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Factors Related to the Adoption of Risk Reducing Behavior for Hiv in Women: A Community Based Study

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LOYOLA UNIVERSITY OF CHICAGO

FACTORS RELATED TO THE ADOPTION OF RISK REDUCING BEHAVIOR
FOR HIV IN WOMEN: A COMMUNITY BASED STUDY

A THESIS
PRESENTED TO THE FACULTY
OF THE GRADUATE SCHOOL
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
MASTER OF ARTS

DEPARTMENT OF PSYCHOLOGY

BY

TRICIA LYNN HUNTER

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VITA

The author was born in Evanston, Illinois, February 1, 1969. She received a Bachelor's degree in Psychology from the University of Illinois, Champaign-Urbana in 1990. She was awarded the Patricia Roberts Harris Fellowship in 1990 following her admission into the Clinical Psychology program at Loyola University of Chicago.

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CHAPTER I
INTRODUCTION

Human Immunodeficiency Virus (HIV) has long surpassed its original demographic boundaries and has developed into a problem for persons of all sexual orientations, ethnic backgrounds, and socio-economic groups (Mays & Cochran, 1988). Association with groups such as gay men or persons who use injection drugs has lost its specificity in identifying persons at risk for HIV infection which now entails an assessment of behaviors which afford transmission of HIV. Heterosexual contact as a mode of transmission has increased dramatically, as evidenced by 11 percent of persons with Acquired Immunodeficiency Syndrome (AIDS) being women, of which 37 percent were infected through heterosexual contact (CDC, 1992), placing the AIDS epidemic among the top ten causes of death for women of reproductive age (Chu, Buehler, & Berkelman, 1990).

Minorities and AIDS

There is an overrepresentation of AIDS cases among African-Americans, who despite constituting only 12 percent of the general population, account for nearly 29 percent of current AIDS cases (CDC, 1992). African-Americans and

homosexual men with AIDS and have not witnessed the overall declines in reported AIDS cases observed in the gay community (Mays & Cochran, 1988). Furthermore, of all women with AIDS, over half are African-Americans (CDC, 1992). The literature attributes the increasingly disproportionate number of minority cases, as well as observed subpopulation differences in modes of transmission of HIV, to behavioral and environmental factors that vary across different groups.

For instance, though women overall are engaging in sexual intercourse at younger ages and marrying later in life, the first sexual experience for African-Americans is at an earlier age compared to their white counterparts (Bachran & Horn, 1988). This longer period of premarital sex may be associated with increased risk for sexually transmitted diseases, including AIDS, in these women. Additionally, these alarming numbers appear to be at least partially the result of injection drug use, not uncommon in poor urban areas (CDC, 1992). Selik, Castro, and Pappaioanou (1988) found that higher relative risk in African-Americans and Hispanics was associated with drug use by heterosexuals and bisexuals. Another study which analyzed the AIDS Public Information Data Set (PDIS), found that for African-American and Hispanic females and heterosexual males, drug use was the most frequently reported mode of HIV transmission (Peterson & Bakeman, 1989).

In addition to ethnic differences, gender differences

have been shown to exist. Peterson and Bakeman (1989) found that for women, unlike men, heterosexual contact was among the most important modes of transmission. Taken together, this literature suggests that AIDS may be a more diverse epidemic for African-Americans (Mays & Cochran, 1988) as well as other minority groups, justifying AIDS research that assesses differences within these diverse groups.

It has been the assumption that knowledge or a lack of knowledge is a contributing factor to the increasing numbers of HIV cases in urban minority groups. Studies have found that minorities evidence less accurate knowledge concerning the transmission of HIV (DiClemente, Boyer, & Morales, 1988; Kalichman, Hunter, & Kelly, in press) and are less knowledgeable about the existence of the HIV antibody test (Hardy & Dawson, 1990). Both race and education have served as predictors of AIDS knowledge (Aruffo, Coverdale, & Vallbona, 1991). Interestingly, African-American college students have been found to have adequate knowledge about the basic facts of AIDS, but held inaccurate information concerning viral transmission (Thomas, Gilliam, & Iwrey, 1989). Greater levels of perceived risk, despite ethnicity, have been demonstrated to result from lower levels of knowledge and misconceptions about AIDS (DiClemente, Boyer, & Morales, 1988). This implies that accurate knowledge is not only associated with discouraging underestimation of risk level but also with unnecessarily overestimating risk

level. Accurate knowledge about viral transmission, thus facilitates a realistic personal assessment of risk, whereas inaccurate information may cause overestimation or underestimation of risk level.

To date, assessments in risk behavior among minorities have yielded unclear results. Schilling, El-Bassel, Schinke, Gordon, & Nichols (1992) found that African-American women reported less change in risk behavior and were less likely to purchase and carry condoms than Caucasian or Hispanic women. This may contradict Kalichman, Kelly, & Hunter (in press) who found that minority women reported higher rates of protected intercourse than nonminority women. The discrepancy in these studies may be the result of a lack of clarity concerning whether condoms were being used by the subjects as a means of contraception or HIV risk reduction. Irrespective of these findings, it is important to note that Kalichman et al. (in press) found that for vaginal intercourse, on average, condoms were used only 40% of the time among women at high risk for HIV who did not differ from women at low behavioral risk.

It is well established in the health promotion literature, that risk reducing behavior is related to acknowledging one's personal susceptibility to a particular health problem and that individual's consistently underestimate their personal risk. This phenomenon has been shown to be applicable to AIDS. A study of homosexual and

bisexual men reported that gay men who believed they were at higher risk underestimated the risk of their sexual behaviors (Bauman & Siegel, 1987). This unrealistic optimistic bias may be serving as a barrier to the adoption of risk reducing behavior (Weinstein, 1982). Consistent predictors found to maintain risk reducing behavior in homosexual populations have been perceptions of social norms, efficacy of making behavioral changes, substance use patterns, relationship status, personal vulnerability, accurate self-appraisal of risk, and past risk behavior reinforcement history (Kalichman, Kelly, & St Lawrence, 1990). Such predictors have yet to be as extensively studied in heterosexual populations.

Kalichman et al. (in press) assessed women's perceived risk in an urban sample and found that African-American women engaging in high risk behaviors, as defined by self-reported drug use and sexual behaviors, perceived themselves to be at less risk than Caucasian women engaging in equivalent high risk behaviors. This finding indicated that minority women may have differential perceptions concerning AIDS. The literature that has assessed minority women, supports the need for research that assesses the risk behaviors, perceptions, and knowledge of this population. Gathering such information is pertinent to reducing risk behavior in urban women who have been identified to be at increasing risk for HIV infection. Such reasoning is

supports the need for research that assesses the risk behaviors, perceptions, and knowledge of this population. Gathering such information is pertinent to reducing risk behavior in urban women who have been identified to be at increasing risk for HIV infection. Such reasoning is consistent with literature that suggests that for many African-Americans, the AIDS epidemic is not yet a personal reality, but represents a set of numbers holding minimal personal relevance (Thomas et al., 1989).

A Need for Culturally Sensitive Interventions

As AIDS has increasingly developed into a concern for heterosexual populations, media based educational campaigns have increased their scope. For example, Crawford, Jason, Riordan, Kaufman, Salina, Sawalski, Ho, & Zolik (1990) implemented a large scale intervention in Chicago addressing the issue of AIDS and the family, and subsequently evaluated its effectiveness. Through the use of broadcasts on a local television station and supplements published in a local newspaper, a multimedia approach was used in an attempt to disseminate information to large segments of the population. Mays and Cochran (1988) suggested that television is a major source of information for African-Americans who may view it as a more credible source compared to other groups. Crawford et al's. program was designed to focus on the family and its role in educating its members about HIV. This intervention embedded information in a familial and

program and read the supplements. In addition, there was also an increase in communication among parents and adolescents in the experimental condition. Due to the prevalence of HIV in the population, it has been suggested that the media, if utilized effectively can be a means for informing large numbers of people about AIDS (Crawford & Jason, 1990). Due to the lack of additional research, there is little evidence that such campaigns have been effective in reducing risk behavior in urban women.

