

Talking About Safe Sex: The Role of Expectations and Experience¹

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We examined how affective expectations and objective experience influenced female college students' ($N = 69$) evaluations of discussions of safe-sex practices and willingness to engage in future discussions. Participants interacted with a confident male confederate (positive experience) or a nervous one (negative experience). Positive experiences produced more positive evaluations and greater willingness to participate in the future. Expectations were manipulated after the discussion by telling participants that discussions became easier over time (positive expectations) or telling participants nothing (neutral expectations). Independent of experience, positive expectations also resulted in more positive evaluations and greater willingness. Similar results were obtained 2 weeks later. Findings are discussed in terms of previous studies of affective expectations and implications for safe-sex education programs.

If you can trust a man enough not to laugh at you when you take off your clothes, he's probably not going to give you a terminal disease either.

— Mencimer, 1993

The applied issues tackled by social psychology can be a matter of life and death, as is true for one of social psychology's latest applied challenges: getting people to modify their sexual practices in order to prevent the spread of AIDS. Estimates suggest that somewhere between 650,000 and 900,000 people in the United States (Karon et al., 1996) and at least 1 in 500 American college students are infected with HIV (Gayle et al., 1990). Statements like the quotation opening

¹The authors thank Maureen Popp and Ben Rea for their help in conducting the experiment, and Justin Moore for his help in coding the data. We also thank Scott Allison, Holly Arrow, John Edwards, Bertram Malle, Kathryn Oleson, Carolyn Weisz, and Tim Wilson for their comments on an earlier draft of the paper. Some of the data in this paper were presented in a poster session at the 1996 meeting of the Southeastern Society of Social Psychologists in Norfolk, VA.

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this paper, from a writer who readily acknowledges its defect but nonetheless admits that it guides her behavior, suggest that the task will not be easy.

In this paper, we focus on one behavior linked to the prevention of AIDS: discussing issues of safe sex. Although the term *safer sex* is actually more precise, given that sexual abstinence is the only guaranteed way to keep from acquiring sexually transmitted AIDS, discussions of condom usage, partners' risk factors, and precautions that can be taken with potential sexual partners can reduce the risk of contracting AIDS. In particular, we are interested in the effects of manipulating two variables—people's affective expectations about safe-sex discussions and people's actual experiences discussing safe sex—on their evaluations of safe-sex discussions and their willingness to engage in future discussions. Previous research has demonstrated that people's affective expectations influence their ratings of an experience and their willingness to repeat that experience (e.g., Klaaren, Hodges, & Wilson, 1994), a finding that could have important implications for safe-sex education programs. In addition, we seek to extend Klaaren et al.'s research by demonstrating that expectations given about future experiences will affect ratings of a previous experience that has already occurred.

Historically, the first round of safe-sex public-health strategies focused primarily on education: building a knowledge base about AIDS, how it is transmitted, and how it can be prevented (Choi & Coates, 1994; Fisher & Fisher, 1992; Taylor, 1995; Weisse, Nesselhof-Kendall, Fleck-Kandath, & Baum, 1990). Evidence suggests that these educational efforts are somewhat helpful in spreading information (Kalichman, Rompa, & Coley, 1996; Kelly, Murphy, Sikkema, & Kalichman, 1993) and even in reducing risky sexual behaviors to some extent (Fisher & Misovich, 1990; Kalichman et al., 1996; Kelly et al., 1993). Other studies, however, suggest that knowledge about AIDS does little to reduce reported risk behaviors (McKusick, Horstman, & Coates, 1985; van der Velde & van der Pligt, 1991; Winslow, Franzini, & Hwang, 1992). Thus, education is likely an important first step in preventing the spread of AIDS and other sexually transmitted diseases (STDs), but despite informative educational programs and relatively high levels of knowledge among many groups that have been studied in the United States, people (college students especially) still engage in sex behaviors that put them at risk for contracting AIDS or other STDs (Baldwin & Baldwin, 1988; DiClemente, Forrest, & Mickler, 1990; Fisher & Fisher, 1992; Fisher & Misovich, 1990).

Indeed, college students are a critical target for AIDS-prevention programs (Winslow et al., 1992). They are particularly sexually active (Fisher & Misovich, 1990), they seem to know the risks involved, and they know that they are supposed to discuss using condoms and other safe-sex practices with their partners. Despite this knowledge, however, they often do not pursue these discussions. Instead, many college students (as well as adolescents) know the risks but still do not use condoms regularly (Bandura, 1990; Kegeles, Adler, & Irwin, 1988;

Winslow et al., 1992), and generally find it easier to have unsafe sex than to discuss safe sex (Coates & Sanstad, 1992; Fisher & Misovich, 1990).

