Remembering the Message: The Use of a Reminder Cue to Increase Condom Use Following a Safer Sex Intervention

Sonya Dal Cin
University of Waterloo

Tara K. MacDonald
Queen’s University

Geoffrey T. Fong, Mark P. Zanna, and Tara E. Elton-Marshall
University of Waterloo

Condom use interventions may be more powerful if they provide cues to recall safe-sex messages when sexual activity occurs. The authors tested this notion by assigning sexually active introductory psychology students (N = 196) to a standard safe-sex intervention, a safe-sex with reminder intervention, or a control (drinking and driving) intervention. Participants assigned to the reminder intervention were given a “friendship bracelet” to wear and were instructed to have the bracelet remind them of the intervention. In a follow-up session (5–7 weeks later), they were asked questions pertaining to condom use. Of the 125 participants who had engaged in sexual intercourse, condom use at last intercourse was higher in the bracelet condition (55%) than in the standard (27%) or control (36%) conditions. The authors also found that the bracelet remained effective, even when participants were under the influence of alcohol. These findings therefore imply that health intervention programs may be more efficacious if they include strategies such as reminder cues to increase the salience of health information in the appropriate contexts.

Keywords: safer sex, intervention, reminder cues, alcohol and sexual behavior

The numbers are startling: Over 40 million people are estimated to be living with HIV/AIDS (World Health Organization, 2004a). Young people are especially at risk: Thirty percent of those living with HIV/AIDS are aged 15–24 (World Health Organization, 2004b), and in the United States, 20,000 people aged 13–24 are infected every year (Thurman, 2000). Other sexually transmitted infections also threaten health and follow similar demographic patterns: In the United States and Canada, adolescents and young adults show high (and increasing) rates of gonorrhea and chlamydia (Centers for Disease Control and Prevention, 2003; Public Health Agency of Canada, 2005). Condom use is promoted as one of the few methods available to decrease the risk of contracting sexually transmitted infections among sexually active individuals. Yet in a national study of Canadians, only 26% of 18- to 19-year-olds and 23% of 20- to 24-year-olds reported using a condom the last time they had sex (Federal, Provincial and Territorial Advisory Committee on Population Health, 1999).

A variety of safer sex interventions exist, with varying rates of cost-effectiveness (Pinkerton, Johnson-Masotti, Holtgrave, & Farnham, 2002). Pinkerton et al. (2002) have concluded that targeting HIV interventions at low-risk groups is less cost-efficient than targeting interventions at moderate- to high-risk groups. However, individuals not classified as high risk may engage in risky sexual behaviors, as evidenced by the frequency of unprotected sexual intercourse among heterosexual young people. These individuals may receive no sexual health information beyond a high school health class or a college residence workshop. Our aim was to create a simple enhancement to theory-based interventions that could be administered in a single session by a single provider. We tested the intervention in a highly relevant population, as a large proportion of university students become sexually active during their first year at university (MacDonald, Zanna, & Fong, 1999). Given the need for controlled experiments assessing long-term effects of condom intervention programs (Bryan, Aiken, & West, 1996), this longitudinal study permits empirical assessment of an easily administered treatment based on prior research.

Our primary goal was to demonstrate that the impact of an intervention could be increased by providing participants with a cue reminding them of the intervention. In a “sex-ed” class or sexual health workshop, some young people may not see the importance of sexual health information to their own lives or may fail to attend to the information. Others may attend to sexual health

Sonya Dal Cin, Geoffrey T. Fong, Mark P. Zanna, and Tara E. Elton-Marshall
This research was supported by a Canadian Institutes of Health Research Canada Graduate Scholarship and Ontario Graduate Scholarships awarded to Sonya Dal Cin; a Social Sciences and Humanities Research Council of Canada Research Grant and a Canadian Institutes of Health Research Research Grant awarded to Tara K. MacDonald; and a Social Sciences and Humanities Research Council of Canada Research Grant awarded to Mark P. Zanna. We thank Lee Fabrigar and Erik Woody for helpful statistical advice; Jeffrey and William Fisher for sharing their video with us; and Lindsay Bridgman, Holly Haberer, Christine Logel, Kristie McCann, Gwen Schell, and Taryn Sendzik for assistance in conducting the interventions and project administration.

