decisions that reduce risk?

1. Deciding not to be sexually intimate

One way to avoid the risk of HIV infection is by choosing abstinence - avoiding sexual intimacy of any kind with another person. You may choose abstinence at different times in your life. It may be a temporary choice, until: You have the facts on risk reduction and feel confident using them in a new relationship; or until you and your partner decide on safer sex activities. It may be a long-term decision, for personal, moral, or religious reasons, as well as for protecting your health. Or it may be that you haven't yet found someone with whom you want to be sexually active.

Ask POLs: How realistic is this for you and the women you know?

2. Communicating in a sexual relationship

Whatever decisions you make about sex, good communication with your partner is crucial.

Sometimes it can feel less awkward to have sex than to talk about it beforehand. Discussing past drug use and sexual activity, as well as safer sex, may make you feel vulnerable or worried that your partner will be turned off or leave. However, you need to talk with your partner so you both can agree on what safer sex practices you will use. Your feelings are valid - do not let someone else's lack of concern intimidate you or make you feel that you should not insist on safer sex.

Ask POLs: What are some potential problems with this?

Even if you think you know a partner's sex and drug history, you cannot assume that he or she is free of HIV infection. Sometimes a partner will not give you an accurate history of his or her past sexual or drug behavior, or he or she cannot remember or may not understand past risky behavior.

Ask POLs: How would separation and ending of a relationship affect your AIDS/STD risk?

3. Separation and ending

There are difficult moments in any relationship, short- or long-term. If you are going through a separation or ending, your risk of exposure to HIV may be increased. You and your partner are under stress. Spontaneous contacts may occur with existing and new

partners. During this time, choose abstinence or safer sex options with old and new partners.

If you reunite with your partner after separation, you cannot assume either or you are still at low risk. Consider this a new sexual relationship and practice safer sex. This may be awkward while re-establishing a sense of trust, or it may be a painful reminder of the separation period, but you need to protect yourself and your partner.

4. Uncooperative partners

Ask POLs: What if a partner won't talk or refuses to take the risk of AIDS seriously despite your desire to practice safer sex? What can you do? Ask POLs to generate a list.

1) agree to practice safer sex or abstinence temporarily until you both can agree on a long-term plan.

2) decide the risk is unacceptable. Either choose not to begin a sexual relationship or decide you need to leave it.

3) If it is difficult for you to ask your partner to use condoms or stop risky sexual practices - or you fear physical violence or other consequences of saying no to sex - you still have choices. Get help to decide what to do. Call a hot line or talk to a health provider, counselor, or friend. You don't have to deal with this by yourself.

4) Leaving a relationship may seem difficult if not impossible. You may be under strong emotional, social, or family pressure not to break up. But if you believe you may be at risk for HIV infection, it's important to protect yourself and your future. Get support for any feelings of sadness, anger, and grief you may have if you and your partner separate.

Ask POLs: What about sex between lesbian and bisexual women? What's the risk?

5. Information for Lesbian and Bisexual Women

Sex between women lowers, but does not eliminate, the risk of HIV infection. You cannot assume a potential partner is not infected - she may have had sex or shared needles with an infected person. Apply the safer sex guidelines.

Protecting yourself

Many women have already taken action to reduce their risk of HIV infection. You can too. To be successful you need to:

have a strong, consistent commitment to taking care of yourself

know your feelings, needs, and values

have accurate information on ways to reduce risk

practice risk reduction consistently

remember that you are important to those who love you
Don't let mixed messages about "proper" sexual behavior for women prevent you from taking action to protect yourself.

Alcohol and drugs

Ask POLs: Have you ever had sex with someone without using protection because you were high? What were the effects of alcohol on your sexual behavior? Although getting high may make sex seem easier, the result may be unsafe sex that puts you and your partner at risk.

Some statistics to keep in mind (Handout from the Student Health Services at VPI.):

79-92% of college students report drinking
85% of college students report being drunk
90% of college students feel they do not know how to drink responsibly
25% of women drink to the point of being drunk 4 times per month
80% of first sexual experiences occur under the influence of alcohol
47% of unplanned sexual encounters are under the influence of alcohol
22% report drinking to try to increase sexual assertion
87% of unwanted sexual experiences for women occurred under the influence of alcohol
90% of all sexual assaults occur under the influence of alcohol

Sex without consent

Sex without your consent, whether with someone you know (acquaintance or date rape) or rape by a stranger, may put you at risk for HIV infection. The trauma of sex without consent is difficult enough, but the fear of AIDS can make it worse. If you have been raped, talk to a health care provider, counselor or call a rape hot line. Get some support and the facts about the likelihood of infection.

Sex on Campus (Normalize: College is a time of emotional and sexual exploration.)

Men and women begin college with different levels of sexual experience. (Statistics from the Student Health Services at VPI.)

45% of freshman women are virgins
24% of freshman men are virgins

But by senior year, the level of experience has evened out.

14% of senior women are still virgins.
13% of senior men are still virgins.

The majority of sexually active male and female college students have about 5 partners.

Double standards

Ask POLs: Do double standards still exist for men and women in terms of sexual behavior? What are they?

Despite the equity in experience, sexual double standards still exist. 75% of college men and women still believe that men want to have sex with "loose women," but want to marry a "good girl."

However, 69% believe a "good girl" can be sexually experienced as long as she is discrete. For some women this means not planning to have sex but "getting carried away" either by the passion of the moment, the persuasiveness of her sexual partner, or by drugs or alcohol. Clearly, this course of action does not allow "good girls" to protect themselves from STDs like AIDS.

If you have the facts and know your feelings, you can make choices that you feel good about and that work for you. And you can make better decisions about reducing your risk of HIV infection.

Condoms - As a woman, you are more in control of your own safety if you know how to use and buy condoms (40% of condom purchases are by women), and have them handy when you need them. They are recommended for use during vaginal and anal intercourse and for oral sex on a man. They also help protect you and your partner against other sexually transmitted diseases.

Barriers to Condom Use

Despite the fact that condoms provide protection from STDs/AIDS, in a recent survey of over 16,000 women, it was found that nearly 75% reported never using a condom with a casual lover. Why? What are some barriers to using condoms? Exercise: Ask POLs to generate a list of barriers to condom use for women.

The HIV Antibody Test

To test or not to test is a complex decision for any individual or any relationship. There are a number of questions you should ask yourself before you decide to be tested. You should not feel pressured to take or refuse the test. If you or your partner are considering testing, make sure to use a test site that offers both pre- and post-test counseling. Find out whether the test results will be either confidential or anonymous. Most importantly, a negative test for HIV does not protect you from current or future exposure to the virus - it cannot substitute for practicing safer sex.

Hot lines

For further information, you can call these hot lines:

Centers for Disease Control **1-800-AIDS**
Public Health Service **1-800-477-AIDS**
National Gay Task Force and AIDS Crisis **1-800-221-7044**

Each woman has her own reasons for wanting and needing to know about AIDS and the Human Immunodeficiency Virus (HIV) that causes AIDS.

Exercise: Ask POLs why they want to know more about AIDS/STDs.

1. A sexual partner might expose you to HIV. Women are being diagnosed with AIDS in increasing numbers. And, research suggests that women have a greater risk of getting the virus from sex with men than men do from women.
2. Being infected with HIV can permanently change how you make decisions about relationships, sex, and life choices. A woman with HIV can jeopardize her health if pregnant and can pass the virus to her baby before or during birth and perhaps after birth, through breast milk.
3. No one is immune. Women in some black and Latino communities already feel a severe impact from AIDS. Whether or not AIDS has visibly affected women in your community, you should know that women of all races and cultures have had AIDS.
4. You may be concerned about the life and health of a lover, friend, or roommate, relative, or co-worker who has AIDS or who is infected with the virus.

Getting the facts about AIDS and HIV makes good sense. You can learn to protect yourself and those you care about.

4. The Important Role of POLs in AIDS/STD Prevention Among Peers

Research among gay/bisexual men suggests that the single most predictive factor for safe sex was the perception that it was expected, accepted, endorsed, and standard among friends.

That is, gay/bisexual men were much more likely to practice safe sex if they believed safer sex was practiced and expected among their circle of friends.

You are among the most popular people living in this dorm. That means that you as opinion leaders can reset the norms to make it easier for others (and you!) to practice safe sex.

You may find that it feels awkward or uncomfortable to talk with others about AIDS information. Even popular people can feel shy! But with a little practice, you and others will become more comfortable.

Assignment

Have a conversation with two people living in your dorm about the AIDS/STD information you have heard here tonight. Afterwards, write down any questions that came up and how you responded. Also note how the other women responded to the information (Were they turned off? Curious? Did they confide in you?) Write the first name and last initial only of the women with which you talked. Bring your conversation log next week for payment!

The Women's Health Project

Training Session II

Purpose

1. To review experience of POLs with peer conversations
2. Review the importance of social norms for safe sex.
3. Stress again the importance of POLs in changing the norms.
4. Review STD/AIDS facts.
5. Training in conversational skills: "I" Statements.
6. Training in conversational skills: Empathy.
7. Assign two new conversations for the week.

Training Procedure

1. Briefly review experience of POLs with peer conversations. What were some problems? How to deal with them? What were some of the positives? How did you feel talking to others about safe sex?
(25 minutes)

Exercise: have POLs divide up into groups of 3 and role play some of the "worst" and "best" conversations. Have the third person in the group give feedback. Switch roles. How can the conversation be more effective?

2. Briefly remind POLs of the important role of social norms for safe sex.
3. Remind them of the important role they played in changing the norms. Everyone in the group has now had approximately two conversations. $2 \times N = \#$ number of conversations. Wow!
4. Review STD/AIDS facts. (Handout)
Emphasize the importance for POLs to "know the facts."

AIDS/STDs: Facts at a glance (From the CDC)

- * Since 1986, the number of AIDS cases among women has increased 600% among women.
- * The current growth rate of the AIDS virus among women is 2 1/2 times faster than for men.
- * In 1987, AIDS was the eighth leading cause of death for women under 45 years of age.
- * AIDS is currently the fifth leading cause of death for young women.
- * Women with AIDS have a shorter survival time than do men. In part, this is due to a lack of early recognition and treatment.

- * AIDS can be contracted in one sexual contact.
- * Proper condom use significantly reduces but does not eliminate the AIDS risk.
- * Even after a couple becomes sexually exclusive, it is important to continue safe sex guidelines for up to a year and until after two negative AIDS antibodies tests over a 6 - 12 month period of time.
- * However, it is important to evaluate how monogamous your partner is to you. It's not a pleasant thought, but many people do lie about their sexual behavior.
- * Reducing the number of your sexual partners may not be very effective if even one of your partners is infected with the AIDS virus.
- * Both female-to-male and male-to-female transmission of the AIDS virus has been documented.
- * AIDS cannot be spread by toilet seats.
- * Oral sex with a male sexual partner can be an AIDS risky behavior for a woman even if she "doesn't swallow."
- * The AIDS virus does not penetrate unbroken skin.
- * Shared toothbrushes do not transmit the AIDS virus.
- * Pre-ejaculatory fluids carry the AIDS virus.
- * Many people who have been exposed to the AIDS virus often do not show any immediate signs of serious illness.
- * People who carry the AIDS virus may feel healthy for an extended period of time--even for years. However, they can still transmit the AIDS virus.
- * Sharing a bathroom with a person with AIDS poses no risk of infection.
- * IV drug users become exposed to the AIDS virus because of the exchange of infected blood via shared needles, not because the virus is contained in the drug itself.
- * Donating blood carries no risk of AIDS for the donor.
- * A great deal is now known about how the AIDS virus is transmitted.
- * Most AIDS cases are now due to IV drug use or sexual contact, not to blood transfusions.
- * A negative result for the AIDS antibodies test can occur even for people who carry the virus.

- * A positive result for the AIDS antibodies test can occur even for people who do not carry the virus.
- * Despite the development of penicillin, syphilis is increasing at an epidemic rate.
- * Antibiotics cannot cure genital warts. The current treatment for genital warts is laser surgery.
- * Genital warts are associated with cervical cancer.
- * Even when treated, the herpes virus permanently establishes itself in the nervous system.
- * Oral contraceptives do not offer any protection against STDs.
- * All sexually transmitted disease can be prevented!

5. Conversation skills: "I" Statements

If you need something or are asserting your right to something, it is best to speak clearly and straightforwardly.

The simplest tool for doing that is called the "I-statement," which includes your emotional reaction. These expressions not only say what you think, but they also stress how you feel.

Role play (RA's) Lisa and Sam

Tony: Joanie, let's watch a skin flick and learn something new.

Joan: You know, I feel really uncomfortable when you tell me that you want to watch a sex film. (She decides to make another I-statement.) I'm a little worried that you will expect too much from me.

Here Joan takes responsibility for her own reactions in an assertive manner. She labels what she feels. She does not blame herself or Tony.

It may seem like a big risk to lay your feelings open in this way. It makes you vulnerable. But if you can't say how you feel, you are a lot more vulnerable to things that will happen later if you don't speak up.

One of the biggest mistakes in sexual communication is the You-statement, which usually blames the other person. It puts him on the defensive and is usually aggressive. How would this scene above have gone if Joan had made a You-statement?

Role play (RA's) Lisa and Sam

Tony: I saw a really sexy movie with about 50 different ways to have sex.

Joan: You always bring up those damned movies! You never just let things happen naturally!

Is Tony more likely to see Joan's viewpoint after this? Probably not. When people accuse and blame us, we're likely to go straight into defending ourselves. But after hearing a partner's statement of his own feelings, we have a chance to stop and think about his reaction to what we are doing.

I-statement

You're always rushing me.
You let me down again.
You are too pushy.
You're not turning me on.

You-statement

I need more time.
I'm disappointed.
I'm not ready for that.
I don't feel aroused.