When it comes to practicing safe sex, then, there appears to be a gap between knowledge on the one hand and behavior on the other (Choi & Coates, 1994; Fisher & Fisher, 1992; Stone, Aronson, Crain, Winslow, & Fried, 1994; Taylor, 1995). This gap is not a new problem for social psychologists, but within the realm of safe sex, it has challenged researchers to discover new ways to bring people's behavior in line with what they know and believe. For example, Stone et al. (1994) had college students make a statement to encourage other people to engage in safe sex, which made them hypocrites if they themselves did not also take precautions. The result was that the students began to "practice what they preached," suggesting that pointing out the dissonance between people's words and deeds may motivate them to engage in safer sex practices.

However, we believe that there is still more to be learned about moving people from knowledge to action when it comes to discussing safe sex with a potential sexual partner, in part because talking about safe sex is, in many ways, distinct from other behaviors. First, there is a relative shortage of models and scripts of how safe-sex discussions should go (Miller, Bettencourt, DeBro, & Hoffman, 1993). The entertainment world is slowly incorporating scenes portraying safe-sex practices in television shows targeted at college-aged viewers, such as episodes of the television show *Friends*, but most media couples collapse onto the nearest horizontal surface in the heat of passion without broaching issues of safe sex. Using "real people" as social models—something that has effectively changed public behavior in other realms (e.g., Aronson & O'Leary, 1982-1983; Rushton & Campbell, 1977)—is less practical in the realm of safe sex because it is unlikely that observers will be present to see these intensely private discussions (and the behaviors that often follow) in order to learn "how it's done."

Second, in addition to the lack of models, attempts at educating the public about how to discuss safe sex may be carried out in an environment that is distinctly cooler and calmer than the context in which real discussions occur. We know that learning experiences that take place in the context in which the skill will be performed are often the most effective (Hintzman, 1990; Tulving & Thomson, 1973), and we know from the attitude literature that the more specifically relevant an attitude is to a behavior, the better it predicts the behavior (Ajzen & Fishbein, 1980). Together, these findings suggest that the extent to which people's preparation for discussing safe sex simulates key features of real discussions may be an important variable in determining the likelihood that people discuss issues of safe sex with their actual sex partners. Re-creating some of these conditions in a laboratory study would generate ethical quandaries, but some aspects of these discussions could be captured in the lab, such as having heterosexual research participants ask an opposite-sex person questions about

sexual practices and sexual history in the context of a one-on-one discussion, as we have attempted to do in the present study.

Thus, one's experience with discussing safe sex, either actively participating or practicing, or at least vicariously experiencing a safe-sex discussion may affect the frequency of future discussions. Having navigated a successful safe-sex discussion could provide a number of benefits. Safe-sex intervention programs that directly address communication skills have been shown to be effective in encouraging safe-sex behavior (Carey et al., 1997; Catania et al., 1989; DiClemente & Wingood, 1995; Kalichman et al., 1996; Miller et al., 1993). In addition, from a simple associationist perspective, a pleasant sexual experience following a safe-sex discussion should reinforce the behavior even more (Fisher & Misovich, 1990).

Getting people to successfully discuss safe sex just once might be the first step in breaking an old habit of silence. A successful discussion could promote feelings of efficacy; that is, the feeling that one is capable of exercising control over one's safe-sex-related outcomes, which in turn could lead to behavioral change (Bandura, 1986). Increasing self-efficacy not only changes people's attitudes toward future performance, but can also produce improved performance (e.g., Litt, 1988; Smith, 1989). In the realm of safe sex, self-efficacy has been linked to higher condom usage (e.g., Aspinwall, Kemeny, Taylor, Schneider, & Dudley, 1991; Goldman & Harlow, 1993; O'Leary, Goodhart, Jemmott, & Boccher-Lattimore, 1992; Wulfert & Wan, 1993). Thus, providing people with successful experiences in discussing safe sex could be an important weapon in fighting the spread of AIDS.

The self-efficacy that results in part from successful experience in turn affects people's expectations for future experiences (Bandura, 1977). Leading people either to believe or not believe that they can control their outcomes (i.e., manipulating their expectations of self-efficacy) has been shown to affect people's future behavior—safe-sex behaviors (Bandura, 1990) as well as behaviors in other realms (Litt, 1988). Although Bandura (1977) cautions that simply telling people what to expect is one of the weaker routes to producing self-efficacy, such exhortations in combination with experience, or from highly credible sources, may be more effective. The role of expectations should be given special attention in regard to safe-sex discussions, where manipulating the public's expectations may be more practical than manipulating their experience.