Correspondence concerning this article should be addressed to Sonya Dal Cin, who is now at the Norris Cotton Cancer Center, HB 7925, Dartmouth Medical School, One Medical Center Drive, Lebanon, NH 03756. E-mail: sonya.dal.cin@dartmouth.edu

Sexually transmitted infections among sexually active individuals. Yet in a national study of Canadians, only 26% of 18- to 19-year-olds and 23% of 20- to 24-year-olds reported using a condom the last time they had sex (Federal, Provincial and Territorial Advisory Committee on Population Health, 1999).

A variety of safer sex interventions exist, with varying rates of cost-effectiveness (Pinkerton, Johnson-Masotti, Holtgrave, & Farnham, 2002). Pinkerton et al. (2002) have concluded that targeting HIV interventions at low-risk groups is less cost-efficient than targeting interventions at moderate- to high-risk groups. However, individuals not classified as high risk may engage in risky sexual behaviors, as evidenced by the frequency of unprotected sexual intercourse among heterosexual young people. These individuals may receive no sexual health information beyond a high school health class or a college residence workshop. Our aim was to create a simple enhancement to theory-based interventions that could be administered in a single session by a single provider. We tested the intervention in a highly relevant population, as a large proportion of university students become sexually active during their first year at university (MacDonald, Zanna, & Fong, 1999). Given the need for controlled experiments assessing long-term effects of condom intervention programs (Bryan, Aiken, & West, 1996), this longitudinal study permits empirical assessment of an easily administered treatment based on prior research.

Our primary goal was to demonstrate that the impact of an intervention could be increased by providing participants with a cue reminding them of the intervention. In a “sex-ed” class or sexual health workshop, some young people may not see the importance of sexual health information to their own lives or may fail to attend to the information. Others may attend to sexual health

Sonya Dal Cin, Geoffrey T. Fong, Mark P. Zanna, and Tara E. Elton-Marshall
This research was supported by a Canadian Institutes of Health Research Canada Graduate Scholarship and Ontario Graduate Scholarships awarded to Sonya Dal Cin; a Social Sciences and Humanities Research Council of Canada Research Grant and a Canadian Institutes of Health Research Research Grant awarded to Tara K. MacDonald; and a Social Sciences and Humanities Research Council of Canada Research Grant awarded to Mark P. Zanna. We thank Lee Fabrigar and Erik Woody for helpful statistical advice; Jeffrey and William Fisher for sharing their video with us; and Lindsay Bridgman, Holly Haberer, Christine Logel, Kristie McCann, Gwen Schell, and Taryn Sendzik for assistance in conducting the interventions and project administration.

Correspondence concerning this article should be addressed to Sonya Dal Cin, who is now at the Norris Cotton Cancer Center, HB 7925, Dartmouth Medical School, One Medical Center Drive, Lebanon, NH 03756. E-mail: sonya.dal.cin@dartmouth.edu
information at the time it is presented but fail to use the information when in relevant situations (e.g., when deciding whether to engage in unprotected sex). Thus, the challenge (as with all interventions) is to increase attention to the message at the time of the intervention and to increase the salience of the message at the time and place that the behavior is occurring. In the current study, we utilized components of an intervention that has been used successfully in prior research (Fisher, Fisher, Misovich, Kimble, & Malloy, 1996) and then tested whether the efficacy of the intervention increased when people were provided with a reminder of the safer sex message that would be present at the time and place they would be engaging in sexual activity. Other researchers (e.g., Fisher, Fisher, Bryan, & Misovich, 2002) have included take-home reminders of an HIV-prevention program as part of a larger safer sex intervention, but to our knowledge, the independent value of such a reminder component has never been empirically tested.

Our secondary goal was to test whether the intervention remained effective even under the influence of alcohol. MacDonald and her colleagues (MacDonald, Fong, Zanna, & Martineau, 2000; MacDonald, MacDonald, Zanna, & Fong, 2000; MacDonald, Zanna, & Fong, 1996) have shown that alcohol increases intentions to engage in unprotected sexual intercourse. However, when cues promoting safe sex were introduced into the situation, intoxicated participants were less likely than sober participants to report they would engage in unprotected sex (MacDonald, Fong, et al., 2000). This finding is consistent with alcohol myopia theory (Steele & Josephs, 1990; Steele & Southwick, 1985), which posits that as individuals become intoxicated, their capacity to process information diminishes, leaving them less able to attend to competing cues. Instead, they are more likely to focus and act on the most salient cues in their environment. Thus, if cues promoting safe sex are salient, intoxicated individuals may be highly influenced by such cues.

