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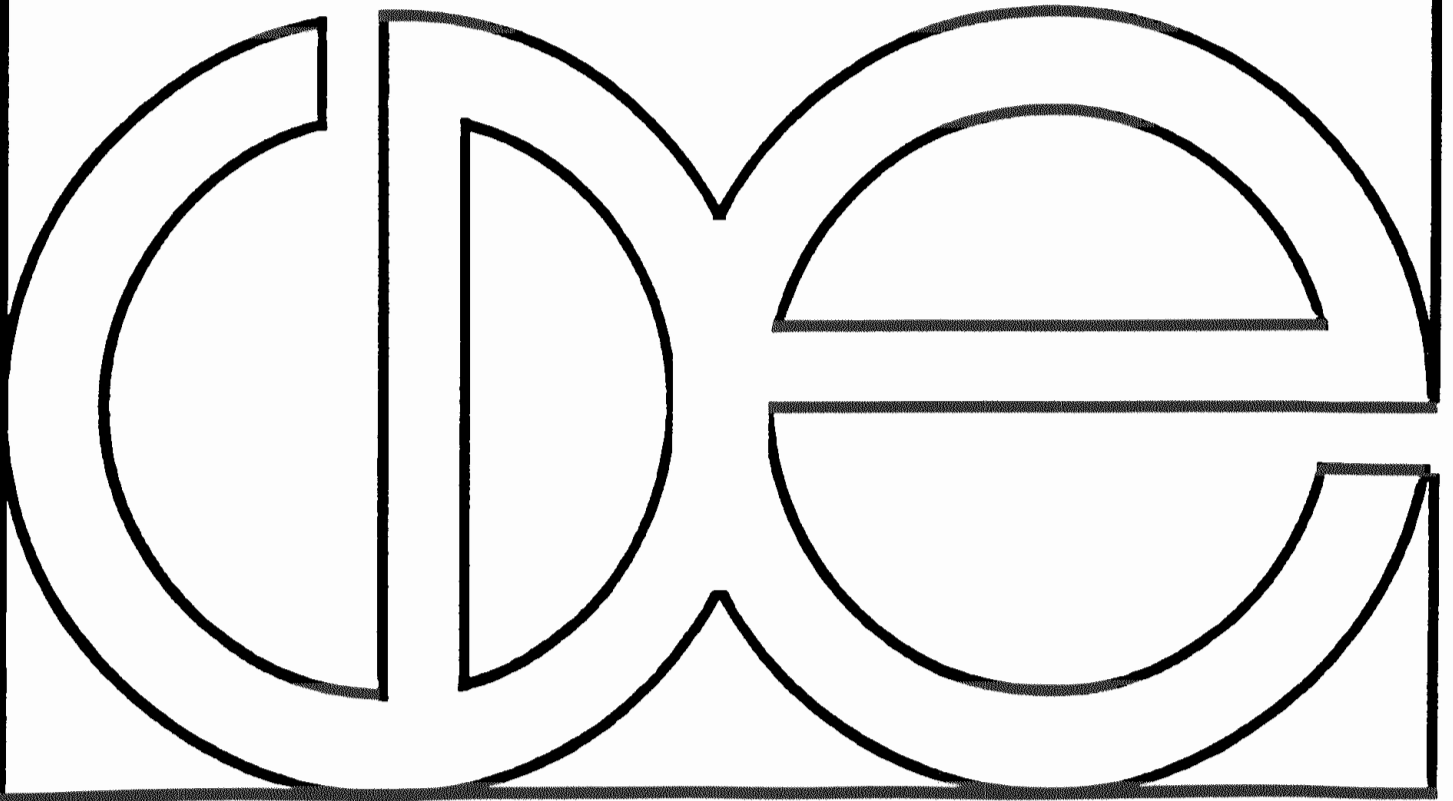
**The Impact of a Health Promotion Intervention
on Condom Use by Black Male Adolescents**

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Introduction

Adolescents are especially at risk of contracting sexually transmitted diseases. The reasons for the risk among adolescents are the prevalence of unprotected sexual contact and the large number of partners. A 1991 national survey of 12,272 high school students found that 36 percent of males and 38 percent of females had intercourse in the preceding three months. In addition, 23 percent of males and 14 percent of females had intercourse with four or more partners (Centers for Disease Control, 1992). Given this level of sexual activity, it is not surprising to find that the rate of gonorrhea among 15-19 year old men in 1991 was 270 percent greater than the rate among all men, and that the rate of gonorrhea among 15-19 year old women was 454 percent greater than the rate among all women (Centers for Disease Control and Prevention, 1993b).

African-Americans are disproportionately represented among the number of new cases of gonorrhea and syphilis. Although African-Americans account for 13 percent of the population, they represented 61 percent of the new cases of gonorrhea and 84 percent of the new cases of syphilis observed in 1993 (Centers for Disease Control and Prevention, 1993d). African-American males are also disproportionately represented among adult and adolescent AIDS cases (Bakeman et al., 1987; Friedman et al., 1987). In 1992 they represented 27 percent of all diagnosed AIDS cases (Centers for Disease Control, 1993c). In 1992, African-American males ages 15-24 were almost five times more likely to die of HIV-related causes than white males the same ages (Centers for Disease Control and Prevention, 1994).

Prevention is especially important in the case of HIV infection because a vaccine is unavailable, and the virus is transmitted by behaviors which individuals can modify (Institute of Medicine, 1986; Centers for Disease Control, 1988). In particular, African-American male

adolescents need intervention programs that increase the frequency with which they use condoms. For such sexually active individuals, correct and consistent condom use currently provides the most effective means of reducing their risk of infection from sexually transmitted diseases (Centers for Disease Control and Prevention, 1993a).