A variety of social-cognition studies have found that people's expectations and theories about how an upcoming event will play a powerful role in determining how they evaluate an experience, even when their expectations or theories are contrary to actual experience (Catanzaro & Mearns, 1999; Hirt, 1990; Hirt, Erickson, & McDonald, 1993; Klaaren et al., 1994; Ross, 1989; Ross, Lepper, & Hubbard, 1975; Wilson, Lisle, Kraft, & Wetzel, 1989). In the realm of affective expectations, Klaaren et al. (1994) found that how people rated an

experience of watching a movie was influenced by both objective aspects of the experience (e.g., viewing conditions, video quality) and affective expectations about the event. In fact, participants' later decisions about whether or not to repeat the experience were influenced more by their expectations than by the objective aspects of the experience. The same study not only found an effect for expectations on the laboratory experience, but also on everyday experience outside the lab; specifically, college students' winter vacations. Both studies suggest that objective experience and expectations contribute independently to people's affective ratings of an event.

Klaaren et al. (1994) explored a number of different explanations for the results that they found. One possibility is that expectations function via a "selective-memory" mechanism that tends to forget inconsistent elements of the experience. Another possibility is that there is an "initial-effects" mechanism that blocks elements of the experience that are inconsistent with expectations from being encoded at the outset. However, the explanation that Klaaren et al. found the most support for was that affective expectations influence people's ratings of their experiences via a reinterpretation of objective experience. Thus, for example, if one expects a vacation to be good, then one's retrospective evaluation of the vacation tends to be good because overcast skies are remembered as preventing sunburn rather than as bad weather, and not because one actually forgets bad parts of the vacation, such as the picnic that caused food poisoning, or because one actually fails to notice the annoying dripping faucet in the hotel room.

Work by Hirt and his colleagues (e.g., Hirt, 1990; Hirt et al., 1993; McDonald & Hirt, 1997) examining expectancy effects on the recall of factual information has shown effects of both expectancy and memory trace. In Hirt and his colleagues' paradigm, when people are asked to recall information about a person's past performance, their answers are influenced by their expectations about how the person will perform in the future, as well as by the actual information that they initially encountered. The expectancies that influence recall in Hirt and his colleagues' work are given after, not before, the past performance information is presented. In contrast, in previous work examining affective expectations (e.g., Klaaren et al., 1994; Wilson et al., 1989), expectations were given prior to actual experiences. However, given that people's present attitudes influence their estimates of their past attitudes (Ross, 1989), it is possible that newly gained positive expectations could change people's construals of an experience that they have already had. Investigating this possibility is one of the main goals of the present study.

Thus, two possible ways to encourage future discussions of safe sex would be to provide people with positive experiences in this realm, and positive expectations that future discussions would go smoothly. If expectations function the same way in the realm of safe-sex discussions as they do in other realms, then even in the absence of any positive safe-sex experiences, giving people the

expectation that their discussions of safe sex will go well should make them more willing and more likely to discuss safe sex in the future. The present study examines the effects of these two variables—experience and expectations—on participants' reactions to discussions of safe sex. We created an experience that, although conducted in a laboratory, shared a number of key features with real safe-sex discussions, by having participants interview an opposite-sex person about topics related to safe-sex practices. (We did not ask our participants about sexual orientation, and thus can only assume that, for some of our participants, discussing safe sexual practices with a same-gender person would be more representative of "real-life" safe-sex discussions.) Outcomes were measured both in terms of how positively people rated the experience and also how willing they were to repeat it. We predicted that a positive experience discussing safe sex would make participants more positive on both measures. In addition, we predicted an independent contribution of expectations, regardless of actual experience, such that participants who were given positive expectations would be more positive on both measures than those not given positive expectations.

Practical considerations involving the use of a confederate (described in the Method section) constrained us to the use of a single-sex sample, and we chose to target female participants because the rate of new AIDS cases is growing faster for women than for men (Ellerbrock, Bush, Chamberland, & Oxtoby, 1991; Karon et al., 1996; Weisse et al., 1990). Most recently ("AIDS Cases Among Women," 1997), Centers for Disease Control researchers have noted that women under the age of 25 years (i.e., the group including college-age women) are increasingly more likely to get AIDS from infected men, rather than via sharing needles, which used to be the primary source of infection for women. Although some safe-sex topics, such as ascertaining a partner's risk factors, are equally important for both genders, discussing condom usage is particular important for women, given that men can protect themselves by simply wearing one, whereas women who are sexually involved with men must convince someone else to wear one in order to protect themselves. (There is also now a "female condom" available, but many people find it expensive and awkward to use.)

Method

Participants

Seventy-nine female students at the University of Virginia served as participants, in exchange for either \$5 or course credit. Thirty-eight of these students were recruited during registration for summer school, and 31 were enrolled in an introductory psychology class in the fall. Five students' data were eliminated from the analyses because of the students' suspicion of the confederate, an additional student's data were eliminated because she discussed the study with another participant before being contacted at the follow-up, and another student's

data were eliminated because she pursued the confederate after the study, presumably out of amorous interest. Despite our repeated attempts, 3 people who participated in the first phase of the experiment were unable to be reached for the follow-up session. (Unfortunately, these participants also never received a full explanation of the study, although all of the participants were given the researchers' phone numbers in case they had questions.) Thus, the analyses reported are based on data from 69 participants.

