PROMPTING BAR PATRONS WITH SIGNS TO TAKE FREE CONDOMS

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This study was designed to determine whether signs would prompt bar patrons to avail themselves of free condoms. The intervention at three "gay bars" involved placing a large sign directly above a container of free condoms; the sign gave statistics for the number of people who have died from AIDS in the state and pointed out that condoms can reduce the spread of AIDS. Additional signs placed in the restrooms gave information about safe sex practices and reminded patrons that free condoms could be obtained at a given location in the bar. An ABAB design was used, with a 2-week baseline, 2-week treatment with signs present, 2-week reversal with no signs, and 2-week reinstatement of treatment with signs present. For all three bars combined, 748 condoms were taken with signs present and 510 condoms were taken with signs absent. Overall, when signs were present, the number of condoms taken increased by 47%.

DESCRIPTORS: AIDS, prompting

In the absence of a cure for AIDS, our greatest hope for fighting this disease is prevention (Baum & Nesselhof, 1988; Caplan, 1964; Morin, 1988). Accordingly, researchers have attempted to isolate variables predicting people's willingness to engage in safe sexual behavior (Emmons et al., 1986). Except for monogamy and celibacy, which are not widely practiced (Martin, 1986), the most effective preventive sexual practice is condom use (Koop, 1987).

Because of the value of condoms for AIDS prevention, it is a high priority to increase their use by people in high-risk populations. Education is an important component of a prevention program (Stall, Coates, & Hoff, 1988) but is not sufficient to promote reliable changes in sexual behaviors (Morin, 1988; Stall et al., 1988).

Another method for increasing the use of condoms is prompting. Prompting can be understood in behavior-analytic terms as an antecedent strategy for influencing behaviors (Geller, 1989). Signs have been used successfully to prompt people to turn off lights (Winett, 1978), use safety belts (Geller, 1988; Geller, Bruff, & Nimmer, 1985; Thyer & Geller, 1987), and purchase soft drinks in returnable bottles (Geller, Farris, & Post, 1973). However, signs

did not increase people's willingness to report a shoplifter (Bickman & Green, 1977).

The purpose of the present study was to determine whether prompting with signs would increase the taking of free condoms. The study was conducted in "gay bars" because gay and bisexual men are at high risk for AIDS (Batchelor, 1988). Further, alcohol use is associated with increased high-risk sexual activity (Stall, McKusick, Wiley, Coates, & Ostrow, 1986).

METHOD

Setting and Procedures

The experiment was conducted in the three currently active gay bars in Anchorage. (We asked the owners of 12 "straight bars" if they would be willing to participate in this study, and all of them declined.) These bars were frequented mainly by men. An ABAB design was used, with 2-week baseline, 2-week intervention with signs present, 2-week reversal, and 2-week reinstatement of intervention. When the first intervention started at Bar A, the initial baseline started at Bar B, and 2 weeks later the initial baseline began at Bar C. The dependent variable was the number of free condoms taken from a container adjacent to the bar where customers purchased drinks. Data were always collected at the same time and day of the week.

Free condoms and educational pamphlets were

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Figure 1. Total number of condoms taken during baseline, intervention, reversal, and reinstatement of intervention at three different gay bars.

available in the bars before the study was conducted. Bar A had the most conspicuous display. Free condoms in a fishbowl were placed in a lighted alcove over which the sign was placed during intervention periods. Bar B had the least conspicuous display. Free condoms in a fishbowl were placed in a dimly lit corner on a cigarette machine, over which the sign was placed during intervention periods. Bar C's display was more visible than that of Bar B but less visible than that of Bar A. Free condoms in a fishbowl were on a window sill. During intervention periods, the sign was posted above the container of condoms on the window.

Signs

Large blue and red letters on white poster board (12 in. by 24 in.) gave the following message: "In the State of Alaska 38 people have died from AIDS. Many more have tested positive. Condoms can reduce the spread of AIDS." The signs were designed to help customers appreciate the risk of contracting AIDS (Bauman & Siegel, 1987) without using a fear appeal strong enough to cause denial (Leventhal, 1970). Specifically, the signs fulfilled three requirements for the effectiveness of fear appeals:

(a) reminding patrons AIDS is a major disease, (b) making them attentive to their vulnerability, and (c) recommending condoms as an effective threat-reducing action (Rogers, 1975).

Commercially printed signs were also placed in restrooms during intervention periods. These signs contained safe sex guidelines, including the use of condoms. In addition, they reminded patrons of the free condoms available at a certain location in the bar.

RESULTS

Data from the three bars are displayed in Figure 1. Results were statistically analyzed by comparing the two time periods when the signs were present with the two time periods when the signs were absent. In Bar A, 275 condoms were taken with signs present and 139 condoms were taken with signs absent, $\chi^2(1) = 44.6, p < .001$. In Bar B, 246 condoms were taken with signs present and 228 condoms were taken with signs absent, $\chi^2(1) = 0.68, ns$. In Bar C, 227 condoms were taken with signs present and 143 condoms were taken with signs absent, $\chi^2(1) = 19.1, p < .001$. With data from all bars combined, 748 condoms were taken with signs present and 510 condoms were taken with signs absent, $\chi^2(1) = 22.5, p < .001$. For all bars combined, the signs resulted in a 47% increase in number of condoms taken.