Exercise: Ask POLs to generate an I-statement for each of the You-statements

You can learn a little "starter" phrase to get yourself going in order to make an I-statement. First, think of what you really feel. You're experiencing some emotion, like pride, thrill, anger, irritation, guilt, jealousy, embarrassment, disappointment, fear, or discomfort. Then plug the emotion into one of these sentences.

"I feel _____ when you do that."

"I'm _____" (mentioning the feeling).

This technique may seem canned and artificial at first, but you'll get used to it so that you can fit I-statements into your conversations more easily.

"I'm uncomfortable" is a good all-purpose statement of feeling. It can be used in many situations without having to give reasons. You can say you're uncomfortable when you can't pin-point your exact feelings, but you feel a need to speak up anyway:

Practice making such statements about small issues. They can help you in nonsexual situations, even with your family and friends:

I'd like some help with this.

I'm so proud of you.

I'm disappointed that you were late.

These expressions are not magic, of course. They are simply an improvement over most people's communication. In the area of sex, they are usually a vast improvement. For the best outcome, however, you need a willing listener who has some concern about your feelings. In other situations, like the above conversation about virginity, you may still want to state your position clearly even if the other person is not a good listener. I-statements increase your odds of getting your feelings across successfully to another person.

6. Conversation skills: Empathy.

An important communication skill for talking with your peers is empathy. Empathy means understanding other individuals so completely that their surface feelings and even their deeper feelings, thoughts, and motives are easily comprehended. Empathy involves crawling inside other individuals and seeing the world through their eyes. Empathy involves experiencing the world of other individuals as if you were they. Empathy is the most significant ingredient in relating with individuals generally, but it is vital when you are in the role of peer helper. The ability to understand others' feelings is crucial to your effectiveness. Tonight we will work on some ways to increase your empathy skills. As your empathy skills are developed, individuals will want to talk to you about their problems more frequently. An additional benefit of training is that you will feel better about yourself. You will tend to become more effective and stronger in your relationships with others.

Two important steps are involved in learning empathy skills. The first step in learning empathy skills concerns your ability to hear well enough that which individuals are saying so that you can repeat it word for word. In this way helpes know for certain that you have heard them.

To repeat helpee's statements word for word would be ridiculous, so the second step is to respond by saying accurately what the helpee has said but in your own words. This process is called paraphrasing and requires the ability to feed back to the helpes an accurate understanding of their feelings and/or meaning. When paraphrasing is done well, you begin to understand how other people feel about their situation, and that understanding is communicated to them. As you practice hearing accurately feelings and meanings of their statements and are able to paraphrase these feelings back to helpes, a more complete understanding of their concerns will take place. This new understanding is an expression of accurate empathy.

How can repeating or paraphrasing to an individual what she has said be helpful? In the first place, by paraphrasing you will be telling your peer that you are listening to her well enough to understand her feelings. This does not mean that you simply parrot back what she has said. This relationship in itself is so unusual that it imparts good feelings to the person with the concern. Secondly, when her own thoughts and feelings are fed back to her, they sound differently, and this difference increases an individual's understanding of the way she feels.

So empathic helper responses enable helpes to get a more complete picture or understanding of their feelings. When you increase the understanding of a problem you increase your ability to deal with it more effectively. For this reason the ability to empathize with others is more helpful initially than any other response. The basis of all effective helping is empathy, and empathy is the foundation of other skills that you will be learning later in your training. When you master the empathy skill, you will have progressed a long way toward being an effective helper.

Handout

EMPATHY SKILL: PARAPHRASING

Practice responding by paraphrasing. As a helper when you use paraphrasing, you attempt to

1. check your own listening to make sure you as a helper heard the right meaning.
2. focus on the exact meaning of the helpee.
3. convey to the helpee that you are trying to understand what she is saying.
4. enable the helpee to know she is understood.

Paraphrasing helps concentrate on the content of the message being sent. Basically, the helper attempts to feed back to the helpee the essence of that the helpee has just said. Paraphrasing helps clarify confusing content, brings together a number of comments, and highlights issues by stating them more simply.

An illustration of a statement by a helpee and a paraphrased response by you the helper is as follows:

Helpee: "I really don't know where to start."

Helper: "You don't quite know how to begin."

Please write a paraphrasing response for each of the following helpee statements that is illustrative of how you as a peer helper might respond.

EXERCISE

1. Helpee: "I don't know what to do; sometimes she is so nice and sometimes she is such a witch."

Helper:

2. Helpee: "I am really having a hard time getting my parents to trust me, and it makes me so angry with them."

Helper:

RATING SCALE FOR PARAPHRASING (Handout)

The terms High, Medium, and Low are used to identify the level of the peer helper's paraphrasing. The following responses are definitions of high, medium, and low paraphrase.

- High (H) Response: The peer helper accurately hears the words expressed by the helpee. Helpee acknowledges that the content heard was correct.
- Medium (M) Response: The peer helper partially hears the content of the statement.
- Low (L) Response: The peer helper does not hear what the helpee has said.

EXAMPLES OF RESPONSES

Helpee: "I am so tired of getting up every morning and going to school."

- High (H) Response: "Getting up every morning and going to school really tires you."
- Medium (M) Response: "You don't like getting up in the morning."
- Low (L) Response: "Do you have your own room?"

EXERCISE

Directions:

1. Form clusters of three.
2. As the helpee, state a concern to the helper who will restate the verbal message in her own words. (Do not try to go beyond the meaning of the actual spoken words.)
3. As the helpee, acknowledge as to whether or not the content of the concern was correctly understood.
4. As the rater, take brief notes during the helpee/helper interchange to facilitate rating and feedback effectiveness.
5. As the rater, rate responses High, Medium, or Low.
6. As the rater, give feedback to the helper.
7. Change roles so that everyone has an opportunity to be rater, helper, and helpee.

EMPATHY SKILL: FEELING WORDS (Handout)

To capture other individuals' feelings we need to know many feeling words. We need to develop a "feeling" word vocabulary. We must be able to communicate to helpees an understanding of their feelings.

GOALS

In this exercise you will learn:

1. feeling words.
2. an increase in your own awareness of feeling words.

DIRECTIONS

Please read the list of feeling words and then practice formulating at least two ways of responding to a situation.

EXAMPLE

Helpee: "I just don't know which way to go."

Helper: "You feel confused."

"You feel lost."

EXERCISE

1. Helpee: "I feel like I'm being pulled both ways."

Helper: "You feel _____."

"You feel _____."

2. Helpee: "I am so happy about my A!"

Helper: "You feel _____."

"You feel _____."

LIST OF FEELING WORDS (Handout)

embarrassed
nervous
frustrated
grateful
proud
scared
amazed
angry
annoyed
ashamed
guilty
stimulated
pressured
inspired
enthusiastic
lonely
healthy
hurt
happy

confused
stupid
bored
relieved
respected
cocky
superior
inferior
weak
strong
restrained
free
envious
defeated
tense
apathetic
sympathetic
sneaky
depressed

down
anxious
energetic
worthless
clumsy
satisfied
overwhelmed
refreshed

EMPATHY SKILL: RESPONDING TO FEELINGS (Handout)

Suggested behaviors to assist you in listening for feelings are as follows:

1. Listen for all the words that express feelings. This action is important if you are to hear all of the meaning.
2. Time your comments. You don't have to reply to every statement.
3. Paraphrase feeling words and meaning, either positive or negative.

GOALS

In this exercise you will learn:

1. to understand, as a helper, what the helpee is experiencing.
2. to communicate to the helpee that "I am with you" and "can accurately sense your feelings."

DIRECTIONS

Please write a response for each of the following helpee statements that would be illustrative of what you could say to help the person know you listened and heard the feeling expressed.

EXAMPLE

1. Helpee: "I am really uncertain about what to take next year."
Helper:
2. Helpee: "My boyfriend is really a jerk. He never wants to do anything with my friends."
Helper:

Exercise: Return conversation skill assessment. Give feedback and ask POLs to generate more appropriate responses.

7. Assignment

We would like you to have two more conversations this week. Remember, you are among the most popular and influential people living in your dorm and you have the power to "reset" the social norms to allow women, even "nice women" to practice health sexual behavior.

Some general guidelines for communicating information about AIDS/STD prevention to other women.

1. Convey that AIDS is a serious health threat to women. Even "nice" women who date "nice" men.
2. Stress positive value, benefits, and desirability to reduce HIV risk.
 - a. Benefits to self: Peace of mind; protection of health
 - b. Benefits to others: Helping them to protect their health
 - c. Safer sex is the norm: It is acceptable to protect your health and to be a sexually responsible adult.
3. Be specific and clear when you talk about safe sex.
 - a. I always carry a condom in my purse, just in case.
 - b. I always make sure that my partner uses a condom.
 - c. I never have sex without a condom.
4. Use "non-preachy", non-judgmental communication skills.
This means don't tell others what to do. Instead talk about the changes you have made or are making to keep yourself safe. Use "I" statements.

Too preachy: Sara, you're just plain stupid if you don't use a condom.

Better: I feel a lot safer making sure that Tom uses a condom.

Remember to write down the first name and initial of the two women that you talk with. It may feel a little awkward but if you use non-preachy "I statements" with a little practice, it will get a lot easier.

Remember to bring your conversation logs to the meeting next week!

Good luck!

The Women's Health Project

Training Session III

Purpose

1. To review POL conversations
2. To review social norms
3. Communication skills: Conversation stoppers
4. Review elements of positive and effective communication
5. Introduce sexual assertiveness skills
6. Assignment

Training Procedures

1. Review POL Conversations (Have POLs role play some "good" and some "bad" conversations) Discuss problems and how to deal with them. Role play ways to deal with them.
2. Review Social Norms

We've talked about the importance of social norms in helping people to adopt safer sex behavior. Many women have a good idea about how to be safer, but they don't put their knowledge into practice because:

1. They don't know what steps to take.
2. They don't know whether changes will be accepted by their sexual partner.
3. They don't know what other women are doing.
4. They don't want to go against what is acceptable social behavior for women.

Your job as a POL is to:

1. Convey that being safe is the right thing to do.
2. Convey that it can be done.
3. Convey that it is the socially acceptable thing to do.
4. Convey that you are making a commitment to be "safe"

Emphasize: Number of conversations X number of POLs = shift in norms.

3. Communicating to Peers about Sexual Health (Handout)

It is important that your conversations with your peers be positive to be effective. Let's now look at Ten Conversation Stoppers. (Handouts)

Exercise: define each of the 10 conversation stoppers and have POLs give an example of each. Was anyone guilty of this in the last week?

1. Directing, ordering: To tell someone to do something in such a manner that gives the other person little or no choice.

Sample: Make sure you always carry a condom.

Have POLs generate other examples. (Go around circle and have next in line do one example.)

2. Warning, threatening: To tell the other person that if the behavior continues, certain consequences will happen.

Sample: If you continue to have unprotected sex, you are going to die from AIDS.

POLs generate other examples.

3. Moralizing, preaching: To tell someone things they ought to do.

Sample: You should not have sex before you are married.

Have POLs generate examples.

4. Persuading, arguing: To try to influence another person with facts, information, and logic.

Sample: You should quit drinking on dates because you are more likely to practice risky sex.

Have POLs generate examples.

5. Advising, recommending: To provide answers for a problem.

sample: I recommend practicing safer sex.

Have POLs generate other examples.

6. Evaluating, criticizing: To make a negative interpretation of someone's behavior.

Sample: You have sex too casually.

Have POLs generate other examples.

7. Praising: To make a positive evaluation of someone's behavior.

Sample: You always know the right thing to do in a situation.

Have POLs generate other examples.

8. Supporting, sympathizing: To try to talk others out of their feelings or to deny their feelings.

Sample: Your problem is really serious. I know how you feel.

Have POLs generate other examples.

9. **Diagnosing:** To analyze other' behavior a communicate you have figured out their behavior.

Sample: You must have low self-esteem to have sex with someone you just met.

Have POLs generate other examples.

10. **Diverting:** To change the subject from the problem presented by another.

Sample: I know you're upset about your boyfriend but let me tell you about what mine did.

Have POLs generate other examples.

Remember, good conversational skills include: using I statements and non-preachy approach. Demonstrate/model for POLs.

Exercise: Ask 2 POLs to roleplay a situation in which one of them tells the other that her boyfriend wants to quit using condoms during sex.

Let's review some effective, positive ways to communicate AIDS risk reduction to women in your dorm. We want to talk about some of those communication skills, show them to you, and ask you to practice them. We will then ask you to give feedback to one another on how well you did.

Elements of Effective and Positive
Messages for Educating Friends
About Risk Reduction (Handout)

1. Stress The Positive Benefits Of Being Safe.

Health consciousness in matters of sexuality represents a positive, desirable value that carries many benefits including peace of mind, lessened worry, concern shown for others, and feeling pleased with yourself. These benefits greatly outweigh any inconvenience or awkwardness in changing from risky patterns to safer ones.

2. Stress That Safety Is Now The Accepted Norm. People Who Are Safe Are "In Step" With The Times. People Who Aren't Safe In Bed Are Out-Of-Date And Outside The Norm.

Everyone is putting safety into effect even if it's a little difficult and awkward at first. People who aren't being safe are the ones out-of-step these days. Safety is the new norm among gay men.

3. Be Explicit In Communicating What Safety Means.

Vague generalizations like "Be careful" or "Take precautions" are less clear than specific, direct statements about what is safe. Say what safer sex means: Use condoms or have sex that doesn't involve sexual fluids entering the body. Give examples.

4. Don't Preach - Instead, Use Yourself And Changes You've Made As A Positive Example.

Start communications with "I now...", "I've learned...", "I always...", or other "I" phrases rather than "You shoulds." This comes across less preachy and you become a positive model for others. The person you're talking with will think, "If she does this, I can too, and it's okay to make the same changes." If you yourself are still working on implementing safety changes, you can say "I'm trying to...."