The increasingly disproportionate number of African-Americans with HIV may suggest the apparent ineffectiveness of most media campaigns in reaching minority populations (Kalichman et al, in press). It seems plausible that the numbers may be partially attributable to a failure of African-Americans to perceive themselves as being vulnerable to HIV infection and consequently failure to adopt precautionary behavioral patterns. The way in which AIDS was first featured in the media and public health messages may have contributed to a perception on the part of many heterosexuals that there was little cause for concern (Siegel & Gibson, 1988). As noted by Weinstein (1988), "as long as people do not see themselves as being at risk, they will not seek out information and will pay relatively little attention to hazard communications." Thus, increasing perceived vulnerability for HIV infection in urban women may be dependent on the development of specific interventions

that target this population subgroup.

Effective prevention programs emphasize population specific issues focusing on racial, cultural, and religious factors (Mays & Cochran, 1988), as well as taking into account sociodemographic characteristics of the population (Holmes, Karon, & Kreiss, 1990). For example, familialism, collectivism, *simpatia*, and *personalismo* are values that are a part of Hispanic culture (Marin, 1989), that should be included in any intervention targeting behavioral change in this population. In addition, one needs to consider ethnic concepts of sexuality when intervening with certain populations (Gibson, 1991). For example, Hispanic, and to a lesser degree, African-American cultural values have been reported to oppose homosexuality and bisexuality and emphasize traditional gender roles (Gibson, 1991). After leading focus groups with working class and lower income African-American women, Fullilove, Fullilove, Haynes, and Gross (1990) reported that traditional sex roles still exist for African-American women. The general conclusions made as a result of these small groups have limited external validity but may be applicable to lower SES African-American urban women. Cochran and Mays (1989) suggest that important areas to address when working with groups of urban women are issues surrounding condom use, skills needed to rebut a partner's refusal to use condoms, and alternative methods of sexual expression. Assertiveness training, behavioral self-

management, and social support development have all been found to be effective in facilitating behavioral change among gay men (Kalichman et al, 1990) and may serve as useful skills to be applied when working with urban women.

Current interventions fail to recognize that behaviors are not isolated events but occur within a social context and thus are lacking in sensitivity to population specific issues (Mays & Cochran, 1988; Stuntzner-Gibson, 1991). Minority women who live in poverty are oppressed because of their gender, race, and socioeconomic status. This introduces an entirely new and complex set of issues specific to urban women. Kalichman et al. (in press) reported that minority women reported a variety of problems being more serious than AIDS, placing AIDS as an issue embedded in an array of competing life problems. Thus, any effective program would additionally address a wide diversity of problems (Gibson, 1991).

Research is needed to clarify the impact of different means of providing AIDS information to minorities and facilitating preventive behavior (Aruffo, Coverdale, & Vallbona, 1991). One such study evaluated the effectiveness of culturally relevant AIDS information tapes for African-American urban women. At follow up, women who viewed the experimental tape were more likely to view AIDS as a personal threat compared to women who viewed a standard tape (Kalichman, Kelly, Hunter, Murphy, and Tyler (in press)).

of culturally relevant AIDS information tapes for African-American urban women. At follow up, women who viewed the experimental tape were more likely to view AIDS as a personal threat compared to women who viewed a standard tape (Kalichman, Kelly, Hunter, Murphy, and Tyler (in press)). Knowledge differences were not found in this study suggesting that culturally relevant interventions are necessary for increasing personal susceptibility but may not impact knowledge. Kalichman et al. (in press) demonstrated a need for research identifying population specific issues for use in the development of interventions that incorporate cultural values of urban and minority populations.

A Framework for Understanding

Health Belief Models are widely used in the development of interventions aimed at changing health related behaviors. Previous studies have treated such models as being additive and containing four essential components--personal susceptibility, perceived severity, efficacy and benefit of target behaviors, and barriers to action. Studies with gay men have supported the usefulness of these models in showing that attempts to change behavior are related to some of its components--perceived susceptibility, degree of exposure to AIDS information, and beliefs about AIDS severity (Joseph et al., 1987; Kalichman et al., 1990). Though Health Belief Models may be useful in understanding the AIDS epidemic, elaboration and the incorporation of other frameworks may be

energy, and material resources (Weinstein, 1988). These are all issues that are particularly relevant for urban populations.

Weinstein (1988) proposed a stage model to explain the progression from awareness of the existence of a health problem to behavioral change initiated to prevent or reduce the risk for a given health problem. A stage theory suggests that people behave qualitatively differently at different stages, and that effective interventions and needed information differ depending on the stage (Weinstein, 1988). Weinstein suggested five stages leading to the adoption of precautionary behavior. As a general progression toward risk reducing behavior, each stage encompasses elements that facilitate the transition to the next. The examination of these elements could inevitably lead to increased understanding of factors that may be related to the failure of an individual to change his/her behavior in an attempt to decrease or eliminate the likelihood of contracting a particular health condition such as HIV.

The first stage of this model is an awareness that a disease or condition exists. It seems safe to assume that due to the widespread media campaigns, the vast majority of individuals are aware of the existence of AIDS and thus have progressed to at least stage two which occurs as knowledge is acquired about this condition and the individual begins

to believe that others are vulnerable to the condition. Because of its implications for the development of effective interventions, it is important to assess the relationship of knowledge to behavioral change. For instance, it has been shown that educating individuals about AIDS is a prerequisite, but does not necessarily lead to behavioral change (Mays & Cochran, 1988; Siegel & Gibson, 1988).

Stage three is when a person acknowledges personal susceptibility to a health problem. Associated with this stage is the idea that individuals have mental images of those people who are susceptible to this particular condition. Mental image, as defined by Weinstein (1982), suggests that perceived vulnerability may be related to a comparison of self to a mental image of a person with this specified health problem. According to Weinstein, a comparison is made concerning ones similarity to this image. The importance of such comparison is related to the observation that minority women, partially as a result of the media, may not view themselves as being at risk for HIV because they do not associate themselves with the images portrayed in available health messages (Mays & Cochran, 1988).

Stage four logically follows, as the decision to take precaution is made. The practice of precautionary behavior evolves out of the behavioral intentions characteristic of stage four. According to Weinstein (1988), in addition to

the belief that one is susceptible to a health condition and that there are negative consequences surrounding the condition, one must also believe that the precaution would be personally effective. These three conditions are necessary for stage four, the last of which is related to the idea of perceived controllability. Weinstein (1988) concluded that perceived controllability was related to unrealistic optimism concerning the likelihood of contracting a particular health condition. One study reported that the more control perceived by the subjects, the more convinced they were that their chances were below average for falling susceptible to a hazard (Weinstein, 1982). Another study demonstrated that gay men engaging in protected intercourse, thus exerting control, were found to be less likely to attribute AIDS to external factors (Kelly et al, 1990). The notion of perceived control over contracting AIDS has not yet been investigated in urban women.

The present study used Weinstein's stage model as a framework to further understand the AIDS epidemic in urban women. Three elements mentioned above: knowledge related to HIV transmission; social comparison by the individual of one's mental image of a person with AIDS; and attribution of personal controllability were examined. In addition, levels of concern and risk behavior also related to the model were examined (Weinstein, 1982, 1988). Differences between

to HIV transmission; social comparison by the individual of one's mental image of a person with AIDS; and attribution of personal controllability were examined. In addition, levels of concern and risk behavior also related to the model were examined (Weinstein, 1982, 1988). Differences between minority and nonminority women were examined as well as differences between women of low and high risk, based on self-reported risk behavior histories.

Hypotheses

Hypothesis I. Based on consistent findings in the literature (DiClemente et al., 1988; Kalichman et al., in press; Thomas et al., 1989), it was hypothesized that minority women would be less knowledgeable than nonminority women concerning the transmission of AIDS.