Method

Participants

We recruited 196 participants (59 men, 137 women; age: $M = 19.58$ years, $SD = 1.77$ years) from introductory psychology participant pools at the University of Waterloo from 1999 to 2003. On the basis of data from a mass pretesting questionnaire, we selected students who had engaged in heterosexual intercourse in the past, used condoms occasionally (between 2 and 8 on a 9-point scale, with endpoints never and always), and consumed alcohol at least weekly. That is, we selected participants for whom the intervention should be particularly relevant. Further, we excluded participants who reported that they were in serious romantic relationships of longer than 12 months duration, expecting that condom use in long-term romantic relationships would be relatively stable and unresponsive to situational effects.

Materials and Procedure

Intervention session. Participants were recruited by telephone for a study on “Improving Your Health.” We told all participants at the time of recruitment that they may be asked to wear a bracelet for several weeks as part of the study. Participants were assigned to time slots consisting of small groups of 2–8 (blocking on gender and level of condom use to ensure an even distribution across conditions) in accordance with their availability. The groups were randomly assigned to one of three intervention conditions (control, standard, or bracelet). All interventions were conducted in a classroom on campus and involved viewing a documentary-style video and listening to the experimenter read a brief script about the tragic nature of the stories and the steps participants could take to reduce their risk. Experimenters were six undergraduate research assistants with no formal training in intervention delivery and were instructed to adhere to the written script. Experimenters could not be blinded to condition because of the nature of the interventions. Only one experimenter was present at each intervention session. Participants in the control condition viewed a documentary about a young man killed by a drunk driver. Participants in the standard condition viewed a documentary (People Like Us; Fisher, Fisher, & Marks, 1994) in which young people living with HIV/AIDS describe their experiences, including contracting the virus through unprotected sexual intercourse. This video is one component of an established HIV intervention (Fisher et al., 1996), but we did not conduct the entire intervention as designed. Our intention was to approximate a typical “sex-ed” class or workshop in which the extent of the intervention might be a layperson (e.g., a residence assistant or don) showing a video. Participants in the bracelet condition viewed this same video on HIV/AIDS but were then given a “friendship” bracelet (approximate cost: $1.50) to wear at all times until the follow-up session. They were explicitly told to remember the stories of the people in the video whenever they looked at the bracelet over the next few weeks to remind them of the dangers of unsafe sex. Following the intervention, we assessed participants’ responses to the videos and scheduled them to return for a follow-up session. In the follow-up sessions (5–7 weeks later), participants completed the dependent measures and were debriefed.

Follow-up session. In a confidential questionnaire, we gave participants a specific date as a reference point and asked if they had engaged in sexual intercourse since that date, which was after the last possible intervention date. Participants who had engaged in sexual intercourse since the target date reported whether they had used a condom the last time they engaged in sexual intercourse and whether they had consumed alcohol on that occasion.

We also asked participants to consider all occasions of sexual intercourse since the target date and asked them to report both the number of times they had sexual intercourse after consuming alcohol and the number of times they had sexual intercourse after they had not consumed alcohol and for each of these, the number of times they had used condoms. We used these values to compute the percentage of condom use on occasions when alcohol had been consumed and the percentage of condom use on occasions when alcohol had not been consumed. Participants then reported on behavior related to driving while intoxicated.

Additionally, as a manipulation check, all participants reported how much they thought about the video since the first session and if they had tried to change their own behavior since seeing the video. We asked those in the bracelet condition to report their experience with the bracelet (e.g., if they were conscious of wearing it and if it reminded them of the intervention). We also asked if they took it off (and when, if they had not worn it at all times). We took pains to encourage honest disclosure by reminding them they would receive full remuneration regardless of their answer and by highlighting the importance of their honest feedback for our research.

Results

Response Rates

Attrition was unrelated to experimental condition, prior frequency of alcohol or condom use, relationship status, or age (see...
Figure 1).¹ Men (response rate = 90%) were slightly less likely than women (response rate = 97%) to return for the follow-up session, χ²(1, N = 196) = 4.48, p < .03. The percentage of participants engaging in sexual intercourse was unrelated to experimental condition, χ²(2, N = 184) = 0.24, ns. The mean number of sexual encounters was also equal across conditions, F(2, 122) = 0.71, ns, as was the likelihood of having consumed alcohol during the last sexual encounter, χ²(2, N = 125) = 1.09, ns (see Table 1).

Responses to the Intervention Videos

In the intervention session, participants rated the video they saw on a number of dimensions. Overall, the videos were rated positively (see Table 2), and students agreed that the “video made me want to change my behavior so that it is safer.”