5. Suggest How To Do It, Not Just What To Do.

It's very helpful to offer pointers about how to put safe intentions into actual practice. Keep in mind the steps we've discussed and use "I" examples.

For example:

"Now, before I have sex with anyone, I talk to them first -- ahead of time -- to make sure they understand the need to be safe."

"If I've had too much to drink, I put off sex. I want to be clearheaded and safe."

"When I'm in bed and if somebody wants to screw without a condom, I say no. Let's do something safe instead."

"If I think I might have sex, I keep condoms everywhere so they're always within reach. And, I've even practiced how to use them."

4. What is Sexual Assertiveness?

Let's look at an issue that's very important for women in protecting their sexual health. Assertion, or assertiveness, is behavior in which you stand up for your rights and say directly what you believe, want, and feel. Assertive people do this appropriately and honestly while respecting other people's rights as well. The assertive person speaks up in her own defense, but does so without and effort to harm or put down another person.

Let's listen to Lisa, who has been out with John several times. She's worried about sexually transmitted diseases, and their relationship has been getting more passionate. One night, after some kissing and petting that they both enjoyed, she decides to bring up her concerns.

Role play (RA's) Chris and Sam

Lisa: (Pushes John back and looks at him) John. (Sighs). I need to stop for a minute. I need to talk.

John: What for?

Lisa: Things are going pretty fast here, and I'm...just worried about going too fast.

John: What's to worry about if you feel good? (He tries to kiss her on the neck.) Come on, Lisa.

Lisa: (Leans back a bit.) John, you know I like you and I'm very attracted to you and right now I want this as much as you do, but (she takes a deep breath) I think we need to talk about...protection... about using a condom... before we go any further.

Notice that Lisa sticks to the point of what she needs. She expresses her views without putting John down. Since John was not out of line in merely wanting to continue enjoying what they were doing, she does not get angry.

Aggression, on the other hand, is behavior aimed at hurting or dominating. For example, consider Brent and Linda. Linda has asked Brent to use a condom, but he doesn't want to.

Role play (RA's) Laurie and Lisa

Brent: You know how much I want to be with you and I don't feel like stopping to go get a condom.

Linda: Cut it out, Brent! You men are all the same!

Linda's response is aggressive. She lashes out at Brent and labels him and all men. She might really prefer that her outburst not escalate into bad feeling between them. She would rather have spared his feelings, since he was just asking for--not forcing--what he wanted. But she wanted Brent to use a condom and she didn't know how to be assertive. An assertive response would have been:

Role play (RA's) Laurie and Lisa

Linda: I know it's a hassle, Brent. But I'm just not comfortable having sex without a condom.

Brent: Okay, if it means that much to you.

Here she showed she was sensitive to Brent's feelings, but she made it clear what she wanted.

In a nonassertive response a person does not stand up for his or her own wants and needs. This behavior usually comes from feeling helpless and threatened. An example is Amy and Jim, who are sitting in a car kissing. Jim starts to unbuckle Amy's belt. Amy takes his hand away.

Role play (RA's) David and Chris

Jim: Come on, Amy. You know I want you.

Amy: Oh, Jim, I don't know, I just...I don't think we should.

Jim: Just stay out here a little longer.

Amy: But, Jim...you know, you really turn me on, you know you do...but we just met last week and...

Jim: I thought you were as turned on by me as I am by you. Are you seeing someone else?

Amy: No, I'm not. (He gives her a very long kiss. She's aroused and thinking she doesn't want to lose him. After a while they go inside and have intercourse, without a condom.)

Amy did not stand up for her rights. Although she was feeling passionate, she also was worried because she knew she was endangering herself as long as she did not talk over sexual protection with Jim. She allowed sex to progress to the point where it was too late to discuss risk. And, of course, as we all know, sexual attraction tends to distort judgment so that Jim seems more and more wonderful and disease-free. But she's known him only a week and could not possibly have enough information to justify taking a sexual risk with him.

There are three kinds of assertiveness. (Handout)

The first kind of assertiveness is empathic assertion. In this case, the individual asserts himself by first acknowledging the other person's feelings--that is, showing sensitivity to the other person before asserting oneself.

Role play (RA's) Chris and Lisa

For example, if Kara is being pressured verbally by Joe, she could be assertive and still empathetic:

Joe: (Pulls her to him, kisses her) Come on, Kara, please, what's holding us back?

Kara: I know you'd like to make love, Joe, but I'm not ready for that.

Here Kara has stood up for her own feelings, but she has been sensitive to Joe and does not try to hurt him. She sticks to the subject of her own reactions.

The second kind is escalating assertion, in which the person begins with mildly expressing herself, but, because her partner does not listen or respond, the intensity of her statements escalates:

Joe: Come on, Kara, you know you want me.

Kara: I...I'm just not ready to go that fast. Let's be responsible, like they say.

Joe: Come on, you know you need it. Kara, I just want you so much. (He tries to pull her toward him.)

Kara: I want you, too, but...not yet.

Joe: What's your problem, hon? You got a problem with sex or something?

Kara: I really get mad when you talk like that! I said I'm not ready, and I don't appreciate being put down.

The third kind of assertion is confrontive assertion. One confronts a partner when he does something that contradicts what he agreed to do. Suppose, for example, Kaye has told Rick that she doesn't feel comfortable making love in the dorm that she would rather be more discrete. Rick agrees to respect her wish, but two weeks later, he goes back to pressuring Kaye for sex in the dorm.

Rick: Mmmmmmm...(he runs his hands over her breasts.) Want to lie down awhile?

Kaye: Rick! What's going on here? We talked about this and now here you go again. I'm really upset--don't you remember what we agreed?

Here Kaye confronts Rick directly with the fact that he's not living up to what he said. She doesn't let him get by with it, but she does not respond aggressively. She sticks to the point.

Exercise: Have POLs get in groups of 3 and role play: 1) empathic assertion, 2) evaluating assertion, and 3) confrontive assertion using "real" situations. Have the third member of the group give feedback. Switch roles.

Your Sexual Rights

Some people think they have no right to ask for what they want. Others feel they do not have a right to refuse except under certain circumstances, sometimes even in marriage. Some even believe that being made fun of in sexual ways at work, while slightly embarrassing, is something one just has to endure. We need to be able to understand, and to state explicitly, our sexual rights. Only then can we assert our power over our own bodies.

Exercise: Have POLs generate a list of 5-6 sexual rights before passing out handout.

These fundamental rights to which we believe everyone is entitled are not legal rights, although some of them are built into our laws. You may want to add to this list with ideas of your own.

Your Sexual Rights (Handout)

1. A person has a right to refuse any type of sexual contact at any time or place, regardless of how aroused the partners might be. There is no such thing as being so aroused that you "owe" anything to your partner. If you are stark naked and change your mind, you still have a right to do so.
2. A person has a right, in a sexual relationship, to express frustration and disappointment if sexual contact is refused. If you refuse to continue sexual activity when both of you become very aroused, your partner has a right to express disappointment. That is, other people have a right to their feelings and you have a right to yours.
3. A person has a right to request any type of sexual activity in a sexual relationship, as long as it does not violate anyone else's rights. The partner, however, has a right to decide whether to comply. If you've always wanted to try intercourse hanging from the chandelier, you can ask for it, but your partner has a right to think you are asking too much. You can ask for anything you want, but asking does not give you a right to receive it.
4. A person has a right to any feeling, fantasy, or thought. Whatever happens inside of your head is yours. However, you are responsible for all of your behavior, which should not interfere with anyone else's rights.
5. Partners involved in a sexual relationship have a right to share expenses that in any way result from their sexual involvement. Their mutual obligation includes sharing the cost of contraceptives and expenses resulting from pregnancy. Deception by one, however, might change the rights of the other.
6. A person has a right to know if a potential sex partner has a contagious disease of any kind, or could possibly have been exposed to one. You have the right to information and you should ask assertive questions. Your right to know, however, does not guarantee that your partner will tell the truth. Research indicates that from one-third to one-half of sexually active people say they would lie to another person in order to get sex. Trusting someone you do not know well with your body is simply not smart.
7. A person planning sexual intercourse has a right to know whether the partner is using a contraceptive or other protective device, and any pertinent facts about it. Condom users have a right to know whether the condom is latex (the most effective kind), whether it is new or five years old, and whether his partner missed her pill any day that month.
8. A person has a right to be free from becoming the object of unwanted sexual remarks or unwanted sexual gestures. "Look at the knockers on that broad!" yelled down from a construction site, or a whistle from the street corner, is a form of intrusion, sex without consent. However, the one who sees a sexually attractive person has a right to feelings that do not result in offensive behavior.
9. A person has a right to use the telephone without the intrusion of uninvited sexual remarks or sexual threats. An obscene phone call is an expression of hostility, a violation of sexual privacy, and another form of sex without consent. It is also a crime. The overwhelming majority of women in the United States have experienced this form of sexual intrusion.

10. A person has a right to be free from physical contact of any kind unless she clearly indicates a desire for it. Between strangers, this prohibition is very clear. Touching another person's buttocks, breasts, or genitals without consent, for example, is illegal in most states. And the consensus that exists in our society which forbids more extreme force, such as rape, is rarely a point of disagreement. However, some acquaintance rapists claim that they misunderstood the women's intentions. He may believe that her "No" means "Yes."

Thinking about these rights and integrating them is very important to you ability to be sexually assertive. If you do not believe you have sexual rights, your actions will reflect your fears and uncertainties. Any efforts you make to protect yourself would lack real conviction; even if the other person is unaware of what is causing it, confusion will result. Ask POLs to generate other sexual rights (i.e., What about children?)

5. Assignment

1. This week we would like you to have two conversations with two "new" women in your dorm - women you haven't talked with yet. Talk with them about what you've learned tonight. Focus especially on situations that make it hard for women to bring up the subject of sex and how you hope to handle it in the future and why you think safe sex is very important.
2. Bring a friend to next week's meeting. There will be a drawing for a \$25 prize for visitors and goodies for everyone.
3. Remember your conversation logs!!

The Women's Health Project

Session IV

Purpose

1. Summarize POL participation/Thank POLs for participation
2. Recognize POL guests
3. Review use of conversation skills
4. Review sexual assertiveness
5. Discuss POLs' experience with peer conversations
6. Review the need for AIDS prevention among women and encourage continued POL activity
7. Discuss POLs' experience with project
8. Assign 4 more conversations over the next 2 weeks

Training Procedure

1. Summary

We have covered a great deal of material in the last three weeks including information about AIDS and other STDs, communication skills such as attending and empathy, and sexual assertion.

We have discussed how perceived social norms can encourage changes in social behavior.

You are now a part of the social norm that allows women to right to take care of their physical health -- including their sexual health.

Each of you has now had conversations with approximately 10 other people about safe sex -- that means that $n \times 10 = ?$ conversation have occurred.

You have made a difference!

2. Recognize POL guests

3. Review Conversation Skills

Some of the skills that you are taking with you include attending, empathy, and sexual assertiveness.

It is important to continue to practice these important skills in the future and to convey to other women and to men including your sexual partners that:

- AIDS is a genuine concern for women and should be a personal concern for women here
- behavior changes can be successfully made to reduce or eliminate risk
- these changes are desirable; they are "do-able" and have good consequences

-- safer sex for women is a new and positive social norm; it is the acceptable, expected way to behave

-- you are practicing or to practice safer sex

3. Review Sexual Assertiveness

-- practicing safer sex is easier if:

- a. you decide in advance what you will and won't do
- b. you talk about being safe with your partner ahead of time
- c. you are aware of your sexual rights
- d. you are sexually assertive with others and with yourself and saying no if safe sex is not a choice
- e. you keep condoms available "just in case"
- f. you avoid the combination of sex and heavy drinking

-- by using your own behavior and beliefs as a positive example in "non-preachy" conversation.

4. Review Peer Conversation

How many of you were able to have discussions with 2 "new" people?

When and where did conversations occur?

What did you say?

How did you feel?

How did the other person react?

What conversation skills did you use?

5. Reiterate the importance of HIV prevention among women

But we don't have to see the AIDS epidemic take the toll among young women and children that it did among gay/bisexual men.

POLs: What are your thoughts about this? How do you answer people who say it is not much of a risk?

6. Important Role of POLs in Project

That brings us back to the purpose of the Women's Health Project.

You are here because you volunteered to be the leading force in changing the norms for safe sex among women.

You are the most important element of this project.

If the ideas that you exchange with your peers lead just one person to change HIV risky behavior to safer sexual behavior, you will have saved a life.

7. Review safer sex practice and high risk

8. Comment and questions about POL participation

Assignment

-- Have four more conversations with women in your dorm over the next four weeks.

--Keep your conversation logs.

We will be in touch by phone.

Remember the booster session April 13.

9. Post Assessment Measures

- a. Post-test of AIDS knowledge
- b. Written post-test of conversation skills
- c. Role play assessment of assertiveness
- d. Number of friends talked with in last 4 weeks about safe sex

The Women's Health Project Booster Session (Session V)

Purpose

1. To review POLS experiences with peer conversation in the four weeks since Session IV.
2. Review importance of AIDS/STD prevention among women.
3. Reemphasize POLs importance to project.
4. Review conversation skills.
5. Roleplay and rehearsal with feedback initiation of conversations with peers about safe sex.

Narration: You have a friend who is sexually active. You feel concern over how much she knows about AIDS and you want to talk with her in a way that won't turn her off, but will educate her. You see your friend and decide to have the conversation now, but you'll have to start it.

Roleplay partner comment: "Hi, how are you?"

Participant roleplay response: "_____."

Friend A response: Receptive

Friend B response: Hostile

6. Post-assessment surveys and report of number of conversations.

Assignment

It is very important that you continue to have conversations with your peers about safe sex. In the next 3 weeks, please talk with 3 more women living in your dorm.