Unfortunately, studies suggest that condom use by adolescents is neither widespread nor consistent. In a recent national study of 12,272 high school students, 54 percent of males and 38 percent of females reported condom use at last intercourse (Centers for Disease Control, 1992). Other studies suggest that adolescents' use of condoms is less prevalent. In their study of sexually active adolescents, Kegeles, Adler, and Irwin (1988) found that 49 percent of males and 22 percent of females reported condom use in the preceding month. Brown, DiClemente, and Park (1992) found that 29 percent of sexually active adolescent males and females reported consistent condom use. Then, in a study of a public health department contraceptive service, Glasser et al. (1989) found that, of the males who requested condoms, only 27 percent reported using condoms when they had intercourse.

The present paper reports the immediate and short-term impact of a brief educational intervention on the condom use behavior of black adolescent males seeking care at a municipal social hygiene clinic. The intervention's theoretical model is based on the Self-Regulation Model (Leventhal, Zimmerman, and Gutmann, 1984; Meyer, Leventhal, and Gutmann, 1985). However, in defining the role of perceived risk and perceived self-efficacy, we drew upon the Health Belief Model (Becker, 1974; Janz and Becker, 1984) and social learning theory (Bandura, 1977; 1982).

Theoretical Model

The Self-Regulation model assumes that individuals are motivated to protect themselves against health risks and that they regulate their behavior in relation to goals that they have

defined. Self-regulation is initiated when individuals extract information from their environment and generate "common sense" representations of the health threat (Figure 1). For example, an individual's common sense representation of gonorrhea may include beliefs about its cause, symptoms, consequences, duration, and cure. In turn, these representations of the health threat shape the individual's perceptions of personal vulnerability, perceptions of the threat's severity, and perceptions of the efficacy of various behaviors in reducing the risk.

The Self-Regulation model assumes that individuals identify the risk by concrete, perceptual signs (symptoms) as well as abstract labels (e.g., the name of the illness); the model assumes that these concrete signs play a significant role in the individual's assessment of the threat's salience and severity. In the present context, these concrete signs can be cognitive cues (beliefs, self-talk) or affective cues (reduced anxiety, increased self-esteem) that can be linked to performing the desired behavior (condom use). In turn, these perceptions and the concomitant emotions lead to planning of responses intended to cope with the threat.

Our integrated Self-Regulation model assumes that a person is more likely to execute behaviors that (a) she believes will reduce risk, and (b) she believes that she is capable of performing successfully. Having acted, the individual appraises the effectiveness of the behaviors. If the individual attains his goal, he will repeat the behavior; if the individual does not attain the goal, he will revise his representations and/or develop different coping strategies.

Additionally, the literature suggested several considerations relevant to designing an effective condom use intervention for black male adolescents. First, the intervention should be tailored to the needs of the intended program participants and take into account participants' values, knowledge, and lifestyles (Solomon and DeJong, 1986; Kelly, 1990; Stevenson and Davis, 1994). Second, the intervention should provide age-appropriate information (Friedman and Litt, 1987). Third, it should provide specific rather than general information about condoms and

sexually transmitted diseases, as adolescent thinking tends to be concrete rather than abstract (Hein, 1989). Fourth, it should provide accurate information about the risk of contracting an STD, including AIDs, in a non-threatening manner (Johnson, 1975; Leventhal, Safer, and Panagis, 1983; Siegel, Grodsky, and Herman, 1986). Fifth, the intervention should challenge common misperceptions and provide accurate information about condoms and condom use.

Intervention

Over a nine-month period, we developed an intervention that could be delivered by videotape and by interaction with a health educator. The primary advantage of a videotape intervention was that it could be implemented easily at multiple sites. The primary advantage of a face-to-face interaction with a health educator was that the health educator could tailor the presentation to the participant.

To develop an intervention consistent with our model, we needed to identify the health goals of high-risk, sexually active African-American adolescent males and the salient features of their common sense representations of STDs. Thus, we interviewed public health workers and health care providers who worked at the proposed site. We sponsored an informal group discussion with African-American teenagers who served as peer sex(uality) educators for two different programs. Finally, we conducted one-on-one interviews and focus groups with African-American male adolescents seeking care at the proposed site. With each group, we asked about the sexual health concerns and beliefs of African-American adolescent males. More importantly, we were attentive to what the young people said and how they said it.

The 14-minute videotape was made by a team of local African-American video producers. It was scripted, acted in, and filmed by the group of African-American male adolescents participating in a school program for students at risk of not completing high school. The use of

videotape allowed us to present the intervention's messages through music, lyrics, dialogue, images, and personal stories. We believed that the videotape would be an appealing format for adolescents, particularly as it depicted places and situations familiar to them.

The intervention was presented via face-to-face interaction with the project's trained health educator, who was a young African-American adult female. To ensure comparability, the script for the face-to-face interaction mirrored the videotape's script and also took 14 minutes to deliver. However, in her delivery, the health educator was expected to tailor the intervention messages to the adolescent's particular situation. Given the face-to-face exchange, it was felt that the health educator could be effective in personalizing the risk for the adolescent. The face-to-face format also allows for rehearsal by the client of prevention related behaviors. In this case, each client could practice placing a condom on a penis model.

The intervention included messages relevant to several components of the model. With regard to RISK, it presented information about the risk of STDs, specifically gonorrhea and AIDS. With regard to MOTIVATION, the intervention presented several messages. First, it tells the adolescent that both partners are responsible for using condoms and that "you will be more of a man if you use condoms." Second, it states that STDs and AIDS can be prevented by correctly and consistently using condoms. Third, it states that using condoms can "give you a feeling of self-respect." These messages were designed to elicit identification with and feelings of belonging to the community of young African-American men with the expectation that such identification would increase participants' motivation to perform preventive behavior (Fisher and Misovich, 1990).

