

# A Door to HIV-Prevention Interventions: How Female-Targeted Materials Can Enhance Female Participation<sup>1</sup>

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The aim of this study was to examine the influence of gender on exposure to gender-tailored HIV-prevention brochures. During an unobtrusive observation of participants' reading of brochures, both men and women were likely to avoid gender-mismatched brochures. However, women were more likely to selectively approach gender-matched brochures over gender-neutral brochures than were men. Furthermore, exposure to the female-targeted brochure predicted accepting an HIV-prevention video. This pattern was only the case for females and not for males or for the male-targeted brochure. This finding implies that the gender-tailored brochures are more useful for women than for men, and may open the door to other materials designed with preventive objectives.

As the incidence of HIV has escalated since its identification in the United States in the early 1980s (Centers for Disease Control [CDC], 2004), numerous intervention strategies have been implemented to curb this rise (e.g., CDC AIDS Community Demonstration Projects Research Group, 1999; National Institute of Mental Health [NIMH] Multisite HIV Prevention Trial Group, 1998; O'Leary et al., 1998; Rotheram-Borus et al., 2001; for meta-analyses, see Albarracín et al., 2003, 2005; Weinhart, Carey, Johnson, & Bickham, 1999). These interventions, while effective, are based on controlled tests. Thus, one must know whether people will actually participate in such interventions once they are launched into the real world.

Overarching factors that might play a role in whether people participate in HIV-prevention interventions are selective exposure and gender. For example, a brochure entitled "On the Down Low: HIV Risk Factors for African American Women" would appear to be more relevant for an African

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American woman. Thus, an African American woman might be more likely to select this brochure than a person not in this group. Hence, gender tailoring of brochures might lead to selection of those brochures by the target group and ultimately might be an inroad to developing successful interventions. Further, simply reading a gender-targeted HIV-prevention brochure might increase the chance of exposure to other programs (e.g., watching an HIV-prevention video). In this sense, gender-tailored brochures might increase the reading of those brochures, as well as exposure to other preventive materials that might be available at the time.

Importantly, selective exposure might also imply that gender-mismatched materials are not selected. For example, a pink brochure entitled "Women and HIV" might attract women, but also might repel men. Such strategic avoidance might represent disadvantages for gender-mismatched brochures, even when the gender-matched ones are selected at the same rates as are the gender-neutral ones. In this regard, our study looks at the behavior of participants who were exposed to six HIV brochures, two of which were gender-targeted (i.e., male and female) and four of which were gender-neutral. We wanted to see whether participants select brochures that match their gender more often than gender-neutral or gender-mismatched brochures. We also wanted to examine if gender-mismatched brochures are avoided, relative to gender-neutral brochures. To assess the downstream consequences of this exposure, participants were provided with the opportunity to watch an HIV-prevention video and to participate in an HIV-prevention counseling session.

### Gender-Based Selective Exposure

A factor that might affect exposure to interventions is gender. As is well known, particular interventions tailor the message content to subgroups of the population (e.g., adolescents, heterosexual males) or ethnic backgrounds (e.g., African American women; Carey et al., 2004; Ford, Wirawan, Reed, Muliawan, & Wolfe, 2002; Kalichman, Cherry, & Browne-Sperling, 1999). Moreover, there are general intervention strategies that impact men and women differentially in terms of effects on condom use (Albarracín et al., 2005; Durantini, Albarracín, Mitchell, Earl, & Gillette, 2006). Albarracín et al. found that self-management skills training and HIV counseling and testing were both effective, but more so for women. Only for women, however, did HIV-prevention information and attitudinal arguments prove to be effective at increasing condom use. Furthermore, the impact of interventions for women was found to be higher when presented by female experts of matched ethnicity and behavior risk group (Durantini et al., 2006). Nonetheless, the effects of group tailoring, including gender, on selective exposure has remained surprisingly unexplored.

Despite the lack of attention to selective exposure, there is considerable work comparing heterosexual men and women in their choices in the domain of sexual behavior. In particular, men's and women's decisions occur in the context of considerable gender imbalance. For instance, Connell (1987) detailed three structures: sexual division of labor, sexual division of power, and sexual division of affective attachment (also termed *cathexis*) in relationships. Following Connell's theory of gender and power, Wingood and DiClemente (2000) stated that gender roles for women are rooted in all three structures. For instance, in the sexual division of labor, the underpaid nurturing work typical of women leads to economic disadvantage and, therefore, health risks. Also, Amaro (1995; Amaro & Raj, 2000) described how behavioral approaches to HIV prevention must pay attention to the role of gender, women's status, and women's roles. All of this literature suggests that women have less power than do men, and this imbalance might affect their health outcomes via affecting sexual risk behaviors and efficacy in reducing their incidence.