DISCUSSION

This study satisfied a common problem in AIDS prevention research of gaining access to high-risk populations (Williams, 1986). In addition, the intervention and data collection were unobtrusive and nonreactive (Bickman & Henchy, 1972; Webb, Campbell, Schwartz, & Sechrest, 1969).

The present data contribute to previous research demonstrating the effectiveness of antecedent strategies for behavior change in community settings (Geller, 1989). The study's setting and methodology satisfied characteristics of antecedent messages enhancing the effectiveness of prompts, including a convenient and clearly defined target behavior

and a nonthreatening message delivered in close proximity to opportunities for the behavior to occur (Geller, 1989).

Our best guess is that the signs were most effective in Bars A and C because of the availability of a well-lighted location for their placement. In other words, the signs were more salient in Bars A and C than in Bar B. There were no obvious distinctions in location of bars or their clientele that could account for this difference.

Although a 47% increase in acceptance of free condoms is significant, we can only assume they were used for their intended purpose. We also don't know whether the condoms were taken by a few selected patrons or by many patrons. We can conclude that signs as prompts offer a promising possibility for inclusion in an AIDS prevention program.

When this study was completed, owners of the three bars studied received a report of our results. They were also given a sign to be posted in the restrooms reminding patrons of the free condoms. When last checked in early 1990, these signs were intact.

REFERENCES

- Batchelor, W. F. (1988). AIDS 1988: The science and limits of science. *American Psychologist*, **43**, 853-858.
- Baum, A., & Nesselhof, S. E. A. (1988). Psychological research and the prevention, etiology, and treatment of AIDS. *American Psychologist*, **43**, 900-906.
- Bauman, L. J., & Siegel, K. (1987). Misperception among gay men of the risk for AIDS associated with their sexual behavior. *Journal of Applied Social Psychology*, **17**, 329-350.
- Bickman, L., & Green, S. K. (1977). Situational cues and crime reporting: Do signs make a difference? *Journal of Applied Social Psychology*, **7**, 1-18.
- Bickman, L., & Henchy, T. (1972). Introduction. In L. Bickman & T. Henchy (Eds.), *Beyond the laboratory: Field research in social psychology*. New York: McGraw-Hill.
- Caplan, G. (1964). *Principles of preventive psychiatry*. New York: Basic Books.
- Emmons, C. A., Joseph, J. G., Kessley, R. C., Wortman, C. B., Montgomery, S. B., & Ostrow, D. G. (1986). Psychosocial predictors of reported behavior change in homosexual men at risk for AIDS. *Health Education Quarterly*, **4**, 331-345.
- Geller, E. S. (1988). A behavioral science approach to transportation safety. *Bulletin of the New York Academy of Medicine*, **64**, 632-661.
- Geller, E. S. (1989). Applied behavior analysis and social marketing: An integration for environmental preservation. *Journal of Social Issues*, **45**, 17-35.
- Geller, E. S., Bruff, C. D., & Nimmer, J. G. (1985). "Flash for life": Community-based prompting for safety belt promotion. *Journal of Applied Behavior Analysis*, **18**, 309-314.
- Geller, E. S., Farris, J. C., & Post, D. S. (1973). Prompting a consumer behavior for pollution control. *Journal of Applied Behavior Analysis*, **6**, 367-376.
- Koop, C. E. (1987). *Surgeon General's report on: Acquired immune deficiency syndrome* (U.S. Department of Health and Social Services). Washington, DC: U.S. Government Printing Office.
- Leventhal, H. (1970). Findings and theory in the study of fear communication. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 5, pp. 119-186). New York: Academic Press.
- Martin, J. L. (1986). AIDS risk reduction recommendation and sexual behavior patterns among gay men: A multifactorial categorical approach to assessing change. *Health Education Quarterly*, **4**, 347-359.
- Morin, S. F. (1988). AIDS: The challenge to psychology. *American Psychologist*, **43**, 838-842.
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, **91**, 93-114.
- Stall, R. D., Coates, T. J., & Hoff, C. (1988). Behavioral risk reduction for HIV infection among gay and bisexual men: A review of results from the United States. *American Psychologist*, **43**, 878-885.
- Stall, R. D., McKusick, L., Wiley, J., Coates, T. J., & Ostrow, D. G. (1986). Alcohol and drug use during sexual activity and compliance with safe sex guidelines for AIDS: The AIDS behavioral research project. *Health Education Quarterly*, **4**, 359-371.
- Thyer, B. A., & Geller, E. S. (1987). The "Buckle-Up" dashboard sticker: An effective environmental intervention for safety belt promotion. *Environment and Behavior*, **19**, 484-494.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (1969). *Unobtrusive measures: Nonreactive research in the social sciences*. New York: Rand McNally.
- Williams, L. S. (1986). AIDS risk reduction: A community health education intervention for minority high risk group members. *Health Education Quarterly*, **4**, 407-421.
- Winett, R. A. (1978). Prompting turning-out lights in unoccupied rooms. *Journal of Environmental Systems*, **6**, 237-241.

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