With regard to EFFICACY, the intervention stated that it is relatively easy to get and use condoms properly. It also stressed the importance of talking to partners about using condoms and other preventive behaviors. With regard to COPING, it provided information about and a

demonstration of the correct use of condoms. Other messages included the need to use a fresh condom for each sexual act, and that abstinence is the only 100 percent safe sex.

Methods

Participants and Design

During the 13-month period from September 1992 to October 1993, we recruited 562 males from the population of African- American males, ages 15 to 19, seeking care at a municipal social hygiene/STD clinic. The clinic, located in the central city, is the municipality's sole treatment facility for sexually transmitted diseases. Consecutive patients were recruited and randomly assigned to one of three conditions: health educator intervention, video intervention, or standard care (the control condition). Each participant completed a pretest questionnaire, received the assigned treatment, completed a post-test survey, and a 30-day follow-up questionnaire. One-third of the participants, selected randomly from each condition, completed a six-month follow-up questionnaire.

Procedure

An African-American male research associate, a graduate student in clinical psychology, approached each eligible male and briefly explained the nature of the project and what would be asked of each participant. If the young man expressed interest, the research associate invited him into his office and gave him a detailed description of the project. If the young man agreed to participate, the research associate obtained written informed consent and then used a block randomization procedure to assign the adolescent to the health educator, the video, or the standard care (control) condition.

Next, the participant completed the self-administered pretest questionnaire. If the participant had difficulty reading (e.g., the young man did not fill out the clinic registration form, or had

difficulty reading the consent form), the research associate obtained the pretest data via interview. He did so for 18 participants (3.2 percent). After completing the questionnaire, the participant was returned to the clinic for blood and urine testing.

When the lab results were available, the public health nurse working with the project took the participant to her office and gave him the necessary information and treatment. If the participant was assigned to the standard care (control) condition, the nurse took him to the research associate who administered the immediate post-test questionnaire. If the participant was assigned to the health educator condition, the nurse took him to the health educator who then delivered the face-to-face intervention. If the participant was assigned to the videotape condition, the nurse took him to the health educator who took the teen to another office, turned on the VCR, and left the room while the participant watched the video. After the participant received the intervention, the health educator took him to the research associate who gave him the self-administered post-test questionnaire.

After the participant completed the post-test, the research associate gave him 25 condoms, reminded him that he would be contacted for a follow-up survey in 30 days, and thanked him for his participation.

Measures

Four questionnaires were prepared using language familiar to our participants to assess the variables of interest. To determine an appropriate reading level for our instruments, 20 African-American adolescent males were recruited from the clinic and asked to complete the Gates-MacGinitie Reading Test (MacGinitie, 1978). The median reading grade level was 7.2, the minimum was 3.2, and the maximum was 12.0. The FOG index (McLaughlin, 1969) suggested that our instruments required no more than a sixth-grade reading level.

The pretest questionnaire included basic demographic items, an assessment of the participant's STD symptoms, and knowledge about STDs. Other questions asked about sexual experience (particularly within the preceding 30 days), and past condom use during sexual activity with steady and casual partners. The survey also included six condom knowledge items, several items assessing perceived risk of contracting AIDS and other STDs, and nine items designed to measure perceived self-efficacy in using condoms.

The post-test questionnaire included items assessing participant's sexual experience, condom use intentions in the next 30 days, what kind he would use, and who he would discuss condoms with. Other questions included the six condom knowledge items, fourteen condom attitude items, the three items assessing perceived risk, and the condom self-efficacy items. The last section included questions regarding the estimated frequency of sexual behavior and condom use in the next 30 days, with steady and casual partners.

Analyses

The focus of this paper is on the intervention's immediate impact on perceived risk, condom-use self-efficacy, and condom knowledge. To assess the intervention's impact on these variables, we used three separate one-between, one-within analyses of variance. For each analysis, the between-subjects variable was condition and the within-subject variable was measurement period (pretest, post-test). The dependent measure was the individual's score on the multi-item scale. To construct each scale, a correlation matrix was computed. Items which were significantly correlated were then included in a factor analysis. Items with loadings of .5 or greater were grouped and Cronbach's α (Cronbach, 1951) was calculated. Items were combined into a scale if α was .6 or greater.

We also report the results of analyses of post-test data. The post-test questionnaire included items that assessed the young man's attitudes toward condoms, his intention to use condoms, and

his ability to talk with his partner(s) about risk-related topics. To assess the impact of the intervention on these variables, we used separate one-way analyses of variance (between subjects, by condition). All analyses were performed on a PC, running the DOS version of SYSTAT (Wilkinson, 1990). The measures to be discussed are displayed in Table 1.

Results

Participants

Table 2 presents demographic information about the participants. One-third of the participants were between ages 15-17, one-third were 18, and one-third were 19 years old. Sixteen percent had completed less than 10 years of school; less than three percent reported any education beyond high school. Comparing the respondent's age with reported grade in school, 159 or 29 percent were one or more years below the expected grade level (based on age). Most of the respondents who were in school reported a grade average of B or C. At the time of their clinic visit, twenty-five percent were employed. There were no significant differences between participants in the three conditions on the demographic measures.