You will be receiving a phone call each week from a project staff member to talk with you about your conversations with peers.

Session Handouts

The Women's Health Project

Women & AIDS

What is AIDS? AIDS is the acquired immunodeficiency syndrome -- a serious illness that harms the body's ability to fight infection. A person with AIDS is unable to fight certain infections and cancers that are usually mild or rare in healthy people. There is no cure for AIDS at this time. AIDS is caused by a virus called HIV (human immunodeficiency virus). A person infected with HIV may: 1) pass the virus to others; 2) show no signs of infection; 3) develop symptoms of HIV infection; and/or 4) develop AIDS.

Right now women make up only a very small percentage (about 10%) of reported AIDS cases in the United States. However, since 1986, the number of AIDS cases among women has increased 600% with a current growth rate of infection among women 2 1/2 times faster than for men. At present, there are an estimated 100,000 women who are HIV positive. It is expected that a large majority of these women will eventually develop full blown AIDS, the end stages of HIV infection. In 1987, AIDS was the eighth leading cause of death for women under the age of 45 years. AIDS is now the fifth leading cause of death for women in this age group.

Hot lines

For further information on AIDS and other STDs, you can call these hot lines:

Centers for Disease Control **1-800-AIDS**
Public Health Service **1-800-477-AIDS**
National Gay Task Force and AIDS Crisis **1-800-221-7044**

Ten tips on condom use

1. Only use latex condoms - natural or lambskin condoms let HIV pass through them.
2. Condoms vary; finding a comfortable or "fun" condom may increase your partner's willingness to use them.
3. Read the instructions thoroughly with your partner - not all men are completely sure of correct condom use.
4. The condom must be put on before penetration because the virus can be present in pre-ejaculatory fluid.
5. If you need additional lubrication for vaginal or anal intercourse, use a water-based lubricant like K-Y™ jelly that will help prevent condom breakage.
6. To further avoid breakage, try extra-strength or ribbed condoms or use two at once.
7. Use unlubricated condoms for oral sex.

8. No man is too big or small for a condom - snug-fit condoms are available for smaller men.
9. A man may temporarily lose his erection when first using a condom, but you can help him get it back.
10. Practice makes it easier.

Spermicides containing nonoxynol-9 - Using a spermicide containing nonoxynol-9 may provide additional protection against HIV.

Alcohol Use and Sexual Behavior (Statistics from the Student Health Services at Virginia Tech.)

- 79-92% of college students report drinking
- 85% of college students report being drunk
- 90% of college students feel they do not know how to drink responsibly
- 25% of women drink to the point of being drunk 4 times per month
- 80% of first sexual experiences occur under the influence of alcohol
- 47% of unplanned sexual encounters are under the influence of alcohol
- 22% report drinking to try to increase sexual assertion
- 87% of unwanted sexual experiences for women occurred under the influence of alcohol
- 90% of all sexual assaults occur under the influence of alcohol

The Women's Health Project

Assignment for the week of February 24 - March 2, 1992

Please have two conversations with two different people living in your dorm about the AIDS/STD information you have heard here tonight.

Afterwards, write down in your conversation log any questions that came up and how you responded.

Also note how the other women responded to the information (Were they turned off? Curious? Did they confide in you?)

Write the first name and last initial only of the women with which you talked.

Bring your conversation log next week for payment!

Call Deborah at 366-4860 or Tamara and David at 703-552-8187 if you have any questions.

The Women's Health Project

Honor Pledge

I _____, pledge to respect the confidentiality of the women involved in this training group. I will not disclose personal information shared by others during the training sessions. I also pledge to respect information that might be confided to me by my dormitory peers in conversations connected with this project.

Signature

Date

THE WOMEN'S HEALTH PROJECT

Ten Conversation Stoppers

1. Directing, ordering: To tell someone to do something in such a manner that gives the other person little or no choice.
Example: Make sure you always carry a condom.
2. Warning, threatening: To tell the other person that if the behavior continues, certain consequences will happen.
Example: If you continue to have unprotected sex, you are going to die from AIDS.
3. Moralizing, preaching: To tell someone things they ought to do.
Example: You should not have sex before you are married.
4. Persuading, arguing: To try to influence another person with facts, information, and logic.
Example: You should quit drinking on dates because you are more likely to practice risky sex.
5. Advising, recommending: To provide answers for a problem.
Example: I recommend practicing safer sex.
6. Evaluating, criticizing: To make a negative interpretation of someone's behavior.
Example: You have sex too casually.
7. Praising: To make a positive evaluation of someone's behavior.
Example: You always know the right thing to do in a situation.
8. Supporting, sympathizing: To try to talk others out of their feelings or to deny their feelings.
Example: Your problem is really serious. I know how you feel.
9. Diagnosing: To analyze other's behavior and communicate you have figured out their behavior.
Example: You must have low self-esteem to have sex with someone you just met.
10. Diverting: To change the subject from the problem presented by another.
Example: I know you're upset about your boyfriend but let me tell you about what mine did.

Remember, good conversational skills include using I statements and a non-preachy approach.

Your Sexual Rights

1. A person has a right to refuse any type of sexual contact at any time or place, regardless of how aroused the partners might be. There is no such thing as being so aroused that you "owe" anything to your partner. If you are stark naked and change your mind, you still have a right to do so.
2. A person has a right, in a sexual relationship, to express frustration and disappointment if sexual contact is refused. If you refuse to continue sexual activity when both of you become very aroused, your partner has a right to express disappointment. That is, other people have a right to their feelings and you have a right to yours.
3. A person has a right to request any type of sexual activity in a sexual relationship, as long as it does not violate anyone else's rights. The partner, however, has a right to decide whether to comply. If you've always wanted to try intercourse hanging from the chandelier, you can ask for it, but your partner has a right to think you are asking too much. You can ask for anything you want, but asking does not give you a right to receive it.
4. A person has a right to any feeling, fantasy, or thought. Whatever happens inside of your head is yours. However, you are responsible for all of your behavior, which should not interfere with anyone else's rights.
5. Partners involved in a sexual relationship have a right to share expenses that in any way result from their sexual involvement. Their mutual obligation includes sharing the cost of contraceptives and expenses resulting from pregnancy. Deception by one, however, might change the rights of the other.
6. A person has a right to know if a potential sex partner has a contagious disease of any kind, or could possibly have been exposed to one. You have the right to information and you should ask assertive questions. Your right to know, however, does not guarantee that your partner will tell the truth. Research indicates that from one-third to one-half of sexually active people say they would lie to another person in order to get sex. Trusting someone you do not know well with your body is simply not smart.
7. A person planning sexual intercourse has a right to know whether the partner is using a contraceptive or other protective device, and any pertinent facts about it. Condom users have a right to know whether the condom is latex (the most effective kind), whether it is new or five years old, and whether his partner missed her pill any day that month.
8. A person has a right to be free from becoming the object of unwanted sexual remarks or unwanted sexual gestures. "Look at the knockers on that broad!" yelled down from a construction site, or a whistle from the street corner, is a form of intrusion, sex without consent. However, the one who sees a sexually attractive person has a right to feelings that do not result in offensive behavior.
9. A person has a right to use the telephone without the intrusion of uninvited sexual remarks or sexual threats. An obscene phone call is an expression of hostility, a violation of sexual privacy, and another form of sex without consent. It is also a crime. The overwhelming majority of women in the United States have experienced this form of sexual intrusion.

10. A person has a right to be free from physical contact of any kind unless she clearly indicates a desire for it. Between strangers, this prohibition is very clear. Touching another person's buttocks, breasts, or genitals without consent, for example, is illegal in most states. And the consensus that exists in our society which forbids more extreme force, such as rape, is rarely a point of disagreement. However, some acquaintance rapists claim that they misunderstood the women's intentions. He may believe that her "No" means "Yes."

Thinking about these rights and integrating them is very important to your ability to be sexually assertive. If you do not believe you have sexual rights, your actions will reflect your fears and uncertainties. Any efforts you make to protect yourself would lack real conviction; even if the other person is unaware of what is causing it, confusion will result.

Three Kinds of Assertiveness

The first kind of assertiveness is empathic assertion. In this case, the individual asserts herself by first acknowledging the other person's feelings--that is, showing sensitivity to the other person before asserting oneself.

The second kind is escalating assertion, in which the person begins with mildly expressing herself, but, because her partner does not listen or respond, the intensity of her statements escalates.

The third kind of assertion is confrontive assertion. One confronts a partner when he does something that contradicts what he agreed to do.

THE WOMEN'S HEALTH PROJECT

Assignment for week of March 2 - 8

PLEASE HAVE TWO MORE CONVERSATIONS THIS WEEK WITH WOMEN LIVING IN YOUR DORM. Remember, you are among the most influential people living in your dorm and you have the power to "reset" the social norms to allow women, even "nice" women, to practice health sexual behavior.

Some general guidelines for communicating information about AIDS/STD prevention to other women.

1. Convey that AIDS is a serious health threat to women. Even "nice" women who date "nice" men.
2. Stress positive value, benefits, and desirability to reduce HIV risk.
 - a. Benefits to self: Peace of mind; protection of health
 - b. Benefits to others: Helping them to protect their health
 - c. Safer sex is the norm: It is acceptable to protect your health and to be a sexually responsible adult.
3. Be specific and clear when you talk about safe sex.
 - a. I always carry a condom in my purse, just in case.
 - b. I always make sure that my partner uses a condom.
 - c. I never have sex without a condom.
4. Use "non-preachy", non-judgmental communication skills.

This means don't tell others what to do. Instead talk about the changes you have made or are making to keep yourself safe. Use "I" statements.

Too preachy: Sara, you're just plain stupid if you don't make sure your boyfriend uses a condom.

Better: I feel a lot safer making sure that my boyfriend uses a condom.

Remember to write down the first name and initial of the two women that you talk with. It may feel a little awkward but if you use non-preachy "I statements" with a little practice, it will get a lot easier.

Remember to bring your conversation logs to the meeting next week!

Good luck!

THE WOMEN'S HEALTH PROJECT

Elements of Effective and Positive Messages for Educating Friends About Risk Reduction

1. Stress The Positive Benefits Of Being Safe.

Health consciousness in matters of sexuality represents a positive, desirable value that carries many benefits including peace of mind, lessened worry, concern shown for others, and feeling pleased with yourself. These benefits greatly outweigh any inconvenience or awkwardness in changing from risky patterns to safer ones.

2. Stress That Safety Is Now The Accepted Norm. People Who Are Safe Are "In Step" With The Times. People Who Aren't Safe In Bed Are Out-Of-Date And Outside The Norm.

Everyone is putting safety into effect even if it's a little difficult and awkward at first. People who aren't being safe are the ones out-of-step these days. Safety is the new norm among women.

3. Be Explicit In Communicating What Safety Means.

Vague generalizations like "Be careful" or "Take precautions" are less clear than specific, direct statements about what is safe. Say what safer sex means: Use condoms or have sex that doesn't involve sexual fluids entering the body. Give examples to your peers.

4. Don't Preach - Instead, Use Yourself And Changes You've Made As A Positive Example.

Start communications with "I now...", "I've learned...", "I always...", or other "I" phrases rather than "You shoulds." This comes across less preachy and you become a positive model for others. The person you're talking with will think, "If she does this, I can too, and it's okay to make the same changes." If you yourself are still working on implementing safety changes, you can say "I'm trying to...."

5. Suggest How To Do It, Not Just What To Do.

It's very helpful to offer pointers about how to put safe intentions into actual practice. Remember to use "I" statements.

"Now, before I have sex with anyone, I talk to them first -- ahead of time -- to make sure they understand the need to be safe."

"If I've had too much to drink, I put off sex. I want to be clearheaded and safe."

THE WOMEN'S HEALTH PROJECT

Assignment for week of March 9 - 15

1. This week we would like you to have two conversations with two "new" women in your dorm - women you haven't talked with yet. Talk with them about what you've learned tonight. Focus especially on situations that make it hard for women to bring up the subject of sex and how you hope to handle it in the future and why you think safe sex is very important.
2. Bring a friend to next week's meeting. There will be a drawing for a \$25 prize for visitors and goodies for everyone.
3. Remember your conversation logs!

THE WOMEN'S HEALTH PROJECT

Assignment for March 16 - April 13

1. Please have four more conversations with women living in your dorm over the next four weeks.

2. Please remember to record these conversations in your log.

We will be in touch by phone to see if you have any questions.

Remember the booster session April 13.

Have a good Spring break and we'll see you then.

THE WOMEN'S HEALTH PROJECT

Assignment for April 13 - May 4

It is very important that you continue to have conversations with your peers about safe sex. In the next 3 weeks, please talk with 3 more women living in your dorm.

The Women's Health Project

AIDS/STDs: Facts at a glance (From the CDC)

- * Since 1986, the number of AIDS cases among women has increased 600% among women.
- * The current growth rate of the AIDS virus among women is 2 1/2 times faster than for men.
- * In 1987, AIDS was the eighth leading cause of death for women under 45 years of age.
- * AIDS is currently the fifth leading cause of death for young women.
- * Women with AIDS have a shorter survival time than do men. In part, this is due to a lack of early recognition and treatment.
- * AIDS can be contracted in one sexual contact.
- * Proper condom use significantly reduces but does not eliminate the AIDS risk.
- * Even after a couple becomes sexually exclusive, it is important to continue safe sex guidelines for up to a year and until after two negative AIDS antibodies tests over a 6 - 12 month period of time.
- * However, it is important to evaluate how monogamous your partner is to you. It's not a pleasant thought, but many people do lie about their sexual behavior.
- * Reducing the number of your sexual partners may not be very effective if even one of your partners is infected with the AIDS virus.
- * Both female-to-male and male-to-female transmission of the AIDS virus has been documented.
- * AIDS cannot be spread by toilet seats.
- * Oral sex with a male sexual partner can be an AIDS risky behavior for a woman even if she "doesn't swallow."
- * The AIDS virus does not penetrate unbroken skin.
- * Shared toothbrushes do not transmit the AIDS virus.
- * Pre-ejaculatory fluids carry the AIDS virus.
- * Many people who have been exposed to the AIDS virus often do not show any immediate signs of serious illness.
- * People who carry the AIDS virus may feel healthy for an extended period of time--even for years. However, they can still transmit the AIDS virus.
- * Sharing a bathroom with a person with AIDS poses no risk of infection.
- * IV drug users become exposed to the AIDS virus because of the exchange of infected blood via shared needles, not because the virus is contained in the drug itself.
- * Donating blood carries no risk of AIDS for the donor.