Procedure

Participants were told that the study involved issues of safe sex and that they would be discussing safe-sex behaviors with a partner during the study. When they arrived in the laboratory, they found a male confederate, posing as another participant. He always arrived before the real participant and pretended to be waiting for the experimenter. Shortly after the participant arrived, the experimenter (a female) came and greeted both the participant and the confederate. They were told that the two of them would be discussing safe-sex behaviors in the form of a question-and-answer session for about half an hour using a structured interview, and then they would fill out a questionnaire about their feelings during the interview. The experimenter mentioned that this was part of a study designed to develop techniques to help people discuss safe sex more comfortably. In order to simulate some of the self-consciousness of real safe-sex discussions, and also to be consistent with the cover story, participants were told that their discussions would be videotaped (however, no videotaping occurred during the portion of the study when we collected our dependent measures).

The male confederate was always assigned to be the interviewee answering the questions, and the participant was always assigned to be the interviewer asking the questions, although these assignments appeared to have been made randomly. Participants were instructed to record the confederate's answers to each of 10 questions on the sheet provided. Examples of the questions included in the interview are "How do you discuss safe sex with your partner or partners?" "What precautions do you take to guard against contracting the AIDS virus?" "What behaviors do you engage in that you would consider risky?" and "What are some important things to know about condom usage (e.g., how to put one on, what to do if it breaks)?"

The experimenter then left the room, instructing the interviewee (confederate) to come get her when they were done. The participant began by reading the first question on the list. In response to each question, the confederate answered with what appeared to be a spontaneous reply. In actuality, he was following one of two memorized scripts, depending on the experimental condition.

Manipulation of experience. For participants randomly assigned to the positive experience condition, the confederate followed a script designed to make the

interview as pleasant and as comfortable as possible. This included acting in a generally straightforward and comfortable manner, answering all questions clearly without hesitation, and showing no signs of discomfort. If the participant had been randomly assigned to the negative experience condition, the confederate followed a script designed to make the interview awkward and difficult. This included acting in a generally uncomfortable fashion, hesitating before answering, appearing very embarrassed, and muttering some responses so softly that the participant had to ask that they be repeated. To maintain consistency, the same questions and answers were used in each of the two conditions—only the manner in which the questions were answered and the confederate's overall level of comfort/discomfort were varied.

Manipulation of expectation. When the participant and confederate finished with the questions, the experimenter reentered the room and proceeded with the expectation manipulation. Participants randomly assigned to the control expectation condition did not receive any additional information at this point. Although this was our control expectation condition (because we did not actively lower participants' expectations), if college students' behavior and reports are any indication (e.g., Bandura, 1990; Fisher & Misovich, 1990), then expectations about safe-sex discussions are more negative than positive. Thus, the control expectation condition, through no action on our part, should have resulted in expectations that were more negative than neutral.

Participants who were assigned to the positive expectation condition were given information leading them to believe that discussing safe sex would get easier and more pleasant for them in the future. They were told that researchers have found that, with practice and with the help of the interview questions being developed in this study, people are more likely to discuss safe sex and are more likely to do it effectively. They were shown a graph that supposedly tracked a group of students who had participated in an earlier phase of the study at another university. The graph displayed a highly significant difference indicating less anxiety, nervousness, and embarrassment during discussions of safe sex for an experimental group that supposedly had been trained using interview techniques. They were also shown fabricated responses supposedly from participants in yet another phase of the project at a nearby college. These responses were generally positive, including feeling comfortable during a discussion, thinking that the interview questions were helpful and easy to use, and rating discussions of safe sex as pleasant overall. The experimenter casually reinforced the notion that these data indicated positive responses.

Dependent Measure

All of the participants then completed a questionnaire assessing how comfortable they felt during the interview (1 = *very uncomfortable*, 7 = *very*

comfortable), how pleasant it was (1 = very unpleasant, 7 = very pleasant), how smooth it was (1 = very awkward, 7 = very smooth), and how much they enjoyed it (1 = not at all, 7 = very much). In addition to these evaluative measures, participants were asked "If you had an option to be in this experiment again, how likely would you be to participate?" and responded on a 7-point scale ranging from 1 (definitely would not participate) to 7 (definitely would participate).

The questionnaire also included some background information on participants' safe-sex experiences prior to being in our study. Participants were asked to indicate their current dating status, how often they engaged in risky sexual behavior, and how many actual or attempted discussions of safe sex they had had with potential sexual partners in the past. After completing the questionnaire, the participants were thanked for participating and were dismissed.