Hypothesis II. It was hypothesized that this study would replicate the findings of Kalichman et al. (in press). It was expected that there would be reliable main effects for race as well as risk group for levels of concern with minority women being less concerned about getting AIDS than nonminority women, and women in the high risk group having more concern than women in the low risk group.

In addition, it was hypothesized that there would be an interaction between levels of risk and race, with minority women at high risk having less concern than nonminority women at high risk.

Hypothesis III. It was hypothesized that controllability would differ between risk groups with the high risk group reporting a more external locus of control. A study which found that gay men not engaging in high risk behaviors, were more likely to report a more internal locus of control supports this hypothesis in that it suggests that individuals who exert control by not engaging in high risk sexual behaviors, are more likely to make internal attributions (Kelly et al, 1990).

Hypothesis IV. It was hypothesized that minority women would have less intention to adopt precautionary behaviors. An interaction was expected with minority women at high risk having less behavioral intention than nonminority women at high risk. This hypothesis was based on the premise that a similar pattern as observed for level of concern (Kalichman et al, in press) would hold for intention to adopt precautionary behavior as Weinstein's model suggests that this condition precedes behavioral change (Weinstein, 1988). Other literature also supports the relationship between perceived susceptibility and risk reducing behavior (Kirscht & Joseph, 1988; Weinstein, 1989).

Hypothesis V. It was hypothesized that minority women would report other subgroups of the population as being at greater risk relative to their reported risk level than nonminority women. This hypothesis is supported by

literature suggesting that minorities may not yet attach personal relevance to the AIDS epidemic (Thomas et al., 1989).

CHAPTER II

METHOD

Participants

This study employed the method used by Kalichman et al. (in press) which proved successful in studying the AIDS related perceptions of urban women. Subjects were 370 women approached in downtown Chicago while waiting in mass transit standing areas. Of these 370 women, 146 (39%) were unable to complete the measure due to the arrival of their train. The composition of the sample included 119 (32.1%) Caucasian women, 213 (57.6%) African-American women, 20 (5.4%) Hispanic/Latin American women, and 18 (4.8%) women categorized as falling into another minority group. African-American, Hispanic/Latin American, and other minorities were grouped into one category of "minority women" for analyses purposes. The mean age of the sample was 28.6 years ranging from 13 to 65 years. With regard to marital status, 66% percent of the sample reported that they were currently single, 17.6% were currently married, 6.3% were living with a man, and the remaining women were either widowed, separated, or divorced. Forty-four percent of the women sampled reported having at least one child and 74.8% reported some education beyond high school. Last, 26.4% of

the women had incomes under \$5000, and 29.3% had incomes over \$21,000, with the remaining women falling somewhere in between.

Participants were divided into two natural groups based on self-reported levels of risk histories. The high risk group was defined as women who have ever engaged in any of four high risk behaviors or women who had more than one sexual partner in the past year. The high risk group consisted of 3 (1.3%) women who reported having used needles to inject drugs, 13 (5.8%) women who had a sexual partner who used injection drugs, 24 (10.8%) who had bisexual partners, 40 (17.8%) who reported having previously had a sexually transmitted disease, and 72 (30.9%) who had sexual relations with multiple partners in the past year (see Table 1). The low risk group consisted of the remaining 72 women who did not report any of the high risk behaviors and did not have multiple partners in the past year. Differences between groups on the following elements were assessed.

Materials

The measures utilized in this study included items pulled directly from existing literature as well as some developed specifically for this study. The measure was constructed such that it could be completed by an individual with minimal reading abilities. An AIDS health educator working specifically with minority urban women was consulted during the development of the questionnaire to facilitate

the formation of a clear and comprehensible measure. The five page questionnaire consisted of a total of 53 items. The women were required to circle their responses. The length of time needed to complete the questionnaire was kept to approximately 10 minutes so that women who were approached would have time to complete the questionnaire prior to the arrival of their train. The complete questionnaire is presented in Appendix A.

AIDS-Related Knowledge. HIV knowledge was assessed through items taken from existing HIV/AIDS literature. The emphasis was to test levels of knowledge concerning modes of transmission. Subjects were asked to respond true or false to the following four items:

1. A person can get AIDS from having sex just once.(T)
2. People only get AIDS by using drugs or having anal (rectal) intercourse.(F)
3. Women cannot get AIDS from having vaginal intercourse.(F)
4. People can get AIDS from sharing bathrooms and kitchens.(F)

A knowledge score was computed by adding the number of correct responses.

AIDS-Related Risk Perceptions. Perceptions of AIDS vulnerability related to stages two and three of Weinstein's stage model were measured using four-point Likert type items in which the subject was ask to indicate the degree of

perceived susceptibility to AIDS concerning self as well as concerning others. Subjects were asked to respond to how true the following statements were for them: "I am concerned I will get AIDS," "I am concerned that someone I know will get AIDS," "AIDS is a serious problem in my community," and "I am at risk for getting AIDS."

Additionally, subjects were asked to report whether they personally knew someone with AIDS. Weinstein (1989) emphasized the importance of personal experience in that a person will see a hazard as occurring more often and subsequently view themselves as potential victims after knowing someone personally who has been effected by the hazard.

Attributions of Controllability. Controllability was assessed directly by asking subjects how much they agreed with statements concerning control over becoming infected with HIV. Items were adapted from a health locus of control measure of "health-internals" and "health-externals" which assesses beliefs that health is or is not attributed to personal behavior (Wallston, Wallston, & Devillis, 1978). For example, subjects were asked how much they agree with the statements "I am in control of whether or not I get AIDS" and "whether I get AIDS or not is up to luck."

Behavioral Intentions. Behavioral intentions to reduce risk which characterizes stage four of Weinstein's model,

were assessed by directly asking subjects to identify on four point scales how likely they are to engage in certain behaviors indicating an intention to reduce HIV risk behaviors. For example, subjects were asked how likely they would be to "refuse to have sex with a man who refuses to use a condom" and "to have sex with fewer men than you did in the past."

Mental Image. Subjects were given a list of 10 descriptions of different subgroups of the population such as "poor person" or "homosexual" and asked to indicate on a four point scale how much at risk these "types" of people are for contracting AIDS. This allowed for the examination of images these women have of persons who are at risk for AIDS.

Risk Behavior. Participants were asked to report on the occurrence of sexual behaviors in the last six months as well as times condoms were used, the number of different sexual partners in the past year, whether or not IV drugs were ever used, sexual occurrences with an IV drug user or bisexual partner, and the lifetime occurrence of a sexually transmitted disease. This served as an indication of the levels of risk histories within the sample as well as provided a measure of actual risk reducing behavior related to Weinstein's stage five. See Table 2 for frequencies of sexual behavior and condom use for the sample.

Procedure

Data were collected from women waiting for trains in public standing areas where there are high concentrations of passengers traveling to and from different parts of Chicago, to and from surrounding areas, as well as transferring along main routes in areas of high AIDS incidence (Chicago Department of Health, 1991). The sites were selected in a manner that maximized the diversity of women from different sections of the inner city.

Women were approached as they waited for their train and asked to fill out a brief questionnaire concerning women and AIDS. The women were informed of the personal nature of some of the questions, assured that their identity would remain anonymous, and promised compensation in the form of a mass transit token. Women who agreed to participate were given a survey, a clipboard, and a pencil. To insure privacy, the women were asked to signal the researcher when they had finished the survey. Participants were then debriefed with a flyer identifying the researchers, provided with more details concerning the purpose of the study, given accurate AIDS related information, and a phone number to obtain more information about AIDS and AIDS related services. A copy of the debriefing statement is presented in Appendix B.

CHAPTER III

RESULTS

Because all demographic items appeared first on the measure, a preliminary analysis comparing women who completed the questionnaire (61%) to those who did not complete the questionnaire (39%) was possible. Results showed no differences in age, income, marital status, or education.