Table 3 presents information about the participants' sexual experience. Seventy-six percent were 14 or younger the first time they had sexual intercourse; ninety-six percent were 16 or younger. Fifty-nine percent reported that they had intercourse with more than 10 sexual partners. Fifty-six percent reported that they had sex at least two times each week. Twenty percent of the youth had fathered one child, and eight per cent had fathered two or more children. There were no significant differences between participants in the three conditions on these measures.

Perceived Risk

The pretest and post-test questionnaires included four items intended to measure the perceived risks associated with unsafe sexual activity. Since the intervention included accurate

information about these risks, we thought that responses to these items might change as a result of the intervention.

One item asked the respondent to assess the likelihood that he would contract another STD in the next year. This item measures perceived risk as defined in our theoretical model. The average scores at pretest and post-test on this item are displayed in Table 4. On the pretest measure, the means by condition are 2.77 (Health Educator, Video) and 2.68 (Control); four is "very likely." On the post-test measure, the means are 3.02, 2.96, and 2.76 respectively. A repeated measures analysis of variance indicated that there was a significant change from pretest to post-test. There was an interaction between time and condition. Young men in the health educator (n=183) and video (n=185) intervention conditions perceived greater risk at the post-test. The effect size for the face-to-face intervention is 0.246, and in the video condition is 0.189.¹

Two additional items inquired about the likelihood of transmission of HIV during intercourse involving two men and intercourse involving a man and a woman. Respondents considered transmission "not very likely" in both situations, at both pretest (mean=1.167) and post-test (mean=1.151). Responses to these two items were highly correlated (r=.486). A third item asked about the likelihood that someone infected with HIV would die. Scores on the three items were averaged to create a measure of HIV risk. A repeated measures analysis of variance by condition indicated no significant differences by time or condition. These results are displayed in the second panel of Table 4.

¹ The formula used to compute effect size is

$$\frac{\frac{M1-M2}{sI+2}}{2}$$

Condom-Use Self-Efficacy

Seven of the nine items designed to measure the individual's perception that he could use condoms were used in forming a scale. The seven items are listed in Table 1. Since the intervention included information about correct use, a demonstration of proper use, and assurances that condoms are relatively easy to get and use, we hoped that participants would perceive themselves as more efficacious after the intervention. The means at pretest and post-test, by condition, are displayed in the third panel of Table 1. Higher scores indicate greater efficacy. Cronbach's α for the scales are also listed in Table 1.

The results of the analysis of variance are reported in Table 4. The main effect of time is significant ($p=.005$); there is a significant increase from pretest (mean across conditions = 4.44) to post-test (4.53). There is also a significant interaction between time and condition ($p=.042$). The means by condition are displayed in Figure 2. Participants in the health educator condition perceived themselves as more efficacious at the post-test (4.422 vs. 4.611). The effect size associated with this increase is .257. The mean for participants in the video condition increased by half that amount, 0.085 points (effect size=.173). The means for those in the standard care condition are virtually the same.

Condom Knowledge

Accurate information about condoms is a prerequisite for their effective use, i.e., to successful coping. The pretest and post-test questionnaires included items designed to measure knowledge of how to use condoms correctly. Since the intervention included several messages about correct use, and a demonstration of proper use, we expected that participants' knowledge would improve from pretest to post-test. Five of these items formed a scale; they are the first

five items listed in Table 1.² The means are displayed in Table 4 and Figure 3; higher scores indicate more accurate knowledge.

Cronbach's α for the scales are listed in Table 1. Note that α for the pretest scale, CONKNOW1, is very low, .252. This is not unusual for pretest measures of knowledge; respondents did not know the correct answer to some of the items prior to the intervention, so the intercorrelations are not high. The α for the post-test scale, CONKNOW2, is .708.

The results of the analysis of variance are reported in Table 4. There was a significant main effect for condition ($p=.000$). There was also a significant main effect for trials ($p=.000$). Finally, there was a significant interaction between time and condition ($p=.000$). These results suggest that the principal effect is the interaction. The largest change from pretest to post-test is in the scores of the participants in the health educator condition. Their mean increased from 3.004 to 3.499 (effect size=.804). The mean for participants in the video condition increased from 3.066 to 3.159 (effect size=.28). The means for the young men in the standard care condition show a negligible decrease.

These results indicate that the intervention had a substantial impact on condom knowledge. Participants in both intervention conditions were more likely to respond correctly to knowledge items on the post-test. Furthermore, the health educator was more effective in increasing knowledge than the video.

Condom Attitudes

The post-test questionnaire included a dozen items measuring attitudes toward condom use. Since the intervention focussed on and emphasized the importance of condom use, we expected that attitudes toward condoms would become more positive. Participants in the standard care

² On the original questionnaire, the order of the response categories were reversed for items 2 and 5; these items were recoded before the scale was constructed.

condition did not receive information about condoms, so their attitudes should not be affected. Thus, we expect more positive attitudes among the young men in the two intervention conditions compared to those in the control condition. Five items formed a scale; they are listed in Table 5. The means by condition are also listed in Table 5; higher scores indicate more favorable attitudes.³ Cronbach's α for the five-item scale is .7031.

The results of an analysis of variance are reported in Table 6. There is a significant effect of condition ($p=.001$). Participants in both of the intervention conditions have high average scores (3.00, 2.99); participants in the standard care condition have a lower average (2.80). The effect size associated with the health educator vs. standard care difference is .36; the effect size associated with the video vs. standard care difference is .34.

Intention to Use Condoms

The post-test questionnaire contained three items regarding the young man's intention to use condoms in the next 30 days. We assessed how often he intended to use condoms during vaginal, oral, and inceptive anal sexual activity. Three items asked about intention to use with his steady partner. These items are listed in Table 5. A similar series inquired about intention to use with other partners. A scale was created by averaging the response values for the three items. Cronbach's alpha for the scale is 0.866.