Follow-Up Measures

Approximately 2 weeks later ($M = 16.6$ days, $SD = 3.23$), the participants were contacted by telephone by a different experimenter who was unaware of the participants' assigned conditions. The caller explained that the researchers were contemplating extending this line of research and were wondering how willing the participants would be to participate in the study again on a scale of 1 (definitely will not participate) to 7 (definitely will participate). They were also asked the same evaluative questions that were asked at the first session regarding how comfortable, pleasant, smooth, and enjoyable the original session had been. After probing for suspicion, we gave all participants a complete and thorough explanation of the study, including an explanation of all deception and the use of the confederate in the initial interview.

Results

The four evaluative measures of the experience at Time 1 (how smooth the interview was, how pleasant the interview was, how much they enjoyed being in the interview, and how comfortable they felt during the interview) were highly intercorrelated ($\alpha = .89$). Similarly, these same measures were highly intercorrelated at Time 2 ($\alpha = .87$). Thus, the four Time 1 measures were averaged to form a Time 1 composite evaluative measure, and the four Time 2 measures were averaged to form a Time 2 composite evaluative measure.

A $2 \times 2 \times 2$ within-between ANOVA was performed on the composite evaluative measures, with time of evaluation (same day or 2 weeks later) as the within-subjects factor and expectations (positive or neutral) and experience (positive or negative) as the between-subjects factors. Results revealed two main effects: one for expectations and one for experience (Figure 1). Participants rated their experience during the interview as more positive not only when they actually had a

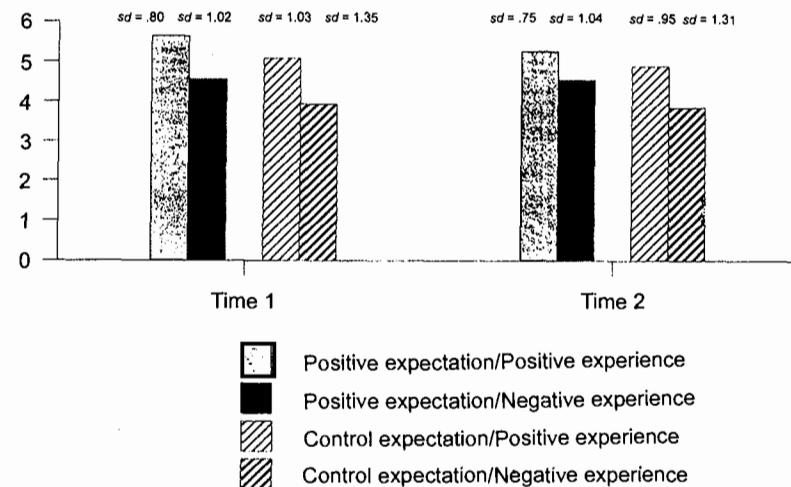


Figure 1. Evaluation of experience, broken down by expectation and experience condition.

positive experience in the study, $F(1, 65) = 17.64, p < .001$ ($\eta = .46$), but also when they were merely told that discussing safe sex gets easier with practice, $F(1, 65) = 5.69, p = .02$ ($\eta = .28$). There was no two-way interaction effect of expectations and experience. Thus, both experience and expectations had an independent effect on participants' evaluations of the experience. The main effect of the within-subjects variable, time, was marginal, $F(1, 65) = 3.41, p = .07$ ($\eta = .22$), indicating that over time, participants' evaluations became more negative. There were no interaction effects involving time.

The same $2 \times 2 \times 2$ within-between ANOVA was also performed on participants' willingness to participate in the study again; that is, their willingness to discuss safe sex with another male college student (Figure 2). Paralleling the evaluative measure, there were once again independent, main effects of experience and expectations: Participants' willingness to discuss safe sex again was increased by not only having had a positive experience in the study, $F(1, 65) = 5.16, p = .03$ ($\eta = .27$), but also by being told that discussing safe sex gets easier over time, $F(1, 65) = 5.44, p = .02$ ($\eta = .28$). There was no two-way interaction of experience and expectations, and there were no main or interaction effects involving time (i.e., whether participants were asked the same day or 2 weeks later). Thus, across two dependent variables (evaluation of the experience and willingness to participate again) and two time points (immediately after the experience and about 2 weeks later), there was a very similar pattern of results.

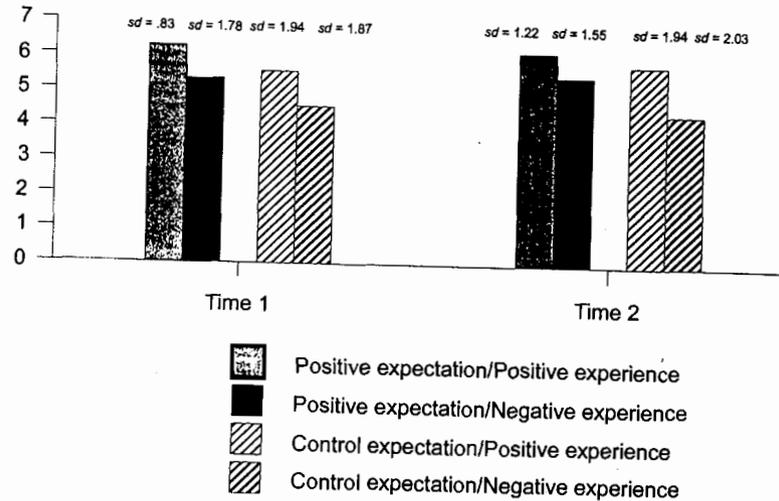


Figure 2. Willingness to repeat experience, broken down by expectation and experience condition.