A t-test conducted between minority and nonminority women indicated differences in educational level, $t(456) = 10.47$, $p < .001$, with nonminority women (Mean = 4.53, SD = .58) reporting a higher level of education than minority women (Mean = 3.64, SD = 1.02). Education was subsequently covaried for all remaining analyses.

HIV-Related Knowledge

An Analysis of covariance (ANCOVA) for the knowledge score, using education level as a covariate, indicated a main effect for race, $F(1,210) = 12.00$, $p < .001$, with nonminority subjects (Mean = 3.73, SD = .24) displaying greater knowledge about HIV/AIDS than minority women (Mean = 3.22, SD = .14). Neither the main effect for group nor the race by group interaction was statistically significant.

Additionally, the four knowledge items were

individually analyzed using a nonparametric test. A chi-square analysis showed reliable race differences for "A person can get AIDS from having sex just one time", $\chi^2 (1) = 3.78$, $p < .05$, "A person can get AIDS by giving (donating) blood", $\chi^2 (1) = 41.61$ $p < .001$, and "Women cannot get AIDS from having vaginal intercourse", $\chi^2 (1) = 11.26$ $p < .001$. For each of these items, nonminority women demonstrated a higher rate of correct responses. Analyses did not reveal a significant group effect or group by race interaction. The percentages of incorrect responses by race and risk group are presented in Table 3.

Mental Image of a Person at Risk for Contracting AIDS

The 11 items used to measure the image of an individual at risk for AIDS were factor analyzed using a varimax procedure to rotate factors with eigenvalues greater than one. Results indicated two factors accounting for 65% of the variance. The first factor included homosexuals, IV drug users, and prostitutes with the second factor including all other groups (see Table 4). Factor scores were used as dependent variables to test differences between races and risk groups for mental image.

A 2(race) x 2(risk group) multivariate analysis of covariance (MANCOVA) using education as a covariate, failed to indicate significant race, group, or race by group differences (see Table 5).

Paired contrasts comparing personal risk estimates to each perception of others at risk were also conducted. Results indicated statistically significant differences for all 11 image items, with subsequent univariate tests indicating significant group differences for personal risk estimate. All women consistently reported lower risk levels for themselves compared to heterosexual women, Whites/Caucasians, homosexual men, rich people, Blacks/African-Americans, injection drug user, Hispanic/Latin-Americans, poor people, heterosexual men, people living in the city, and prostitutes (see Figure 1).

Self-Reported Intention to Adopt HIV Risk Reducing Behavior

A factor analysis was conducted for six items assessing subject intentions to engage in risk reducing behaviors. Rotating factors with eigenvalues greater than one, a varimax procedure suggested two factors: sexual behaviors and nonsexual behaviors which together accounted for 54.6% of the variance (see Table 6).

A MANCOVA covarying education conducted with the two resulting factor scores was statistically significant for the race main effect, $F(2,212) = 3.17, p < .04$. Univariate tests were statistically significant for the sexual behaviors factor, with nonminority women being more likely to engage in these risk reducing behaviors than minority women, $F(1,214) = 5.20, p < .02$. For the nonsexual behaviors factor, minority women reported being more likely

to engage in these behaviors, $F(1,214) = 7.15, p < .008$. Neither the group effect nor race by group interaction reached statistical significance. For means of behavioral intention factors by race and risk group, see Table 7.

Perceived Susceptibility of Self and Others

A 2(race) x 2(risk group) MANCOVA, controlling for educational level, was conducted on three measures of perceived susceptibility and one measure of risk estimation with regard to AIDS/HIV. Results indicated a main effect for group, $F(4,203) = 5.73, p < .001$. Subsequent ANCOVAs indicated significant differences between risk groups for personal concern of getting AIDS, $F(1,206) = 12.79, p < .001$, concern for others, $F(1,206) = 15.16, p < .001$, community concern, $F(1,206) = 9.23, p < .003$, and estimated risk level, $F(1,206) = 9.39, p < .002$; with the high risk group being more concerned across the board and with higher risk estimations. Analyses also revealed race differences for concern about HIV/AIDS, $F(4,203) = 2.41, p < .05$. Univariate tests indicated that nonminority women were more concerned about others getting AIDS than minority women, $F(1,206) = 7.42, p < .007$ (see Table 8). The race by group interaction was not statistically significant.

To examine the effect of personally knowing someone with AIDS on perceptions, multivariate analyses for level of concern between subjects who knew someone with AIDS compared to subjects who did not were conducted. Results indicated

significant differences, $F(3,331) = 4.32, p < .005$. Women who personally knew someone with AIDS were more concerned about an acquaintance getting AIDS, $F(1,333) = 4.63, p < .03$, and reported AIDS as being a more serious problem in their community, $F(1,333) = 9.07, p < .003$. The means for the three concern items are presented in Table 9.

Personally knowing someone with AIDS did not affect self-concern for getting AIDS.

To test the hypothesis that women would demonstrate an optimistic bias as described by Weinstein, (1982), a multivariate analysis using a within subjects factor and controlling for education was also conducted on the three concern items. Results showed a race by within subjects factor interaction, $F(2,207) = 4.47, p < .01$. Contrasts conducted between concern items within races, covarying for education, illustrated Weinstein's optimistic bias in both groups. For both minorities, $F(2,216) = 58.18, p < .001$, and nonminorities, $F(2,107) = 8.49, p < .001$, concern for an acquaintance getting AIDS was greater than self-concern. Contrasts conducted between self-concern and concern for the community indicated that for minorities $F(2,214) = 81.58, p < .001$, as well as for nonminorities, $F = (2,106), p < .001$, there was greater concern for the community (see Figure 2).

Locus of Control Concerning the Contraction of AIDS

A 2(race) x 2(group) MANCOVA covarying educational level was conducted for four items measuring external and

internal locus of control. Results indicated a main effect for race, $F(4,207) = 2.97, p < .02$. Univariate tests showed race differences for one statement, "If it is meant for me to get AIDS, I will get AIDS no matter what I do," $F(1,210) = 7.12, p < .008$, with minority women indicating a more external locus of control concerning the contraction of AIDS (see Table 10). There were no significant group or group by race differences.

Effect of Celebrity Self-Disclosure on Personal Risk

Estimation

A potential natural confound was introduced during the course of data collection with the announcement by Earvin "Magic" Johnson, a celebrity athlete, of his HIV positive status. Because the data were collected in such a way that it was possible to divide the sample into two groups, before the announcement by Magic and after the announcement, analyses were conducted on the items that were thought most likely to be affected by his disclosure. Analyses introducing time as a third variable indicated a three way interaction, $F(1,218) = 5.84, p < .02$ for the item assessing personal risk estimation, "What is your risk for getting AIDS?" Interestingly, after the Magic Johnson announcement, nonminority women at high risk reported lower risk estimations than before the announcement. There was no change after the announcement in risk estimation for minority women classified as "high risk" (See Figure 3).

CHAPTER IV

DISCUSSION

Results support the presence of race differences for several variables related to Weinstein's stage model. First, findings are consistent with previous studies that have found nonminorities display more accurate information concerning the transmission of AIDS relative to minorities. As educational campaigns increase their scope to target minority populations, it is likely that an increase in knowledge for these groups will be observed, alleviating any significant differences between races. Though disseminating information seems to be the goal of many interventions and is a necessary prerequisite for behavioral change, accurate knowledge does not translate into the adoption of risk reducing behavior.