- * A great deal is now known about how the AIDS virus is transmitted.
- * Most AIDS cases are now due to IV drug use or sexual contact, not to blood transfusions.
- * A negative result for the AIDS antibodies test can occur even for people who carry the virus.
- * A positive result for the AIDS antibodies test can occur even for people who do not carry the virus.
- * Despite the development of penicillin, syphilis is increasing at an epidemic rate.
- * Antibiotics cannot cure genital warts. The current treatment for genital warts is laser surgery.
- * Genital warts are associated with cervical cancer.
- * Even when treated, the herpes virus permanently establishes itself in the nervous system.
- * Oral contraceptives do not offer any protection against STDs.
- * All sexually transmitted disease can be prevented!

DON'T PLAY HIV ROULETTE: GET THE FACTS!

- * Since 1986, the number of AIDS cases has increased **600% among women**.
- * The current growth rate of AIDS among women is **2 1/2 times faster** than for men.
- * AIDS is currently the **fifth** leading cause of death for young women.
- * Women with AIDS have **a shorter survival time** than do men.
- * AIDS can be contracted in **one** sexual contact.
- * Proper condom use significantly reduces but **does not** eliminate the AIDS risk.
- * Even after a couple becomes sexually exclusive, it is important to continue safe sex for up to a year and until after two negative AIDS tests over a 6 - 12 month period of time.
- * Reducing the number of your sexual partners **may not** be very effective **if even one** of your partners is infected with the AIDS virus.
- * Female-to-male and male-to-female transmission of the AIDS virus has been reported.
- * Sharing a bathroom with a person with AIDS poses **no** risk of infection; AIDS **cannot** be spread by toilet seats; shared toothbrushes **do not** transmit the AIDS virus.
- * Oral sex with a male sexual partner can be an AIDS risky behavior for a woman.
- * People who carry the AIDS virus may feel healthy for an extended period of time--even for years. However, they can still transmit the AIDS virus.
- * IV drug users become exposed to the AIDS virus because of the exchange of infected blood via shared needles, **not** because the virus is contained in the drug itself.
- * Most AIDS cases are now due to IV drug use or sexual contact, **not** to blood transfusions; donating blood carries **no** risk of AIDS for the donor.
- * A **negative** result for the AIDS test can occur even for people with AIDS.
- * A **positive** result for the AIDS test can occur even for people who do **not** have AIDS.
- * Despite the development of penicillin, syphilis is **increasing** at an epidemic rate.
- * Antibiotics **cannot** cure genital warts; genital warts are treated with laser surgery.
- * Genital warts are associated with cervical cancer.
- * Even when treated, herpes **permanently** establishes itself in the nervous system.
- * Oral contraceptives do **not** offer any protection against STDs.
- * **ALL SEXUALLY TRANSMITTED DISEASE CAN BE PREVENTED!**

The Women's Health Project: 366-4860

The Women's Health Project

Building Empathy Skill

An important communication skill for talking with your peers is empathy. Empathy means understanding other individuals so completely that their surface feelings and even their deeper feelings, thoughts, and motives are easily comprehended. Empathy involves crawling inside other individuals and seeing the world through their eyes. Empathy involves experiencing the world of other individuals as if you were they. Empathy is the most significant ingredient in relating with individuals generally, but it is vital when you are in the role of peer helper. The ability to understand others' feelings is crucial to your effectiveness. Tonight we will work on some ways to increase your empathy skills. As your empathy skills are developed, individuals will want to talk to you about their problems more frequently. An additional benefit of training is that you will feel better about yourself. You will tend to become more effective and stronger in your relationships with others.

Two important steps are involved in learning empathy skills. The first step in learning empathy skills concerns your ability to hear well enough that which individuals are saying so that you can repeat it word for word. In this way helpees know for certain that you have heard them.

To repeat helpee's statements word for word would be ridiculous, so the second step is to respond by saying accurately what the helpee has said but in your own words. This process is called paraphrasing and requires the ability to feed back to the helpees an accurate understanding of their feelings and/or meaning. When paraphrasing is done well, you begin to understand how other people feel about their situation, and that understanding is communicated to them. As you practice hearing accurately feelings and meanings of their statements and are able to paraphrase these feelings back to helpees, a more complete understanding of their concerns will take place. This new understanding is an expression of accurate empathy.

How can repeating or paraphrasing to an individual what she has said be helpful? In the first place, by paraphrasing you will be telling your peer that you are listening to her well enough to understand her feelings. This does not mean that you simply parrot back what she has said. This relationship in itself is so unusual that it imparts good feelings to the person with the concern. Secondly, when her own thoughts and feelings are fed back to

her, they sound differently, and this difference increases an individual's understanding of the way she feels.

So empathic helper responses enable helpees to get a more complete picture or understanding of their feelings. When you increase the understanding of a problem you increase your ability to deal with it more effectively. For this reason the ability to empathize with others is more helpful initially than any other response. The basis of all effective helping is empathy, and empathy is the foundation of other skills that you will be learning later in your training. When you master the empathy skill, you will have progressed a long way toward being an effective helper.

Name _____

EMPATHY SKILL: PARAPHRASING

Practice responding by paraphrasing. As a helper when you use paraphrasing, you attempt to

1. check your own listening to make sure you as a helper heard the right meaning.
2. focus on the exact meaning of the helpee.
3. convey to the helpee that you are trying to understand what she is saying.
4. enable the helpee to know she is understood.

Paraphrasing helps concentrate on the content of the message being sent. Basically, the helper attempts to feed back to the helpee the essence of that the helpee has just said. Paraphrasing helps clarify confusing content, brings together a number of comments, and highlights issues by stating them more simply.

An illustration of a statement by a helpee and a paraphrased response by you the helper is as follows:

Helpee: "I really don't know where to start."

Helper: "You don't quite know how to begin."

Please write a paraphrasing response for each of the following helpee statements that is illustrative of how you as a peer helper might respond.

EXERCISE

1. Helpee: "I don't know what to do; sometimes she is so nice and sometimes she is such a witch."

Helper:

2. Helpee: "I am really having a hard time getting my parents to trust me, and it makes me so angry with them."

Helper:

RATING SCALE FOR PARAPHRASING

The terms High, Medium, and Low are used to identify the level of the peer helper's paraphrasing. The following responses are definitions of high, medium, and low paraphrase.

- High (H) Response: The peer helper accurately hears the words expressed by the helpee. Helpee acknowledges that the content heard was correct.
- Medium (M) Response: The peer helper partially hears the content of the statement.
- Low (L) Response: The peer helper does not hear what the helpee has said.

EXAMPLES OF RESPONSES

Helpee: "I am so tired of getting up every morning and going to school."

- High (H) Response: "Getting up every morning and going to school really tires you."
- Medium (M) Response: "You don't like getting up in the morning."
- Low (L) Response: "Do you have your own room?"

EXERCISE

Directions:

1. Form clusters of three.
2. As the helpee, state a concern to the helper who will restate the verbal message in her own words. (Do not try to go beyond the meaning of the actual spoken words.)
3. As the helpee, acknowledge as to whether or not the content of the concern was correctly understood.
4. As the rater, take brief notes during the helpee/helper interchange to facilitate rating and feedback effectiveness.
5. As the rater, rate responses High, Medium, or Low.
6. As the rater, give feedback to the helper.
7. Change roles so that everyone has an opportunity to be rater, helper, and helpee.

EMPATHY SKILL FEELING WORDS

To capture other individuals' feelings we need to know many feeling words. We need to develop a "feeling" word vocabulary. We must be able to communicate to helpees an understanding of their feelings.

GOALS

In this exercise you will learn:

1. feeling words.
2. an increase in your own awareness of feeling words.

DIRECTIONS

Please read the list of feeling words and then practice formulating at least two ways of responding to a situation.

EXAMPLE

Helpee: "I just don't know which way to go."

Helper: "You feel confused."

"You feel lost."

EXERCISE

1. Helpee: "I feel like I'm being pulled both ways."

Helper: "You feel _____."

"You feel _____."

2. Helpee: "I am so happy about my A!"

Helper: "You feel _____."

"You feel _____."

LIST OF FEELING WORDS

embarrassed
nervous
frustrated
grateful
proud
scared
amazed
angry
annoyed
ashamed
guilty
stimulated
pressured
inspired
enthusiastic
lonely
healthy
hurt
happy
confused
stupid
bored
relieved

respected
cocky
superior
inferior
weak
strong
restrained
free
envious
defeated
tense
apathetic
sympathetic
sneaky
depressed
down
anxious
energetic
worthless
clumsy
satisfied
overwhelmed
refreshed

EMPATHY SKILL RESPONDING TO FEELINGS

Suggested behaviors to assist you in listening for feelings are as follows:

1. Listen for all the words that express feelings. This action is important if you are to hear all of the meaning.
2. Time your comments. You don't have to reply to every statement.
3. Paraphrase feeling words and meaning, either positive or negative.

GOALS

In this exercise you will learn:

1. to understand, as a helper, what the helpee is experiencing.
2. to communicate to the helpee that "I am with you" and "can accurately sense your feelings."

DIRECTIONS

Please write a response for each of the following helpee statements that would be illustrative of what you could say to help the person know you listened and heard the feeling expressed.

EXAMPLE

1. Helpee: "I am really uncertain about what to take next year."
Helper:
2. Helpee: "My boyfriend is really a jerk. He never wants to do anything with my friends."
Helper:

Appendix L.
Consent Forms for Key Opinion Leaders

THE WOMEN'S HEALTH PROJECT

Consent Form

Purpose of the Research and Procedures: The major purpose of the research, which is conducted at Virginia Polytechnic Institute and State University, is to assess the impact of an intervention which recruits and trains individuals identified as popular and well-liked to serve as behavior change agents to their peers. The intervention is focused on teaching behavioral skills for implementing risk reduction, communication methods to suggest risk-reduction steps to others, and assignments to personally endorse to others in conversation the desirability of making precautionary behavior changes. For example, leaders will learn the most effective communication styles for talking with others about AIDS (i.e., stressing positive, desirable benefits of risk reduction; communicating how to make relevant behavior changes; conveying that the speaker is personally attempting the same changes and values them; avoiding a preachy style by using "I am . . ." rather than "you should . . ." statements; and offering to answer the other parties' questions in more details). It is expected that approximately 24 key opinion leaders will participate over the course of the study.

As a participant in this project, you will be asked to attend five weekly training sessions of approximately 1 1/2 hours in duration each. You will be asked to complete self-report measures of risk knowledge, risk behavior, and social norm perceptions concerning AIDS, sexually transmitted diseases, and safer sexual practices. As a participant, you will receive information concerning the characteristics of AIDS and HIV infection, basic epidemiology of the disease, and risk behaviors. You will also receive information concerning practical strategies for initiating risk reduction changes. Finally, you will learn conversational strategies for disseminating AIDS risk-reduction information to others. To facilitate mastery of the desirable conversational skills, you will be instructed to behaviorally rehearse these conversations in training sessions while receiving coaching and corrective feedback from staff members. Each week of the training sessions, you will be asked to have educational/endorsement conversations with two to four other women residing in your dormitory. At the end of the fourth week, you will be asked to have four to six more peer conversations over the next two weeks.

At any point during the intervention, you may withdraw from this project without penalty. You may also skip or refuse to answer any questions on the self-report measures.

As a participant, a major responsibility for you is to contract to have a number of educational/endorsement conversations with your peers over a period of several weeks. Therefore, it is very important that you decide whether you would feel comfortable in this role.

Confidentiality: Neither your name nor the name of the college will appear on any of the assessment forms. Since we must track you over multiple assessments, we will do it anonymously by asking you to create a code for yourself. However, a code number generated by you (involving your first initial, your mother's first initial, the last two numbers in your social security number and the day of your birth) will be requested on each form. At no time will your name be associated with any form. These code numbers will allow the project to track the effectiveness of the intervention while protecting your identity. All information on the forms is considered confidential and will only be available to the Project Director and research staff for this project.

Payment: You will receive \$10 for each training session that you attend (approximately five) and \$5 for returning postintervention data. You will receive an additional payment of \$25 if you attend all five of the training sessions. Payment will be made by check to you at the beginning of each training session that you attend. Even if you withdraw from the study, you will be paid for those sessions in which you participated.

Risk: It is possible that you may feel uncomfortable by the sexually explicit content of the questionnaire and training materials. You may also find that you come to feel "overly responsible" for the behavior of others or feel ineffective if friends or acquaintances continue high-risk behavior patterns. While rare, during or after the training session, psychological issues could be brought up that need attention. If that is the case, we request that you contact:

- 1) Deborah A. Webster, M.A. , Project Director (366-4860);
- 2) Tamara Neubauer, project staff member (703-552-8187);
- 3) David Lombard, project staff member (703-552-8187);
- 4) Mikey Hayes, M.S.W., at the Student Counseling Services (362-6404);
- 5) Mary Williams, M.D. (989-6628); or
- 6) Mental Health Services of the Roanoke Valley/24-hour Hotline (981-9351).