In order to explore the effects of individuals' experiences prior to those that we manipulated in the lab, we reran the ANOVAs, including whether or not participants were sexually active as an additional factor. (The resulting cell sizes were not equal—approximately one third of our sample reported not being sexually active.) The main effects for expectations and experience showed largely the same patterns, but the new factor, sexual activity status, added a new dimension to our results: Participants who reported being sexually active reported being more willing to participate in the future, $F(1, 61) = 11.48, p = .001$ ($\eta = .40$). At Time 1, the mean willingness of sexually active participants was 5.87 ($SD = 1.53$) on the 7-point scale, whereas it was only 4.39 ($SD = 1.78$) for non-sexually active participants. The corresponding means at Time 2 were 5.72 ($SD = 1.59$) for sexually active participants and 4.30 ($SD = 1.89$) for non-sexually active participants. Sexually active participants also gave marginally higher evaluations of the interview than did non-sexually active participants, $F(1, 61) = 3.00, p = .09$ ($\eta = .22$). The mean for sexually active participants at Time 1 was 4.98 ($SD = 1.21$); the mean for non-sexually active participants at Time 1 was 4.35 ($SD = 1.21$). The corresponding means at Time 2 were 4.79 ($SD = 1.20$) and 4.21 ($SD = 0.96$). Sexual activity status did not interact with either expectation or experience condition.

Similar results were obtained when we reran the ANOVAs including whether or not participants reported ever having discussed safe sex before or not.

Table 1

Mean Evaluations of Experience by Expectation Condition and Whether or Not Participants Had Discussed Safe Sex Before

	Control expectations	Positive expectations
At Time 1		
Never discussed	3.81 (1.37)	5.41 (0.89)
Discussed before	4.75 (1.22)	4.99 (1.10)
At Time 2		
Never discussed	3.95 (1.16)	5.28 (0.84)
Discussed before	4.48 (1.28)	4.76 (0.98)

Note. Standard deviations are presented in parentheses.

(Once again, the resulting cell sizes were not equal. About 30% of our sample reported never having discussed safe sex.)³ The main effects for expectations and experience remained largely unchanged. Analogous to the results for sexual activity status, participants who had discussed safe sex in the past were more willing to participate again (M at Time 1 = 5.76, $SD = 1.53$; M at Time 2 = 5.51, $SD = 1.63$) than were participants who had never discussed safe sex (M at Time 1 = 4.45, $SD = 1.93$; M at Time 2 = 4.60, $SD = 2.09$), $F(1, 61) = 7.03, p = .01$ ($\eta = .32$). There was no main effect of having discussed safe sex in the past on participants' evaluations of the interview, but there was an interesting interaction effect of having discussed safe sex in the past and expectations (see means in Table 1): Positive expectations had a greater effect among those participants who had never discussed safe sex than among those who had previously discussed safe sex, $F(1, 61) = 4.57, p < .04$ ($\eta = .26$). In other words, being told that discussing safe sex becomes easier over time boosted inexperienced participants' evaluations of the interview that they had participated in more than it boosted the evaluations of experienced participants.

Discussion

Participants who carried out a discussion of safe sex with an articulate, confident partner were more positive about the experience, as well as more willing to

³Although the group of participants who were not sexually active largely overlapped with the group who had never discussed safe sex with a potential partner, there were some participants who were sexually active and who had never discussed safe sex ($n = 6$; a group that is, unfortunately, probably underreported because of social desirability) and some participants who said that they were not sexually active but had discussed safe sex with a potential sexual partner ($n = 9$; presumably the partner remained only "potential").

participate again, than were participants who had to endure discussing issues of condom usage and sexual history with a nervous, mumbling partner. Although not unexpected, these results have important applied implications: Our results suggest that providing people with positive experiences to practice discussing issues of safe sex can foster a more positive attitude toward future discussions, especially if the setting captures some aspects of a real discussion prior to sex (e.g., one on one, with a similarly aged partner). It also suggests that providing people with models of how to discuss safe sex articulately and confidently (essentially what we trained our confederate to do in the positive experience condition) may be an important determinant of how positively their real safe-sex discussions go, which could in turn affect the likelihood of future discussions. Furthermore, despite the fact that our participants brought a wide range of prior real-life experiences to the study, our two different experience conditions (to which participants were randomly assigned) had an effect across the board, suggesting that this may be an intervention strategy that works with a wide range of target groups.