Analyses conducted on items used to assess subjects mental image of a person at risk for AIDS resulted in two factors. One factor included groups of people, prostitutes, homosexual men, and injection drug users, who have through the media and intervention efforts been labeled as being at high risk. All other groups of people were included in another factor. These two factors did not differ across groups of women suggesting that overall, women in this

sample believed prostitutes, homosexual men, and injection drug users to constitute a high risk group distinct from the general population. This finding may be supportive of literature which describes the media as being a facilitator in maintaining inaccurate risk assessments by portraying AIDS as a disease which affects only those individuals who belong to these high risk groups. It is only relatively recently that AIDS has been accurately portrayed as a disease that is affecting great numbers of people from all walks of life. It may not be fair to hold the media responsible for the initial distorted portrayal of this disease. It is also necessary to examine the role government institutions and the scientific community have played. Institutional failure to address this disease directly and with force when it first surfaced may have also played a role in creating and maintaining harmful stereotypes. The lack of financial support from government agencies may be a reflection of a continuing general attitude of denial concerning the importance and urgency of this epidemic. Additionally, questions still remain concerning the level of responsibility of community structures such as the church and schools in preventing the spread of the virus. Finally, what might be the role of parents and other caregivers in educating family members? It may be that a failure to address this problem at each

level starting from the government down has resulted in the wide spread AIDS epidemic.

Results also support the presence of what Weinstein (1982) described as an unrealistic optimistic bias for contracting a particular disease. This term refers to the observation that people tend to see others to be at greater risk than themselves. This is illustrated in two findings. First, women consistently rated their personal risk level as being lower compared to the 11 groups of people they were also asked to estimate risk levels. Second, when looking at women who reported knowing someone with AIDS compared to those women who did not know someone, the women who personally knew someone who had contracted HIV and developed AIDS were more concerned about an acquaintance getting AIDS and believed AIDS to be a greater problem in their community, however, knowing someone with AIDS did not have the same affect on self-concern for getting AIDS. These findings speak to the strength and consistency of optimistic bias and suggest that this issue may be at the core of why it has historically been so difficult to get individuals to adopt risk reducing behavior.

Hypothesized risk group differences between women at different risk levels were confirmed for all items assessing perceived susceptibility. High risk women evidenced greater personal concern, greater concern for others, and held higher personal risk estimations than women at low risk for

contracting AIDS. This suggests that high risk women are aware of their risky behavior but have not yet moved toward behavioral change as indicated by no significant differences in behavioral intentions for risk groups. It may be that other relevant factors are acting as barriers, preventing the adoption of risk reducing behavior.

Findings show that nonminority women reported that they were more likely to engage in sex related, risk reducing acts (ie. refuse to have sex with a man who will not use a condom) than minority women whereas minority women reported being more likely to engage in nonsex activities (ie. get tested for AIDS) not directly related to reducing personal risk. This finding may be consistent with literature reporting that for some minority groups, traditional sex roles still exist (Gibson, 1991). Additionally, it is supportive of the need for interventions that include skills training to facilitate the initiating of such sex related risk reducing acts, particularly for minority women (Cochran & Mays, 1989). Also, the failure of minority women to engage in these behaviors may be the result of other factors such as various economic related issues. Kalichman et al. (in press), reported that minority women endorsed higher levels of seriousness to some life problems. Employment, child care, and crime were indicated as being more of a problem than AIDS in their sample, suggesting that AIDS is

simply one aspect of a complicated network of difficulties to be contended with in poverty stricken urban areas.

Data may also suggest that minority women evidence a more external locus of control for getting AIDS compared to their nonminority counterparts. Minorities agreed more often with the statement "If it is meant for me to get AIDS, I will get AIDS no matter what." Cultural differences for locus of control for minority groups relative to nonminority groups have been documented, with the minority groups indicating greater feelings of a lack of control (Forward & Williams, 1970; Garcia & Levenson, 1975). This cultural difference may be a significant consideration for the planning of interventions as it may act as an additional barrier to the adoption of precautionary behavior in some minority populations.

Overall, results suggest that nonminority women may be further progressed along Weinstein's model than minority women as they demonstrate more accurate knowledge concerning HIV transmission, greater concern for others contracting AIDS, a more internal locus of control, and greater intention to engage in risk reducing behavior. Results also suggest that distorted perceptions concerning high risk groups still exist and may be contributing to a failure of women to acknowledge that individual behavior determines level of risk, not group association. This may account for races not differing in personal concern for getting AIDS as

well as the presence of an optimistic bias across all women. These results may also indicate that nonminorities are closer to self-protection, further supporting the notion of the apparent ineffectiveness of campaigns in reaching these minority women and probably other urban minority populations.

Results did not confirm the hypothesized interactions between risk and race groups. There are several explanations that might account for this failure to replicate Kalichman et al's (in press) previous findings. First, and probably most interesting was an announcement by Earvin "Magic" Johnson, a well known celebrity, concerning his HIV positive status. The actual announcement, coupled with the increased media surrounding the topic of AIDS, may have acted as a confounding variable in the current study. Results may suggest that nonminority women were not personally identifying and/or identifying their partners with Magic, and thus felt less at risk after the announcement as a result of an increased perceived discrepancy between themselves and individuals who get AIDS. High risk minority women did not evidence a change in concern after the announcement. It is possible that other factors may have contributed to this differential reaction such as anxiety that may have been experienced by some individuals as a result of Magic Johnson's disclosure. Interpreting the effects of Magic's disclosure may not be

possible with this data set; however, it seems safe to conclude that for this sample, races and risk groups may have been differentially affected by Magic Johnson's announcement. These findings are not consistent with those reported for a sample of urban men (Kalichman & Hunter, in press).

A second potential confound was the definition of risk groups. This is one of several methodological issues to be contended with when doing AIDS research. Previous studies have used more stringent criteria for defining high risk than the current study (Kalichman et al., in press). For instance, Kalichman et al. (in press) defined a high risk group as women who had engaged in certain risk behaviors within a relatively short time frame compared to the current study that defined high risk groups with women who had ever engaged in one of these same high risk behaviors. The former definition may be more useful in this area of research because it identifies only those women who have recently engaged in risky behaviors opposed to targeting women who potentially engaged in the risky acts many years ago. For example, a woman who was an injection drug user 20 years ago could accurately conclude she was not at high risk.

This study has several other limitations. Because the sample may not be representative of all women in Chicago, results should not be generalized. Additionally, due to the

sensitive nature of the questionnaire, social desirability may be an issue along with other problems associated with self-report measures (Catania, 1990). Finally, because the measure was constructed specifically for this study, there is a question concerning its reliability and validity.

Overall, this study illustrates the presence of race differences for HIV-related knowledge, locus of control in contracting AIDS, and intention to adopt AIDS risk reducing behavior. The existence of such differences has implications for the planning and development of future AIDS interventions as far as content and target populations. Additionally, results illustrate the presence of an unrealistic optimistic bias for contracting AIDS. Last, results suggest that Weinstein's stage model may be a useful framework for beginning to understand the failure of many urban women to adopt risk-reducing behavior but alone may not be sufficient in explaining this complex process. Because attempts to facilitate behavioral change to reduce risk for various health problems have proven to be a challenge, it becomes obvious that there is not a straightforward or simple solution. Wallerstein and Bernstein (1988) present a health model based on Freire's Empowerment Model. The intervention consists of a group situation involving active dialogue on the part of all participants, for which the goal is to enhance the sense of control. Empowerment as promoting "participation of people,

organizations, and community in gaining control over lives in their community and larger society" may serve as a long term solution. Meanwhile, it seems that a joining of mental health professionals, along with community leaders and organizations, the support of government, and the talents of the media, to create innovative, attractive, population specific interventions addressing AIDS within a framework of population issues, coupled with an extensive support network and a gradual removal of the stigmatization associated with AIDS, may be a more plausible approach for the immediate future.

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APPENDIX A

**FIVE MINUTES OF YOUR TIME CAN HELP FIND BETTER WAYS
TO STOP AIDS**

Thank You for taking the time to fill out this survey.

Because there have been increasing numbers of women with AIDS, it is important for us to gather information about women and their life-styles. Such information can help us understand the spread of AIDS

This survey asks many personal questions. It has to or it could do no good.

Please DO NOT put your name anywhere on the survey.

In Thanks, we would like to offer you a CTA token after you have completed the survey.

DO NOT TELL US YOUR NAME, but please answer the following.