Benefits: By participating in this project, you can learn new information about the causes and prevention of AIDS and other sexually transmitted diseases. As a participant, you will also have the opportunity to potentially change your own risky sexual behavior as well as learn conversational skills that may enable you to share information concerning AIDS prevention with others. If this method of disseminating information concerning AIDS prevention is proven effective, then many other women may benefit from this kind of program.

Alternative Sources of Information; It may be possible for you to gather similar information from the college library, campus health center, or your religious organization and thus make health behavior changes. It may also be possible for you to receive training in conversational skills in your academic classes, at your mental health agency, or religious organization.

If you have any questions about this project, please feel free to call the sponsor of this project, Dr. Richard Winett, at 1-800-752-4791 or the Project Director, Ms. Deborah Webster, at 366-4860. If you have any questions about the terms of your consent to participate in this project, you can call Dr. Ernest Stout, Chair of Virginia Tech's Institutional Review Board at 703-231-5281 or Dr. Helen Crawford, Chair of the Human Subject's Committee, at 703-231-6581.

THE WOMEN'S HEALTH PROJECT

Opinion Leader Participant Consent Form

1. I hereby acknowledge my voluntary participation in the Women's Health Project, conducted by Dr. Richard A. Winett (Project Sponsor) and Ms. Deborah Webster (Project Director) at Virginia Tech. I understand that I will be asked to fill out a series of self-report measures of risk knowledge, risk behavior, and social norm perceptions concerning AIDS, sexually transmitted diseases, and safer sexual practices. I understand that this information is of a sexually explicit nature. I realize that I may skip any question on the self-report questionnaire or decide to withdraw from the study at any point without penalty to me. It is my understanding that I will attend approximately five weekly sessions which are approximately 1 1/2 hours in duration each.
2. I have had the study described to me and have completely read the description of the project on the previous page. I have had all my questions answered, realizing that this experiment is an evaluation of the efficacy of using key opinion leaders to disseminate AIDS information to their peers.
3. As far as I know, I have no psychological problems that would interfere with the training sessions.
4. The potential effects of my participation in this project have been explained to me. No guarantee of benefit has been made to me by anyone to induce me to participate.
5. The information accumulated by this research may be used for research and educational purposes and information relating to my responses may be presented at scientific meetings and/or published and republished in professional journals or books, or used for any other purpose which Virginia Tech's Department of Psychology considers proper in the interest of education, knowledge, or research. Provided, however, that it is specifically understood that in any such use or publication, I shall not be identified by name but will remain completely anonymous.
6. I am participating freely, in full understanding that I need not participate if I do not wish to, and if I participate, I may withdraw at any time. I realize that I will be paid for that portion of the training sessions in which I participate (\$10 per session plus \$5 for each conversation log). In addition, I understand that I will receive a bonus payment of \$25 if I complete all five training sessions.
7. I understand that this research project has been approved by the Human Subjects Research Committee and the Institutional Review Board, and that if I should have any questions, I should contact the following:

Helen Crawford, Ph.D. 231-6581 Chair, VPI's Human Subject's Committee
Ernest Stout, Ph.D. 231-5281 Chair, VPI's Institutional Review Board

8. I understand that if I ever feel upset by the training sessions or my participation in the project, I am to call the Project Director, Deborah A. Webster, M.A. (366-4860); the Student Counseling Services (362-6404); Mary Williams, M.D. (989-6628); or the Mental Health Services of the Roanoke Valley/24 hour Hotline (989-9351).

9. I hereby agree to participate voluntarily in the research project described above and under the conditions described above and by the researcher.

Participant's Signature

Date

Project Director's Signature

Date

Appendix M

Honor Pledge for the Key Opinion Leaders

The Women's Health Project

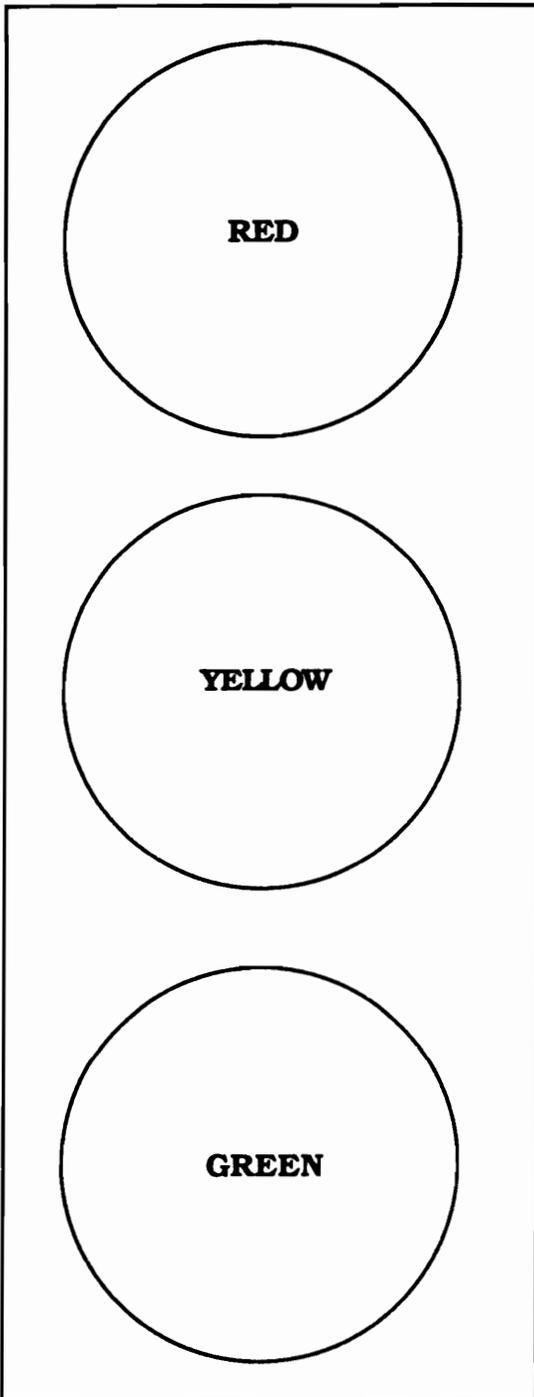
Honor Pledge

I _____, pledge to respect the confidentiality of the women involved in this training group. I will not disclose personal information shared by others during the training sessions. I also pledge to respect information that might be confided to me by my dormitory peers in conversations connected with this project.

Signature

Date

Appendix N
Traffic Light



Intercourse Without A Condom Creates Great Risk for AIDS. Avoid Activities Where Sexual Fluids Enter Your Body.

Condoms Reduce Risk But Use Them Consistently and Correctly. Always Protect Yourself.

Massage, Rubbing Without Intercourse, Cuddling, and Activities Without Fluid Exchange Carry Little Risk.

For more information, call the Women's Health Project (366-4860).

Appendix O
Contact Take-Home Monitoring-Logs

Name _____

**The Women's Health Project
Conversation Log
Assignment for February 24-March 1**

Please have two conversations this week with women living in your dorm.

Date	Peer's Initial	Content of conversation	"I-statements"
1.			
2.			

Name _____

**The Women's Health Project
Conversation Log
Assignment for March 2- 8**

Please have two more conversations this week with women living in your dorm.

Date	Peer's Initial	Content of conversation	"I-statements"
1.			
2.			

Name _____

**The Women's Health Project
Conversation Log
Assignment for March 9 - 15**

Please have two more conversations this week with women living in your dorm.

Date	Peer's Initial	Content of conversation	"I-statements"
1.			
2.			

Name _____

**The Women's Health Project
Conversation Log
Assignment for March 16 -April 13**

Please have four more conversations over the next four weeks with women living in your dorm.

Date	Peer's Initial	Content of conversation	"I-statements"
1.			
2.			

Date	Peer's Initial	Content of conversation	"I-statements"
3.			
4.			

Appendix P
The Liking People Scale

LPS

The following questions ask your feelings about a number of things. Since we are all different, some people may think and feel one way; other people think and feel another way. There is no such thing as a "right" or wrong answer. The idea is to read each question and then fill out your answer. Try to respond to every question, even if it does not apply to you very well. The possible answers for each question are:

<u>a</u> Strongly Agree	<u>b</u> Moderately Agree	<u>c</u> Neutral	<u>d</u> Moderately Disagree	<u>e</u> Strongly Disagree
-------------------------------	---------------------------------	---------------------	------------------------------------	----------------------------------

- ___ 1. Sometimes when people are talking to me, I find myself wishing they would leave.
- ___ 2. My need for people is quite low.
- ___ 3. One of the things wrong with people today is that they are too dependent upon other people.
- ___ 4. My happiest experiences involve other people.
- ___ 5. People are not important for my personal happiness.
- ___ 6. Personal character is developed in the stream of life.
- ___ 7. I could be happy living away from people.
- ___ 8. It is important to me to be able to get along with other people.
- ___ 9. No matter what I am doing, I would rather do it in the company of other people.
- ___ 10. There is no question about it — I like people.
- ___ 11. Personal character is developed in solitude.
- ___ 12. In general, I don't like people.
- ___ 13. Except for my close friends, I don't like people.
- ___ 14. A person only has a limited amount of time and people tend to cut into it.
- ___ 15. People are the most important thing in my life.

Appendix Q
Opinion Leader Self-Rating of Popularity

Self-Rating Evaluation Form - Peer Leader

Name: _____

Code: 5 = outstanding (top 1%)
4 = excellent (top 5%)
3 = good (top third)
2 = average (middle third)
1 = poor (bottom third)

- ___ Good relationship with peers
- ___ Has ability to listen and to understand others
- ___ Has ability to keep confidences
- ___ Sense of humor
- ___ Self-confidence
- ___ Energetic
- ___ Frequently included in dorm activities
- ___ Well-liked by peers
- ___ Trusted by others
- ___ Able to accept criticism

Appendix R
Conversation Skills Assessment

CSPT

CODE:

Your first initial	Mother's first initial	Last two digits of your SSN	Day of your birth
-------------------------------	-----------------------------------	--	----------------------------------

Directions for Statements 1 through 5

Rate each of the four responses given to the statement in order of the response's helpfulness:

- | | |
|----------------------|---|
| High (H) Response: | The response is extremely helpful. |
| Medium (M) Response: | The response is of some help to another person. |
| Low (L) Response: | The response is not helpful to another person. |

Statement 1

"My boyfriend is really mad because I'm planning to spend short term working in Atlanta. He thinks I'm going to meet someone else."

Responses for Statement 1

- _____ 1a. You must have done something to make him distrust you.
- _____ 1b. Hey, it's really none of his business. You don't have to get his approval.
- _____ 1c. It's hard when you and your boyfriend argue.
- _____ 1d. It is upsetting because your boyfriend is giving you a hard time about being away. It sounds like you feel like he doesn't trust you.

Statement 2

"Nobody here likes me -- they're all just a bunch of rich snobs and they look down on me because I never have as much money as they do."

Responses for Statement 2

- _____ 2a. Why don't you stop pouting about it and find friends who are more genuine?
- _____ 2b. It makes you feel bad that people judge you by what you have instead of what kind of person you are.
- _____ 2c. You'd like to be friends with people here, but they act like they're not interested in you . . . you wonder what you should do.
- _____ 2d. Look, I agree. The women here are all a bunch of snobs -- you don't need them anyway!

Statement 3

"I'm really bummed -- my parents are getting a divorce and now my mom wants me to move to California with her and go to school out there! I love my mom, but I really like Hollins."

Responses for Statement 3

- _____ 3a. You feel really sad over your parent's divorce and worried about the changes it's going to make in your life, too.
- _____ 3b. Don't worry, things always get better!
- _____ 3c. Yeah, I know what you mean. My parents got divorced last year; you feel like the whole world is really going crazy.
- _____ 3d. Wow! Moving to California sounds great! Think of all the cute guys!

Statement 4

"I tried to ask Michael to use a condom when we had sex last night, but he acted like he was really insulted -- like I thought he had some kind of disease or something."

Responses for Statement 4

- _____ 4a. You just have to accept the fact that Michael doesn't want to use a condom.
- _____ 4b. You're really concerned about your sexual health and you want to use condoms, but it sounds like you're afraid of hurting Michael's feelings.
- _____ 4c. Why don't you just tell him to either use a condom or no sex!
- _____ 4d. Why don't I pretend I'm Michael and you can practice asking him to use a condom.

Statement 5

"My best friend from home hates all my new friends here. She calls them "Hollie Collies" and won't even give them a chance!"

Responses for Statement 5

- _____ 5a. You must be doing something to make your friend from home feel left out!
- _____ 5b. Why don't you try getting your friend from home together with friends from Hollins! Then they'll see how much fun they can have together.
- _____ 5c. You feel pulled in two directions -- you want to be able to make new friends here, but you don't want to hurt your friend from home.
- _____ 5d. Hey, you have a right to be friends with anyone you want. Don't worry about your friend from home -- she'll come around.

Directions for Statements 6 through 10

For each of the five statements to follow, write what you consider would be a helpful response to the person if the statement was made to you.

Statement 6

"I should never have tried to straighten things out between Laura and Rick. Now they both hate me for trying to interfere. If that's the way they want to be about it, that's just fine. I was just trying to help!"

Write what you would say:

Statement 7

"My parents want me to come home over spring break, but I really want to go skiing with my friends. I don't want to hurt my mom and dad's feelings; but I'm going to be home all summer, and this is the last chance I'll have to spend time with friends from school."

Write what you would say:

Statement 8

"I really hate my roommate. She's driving me crazy . . . she throws her clothes all over my side of the room and she monopolizes the phone!"

Write what you would say:

Statement 9

"I know Jeff and I should always use a condom when we have sex; I mean, I worry about all the different sexual partners we've both had. But using a condom seems to destroy all the spontaneity, especially for Jeff."

Write what you would say:

Statement 10

"I'm really worried. I started sleeping with a guy from W & L that I found out is sleeping with two other women. The problem is I really like him but every time we have sex I feel freaked out that I'm going to get something."