Using a priori orthogonal contrasts, we compared responses of those who had seen the video on drinking and driving (control condition) with the responses of those who had seen People Like Us (standard and bracelet conditions). Participants were more likely to agree that family or friends had been affected by drunk driving than by HIV/AIDS, t(181) = 7.92, p < .001, and that the drinking and driving video was more interesting than People Like Us, t(181) = 2.45, p < .02. There were no differences in ratings of how informative, effective, persuasive, or relevant the videos were or in intentions to change behavior. In a second contrast, we compared ratings of the safer sex video in the standard and bracelet conditions. Participants in the bracelet condition were more likely to report that the video was relevant to first-year psychology students than were those in the standard condition, t(181) = 2.56, p < .02, and also reported greater intentions to change their behavior, t(181) = 2.27, p < .05.

Manipulation Check

In the follow-up session, participants in the bracelet condition reported that they had thought about the video more than did participants in the standard and control conditions, t(175) = 4.08, p < .001. The standard and control conditions did not differ, t(175) = 1.30, ns. Participants in the bracelet condition were also more likely to agree that they had tried to change their behavior than were participants in the standard and control conditions, t(174) = 3.57, p < .001. The standard and control conditions did not differ, t(174) = 0.58, ns (see Table 3). We averaged responses to three items as an index of bracelet salience: (a) if the participant was conscious of wearing the bracelet, (b) if the bracelet reminded him or her of the message of the intervention, and (c) if the bracelet reminded him or her of the videotape seen during the intervention (Cronbach’s α = .76). Bracelet salience (M = 7.02, SD = 1.69) was significantly above the theoretical midpoint of the scale, which was 5, t(62) = 9.51, p < .001, and was no different for those who engaged in sexual intercourse (n = 42, M = 7.00, SD = 1.71) versus those who had not (n = 21, M = 7.06, SD = 1.69), t(61) = 0.14, ns. Bracelet salience also correlated significantly with the two manipulation check measures: thinking about the video since the intervention (r = .60, p < .001) and attempting to change their own behavior (r = .50, p < .001).

Intervention Effects

Effect of bracelet on rate of condom use. We expected the rate of condom use would be highest among participants provided with a reminder cue (i.e., rates of condom use in the bracelet condition should be higher than in the other conditions). We conducted a logistic regression analysis with a priori orthogonal contrasts, controlling for age and prior condom use (these covariates were included in all analyses of condom use). Of the 127 participants who had engaged in intercourse, we included 125 in the analysis.² As predicted, the rate of condom use at last intercourse in the bracelet condition was higher than in the control and standard conditions, odds ratio (OR) = 2.74, p = .03, d = 0.41. The difference in condom use rates in the latter conditions did not differ, OR = 0.61, ns, d = 0.09 (see Table 1). The overall effect of condition was also significant, Wald(2) = 5.93, p = .05, d = 0.35.

Table 1

<table>
<thead>
<tr>
<th>Sexual Intercourse and Condom Use for Each Condition Following Intervention</th>
<th>Control</th>
<th>Standard</th>
<th>Bracelet</th>
</tr>
</thead>
<tbody>
<tr>
<td>% engaging in intercourse</td>
<td>67</td>
<td>70</td>
<td>67</td>
</tr>
<tr>
<td>% using alcohol at last intercourse</td>
<td>28</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>% using condoms at last intercourse</td>
<td>36</td>
<td>27</td>
<td>55</td>
</tr>
</tbody>
</table>

Note. The mean number of sexual encounters since the target date was 8.03 (SD = 6.94) for the control condition, 9.40 (SD = 8.78) for the standard condition, and 7.38 (SD = 8.53) for the bracelet condition. 

² Adjusted for age and prior condom use.

¹ One participant was excluded, as she failed to provide her age; another was excluded because he was significantly older than the rest of the participants (28 years old, greater than four standard deviations above the mean).

² See footnote 1.
We also computed percentage of condom use across all sexual encounters since the target date (see Table 1) for 123 participants (2 participants incorrectly completed the items needed to calculate the percentage). As predicted, condom use (controlling for prior condom use and age) varied as a function of condition, $F(2, 118) = 3.34$, $p = .04$, $d = 0.38$. The a priori orthogonal contrast comparing the bracelet condition with the control and standard conditions was also found to be significant, $t(118) = 2.56, p = .01$, $d = 0.47$, such that the mean percentage of condom use was higher in the bracelet condition than in the other two conditions, which did not differ from each other, $t(118) = .11$, $ns$, $d = 0.02$ (see Table 1).