Power should also be crucial to understanding selective exposure as a function of gender (Davis, 1991). There are at least three reasons why gender would affect exposure to gender-targeted materials. First, members of disenfranchised groups identify with their groups more than do majority members. For example, the rejection-identification model (Branscombe, Schmitt, & Harvey, 1999; Foster, Jackson, Hartmann, & Woulfe, 2004) suggests that targets of prejudice identify more with their groups than with other people. Hence, women might self-identify as women, whereas men might self-identify more as members of other groups (e.g., family, group of friends). This identification might have consequences for the reception of HIV materials. For instance, as mentioned previously, women and people from African ethnicities change their behavior more when demographically similar experts deliver interventions (Durantini et al., 2006; for recent work on demographic matching, see Hall, Guterman, Lee, & Little, 2002; Winterstee, Mensinger, & Diamond, 2005). Given these factors, it is plausible that females will choose female-targeted brochures, albeit consciously or not.

Second, women might choose the female-targeted brochure because it fulfills more than one of their needs or goals. Women have low power on many different levels (e.g., interpersonal, cultural). To overcome this power imbalance, women might wish to seek education, including knowledge regarding sexual health. If sexual issues and related illnesses are gender-defined (Meyer-Weitz, Reddy, Weijts, Van den Borne, & Kok, 1998), then making gender paramount should enhance the effectiveness of HIV-prevention strategies. Hence, gender-targeted brochures could provide an avenue for arming women with information in a context relevant to their

status, while at the same time addressing sexual issues in ways that are relevant to women.

Third, women might need reassurance that their questions about sexual health are shared by others. This aspect is important because many taboos are associated with women's reproductive health and sexual identity or freedom. Although taboos present a substantial barrier to education and treatment (Mane & Maitra, 1992), they may represent an advantage in terms of framing interventions. Specifically, women are accustomed to this "feminine framing." Thus, this same framing might be utilized to get women to read female-targeted brochures. In tandem, female-targeted brochures might send the message to women that there is unique information for them regarding their own role in taking care of their sexual health. Therefore, exposure to female-targeted brochures might increase involvement with these brochures, manifested in reading them and paying more attention while doing so.

Fourth, there are reports showing that women have learned to avoid men and to seek refuge with other women (Evans & Herr, 1991). Racism and sexism are perceived by women as having a negative effect on their control of the environment, and they have developed strategies to elude potentially discriminating situations. As an example, African American women have historically avoided work fields dominated by men, given that they perceive careers as racialized and gendered (Smith & Stewart, 1983). It would not be surprising that women in our study were leaning toward selecting female-targeted materials as part of their coping system. Consequently, we had considerable support for predicting greater matching effects of gender on exposure to preventive materials among women than among men. For example, women may both seek out gender-matched materials and avoid gender-mismatched materials, whereas men may do less of both, or perhaps engage in only approach or only avoidance.

### The Present Research

In the present study, we examined the effects of gender on selective exposure to gender-targeted and gender-neutral HIV-prevention materials. Given an array of these brochures from which to choose, will the gender of participants affect which brochures are selected and the level of involvement with these brochures? Subsequently, what effects will cascade from involvement with these brochures?

To investigate these questions, we conducted a field experiment with 350 clients of the Alachua County (Florida) Health Department. The study was conducted using participants who volunteered for a general health study. During the interview process, in addition to assessing general health (e.g.,

cardiovascular symptoms, psychological symptoms), there was an unobtrusive measure of selective exposure. Participants were given the opportunity to participate in HIV-intervention programs. First, participants were exposed to six HIV brochures, two of which were gender-targeted (one for males, one for females) and four of which were gender-neutral. After this, participants were given the chance to watch an HIV-prevention video and to participate in an HIV-prevention counseling session.

Our main hypotheses were threefold. First, there may be a general advantage of gender-matched brochures in inducing exposure. If so, it would be important to determine whether the advantage is a result of the approach of gender-matched brochures, relative to gender-neutral brochures; avoidance of gender-mismatched brochures, relative to gender-neutral brochures; or both. Second, women are more sensitive or accustomed to feminine framing, and exposing themselves to a female brochure meets more than one of their needs (e.g., empowerment, education). Thus, women should be more likely to choose the female-targeted brochure than should men. Third, the gender-matched brochures may serve as a foot in the door for other intervention items (e.g., HIV-prevention video).

## Method

### *Participants*

Participants were 350 clients of the Alachua County (Florida) Health Department who were paid \$5 for the eligibility screening and \$40 for participation in the main study, if they were eligible. Noneligible participants were paid a total of \$5, while completers were paid a total of \$45.

### *Procedure*

*Recruitment.* Participants were passively recruited via a flyer that advertised the study at the health department, or actively through a direct referral from a community member. The study was touted as a “general health study” with no mention of HIV or condom use. Participants were asked to call to make an appointment, at which time they were screened for eligibility (age range = 18–50 years; sexually active; not currently pregnant or trying to get pregnant). Participants needed to be sexually active in order to represent an at-risk population. They could not be pregnant or trying to get pregnant, as pregnancy affects the decision to use condoms for birth-control purposes.