Write what you would say:

Appendix S
Assertiveness Role-Play Scenarios

Roleplay
(Pre)

Scenario I: You and your friends are going to see a movie. Originally, everyone had agreed to go see "Final Analysis" but at the last minute someone suggested going to see the new Friday 13th movie. You feel really uncomfortable seeing really violent films and you would rather see something else.

Friend: Okay, then, it's decided. We'll go see the new Friday 13th.

You: _____

Friend: Oh, come on! Don't be such a baby!

You: _____

Friend: Then maybe you would just rather go by yourself!

You: _____

Scenario II: You and your boyfriend have been seeing each other for several months. You have been engaging in sexual activities that are low risk for AIDS/STDs (Mutual masturbation, massage, kissing and cuddling). You are happy with this for now but your boyfriend wants to have intercourse. How do you respond?

Guy: I really want to make love to you.

You: _____

Guy: Look, we've done everything but have sex. What are you waiting for?

You: _____

Guy: I'm not sure I can go on seeing you like this. I need to have a real relationship.

You: _____

Scenario III: You are at a mixer at W & L. You are feeling really down and kind of lonely. You see a guy who looks interesting to you and you feel attracted to him. You two get to talking and drinking beer together. You go off to find a guest room to talk. After a while, things get heavy. You want to have sex, but you realize neither of you have a condom. You suggest going after some.

Guy: It doesn't matter. We don't need a condom. (He begins to unbutton your blouse.)

You: _____

Guy: Come on. I'll pull out before I come.

You: _____

Guy: You're a big frigging tease.

You: _____

Roleplay
(Post)

Scenario I: You and your friends have agreed to try a new Chinese restaurant on the market. At the last minute, however, someone suggested going instead to an expensive French restaurant, "The Library." You really are running kind of low on cash and anyway you were looking forward to having Chinese.

Friend: Okay, then, it's decided. We'll go to "The Library."

You: _____

Friend: Oh, come on! Don't spoil everyone else's fun.

You: _____

Friend: You're really selfish!

You: _____

Scenario II: You and your boyfriend have been seeing each other for several months. Now you're feeling like you would really like to see other people especially since you're going to be going away for the summer. However, your boyfriend is really putting pressure on you to just see him.

Guy: I don't like the idea of us dating other people.

You: _____

Guy: Look, I thought you loved me and I loved you.

You: _____

Guy: Okay, fine, if you want to be a slut and sleep around, it's up to you.

You: _____

Scenario III: You're at a really great party. You've had a little bit too much wine to drink and the guy you're with is really sexy. You've gone out with him before but you've never slept together. Tonight's the night! Things get really heavy and you bring out a condom you always carry "just in case."

Guy: Wow! Miss Everready! You must really have quite a love life!

You: _____

Guy: Well, you don't need to use a condom with me -- I'm clean!

You: _____

Guy: What is it? Do you have some kind of disease?

You: _____

Appendix T
Assertiveness Role-Play Rating Criteria

SEXUAL ASSERTIVENESS RATING CRITERIA

Assertion, or assertiveness, is behavior in which one stands up for one's rights and says directly what one believes, wants, and feels. Assertive people do this appropriately and honestly while respecting other people's rights as well. The assertive person speaks up in her own defense, but does so without any effort to harm or put down another person.

Consider the following scenario involving Lisa, who has been out with John several times. She's worried about sexually transmitted diseases, and their relationship has been getting more passionate. One night, after some kissing and petting that they both enjoyed, she decides to bring up her concerns.

Lisa: (Pushes John back and looks at him) John. (Sighs). I need to stop for a minute. I need to talk.

John: What for?

Lisa: Things are going pretty fast here, and I'm...just worried about going too fast.

John: What's to worry about if you feel good? (He tries to kiss her on the neck.) Come on, Lisa.

Lisa: (Leans back a bit.) John, you know I like you and I'm very attracted to you and right now I want this as much as you do, but (she takes a deep breath) I think we need to talk about...protection... about using a condom... before we go any further.

Notice that Lisa sticks to the point of what she needs. She expresses her views without putting John down. Since John was not out of line in merely wanting to continue enjoying what they were doing, she does not get angry.

Aggression, on the other hand, is behavior aimed at hurting or dominating.

For example, consider Brent and Linda. Linda has asked Brent to use a condom, but he doesn't want to.

Brent: You know how much I want to be with you and I don't feel like stopping to go get a condom.

Linda: Cut it out, Brent! You men are all the same!

Linda's response is aggressive. She lashes out at Brent and labels him and all men. She might really prefer that her outburst not escalate

into bad feeling between them. She would rather have spared his feelings, since he was just asking for--not forcing--what he wanted. But she wanted Brent to use a condom and she didn't know how to be assertive. An assertive response would have been:

Linda: I know it's a hassle, Brent. But I'm just not comfortable having sex without a condom.

Brent: Okay, if it means that much to you.

Here she showed she was sensitive to Brent's feelings, but she made it clear what she wanted.

In a nonassertive response a person does not stand up for his or her own wants and needs. This behavior usually comes from feeling helpless and threatened. An example is Amy and Jim, who are sitting in a car kissing. Jim starts to unbuckle Amy's belt. Amy takes his hand away.

Jim: Come on, Amy. You know I want you.

Amy: Oh, Jim, I don't know, I just...I don't think we should.

Jim: Just stay out here a little longer.

Amy: But, Jim...you know, you really turn me on, you know you do...but we just met last week and...

Jim: I thought you were as turned on by me as I am by you. Are you seeing someone else?

Amy: No, I'm not. (He gives her a very long kiss. She's aroused and thinking she doesn't want to lose him. After a while they go inside and have intercourse, without a condom.)

Amy did not stand up for her rights. Although she was feeling passionate, she also was worried because she knew she was endangering herself as long as she did not talk over sexual protection with Jim. She allowed sex to progress to the point where it was too late to discuss risk. And, of course, as we all know, sexual attraction tends to distort judgment so that Jim seems more and more wonderful and disease-free. But she's known him only a week and could not possibly have enough information to justify taking a sexual risk with him.

There are three kinds of assertiveness.

The first kind of assertiveness is empathic assertion. In this case, the individual asserts himself by first acknowledging the other person's feelings--that is, showing sensitivity to the other person before asserting oneself.

For example, if Kara is being pressured verbally by Joe, she could be assertive and still empathetic:

Joe: (Pulls her to him, kisses her) Come on, Kara, please, what's holding us back?

Kara: I know you'd like to make love, Joe, but I'm not ready for that.

Here Kara has stood up for her own feelings, but she has been sensitive to Joe and does not try to hurt him. She sticks to the subject of her own reactions.

The second kind is escalating assertion, in which the person begins with mildly expressing herself, but, because her partner does not listen or respond, the intensity of her statements escalates.

For example:

Joe: Come on, Kara, you know you want me.

Kara: I...I'm just not ready to go that fast. Let's be responsible, like they say.

Joe: Come on, you know you need it. Kara, I just want you so much. (He tries to pull her toward him.)

Kara: I want you, too, but...not yet.

Joe: What's your problem, hon? You got a problem with sex or something?

Kara: I really get mad when you talk like that! I said I'm not ready, and I don't appreciate being put down.

The third kind of assertion is confrontive assertion. One confronts a partner when he does something that contradicts what he agreed to do.

Suppose, for example, Kaye has told Rick that she doesn't feel comfortable making love in the dorm that she would rather be more discrete. Rick agrees to respect her wish, but two weeks later, he goes back to pressuring Kaye for sex in the dorm.

Rick: Mmmmmmm...(he runs his hands over her breasts.) Want to lie down awhile?

Kaye: Rick! What's going on here? We talked about this and now here you go again. I'm really upset--don't you remember what we agreed?

Here Kaye confronts Rick directly with the fact that he's not living up to what he said. She doesn't let him get by with it, but she does not respond aggressively. She sticks to the point.

SEXUAL ASSERTIVENESS RATING CRITERIA

<u>Subject</u>	1-4							
<u>Global</u>	<u>Empathy</u>	<u>Escalating</u>	<u>confrontive</u>	<u>Aggression</u>	<u>Pre</u>	<u>Post</u>	<u>Undeter.</u>	
<u>Subject A</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject B</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject C</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject D</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject E</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject F</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								
<u>Subject G</u>								
<u>Roleplay 1</u>								
<u>Roleplay 2</u>								
<u>Roleplay 3</u>								

Subject	1-4 Global	Empathy	Escalating	Confrontive	Aggression	Pre	Post	Undeter.
<u>Subject H</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject I</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject J</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject K</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject L</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject M</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject N</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject O</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								

Subject	1-4 Global	Empathy	Escalating	Confrontive	Aggression	Pre	Post	Undeter.
<u>Subject P</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject Q</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject R</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject S</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject T</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject U</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject V</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								
<u>Subject W</u>								
Roleplay 1								
Roleplay 2								
Roleplay 3								

	1-4							
Subject	Global	Empathy	Escalating	Confrontive	Aggression	Pre	Post	Undeter.
Subject X								
<u>Reply1</u>								
<u>Reply2</u>								
<u>Reply3</u>								
Subject Y								
<u>Reply1</u>								
<u>Reply2</u>								
<u>Reply3</u>								
Subject Z								
<u>Reply1</u>								
<u>Reply2</u>								
<u>Reply3</u>								

SEXUAL ASSERTIVENESS RATING CRITERIA

Assertion, or assertiveness, is behavior in which one stands up for one's rights and says directly what one believes, wants, and feels. Assertive people do this appropriately and honestly while respecting other people's rights as well. The assertive person speaks up in her own defense, but does so without any effort to harm or put down another person.

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The second kind is escalating assertion, in which the person begins with mildly expressing herself, but, because her partner does not listen or respond, the intensity of her statements escalates.

The third kind of assertion is confrontive assertion. One confronts a partner when he does something that contradicts what he agreed to do.

Global rating: Overall, how assertive was the individual's response?

- 3 = Above average assertiveness**
- 2 = Average assertiveness**
- 1 = Mildly assertive**
- 0 = Not assertive**

Appendix U
Assertiveness Self-Report Inventory

ASRI

Read each question carefully and answer all 25 of them. Circle either 'True' (T) or 'False' (F), whichever most represents your viewpoint.

- T F 1. When my date has acted rudely at a party, I don't hesitate to let him/her know I don't like it
- T F 2. I feel guilty after I ask my neighbor to be quiet after midnight on a week night.
- T F 3. After eating an excellent meal at a restaurant, I do not hesitate to compliment the chef.
- T F 4. If I were stood up on a date, I would tell the person who stood me up that I felt angry.
- T F 5. When I get a terrible haircut and my hair stylist/barber asks me how I like it, I say I like it.
- T F 6. I would feel self-conscious asking a question in a large lecture class.
- T F 7. I usually let my friends have a larger portion of food at social gatherings and take a smaller one for myself.
- T F 8. When on a date I act cheerful, even though I am depressed, so as not to upset my date's mood.
- T F 9. I feel justified when I send improperly cook food back to the kitchen in a restaurant.
- T F 10. When people I don't know wear nice outfits, I hesitate to compliment them
- T F 11. I'm not likely to tell my date that I am irritated when he/she pays more attention to others and ignores me.
- T F 12. I tip a consistent percentage to a waitress despite receiving poor service.
- T F 13. When an interviewer cancels an appointment for the third time I tell him/her that I am annoyed.
- T F 14. When a roommate makes a mess I would rather clean it up myself rather than confront him/her about it.
- T F 15. If I received a call late at night from a casual acquaintance, I would say I was sleeping and ask not to be called so late.
- T F 16. When people use my car and don't refill the tank, I let them know I feel unfairly treated.
- T F 17. I find it difficult to ask a favour of a stranger.
- T F 18. If my stereo were stolen, I wouldn't regret reporting it to the police even if I suspected a friend.
- T F 19. If I were going out with friends for an evening and my boyfriend/girlfriend did not want me to, I would do it anyway.
- T F 20. I feel comfortable engaging in discussions in a group, even when my views are different from the majority opinion.
- T F 21. I feel guilty when my boyfriend/girlfriend wants to go to a movie, but we go where I wanted to instead.
- T F 22. When my roommate consistently fails to take an accurate telephone message, I let him/her know I'm upset.
- T F 23. When people use abusive language around me, I ignore it even though it bothers me.
- T F 24. If someone makes loud noises when I am studying at the library, I will express my discontent.
- T F 25. I feel guilty telling my boyfriend/girlfriend that I have to do homework this evening instead of seeing him/her.

Curriculum Vita

Curriculum Vita

Deborah A. Webster

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Blacksburg, Virginia
Major Professor: Richard A. Winett, Ph.D.

Doctoral Dissertation: The Women's Health Project: A community
intervention for AIDS risk reduction in women.
Honors: NIMH National Research Award (1992);
Women's Research Institute Grant (1991)

1992-93

Predocotoral Internship in Clinical Psychology
Medical University of South Carolina
Department of Psychiatry and Behavioral Sciences
Charleston, South Carolina 29425-0742

1989

Master of Arts, Experimental Psychology
Hollins College
Roanoke, Virginia 24020
Major Professor: Randall K. Flory, Ph.D.