One-way analyses of variance were carried out on the two scales, and on the six individual items. There is a significant difference by condition in reported intention to use condoms during vaginal intercourse with steady partners in the next 30 days. Young men who received the intervention from the health educator report the strongest intention to use condoms. The difference between the health educator and control conditions is statistically significant ($p=.03$).

³ Responses to the first and fifth items were recoded so that higher scores indicate accurate knowledge.

The effect size associated with the difference in intention between the health educator and the control condition is 0.325.

Ability to Talk to Partners

Three of the items on the post-test designed to measure the young man's sense that he could talk to partners about risk-related topics formed a scale. One of the messages in the intervention was that you cannot tell whether someone has an STD by looking, that you have to communicate with partners about risk and protective behaviors. We hoped that, if participants' self-efficacy improved as a result of the intervention, they would be more likely to feel able to talk to partners. The items are listed in Table 5. Higher scores indicate more confidence in ability to talk to partners. The Cronbach's α for the three-item scale is .744.

The results of the analysis of variance are displayed in Table 4. The differences in mean scores across the three conditions are significant ($p=.012$). The mean for the health educator condition is 4.434, for the video condition 4.348, and for the standard care condition it is 4.184. The simple effects test indicates that the difference between the health educator and control conditions is significant ($p=.013$). The effect size for the difference between the health educator and standard care conditions is .31. Thus, participants in the health educator condition were more likely to say that they could talk to a partner about STD/AIDS prevention.

Discussion

The analyses reported here indicate that the intervention effected several of the variables identified by the self-regulation model as influences on condom use. The intervention 1) increased participant's awareness of the risk of contracting an STD within the next year, 2) improved participants' perceptions of self-efficacy for condom use, and 3) increased knowledge about condoms. Data from the post-test indicate that the intervention is associated with 1) more

favorable attitudes toward condoms, 2) stronger intention to use condoms in the next 30 days, and 3) improved perception of respondents' ability to communicate with partners about preventive behaviors.

Our analyses also suggest that the health educator was more effective than the video in influencing self-efficacy, condom knowledge, and perceived ability to talk to partners.

A recent review of the research on video interventions in STD clinics (Healton and Messeri, 1993) provides a context within which our results can be interpreted. Eight studies conducted in clinics were reviewed. African-American adult men were a majority or most of the participants in six of the studies. A meta-analysis of results found substantial effects of videotaped educational/intervention programs on knowledge about or attitudes toward STDs and condoms. Our results, with teenage men as participants, show modest effects (effect sizes of .17 to .34) on condom knowledge, attitudes, and self-efficacy. We obtained much larger effects (effect sizes of .257 to .884) in our face-to-face condition. To the extent that our findings can be generalized, they indicate that programs presented face-to-face to African-American males by a health educator will have greater impact than culturally similar videos presenting the same messages.

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TABLE 1
MEASURES OF THEORETICAL CONSTRUCTS

	<u>Pretest</u>	<u>Posttest</u>
	Mean	Mean
	sd	sd
	alpha	alpha
<u>Perceived Risk</u>		
How likely are you to get an STD within the next year?	2.739	2.912
1. Not likely at all	0.076	0.078
2. Not very likely		
3. Somewhat likely		
4. Very likely		
<u>HIV Risk</u>		
If two men have sex, and one is infected with the AIDS virus, how likely is it that the other will become infected?	1.216	1.183
	0.374	0.364
	0.532	0.632
If a man and a woman have sex, and the woman is infected with the AIDS virus, how likely is it that the man will become infected?		
If someone has AIDS, how likely is it that they will die from the disease?		
<u>Condom Self-Efficacy</u>		
If you want to use a condom during sex, how sure are you that you could put it on and take it off correctly?	4.439	4.528
	0.554	0.733
	0.635	0.918
5. Very sure I could		
4. Somewhat sure I could		
3. Not sure I could		
2. Somewhat sure I couldn't		
1. Very sure I couldn't		
How sure are you that you would be able to say "NO" if a partner was trying to talk you into having sex and you didn't want to?		
If you wanted to tell a new sex partner that you won't have sex without a condom, how sure are you that you could?		
How sure are you that you would be able to convince one of your friends to take precautions to prevent STDs and AIDS?		
If you wanted to use a condom every time you had sex with a casual partner, how sure are you that you could?		
If you wanted to use a condom every time you had sex with your steady partner, how sure are you that you could?		
How sure are you that you would be able to get condoms if you or a friend needed them?		

TABLE 1, Con't

	<u>Pretest</u>	<u>Posttest</u>
	Mean	Mean
	sd	sd
	alpha	alpha
<u>Condom Knowledge Scale</u>		
You don't need to put the condom on until you are ready to come.	3.025	3.218
1. Strongly Disagree	0.464	0.598
2. Disagree	0.252	0.708
3. Agree		
4. Strongly Agree		

It's okay to use vaseline to lubricate condoms.

Condoms which have a spermicide are better protection against STDs and AIDS than other condoms.

After you come, withdraw your penis while it is still hard and then remove the condom.

You must unroll the condom completely before you put it on.

You can tell if your partner has an STD.

If she is on the pill, you don't need to use condoms.