Race (Circle one)	White/ Caucasian 1	Black/African- American 2	Hispanic/Latin- American 3	Other 4
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Age _____ years

Marital Status	Single 1	Unmarried/ living with a man 2	Married 3	Separated/ Divorced 4	Widowed 5
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Number of children _____

Please **CIRCLE** the number of school grades you completed:

Less than 10	11	12	Part of college	Finished college
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CIRCLE your approximate yearly income:

under \$5,000	\$5,000-\$10,000	\$11,000-\$15,000	\$16,000-20,000	more than \$21,000
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Have you ever **personally** known someone with AIDS? YES NO

If yes, what was your relationship?	Family 1	Friend 2	Boyfriend/ Husband 3	Other 4
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Please answer each of the following TRUE OR FALSE

People can get AIDS from sharing bathrooms and kitchens	TRUE	FALSE
A person can get AIDS from having sex just one time	TRUE	FALSE
A person can get AIDS by giving (donating) blood	TRUE	FALSE
Women can-not get AIDS from having vaginal intercourse	TRUE	FALSE

Please answer each question with your opinion.

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I am concerned that I will get AIDS..

Not true for me	Somewhat true for me	Mostly true for me	Very true for me
1	2	3	4

I am concerned that someone I know will get AIDS.

Not true for me	Somewhat true for me	Mostly true for me	Very true for me
1	2	3	4

AIDS is a serious problem in my community.

Not true for me	Somewhat true for me	Mostly true for me	Very true for me
1	2	3	4

What is your risk for getting the AIDS virus?

No risk	Little risk	Some risk	High risk
1	2	3	4

Please answer each question with your opinion.

I am in control of whether or not I get AIDS

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

If it is meant for me to get AIDS, I will get AIDS no matter what I do

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

If I am careful, I can avoid getting AIDS

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

Whether I get AIDS or not is up to luck

Strongly disagree	Disagree	Agree	Strongly agree
1	2	3	4

How likely are you to do the following?

Refuse to have sex with a man who will not use a condom

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Talk with your sexual partner about using condoms

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Refuse to have sex with a man who injects (shoots-up) drugs

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Have sex with fewer men than you did in the past

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Get tested for the AIDS virus

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Talk with your friends about AIDS

Not likely	Somewhat likely	Likely	Very likely
1	2	3	4

Have you EVER been tested for having the AIDS virus?

YES NO

IF YOU HAVE BEEN TESTED:

Why did you get tested?

I wanted to know	I gave blood	For my job	Other
1	2	3	4

The results said:

I have the virus	I do not have the virus	I do not know result
1	2	3

How much risk are these people at for getting AIDS?

	No risk	Little risk	Some risk	High risk
Heterosexual/ Straight Women	1	2	3	4
Whites/Caucasians	1	2	3	4
Homosexual/Gay Men	1	2	3	4
Rich People	1	2	3	4
Blacks/ African-Americans	1	2	3	4
Injection (IV) Drug User	1	2	3	4
Hispanics/ Latin-Americans	1	2	3	4
Poor People	1	2	3	4
Heterosexual/ Straight Men	1	2	3	4
People Living in the City	1	2	3	4
Prostitutes	1	2	3	4

Please think carefully about the PAST 6 MONTHS, and circle your answer.

IN THE PAST 6 MONTHS I HAVE HAD.....

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VAGINAL SEXUAL INTERCOURSE

Yes No

Used LATEX CONDOMS (rubbers)	No times 1	Sometimes 2	Every time 3
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ANAL (RECTAL) SEXUAL INTERCOURSE

Yes No

Used LATEX CONDOMS (rubbers)	No times 1	Sometimes 2	Every time 3
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ORAL SEX (MOUTH TO PENIS)

Yes No

Used LATEX CONDOMS (rubbers)	No times 1	Sometimes 2	Every time 3
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IN THE PAST YEAR...how many MEN have you had sexual relations with

_____ Number of MEN

Which of the following is most true for you.

I am sexually interested in men
1

I am sexually interested in women
2

I am sexually interested in both men and women
3

I do not use condoms
1

I use condoms for birth control
2

I use condoms to protect against Sexual Disease (VD)
3

I use condoms for birth control and VD
4

NOW PLEASE ANSWER THESE QUESTIONS

Have you ever used needles to inject (shoot-up) drugs? YES NO

Have you ever had a sexual partner who used needles to shoot-up drugs? YES NO

Have you ever had a sexual partner who you think was bisexual (also having sex with men) YES NO

Have you ever had a Sexual Disease (such as Syphilis, Gonorrhea, Herpes, Chlamydia)? YES NO

I have seen signs or posters about AIDS
on the city buses or trains YES NO

I have read about AIDS in the news paper YES NO

I have seen AIDS on TV commercials YES NO

Please make any additional comments you may have.

THANK YOU FOR HELPING US

APPENDIX B

The survey you have participated in is being conducted by the HIV/AIDS Resource Project (HARP). HARP is a research group conducted through Loyola University of Chicago. The information you have provided will help us better understand how AIDS is impacting the Chicago area. We hope to develop methods of AIDS prevention and the information you have given us will be used for these purposes.

It is important for you to know:

- * A PERSON CAN NOT GET AIDS FROM SHARING BATHROOMS AND KITCHENS WITH A PERSON WHO DOES HAVE AIDS
- * A PERSON CAN GET AIDS FROM SHARING NEEDLES AND HAVING SEXUAL INTERCOURSE WITHOUT THE USE OF A CONDOM
- * WOMEN CAN GIVE THE AIDS VIRUS TO MEN AND MEN CAN GIVE THE AIDS VIRUS TO WOMEN
- * WOMEN AND MEN CAN GET AIDS BY HAVING SEXUAL INTERCOURSE WITH A PERSON WHO HAS THE AIDS VIRUS
- * A PERSON WHO HAS THE AIDS VIRUS LOOKS HEALTHY FOR A LONG TIME BEFORE GETTING ILL
- * A PREGNANT WOMAN WHO HAS THE AIDS VIRUS CAN GIVE THE AIDS VIRUS TO HER UNBORN BABY

We thank you again for helping us. If you would like to obtain further information about HARP or about ways to prevent AIDS, you may call us at (312) 508-3019.

TABLE 1
 FREQUENCIES OF HIGH RISK BEHAVIORS BY RACE

Risk Behavior	Minorities	Nonminorities
Multiple male sex partners in the past year	58 (24.9%)	14 (6.0%)
Injection Drug Use ¹	2 (.9%)	1 (.4%)
Injection Drug Using Partner ¹	8 (3.6%)	5 (2.2%)
Bisexual Sex Partner ¹	10 (4.5%)	14 (6.3%)
Contracted an STD ¹	29 (12.9%)	11 (4.9%)

Note: ¹Ever engaged in these behaviors

TABLE 2

FEQUENCIES OF SEXUAL BEHAVIORS AND CONDOM USE BY RACE AND RISK GROUP

Sexual Behavior	Minorities		Nonminorities	
	Risk Level			
	Low	High	Low	High
Vaginal intercourse	45	73	27	31
Condom use				
No times	26	17	11	7
Sometimes	7	41	8	16
Every time	12	15	8	8
Anal intercourse	16	25	8	6
Condom use				
No times	15	18	4	5
Sometimes	0	5	1	1
Every time	1	2	3	0
Oral intercourse	24	39	22	26
Condom use				
No times	22	27	20	20
Sometimes	1	11	1	5
Every time	1	1	1	1

Note: Women were asked if they had engaged in the behavior in the past year

TABLE 3

NUMBER (PERCENT INCORRECT) FOR HIV-RELATED KNOWLEDGE ITEMS BY RACE AND RISK GROUP

Item	Minorities		Nonminorities	
	Risk Level			
	Low	High	Low	High
People can get AIDS from sharing bathrooms and kitchens.	2 (3.3)	0	1 (2.4)	1 (2.7)
A person can get AIDS from having sex just one time.	4 (6.7)	3 (3.7)	0	0
A person can get AIDS by giving (donating) blood.	33 (54.1)	42 (51.9)	3 (7.1)	10 (27.0)
Women cannot get AIDS from having vaginal intercourse.	10 (16.7)	17 (20.7)	4 (9.5)	2 (5.4)
Mean (SD) Knowledge score	3.19	3.25	3.80	3.64