Effect of alcohol on rate of condom use. We examined whether consuming alcohol played a role in condom use by computing percentages of condom use after consuming alcohol or not for 111 (88%) of the 125 participants who reported engaging in sexual intercourse since the intervention. Data from the remaining 14 individuals were missing, incomplete, or inconsistent (e.g., number of times condoms were used/not used did not equal number of sexual intercourse incidents). The number of participants providing usable data was unrelated to condition, $\chi^2(2, N = 125) = 2.20, ns$. We analyzed the effect of experimental condition on mean percentage of condom use when alcohol had not been consumed (no alcohol) and when alcohol had been consumed (alcohol) in two separate analyses of covariance, with prior condom use and age as covariates in all analyses. We found no effects of gender.

### Table 2

**Mean Ratings of the Video Stimuli for Each Condition**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Control</th>
<th>Standard</th>
<th>Bracelet</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Informative</td>
<td>7.24a</td>
<td>1.59</td>
<td>7.48a</td>
<td>1.48</td>
</tr>
<tr>
<td>Effective</td>
<td>8.15a</td>
<td>0.96</td>
<td>7.84a</td>
<td>1.48</td>
</tr>
<tr>
<td>Interesting</td>
<td>7.80a</td>
<td>1.11</td>
<td>7.24a</td>
<td>1.81</td>
</tr>
<tr>
<td>Persuasive</td>
<td>7.63a</td>
<td>1.38</td>
<td>7.18</td>
<td>1.54</td>
</tr>
<tr>
<td>Relevant to self</td>
<td>6.96a</td>
<td>1.90</td>
<td>6.58b</td>
<td>2.06</td>
</tr>
<tr>
<td>Relevant to psychology students</td>
<td>6.70b</td>
<td>1.74</td>
<td>6.22d</td>
<td>1.86</td>
</tr>
<tr>
<td>Friends/family affected</td>
<td>6.02a</td>
<td>3.00</td>
<td>2.93b</td>
<td>2.86</td>
</tr>
<tr>
<td>Desire to change behavior</td>
<td>6.78a</td>
<td>2.00</td>
<td>6.33d</td>
<td>2.33</td>
</tr>
</tbody>
</table>

*Note.* Nine-point rating scale: 1 = *Strongly disagree*; 9 = *Strongly agree*. Means within rows sharing common subscripts are not significantly different at $p < .05$. We analyzed the effect of experimental condition on mean percentage of condom use when alcohol had not been consumed (no alcohol) and when alcohol had been consumed (alcohol) in two separate analyses of covariance, with prior condom use and age as covariates in all analyses. We found no effects of gender.

### Table 3

**Mean Manipulation Check Ratings for Each Condition**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Control</th>
<th>Standard</th>
<th>Bracelet</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Thought about video</td>
<td>5.09a</td>
<td>2.18</td>
<td>5.63a</td>
<td>2.40</td>
</tr>
<tr>
<td>Tried to change behavior</td>
<td>4.83a</td>
<td>2.15</td>
<td>4.58b</td>
<td>2.33</td>
</tr>
</tbody>
</table>

*Note.* Means within rows sharing common subscripts are not significantly different at $p < .05$. Thought about video: $F(1, 175) = 8.96$, $p < .001$. Tried to change behavior: $F(1, 174) = 6.69, p < .002$.

When alcohol had not been consumed, mean reported condom use since the intervention (adjusted across conditions was 42%. Condom use following the bracelet intervention was higher (50%) than following the control (39%) and standard (36%) interventions, though this contrast was not significant, $t(88) = 1.67, p = .10, d = 0.35$. When alcohol had been consumed, mean reported condom use across conditions was 47%. Again, the bracelet intervention was followed by the highest rate of condom use (60%), which was significantly greater than that following the control (42%) and standard (39%) interventions, $t(72) = 3.20, p < .01, d = 0.75$. The control and standard conditions did not differ in either analysis (all $ps > .05$; see Table 1).

Finally, in a logistic regression analysis with specific contrasts we examined condom use at last intercourse across the 6 groups defined by Experimental Condition × Reported Alcohol Use (also at last intercourse). Consistent with alcohol myopia theory, the highest rate of condom use was among those in the bracelet condition who also reported having consumed alcohol (71%), as compared with the other five groups combined (35%), OR = 3.90, $p = .05, d = 0.36$ (see Figure 2).