TABLE 2
DEMOGRAPHIC CHARACTERISTICS OF
PARTICIPANTS

<u>AGE</u>	<u>N</u>	<u>PERCENT</u>	<u>MOTHER'S EDUCATION</u>	<u>N</u>	<u>PERCENT</u>
15	26	4.6			
16	62	11.1	Less than h.s.	59	10.5
17	108	19.2	H.S. diploma	188	33.5
18	177	31.5	Some college	159	28.3
19	187	32.7	4 yr coll. degree	36	6.4
Missing	2	0.1	+4 years of coll.	15	2.7
			Don't know	104	18.5
			Missing	1	0.2
<u>EDUCATION</u>			<u>FATHER'S EDUCATION</u>		
7th Grade	3	0.5			
8th Grade	28	5.0	Less than h.s.	48	8.5
9th Grade	60	10.7	H.S. diploma	164	29.2
10th Grade	147	26.2	Some college	87	15.5
11th Grade	161	28.7	4 yr coll. degree	46	8.2
12th Grade	131	23.3	+4 years of coll.	26	4.6
GED	18	5.0	Don't know	191	34.0
Trade/Vocation	5	0.9			
Some College	9	1.6			
<u>AVERAGE GRADES</u>			<u>LIVES WITH FATHER</u>		
A-B+	33	5.9	Does	94	16.7
B-C+	260	46.2	Does Not	468	83.3
C-D+	252	44.8			
D-F	12	2.1			
Missing	5	0.1			
<u>EMPLOYMENT</u>					
Employed	142	25.3			
Not Employed	420	74.7			

TABLE 3
SEXUAL BEHAVIOR OF
PARTICIPANTS

	<u>N</u>	<u>PERCENTAGE</u>		<u>N</u>	<u>PERCENTAGE</u>
<u>AGE AT FIRST SEX</u>			<u>SEX WITH A PROSTITUTE</u>		
Under 10	44	7.9	No	497	88.4
10 to 14	384	68.4	Yes	63	11.2
15 to 16	113	20.1	Missing	2	0.4
17 to 19	20	3.6			
Missing	1	.2			
<u>NUMBER OF PARTNERS EVER</u>			<u>SEX FOR DRUGS</u>		
1 to 5	89	15.9	No	531	94.5
6 to 10	135	24.0	Yes	30	5.3
11 to 15	79	13.9	Missing	1	0.2
16 to 20	85	15.2			
21 to 45	94	16.8			
46 to 99	50	9.2	<u>NUMBER OF CHILDREN</u>		
100 or more	24	4.4	None	401	71.0
Missing	6	1.1	One	115	20.5
<u>NUMBER OF CASUAL PARTNERS</u>			Two or more	45	8.0
0	61	10.9	Missing	1	0.5
1 to 3	194	34.6			
4 to 5	91	16.2			
6 to 10	99	17.5			
11 to 25	79	14.1			
26 to 150	31	5.7			
Missing	7	1.2			
<u>FREQUENCY OF SEX</u>					
Less than once a month	62	11.1			
Once a month	58	10.3			
Once a week	120	21.4			
2-3 times a week	224	39.9			
4+ a week	95	16.9			
Missing	3	0.1			

TABLE 4
EFFECTS OF INTERVENTION ON MEASURES
OF THEORETICAL CONSTRUCTS
(Mean, Standard Error)

<u>Measure</u>	<u>Condition</u>			<u>F</u>	<u>p</u>	<u>d</u>
	Health (183)	Video (185)	Control (187)			
Perceived Risk						
Pretest	2.770 .077	2.768 .076	2.679 .076			
Posttest	3.016 .079	2.957 .079	2.765 .078	T 16.994	0.000	0.173
HIV Risk						
Pretest	1.202 .027	1.196 .027	1.250 .027			
Posttest	1.153 .027	1.186 .027	1.209 .027	T 5.549	0.019	
Condom Self-Efficacy						
Pretest	4.422 .617	4.466 .505	4.430 .537			
Posttest	4.611 .602	4.551 .697	4.424 .866	T 7.882	0.005	
				TxC 3.191	0.042	0.257
Condom Knowledge						
Pretest	3.004 .489	3.066 .426	3.004 .475	C 15.044	0.000	
Posttest	3.499 .479	3.159 .576	3.001 .621	T 70.964	0.000	
				TxC 43.22	0.000	0.884

TABLE 5
POSTTEST MEASURES
(Mean, Standard Deviation)

	<u>Posttest</u>
	Mean
	sd
	alpha
<u>Condom Attitudes</u>	
I am not embarrassed to buy condoms in the store.	2.930
1. Strongly Disagree (SD)	0.570
2. Disagree (D)	0.703
3. Agree (A)	
4. Strongly Agree (SA)	
I want my friends to know I use condoms.	
Using condoms makes sex more enjoyable.	
Using a condom is unnatural.	
There are ways you and your partner can make using condoms sexy.	
<u>Condom Intentions</u>	
If you have vaginal sex with your steady in the next 30 days, how often will you use condoms?	
1. Whenever I have ____ sex	
2. More than half of the time	
3. Half of the time	
4. Less than half of the time	
5. A few times	
6. Once	
<u>Ability to Talk to Partners</u>	
It's too hard to talk to a partner about using condoms.	4.321
5. Strongly Disagree (SD)	0.817
4. Disagree (D)	0.744
2. Agree (A)	
1. Strongly Agree (SA)	
How sure are you that you would be able to talk to a partner about ways to prevent STDs and AIDS?	
5. Very sure I could	
4. Somewhat sure I could	
3. Not sure I could	
2. Somewhat sure I couldn't	
1. Very sure I couldn't	
How sure are you that you would be able to ask a potential partner about their sexual and drug experience?	