TABLE 4
 ROTATED FACTOR LOADINGS FOR IMAGE ITEMS

Items	Factor 1	Factor 2
Heterosexual Women	<u>.67468</u>	.03108
Whites/Caucasians	<u>.79146</u>	.16854
Rich People	<u>.82531</u>	.08544
Blacks/African-Americans	<u>.82582</u>	.07087
Hispanics/Latin-Americans	<u>.86194</u>	.08630
Poor People	<u>.75553</u>	.22772
Heterosexual Men	<u>.76158</u>	-.00030
People living in the City	<u>.83042</u>	.01683
Prostitutes	.12107	<u>.85780</u>
Homosexual Men	.13805	<u>.83844</u>
Injection (IV) Drug User	-.00664	<u>.73785</u>

TABLE 5

MEAN (SD) FOR IMAGE FACTORS SCORES BY RACE AND LEVEL OF RISK

Item	Minorities		Nonminorities	
	Risk Level			
	Low	High	Low	High
Factor 1 (Others)	-.014 (1.04)	.185 (1.09)	-.223 (.59)	-.129 (.74)
Factor 2 (Identified High Risk Group)	.008 (1.19)	.022 (1.04)	.125 (.78)	.003 (1.11)

TABLE 6

ROTATED FACTOR LOADINGS FOR BEHAVIORAL INTENTION ITEMS

Items	Factor 1	Factor 2
Refuse to have sex with a man who will not use a condom.	<u>.76113</u>	.10833
Talk with your partner about using condoms.	<u>.64960</u>	.25585
Refuse to have sex with a man who injects drugs.	<u>.75190</u>	-.11742
Have sex with fewer men than you did in the past.	<u>.57671</u>	.07582
Get tested for the AIDS virus.	.00951	<u>.82387</u>
Talk with your friends about AIDS.	.14350	<u>.76202</u>

TABLE 7

MEAN (S.D.) FOR BEHAVIORAL INTENTION FACTORS BY RACE AND LEVEL OF RISK

	Minorities		Nonminorities	
	Risk Level			
	Low	High	Low	High
Factor 1 (Sex Related)	-.035 (1.14)	-1.71 (1.02)	.373 (.65)	.035 (.69)
Factor 2 (Non-Sex Related)	-.048 (1.09)	.243 (.85)	-.271 (.99)	.276 (1.07)

TABLE 8

MEANS (SD) FOR THREE MEASURES OF CONCERN ABOUT GETTING AIDS AND ONE MEASURE OF ESTIMATED PERSONAL RISK

Item	Minorities		Nonminorities	
	Risk Level			
	Low	High	Low	High
I am concerned that I will get AIDS. ¹	1.67 (.83)	2.19 (.99)	1.74 (.63)	2.12 (.86)
I am concerned that someone I know will get AIDS. ¹	2.17 (1.05)	2.79 (.95)	2.62 (1.01)	3.12 (.96)
AIDS is a serious problem in my community. ¹	2.31 (1.16)	2.73 (1.20)	2.31 (1.02)	2.88 (.93)
What is your risk for getting AIDS. ¹	1.93 (.84)	2.27 (.82)	1.95 (.49)	2.27 (.63)

Note: Subjects rated these items using a 4-point scale: Not true for me = 1 to Very true for me = 4.

TABLE 9

MEANS (SD) FOR THREE MEASURES OF CONCERN ABOUT GETTING AIDS FOR
WOMEN WHO PERSONALLY KNOW SOMEONE WITH AIDS

Personally Know Someone with AIDS

Items	Yes	No
Concern for an acquaintance	2.74 (1.01)	2.48 (1.05)
Community concern	2.77 (1.09)	2.38 (1.11)

TABLE 10

MEAN (SD) FOR External and Internal Locus of Control for Getting AIDS

Item	Minorities		Nonminorities	
	Risk level			
	Low	High	Low	High
I am in control of whether or not I get AIDS.	3.12 (.90)	2.96 (.91)	3.34 (.58)	3.14 (.66)
If it is meant for me to get AIDS, I will get AIDS no matter what I do.	1.53 (.72)	1.66 (.82)	1.15 (.36)	1.41 (.56)
If I am careful, I can avoid getting AIDS.	3.47 (.72)	3.39 (.82)	3.39 (.54)	3.32 (.59)
Whether I get AIDS or not is up to luck.	1.50 (.75)	1.71 (.89)	1.83 (1.12)	1.71 (.98)

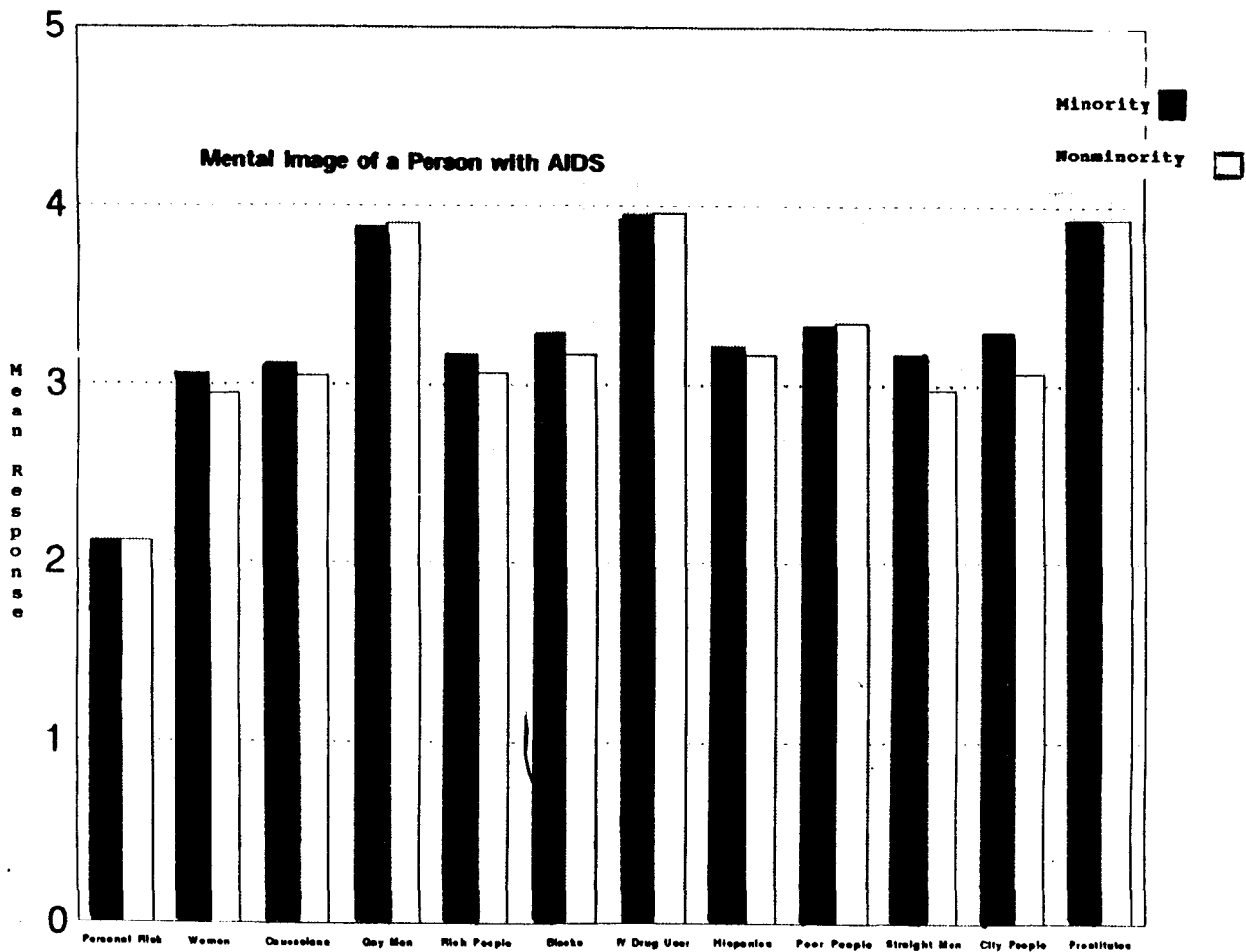


Figure 1. Mean ratings of minority and nonminority women for AIDS risk for twelve categories.