Master's Thesis: Cognitive and affective differences between
weight-preoccupied and not weight-preoccupied individuals.
Honors: Graduate Fellowship (1987-1988); Psi Chi (1987)

1987 Bachelor of Arts, magna cum laude, Department of Psychology
Armstrong State College
Savannah, Georgia

Major: Psychology
Minor: American History
Honors: Who's Who Among Students in American Universities
and Colleges (1987); Silver "A" for Service (1987);
Outstanding Young Women of America (1986);
Dean's List (1985 - 1987)

Other Educational Experience

- October 16, 1992 The narcissistic personality: Assessment and treatment issues (workshop; 6 hours). Presented by Paul Lerner, Ph.D.
Sponsored by the South Carolina Psychological Association
Charleston, South Carolina
- April 8, 1992 Introduction to short-term dynamic psychotherapy (workshop; 4 hours).
Presented by Stephen Heinz, Ph.D. and Jason Worchel, M.D.
Sponsored by the Virginia Psychological Association
Roanoke, Virginia
- April 8, 1992 Couple's therapy (workshop; 3 hours). Presented by Neil Jacobson,
Ph.D.
Sponsored by the Virginia Psychological Association
Roanoke, Virginia
- November 23, 1991 The utility of psychodynamic techniques in the practice of cognitive
behavior therapy (workshop; 3 hours). Presented by R. M. Turner, Ph.D.
Sponsored by the Association for Advancement of Behavior Therapy
New York, New York
- March 23, 1991 Working with adult survivors of childhood sexual abuse (workshop;
8 hours). Presented by C. A. Courtois, Ph.D.
Sponsored by the Virginia Association for Marriage and Family Therapy
Williamsburg, Virginia
- April 9, 1990 MMPI-2 (workshop; 3 hours). Presented by R. Fowler, Ph.D.
Sponsored by the Southeastern Psychological Association
Atlanta, Georgia
- November 3, 1989 Preventing AIDS: Strategies for primary and secondary preventions
(workshop; 3 hours). Presented by T. J. Coates, Ph.D.
Sponsored by the Association for Advancement of Behavior Therapy
Washington, D. C.

Professional Affiliations

American Psychological Association
Student Affiliate, 1986 - Present

Division of Clinical Psychology
of the American Psychological Association, 1989 - Present

Association for Advancement of Behavior Therapy, 1989 - Present

Society for Community Research and Action: The Division of
Community Psychology of the American Psychological Association,
1991

Southeastern Psychological Association, 1987 - Present

Virginia Psychological Association, 1992

Supervised Clinical Experience

September, 1992 **Predoctoral Psychology Intern**
to
August, 1993 Medical University of South Carolina
Charleston, South Carolina

Duties: 1) Weight Management center: Outpatient assessment and
treatment of mild to severe obesity, individual psychotherapy, group
psychoeducational groups.

(24 hours/week for 26 weeks = 624 hours)

Supervisor: Patrick O'Neil, Ph.D.

2) MUSC Counseling and Psychological Services: Treatment of adults
presenting with a wide range of psychological disorders, including mood
disorder, chronic pain, and personality disorders.

(24 hours/week for 26 weeks = 624 hours)

Supervisor: Darlene Shaw, Ph.D.

3) The Crime Victims Center: Assessment and treatment of adult and
child victims of sexual assault using cognitive behavioral and family
therapy strategies.

(24 hours/week for 26 weeks = 624 hours)

Supervisor: Dean Kilpatrick, Ph.D.

4) Institute of Psychiatry: Ongoing treatment of adults discharged from
in-patient psychiatric care.

(24 hours/week for 26 weeks = 624 hours)

Supervisor: Sidney Jordan, Ph.D.

5) Institute of Psychiatry Treatment Center: The application of behavioral
medicine techniques.

(24 hours/week for 26 weeks = 624 hours)

Supervisor: John Roitzsch, Ph.D.

September, 1991 **Psychology Extern**
to Salem Veterans Administration Medical Center
May, 1992 Salem, Virginia

Duties: Inpatient- and outpatient-based assessment and therapy for veterans presenting with a variety of mood, anxiety, and personality disorders with routine screening for neurological disorders. Caseload of two long-term clients and conducted three-four comprehensive assessments per month. Therapy was conceptualized from an eclectic perspective which typically involved assessment and development of treatment within a framework of social learning and systems theory. (8 hours/week for 16 weeks = 290 hours)
Supervisor: Jerome Gilmore, Ph.D.

August, 1990 **Graduate Clinician**
to Psychological Services Center
May, 1991 Blacksburg, Virginia

Duties: Outpatient assessment, diagnosis, and treatment of adults presenting with a wide variety of problems (i.e., depression, marital difficulties, low self-esteem, stress-related health problems, and sexual impulse control). In addition to conducting individual therapy with a caseload of one-two clients throughout the year, I provided case supervision for first- and second-year clinicians. As a supervisor, I employed both direct and indirect observation (videotape). (10 hours/week for 24 weeks = 240 hours)
Supervisors: Carolyn Pickett, Ph.D., Robert Stephens, Ph.D.

May, 1990 **Graduate Clinician**
to Center for Behavioral Medicine
August, 1990 Radford, Virginia

Duties: Outpatient and inpatient assessment, diagnosis, and treatment of adults presenting with chronic pain. I participated as a member of a multidisciplinary (i.e., medicine, social work, nursing, psychology, physical therapy) treatment team which worked to formulate individualized treatment plans based on client need. During my externship, I served as case manager for approximately four client cases on which I coordinated various treatment services as well as provided individual cognitive therapy. I also administered assessment protocols and treatment plans which included biofeedback, progressive muscle relaxation, thermal self-regulation, stress management counseling, and other behavior therapies. Additionally, I conducted cognitive/behavior group therapy sessions two-three times per week. (40 hours/week for 12 weeks = 480 hours)
Supervisor: Bruce Walker, Ph.D.

August, 1989
to
May, 1990

Graduate Clinician
Psychological Services Center
Blacksburg, Virginia

Duties: Second-year clinical duties included an ongoing caseload of four-six clients throughout the year. As a graduate clinician, I provided assessment, diagnosis, and treatment for a broad range of patients, both adults and children, presenting with various behavioral disturbances, emotional problems, family and social adjustment problems, and health-related disorders. Depending on the nature of the case, both short- and long-term intervention were employed including such behaviorally oriented therapies as assertiveness training, parent effectiveness training, cognitive restructuring, and social skills training. In addition, I utilized experiential-cathartic techniques with clients reporting trauma associated with childhood incest. (15 hours/week for 32 weeks = 480 hours)

Supervisors: Laura Clark, Ph.D., Ross Greene, Ph.D.

August, 1988
to
May, 1989

Graduate Clinician
Psychological Services Center
Blacksburg, Virginia

Duties: As a first-year clinical student, I was introduced to family and individual assessment, interviewing, intervention, and community consultation. I carried a client caseload of one-two cases throughout the year on which I received intensive supervision including the direct and indirect (videotape) observation of sessions by my supervisors. My exposure to treatment modalities included primarily social learning theory and cognitive/behavioral techniques. (10 hours/week for 24 weeks = 240 hours)

Supervisors: Carolyn Pickett, Ph.D., Russell Jones, Ph.D.

Additional Clinical Experience

February, 1990
to
March, 1990

Co-Leader, Adolescent Anger Control Group
Alternative School, Christiansburg, Virginia
Supervisor: Laura Clark, Ph.D.

Duties: Group therapy involving the use of social skills training and self-management training with adolescent males 14-18 years of age who presented with aggressive behavior patterns and cognitive-behavioral skills deficiencies related to anger control. Group participants received instruction in self-monitoring techniques such as the recording of the physiological, cognitive, and overt motoric responses that compose an aggression sequence. Brief relaxation techniques (i.e., deep breaths), assertion techniques (i.e., broken record, fogging), problem-solving, and the utilization of contingency statements (i.e., "If I (misbehavior now), I will (future negative consequences)") were used to enable participants to exert more adaptive self-control over anger.

May, 1989
to
August, 1989

Summer Extern
Closed Head Injury Case Study
Hollins Communications Research Institute
Hollins College, Roanoke, Virginia

Duties: Conducted a series of probe exercises to determine the extent to which a brain-damaged young adult male could produce specific speech sounds and speech sound combinations.

Teaching Experience

August, 1991
to
May, 1992

Psychology of Learning
Sophomore level course
Department of Psychology
Virginia Polytechnic Institute and State University

Duties: Responsible for all phases of teaching including the preparation and administration of lectures, selection of reading materials and assignments, construction of examinations, and the assignment of course grades.

August, 1991
to
May, 1992

Independent Research Practicum
Senior level course
Department of Psychology
Hollins College

Duties: Responsible for supervising students in an ongoing community prevention intervention and on a selected research paper.

August, 1988
to
December, 1988

Introductory Psychology/Discussion Section
Freshman/Sophomore level course
Department of Psychology
Virginia Polytechnic Institute and State University

Duties: Responsible for leading students in discussion of relevant reading materials and for the assignment of grades.

Research Experience

September, 1992
to

Medical University of South Carolina.

August, 1993

I am currently involved with two research projects: 1) the effect of body image on weight management outcome; and 2) the impact of sexual assault on AIDS-related fears.

May, 1991 **Doctoral Dissertation.**
to
September, 1992 The Women's Health Project: A community intervention for AIDS risk reduction in women.

The purpose of the dissertation project was to test whether an experimental behavioral intervention based on social influence and diffusion of innovation principles combined with standard educational materials produced greater changes in indices of AIDS risk behavior than standard educational material alone. The proposed project used a randomized experimental field design to compare a community intervention (AIDS education materials plus the training of individuals identified as popular opinion leaders to serve as peer behavior-change agents) with a comparison intervention (AIDS education materials alone). The study was conducted at a small liberal arts college for women in Virginia.

November, 1988 **Research Assistant.**
to
October, 1991 Family/media approach to AIDS prevention project.
Richard A. Winett, Ph.D.

Duties included working approximately twenty hours per week on Dr. Winett's NIMH-funded study of AIDS risk reduction among male and female adolescents, 12-14 years of age. In the course of this research, I conducted approximately fifty structured in-home family interviews involving assertion and problem-solving skills assessment. In addition, I developed participant recruitment techniques and recruited between 200 and 300 families.

August, 1987 **Master's Thesis Research.**
to
August, 1988 Cognitive and affective differences between weight-preoccupied and not weight-preoccupied individuals.

Differences between weight-preoccupied and not weight-preoccupied undergraduate women, identified by the Drive for Thinness (DT) subscale of the Eating Disorders Inventory (EDI), were investigated along several dimensions: Irrational beliefs, depression, anxiety, and anger expression. One hundred thirty-six female college students completed the EDI, the Rational Behavior Inventory, the Zung Self-Rating Depression Inventory, the State-Trait Anxiety Inventory, and the State-Trait Anger Scale. Highly weight-preoccupied individuals showed higher irrational belief scores including Catastrophizing, Inertia and Avoidance, and Downing of Self and Others. High DT participants also scored high on other EDI Subscales: Bulimia, Body Dissatisfaction, Interoceptive Awareness, and Perfectionism. High and medium weight-preoccupied individuals were more depressed and anxious than low weight-preoccupied individuals. Highly weight-preoccupied women suppressed anger more than not weight-preoccupied individuals. Results support research linking dieting to patterns of binge eating and purging. Implications for therapy and prevention are discussed.

Publications and Presentations

- Winett, R. A., Moore, J. F., Anderson, E. S., Hyte, L. A., Neubauer, T. E., Hook, R. J., Wagner, J. L., Lombard, D., Sikkema, K. J., Webster, D. A., Taylor, C. D., Leahy, M., & Walker, W. B. (in press). Broad definition of social validity illustrated by two health behavior change projects. Journal of Applied Behavior Analysis.
- Winett, R. A., Anderson, E. S., Moore, J. F., Webster, D. A., Hook, R. J., Taylor, C. D., Neubauer, T. E., Sikkema, K. J., Mundy, L. L., & Winett, E. A. (1992, March). Family/media approach to HIV prevention: Results of efficacy studies with a home-based video program. In R. Mermelstein (chair), Blue Ribbon Papers: Innovative Approaches to AIDS/HIV Prevention. Paper session (with special citation) presented at the annual meeting of the Society for Behavioral Medicine, New York City.
- Winett, R. A., Anderson, E. S., Moore, J. F., Sikkema, K. J., Hook, R. J., Webster, D. A., Taylor, C. D., Dalton, J. E., Ollendick, T. H., & Eisler, R. M. (1992). Family/media approach to HIV prevention: Results with a home-based, parent-teen video program. Health Psychology, *11*, 203-206.
- Winett, R. A., Anderson, E., Sikkema, K. J., Hook, R., & Webster, D. A. (1990, August). A Family/Media Approach to AIDS Prevention. Symposium conducted at the 98th Annual Convention for the American Psychological Association, Boston, Massachusetts.
- Winett, R. A., Moore, J. F., Anderson, E. S., Sikkema, K. J., Hook, R. J., Webster, D. A., Taylor, C. D., & Dalton, J. E. (1990) Family/Media approach to AIDS prevention, Interim Report, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Webster, D. A. (1990, April). Cognitive and affective differences between weight-preoccupied and not weight-preoccupied individuals. Poster presentation for the Southeastern Psychological Association, Atlanta, Georgia.

Additional Professional Experience

1991 - Present American Journal of Community Psychology
Student Editorial Board

Duties: Review and evaluate submitted manuscripts in terms of their suitability for publication and make recommendations to the editor.

References

Richard A. Winett, Ph.D.
Director Center for Research in Health Behavior
Professor of Psychology
Department of Psychology
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061
(703) 231-8747

Patrick O'Neil, Ph.D.
Director Weight Management Center
Medical University of South Carolina
171 Ashley Avenue
Charleston, South Carolina 29425
(803) 792-2273

Darlene Shaw, Ph.D.
Director Counseling and Psychological Services
Institute of Psychiatry
Medical University of South Carolina
171 Ashley Avenue
Charleston, South Carolina 29425
(803) 792-4930

Thomas Ollendick, Ph.D.
Director of Clinical Training
Professor of Psychology
Department of Psychology
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061
(703) 231-6451

Jack Finney, Ph.D.
Director Child Study Center
Professor of Psychology
Department of Psychology
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061
(703) 231-6670