TABLE 6
EFFECTS OF INTERVENTION ON POSTTEST MEASURES
(Mean, Standard Error)

<u>Measure</u>	<u>Condition</u>				<u>F</u>	<u>p</u>	<u>d</u>
	Health (183)	Video (185)	Control (187)				
Condom Attitudes							
Posttest	3.002 0.487	2.990 0.573	2.799 0.620	C	7.600	0.001	0.360
Condom Intention, Vaginal Sex							
Posttest	1.892 0.154	2.087 0.162	2.481 0.160	C	3.620	0.028	0.325
Ability to Talk to Partners							
Posttest	4.434 0.060	4.348 0.060	4.184 0.059	C	4.500	0.012	0.308

Figure 1. Self-Regulation Model

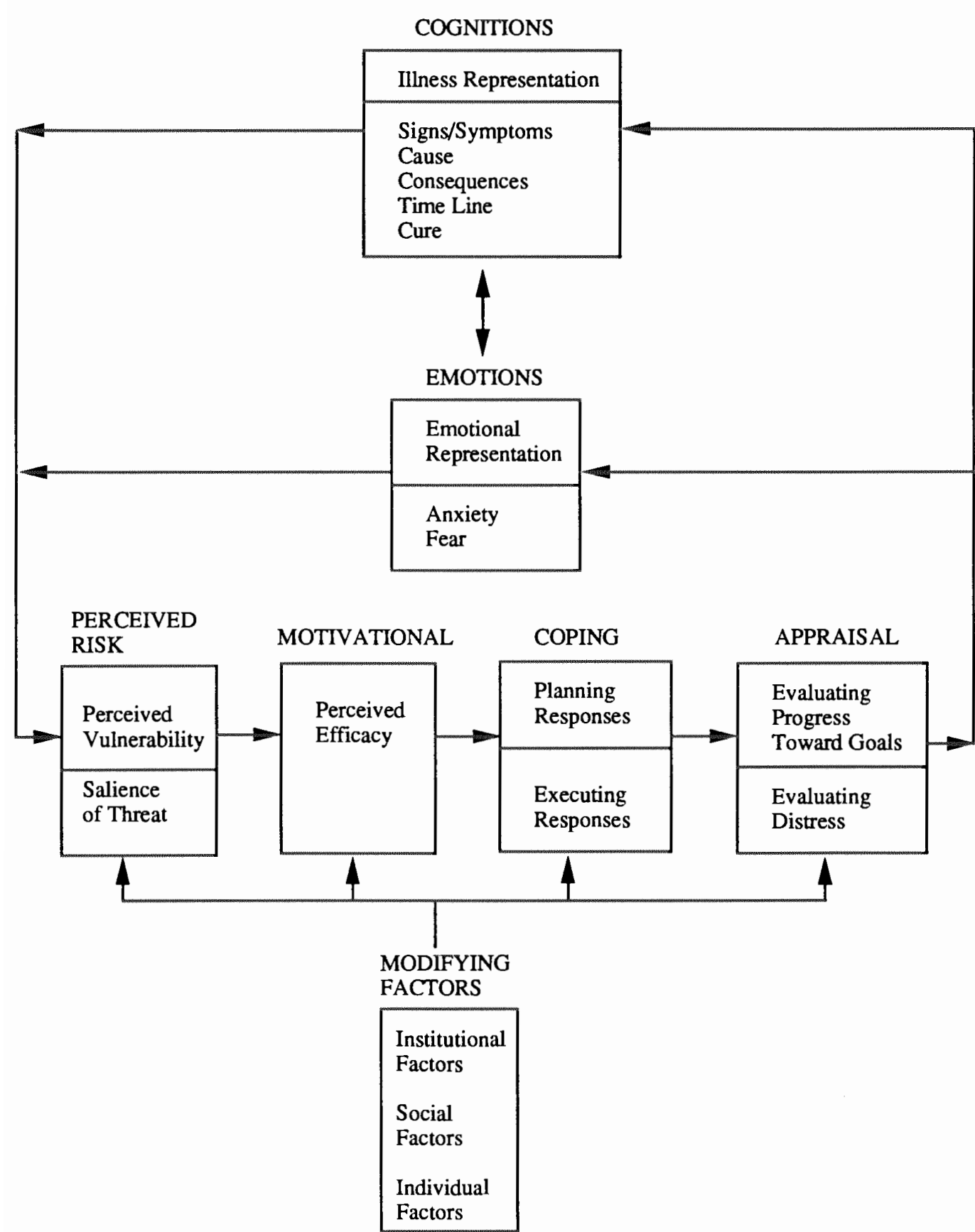


Figure 2: Mean Self-Efficacy Scores by Time and Condition

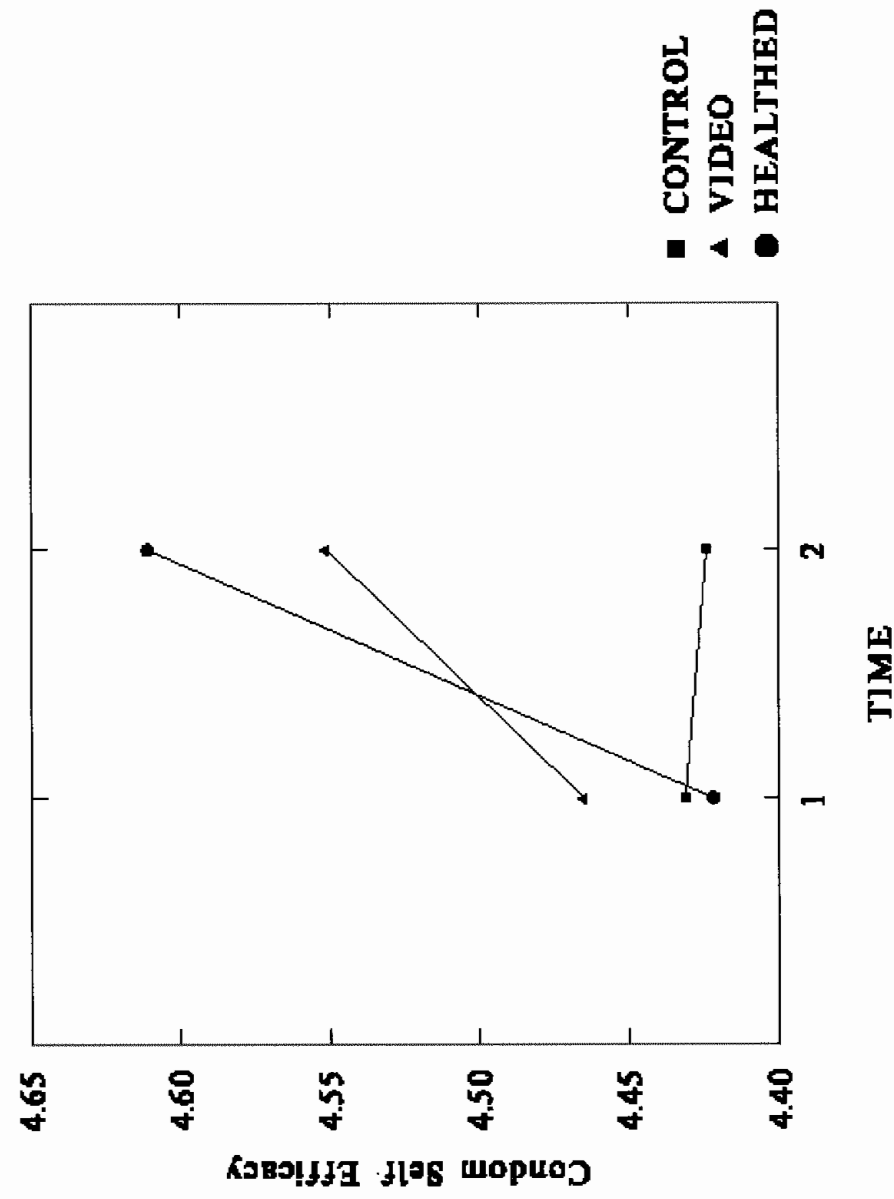
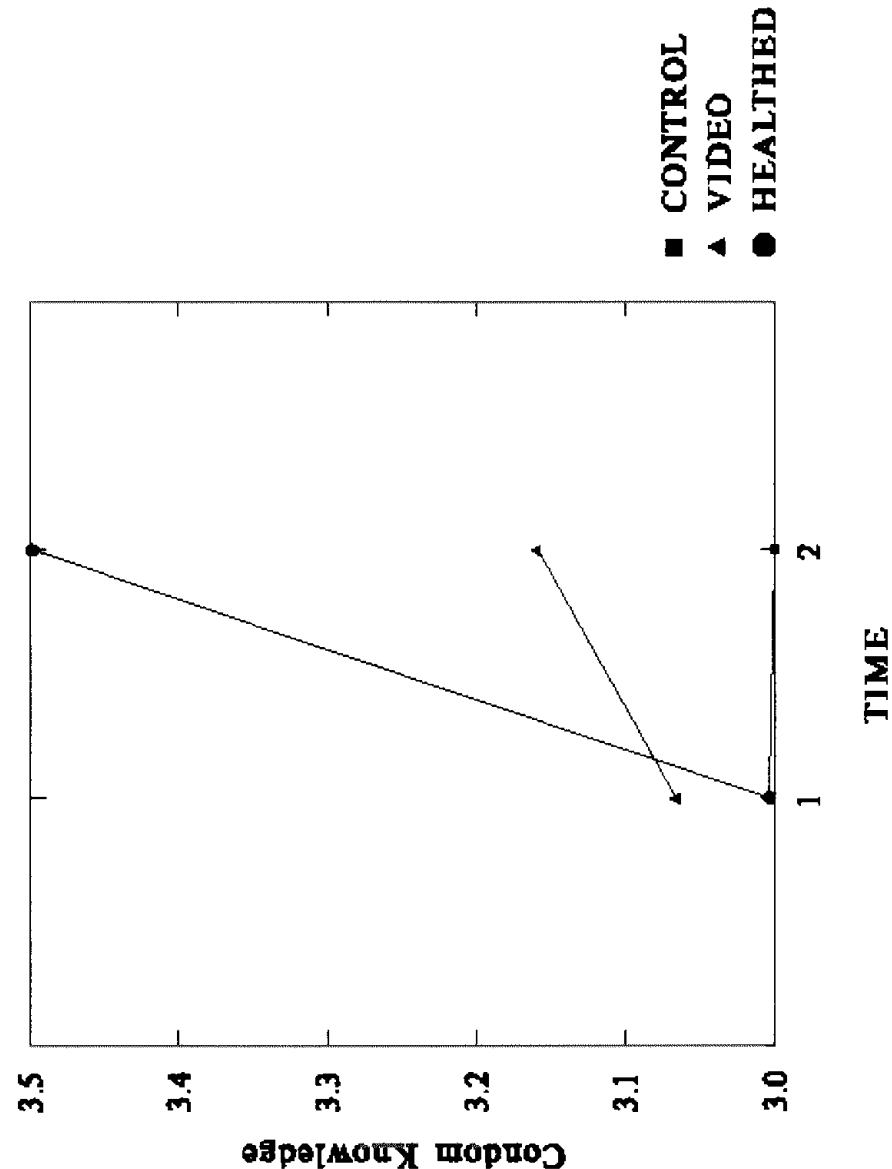


Figure 3: Mean Condom Knowledge Scores by Time and Condition



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