Concern for Getting AIDS

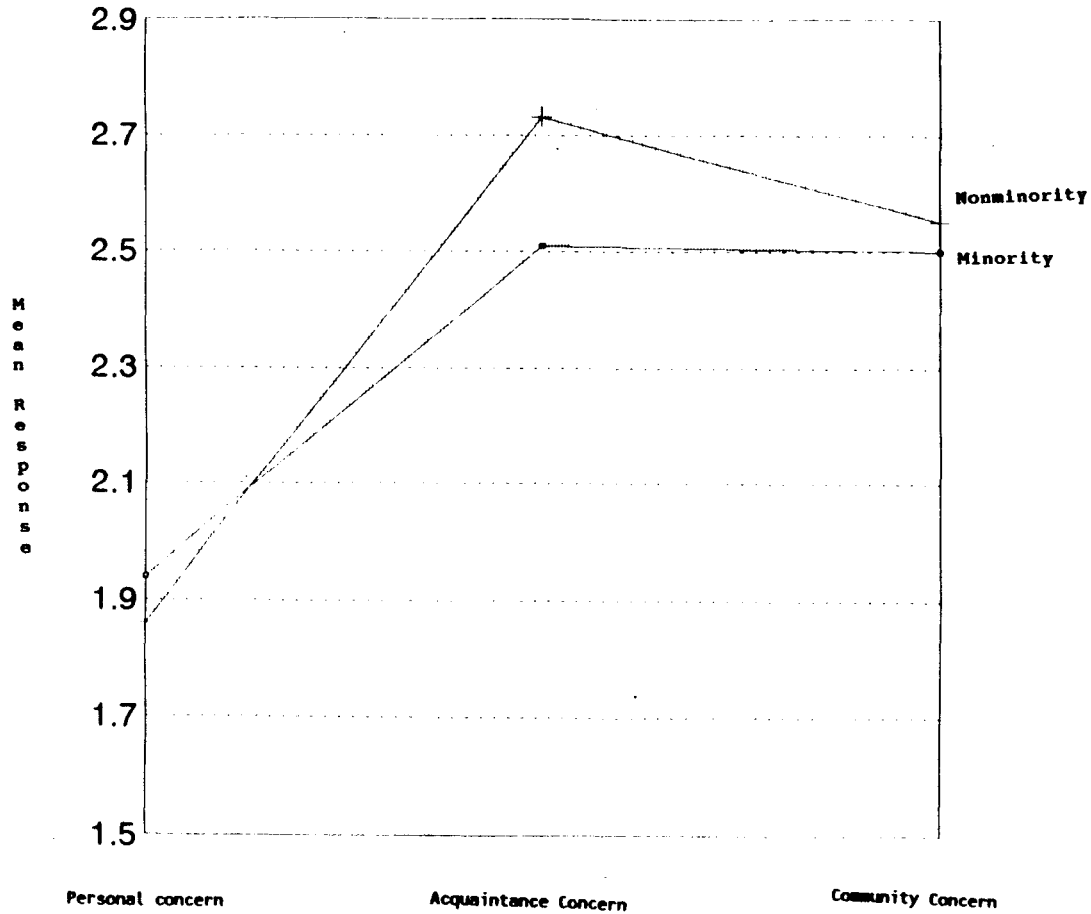


Figure 2. Means for perceived susceptibility of minority and nonminority women.

Personal Risk Before and After Magic Johnson

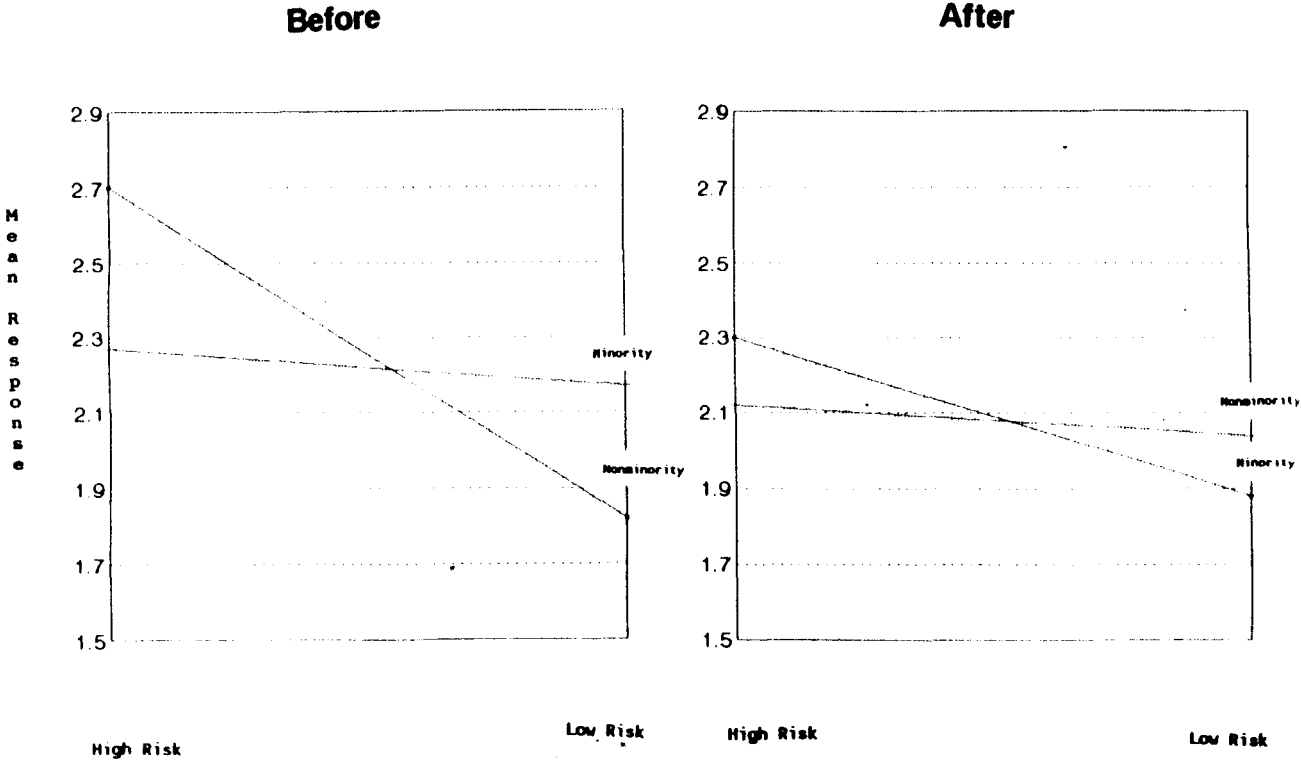


Figure 3. Mean ratings of personal risk for getting AIDS by minority and nonminority women, before and after the disclosure of celebrity Earvin "Magic" Johnson .

The Master's Thesis submitted by Tricia L. Hunter has been read and approved by the following committee:

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The final copies have been examined by both committee members and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the Master's Thesis is now given final approval by the Committee with reference to content and form.

The Master's Thesis is, therefore, accepted in partial fulfillment of the requirements for the degree of Master of Arts.

12-14-92

Date

Isiaah Crawford

Signature