Discussion

We have demonstrated moderate effects on safer sex behavior as the result of a relatively simple, economical intervention. A feature of this intervention was its apparent specificity: It did not seem to alter sexual behavior more broadly (e.g., the incidence or frequency of sexual intercourse), but it did influence condom use, the behavior advocated in the intervention video. We specifically selected a sample of participants from a population (young adults in higher education) not typically viewed as high-risk but who are at risk according to reports of their own behavior (i.e., inconsistent condom use). Although it may be desirable to tailor the content of a safer sex intervention depending on the characteristics of the target audience (Rotheram-Borus, 2000), we see no plausible reason why the value of a reminder cue should not generalize to other groups of young adults and to adolescents.

---

3 Values for percentage of condom use were not normally distributed. Therefore, statistical tests were performed on logit transformed values. To ease interpretation, we report untransformed, adjusted means for these percentages.
Our primary hypothesis was that providing participants with a reminder cue would increase condom use following a safer sex intervention. Consistent with this hypothesis, we found that the bracelet intervention increased condom use (both at last sexual encounter and over all encounters) relative to the other conditions, and the size of these effects was moderate. On the basis of alcohol myopia theory, our second hypothesis was that the effects of the bracelet reminder might be heightened when participants were intoxicated, because the bracelet would function as a salient inhibiting cue. We found that the benefit of the bracelet was certainly maintained, and perhaps even strengthened, when alcohol had been consumed. The logistic regression with contrasts in which the rate of condom use was highest among those in the bracelet condition who had consumed alcohol lends support to this conclusion.

We considered the possibility that participants’ self-reports of condom use in the follow-up session may have been susceptible to demand effects, but after careful consideration, we believe that this is unlikely. Such an effect should manifest by increasing reports of condom use in the standard condition relative to the drinking and driving control condition, but this was not the case. It is possible that the bracelet intervention elicited stronger demand than the standard intervention, but this becomes less plausible given that the effect of the bracelet was maintained when alcohol had been consumed. It is highly unlikely that demand effects influenced participants’ reports of condom use after alcohol; given popular theories of alcohol’s disinhibiting effect on behavior (Critchlow, 1986), a demand explanation would suggest reports of condom use that are lower under alcohol than when sober.

We also have empirical evidence to rule out demand effects. We were able to collect data on condom use from a subset of our participants who completed a questionnaire packet for extra course credit. The packet was administered before the follow-up session (4–5 weeks postintervention) and contained several questionnaires of interest to other university researchers. It also included a questionnaire containing our dependent variables. Therefore, we were able to obtain reports of condom use and alcohol intoxication in a setting completely unrelated to our study, minimizing demand characteristics. Among the 123 participants who were included in the analyses for mean proportion of condom use at follow-up, the correlation between proportion of condom use (over all sexual encounters) at follow-up and the unrelated context was .85 ($n = 75, p < .001$). For reports of proportion of condom use when intoxicated, the correlation was .99 ($n = 48, p < .001$), and for reports of proportion of condom use when sober, the correlation was .78 ($n = 64, p < .001$). Because the questionnaire packet was administered before the follow-up, participants had an opportunity to engage in sexual intercourse between the two assessments and may have been referring to different incidents when reporting on their last intercourse. However, we can be reasonably certain that participants who reported the same number of sexual encounters at both assessments ($n = 57$) were reporting on the same incident for last intercourse. Among these participants, there was perfect correspondence in reported condom use. That is, none of the participants reported condom use at follow-up but not in the questionnaire, or vice versa. This suggests that a demand effect is implausible as an alternative explanation for our results. Indeed, analyses on these data revealed patterns of results consistent with those reported for the follow-up session, but with lower levels of significance, as one would expect given the reduced power in this sample.

Health researchers have succeeded in developing effective health messages; new work may take up the challenge of developing more effective reminders of those messages. Our results suggest that increasing the salience of reminder cues is an important area for future study in health psychology, one that might lead to the development of relatively simple, low-cost additions to brief interventions. Increasing the efficacy of such brief interventions could provide health benefits to groups not targeted by more extensive and focused intervention programs.

**References**


Fisher, J. D. (Producer), Fisher, W. A. (Producer), & Marks, D. (Director). (1994). *People like us* [Motion picture]. (Available from Center for...
Health/HIV Intervention and Prevention (CHIP), University of Connecticut, Storrs, CT 06269


What do the subscripts stand for? See T2 & T3.