Our analyses also revealed a quite novel finding: Influencing people's expectations about future discussions affected not only their willingness to participate in similar discussions in the future, but also their retrospective evaluations of the discussion that they had already had. Past work examining the role of affective expectations (e.g., Klaaren et al., 1994) has shown that people's expectations prior to an experience will affect their ratings of the experience. However, in the present study, the expectations were given after an experience but before evaluating it, and they still affected participants' ratings of the experience. It appears that people update their affective reactions to incorporate their future expectations, and they stay in that updated mode when they are asked to judge an earlier experience. Ross's (1989) work has demonstrated how present attitudes influence people's reports of their prior attitudes, but the space between present and past in his studies was generally weeks or months, not minutes (as was the case for the Time 1 measures in our study).

Our analyses involving participants' past safe-sex experiences suggest that expectations may have had a particularly powerful impact on those who are still relatively new to sexual relationships. Presumably, these inexperienced participants had fewer prior experiences (and potentially fewer previous expectations) to compete with the expectations that we gave them, and they therefore weighted the expectations provided in the study more heavily in their judgments when integrating various sources of affective information.

As discussed earlier, Klaaren et al. (1994) hypothesized that affective expectations influence people's ratings of their experiences via a reinterpretation of objective experience, rather than a selective-memory mechanism that tends to "forget" inconsistent elements of the experience, or an initial-effects mechanism that blocks elements of the experience that are inconsistent with expectations

from being encoded at the outset. Klaaren et al.'s previous work was able to demonstrate evidence against the selective-memory hypothesis by showing that affective expectations do not cause selective amnesia of inconsistent elements of the experience (i.e., when specifically asked, people could recall elements of the experience that were inconsistent with their expectations and their ratings of the experience). Our results in the present study throw additional support to the reinterpretation hypothesis by demonstrating that an initial-effects mechanism that blocks the encoding of inconsistent elements of an experience is clearly not necessary for expectations to have an effect, given that the experience had already been encoded when our participants were given expectations. Thus, paralleling the work of Hirt and his colleagues (e.g., Hirt, 1990) and the work of Ross and his colleagues (e.g., Ross, 1989), events in the past may be viewed differently through the lenses of one's present expectations and theories.

How our expectation manipulation would have worked if we gave our participants negative expectations about future safe-sex discussions is unknown. In the present study, we only manipulated the situation to create positive expectations, and allowed our other expectation condition to be participants' "default" expectations about what it would be like to discuss issues of safe sex with a male college student they did not know, a situation designed to produce expectations of an uncomfortable experience. Future studies could determine whether actually giving participants negative expectations (as opposed to simply allowing participants to hold preexisting expectations) would function the same way that giving them positive expectations has in previous studies. If negative expectations had an effect parallel to that of positive expectations, then manipulating expectations to be negative could be predicted to make people even more negative about future safe-sex discussions. (Given this possibility, ethical considerations would preclude the use of safe-sex contexts to investigate this effect, because if the effect were found, performing a study that gave people negative expectations would have the unfortunate consequence of reducing future safe-sex conversations.) However, it is also possible that giving people negative expectations would not have a parallel effect because of motivational reasons, especially when coupled with a positive experience: Participants in these circumstances may be motivated to reject their expectations in an attempt to avoid harboring feelings of future dread. (For results consistent with this hypothesis that demonstrate how motivation affects expectations in a different paradigm, see McDonald & Hirt, 1997.)

It is interesting to ponder the possibilities for using positive expectations in campaigns to encourage people to discuss safe sex. Merely providing people with positive expectations, even if it does increase the number of safe-sex discussions, presents an ethical quandary if the expectations that are provided are not based on real evidence. However, two of our findings suggest that leading people to believe that safe-sex discussions become more positive over time is not entirely a fabrication: When people engaged in a discussion in our study and had a positive

experience, they were more positive, and our participants who reported having discussed safe sex in the past were more positive.

In addition, because our results show independent contributions of expectations and experience (i.e., there was no interaction effect of these two variables), expectations could be used to help those who have been unfortunate to have a discussion of safe-sex issues go as badly as the one we staged with our nervous confederate. Our results show that even after going through our negative experience condition, our participants were still open to the effects of positive expectations. This finding has important implications in fighting AIDS: It appears that manipulating expectations is a powerful intervention, regardless of what people's past experiences have been.

However, the window of opportunity for expectations to have an effect may not be open indefinitely—our results demonstrate that individual differences in accumulated past experiences are important as well. Our analyses reveal that participants who had never had previous discussions of safe sex were affected by our expectation manipulation more than were those who had previously discussed safe sex. Presumably, the latter participants had other inputs to integrate into their evaluations—specifically, past experiences. However, encouragingly, the participants who had discussed safe sex before were more positive about discussing safe sex again. Our finding that expectations have a greater impact on less experienced participants suggests that adding positive expectations to safe-sex education programs might be especially powerful when the programs are targeted at younger or less sexually experienced individuals.⁴ One thing that we do not know, however, is whether or not expectations would still have an effect in the absence of any experience. Expectations without any “experiential base” (Bandura, 1977, p. 198) may not have an effect.

The results also reveal that participants who were not sexually active had more negative evaluations of the interview and were less willing to participate again. If the participants never intended to be sexually active, their negative responses would not be a concern. It is possible (although clearly speculative) that these participants are part of a group that Fisher and Misovich (1990) speculate have negative attitudes toward safe sex as part of a larger negative attitude toward sexual matters in general. Although heartened by the impact of our manipulation, we are well aware that individual differences in prior attitudes cannot be ignored. Future research should address possible interactions of previous experiences and attitudes with new expectations.

We are hopeful that our findings can have an impact on preventing the spread of AIDS, but we must acknowledge a few caveats. Our dependent measures are

⁴Young people might not be the only ones who are new to discussing safe sex. Baby boomers who first became sexually active during the sexually liberal 1960s and 1970s, but who have recently found themselves out of monogamous relationships and back in the “singles scene” as a result of divorce, might also not be experienced at discussing safe sex.

two steps removed from showing increases in actual discussions of safe sex. First, our results pertain to our participants' feelings about a past safe-sex discussion and future discussions in a laboratory setting, which, although designed to have elements in common with a real, spontaneous discussion with a potential sexual partner, still lacked the many aspects present in the “heat of the moment.” The confederate that our participants talked to was a stranger (albeit one that many of them found potentially attractive, judging from anecdotal evidence and from comments that they made in the follow-up phone calls), and we doubt that any of them had immediate plans for having sex with him, either in our lab or elsewhere (with the possible exception of the participant whose data we excluded because she pursued the confederate after the experiment). Second, we did not include any behavioral follow-up measures, asking instead about participants' evaluations of an experience that they had just had and their willingness to participate in the future. Privacy and pragmatic issues are sticky in this area of research, and we believe that our study did capture a fair degree of construct validity, but we hope that future research will be able to move the dependent measures slightly closer to real outcomes.

In addition, rather than a genuine conversation about safe sex, our participants engaged in something more akin to an interview during which they asked all of the questions. However, although several of our participants commented in the follow-up that they were glad that they got to ask, rather than answer, questions (presumably because they found it less embarrassing), learning how to ask one's partner about safe-sex practices is arguably the more important skill to learn in order to protect oneself. Furthermore, outside of our experimental paradigm, where we clearly instructed the females to take the lead by asking the questions, taking the initiative in any aspect of sexual behavior may be more difficult for women than for men, given traditional gender roles.

There is also the specter of demand characteristics. Participants who were trying to please us or to give the “right” answer might have reported more positive responses in the positive expectation condition, after the experimenter showed them the fabricated results from other campuses, which is consistent with the pattern of results that we found in the data. However, we found similar results both at Time 1, when demand characteristics should be greatest, and at Time 2, when time and a different experimenter should make characteristics of the original setting less immediate. When participants respond the same way in a different setting to a different person, the line between demand characteristics and a successful, internalized intervention program becomes less clear.

As can be seen in Figures 1 and 2, our participants were quite positive about the study in general. Much as we would like to take credit for greatly boosting our participants' self-efficacy, we acknowledge that there was probably a general positive bias in their responses. However, that does not erase the significance of the relative differences among the various conditions. And although we do not

believe that our findings are the result of demand characteristics, even results created by demand characteristics might still increase the number of future safe-sex discussions: When people state what they think they will do in the future (akin in this study to our measure of people's willingness to participate again), they are more likely to behave in line with their predictions (Sherman, 1980).

Finally, our findings address a particular population in a particular culture, and importantly, we only studied women. Although we can easily anticipate male and female college students having different prior expectations about and reactions to discussing safe sex with a stranger, we do not have any reason to believe that our manipulated variables would have a different impact on males. Furthermore, our past work examining the role of expectations (e.g., Klaaren et al., 1994) has not found gender differences.

In conclusion, the present study has potentially important applied implications. Future AIDS-prevention campaigns should consider including a positive-experience component that allows young or inexperienced people a chance to effectively discuss issues of safe sex in a one-on-one situation with someone who might be similar to the kind of person with whom they might be sexually involved. Care should be taken to provide targets of AIDS education a clear understanding of the kinds of questions they should ask, to help ensure that practice (and real) discussions go smoothly. Independent of experience, our results suggest that manipulating people's safer-sex expectations can change their behavior. In addition, our results add an interesting chapter to ongoing basic research examining the role that expectations play in determining experience. Expectations given after, not just before, an experience affect people's ratings of the experience. The applications for this finding may extend well beyond the realm of encouraging people to discuss safe sex.

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