*Interview protocol.* When participants arrived for the interview, they checked in at the front desk of the Alachua County Health Department and were taken by the interviewer to the interview room for eligibility screening. If the participant was eligible, the interview began.

The first part of the interview consisted of general health questions, such as “Do you feel tightness in your chest? Yes or No,” and “On average, how many cigarettes do you smoke per day?” The next part of the interview addressed the decision to use or not use condoms with a main sexual partner. This section included measures of past sexual activity and condom use, HIV-relevant knowledge, attitudes about condoms, intentions to use condoms, beliefs about HIV and condom use, and perceived behavioral control over using condoms. Analyses based on these variables reveal that the effects of gender on exposure were orthogonal to the effects of baseline measures on exposure. For space reasons, those analyses will be reported elsewhere.

After 30 min had elapsed, the confederate knocked on the door of the interview room and asked for some space to do work in the room. The interviewer said that they were in the middle of the interview, but would call the confederate to use the room during the break. When the first half of the questionnaire ended, the interviewer excused himself or herself from the interview, claiming that he or she had to enter the data before completing the rest of the interview. The confederate was called and was told that it was then possible to come into the room and work quietly.

During this “break,” the participant was not given explicit instructions to do anything. However, there were six brochures sitting on a table. The six brochures were prescreened and selected by the site’s health professionals and clients on the basis of attractiveness and educational quality.

After 10 min had elapsed, the interviewer entered the room and explained that the data entry was taking longer than anticipated. The interviewer then offered the participant the opportunity to view a 10-min video about HIV while the participant was waiting. The client could either accept or decline to play the video while waiting for the interviewer to return. The interviewer returned 10 min later if the participant accepted the video, and 5 min later if the participant did not.

When the interviewer returned, he or she announced that the data entry was not yet finished. With that pretense, he or she gave the participant the option of participating in an HIV risk-reduction counseling session. If the participant accepted, the confederate in the room was asked to counsel the participant. If the participant declined, the interviewer left the room and returned 5 min later to conclude the survey.

At the conclusion of the study, there was a debriefing session. None of the participants expressed concerns about the study or their participation.

### *Materials*

*Brochures.* We used six brochures in this study. The brochures were laid out on the desk during the “break” of the interview process. The brochures were either gender-targeted (male and female) and or gender-neutral (four brochures). The titles of the brochures are as follows (the color of each brochure is identified in parentheses):

1. “Women and HIV” (pink)
2. “Men and HIV” (blue)
3. “Safer Sex Self-Test” (purple)
4. “Condoms: Think About It” (green)
5. “HIV: Think About It” (red)
6. “101 Ways to Avoid HIV” (multicolored)

The content is similar across the two gender-targeted brochures and the “HIV: Think About It” brochures, with items such as “You can have HIV and not know it,” “You can look fine and still pass HIV to others,” “You can’t tell by looking at someone if they have HIV,” “If you (or a woman) gets HIV, you (or she) can pass it to your (her) baby in the womb,” “Always carry condoms in your wallet (or purse),” “Talk about sex before you have sex,” “The best way to protect yourself is not to have sex,” and “Never share needles or works.” The “Safer Sex” and “Condoms” brochures contain recommendations more specific to when and how to use condoms (e.g., “Always make sure a condom is put on as soon as the penis is erect”) and facts concerning risky behaviors (e.g., “I know that getting drunk or using drugs can affect my judgment and make me more likely to take risks”). The “101 Ways” brochure is a series of recommendations and includes items such as “Anyone can get HIV” and “If you choose to be abstinent, avoid sexy situations.”

*Video.* The video “Just Like Me” (AIDS Risk Reduction Project, 1997) contains informational and motivational arguments. It is comprised of a series of vignettes featuring people telling how they contracted HIV or what living with HIV entails. The video is quite emotional in tone.<sup>3</sup>

*Counseling.* The counseling session taught behavioral control or skills, including condom-use behavioral skills, condom-use negotiation skills, self-management skills, or specific techniques or skills to promote perceived behavioral control over the decision to use condoms. The session was adapted from Project Respect (Centers for Disease Control, 1997).

<sup>3</sup>The video was very touching for women, who often cried and showed intense emotions in reaction to the stories of infected women and men. Although we do not report these reactions in the present paper, future work may code this qualitative material to examine its impact on subsequent exposure to the counseling program.

### *Dependent Measures*

The dependent measures in the present study were exposure to the materials. The confederate reported this information.

*Exposure to brochures.* For the six brochures, the confederate recorded if the participant looked at, picked up, opened, read, commented on, or took the brochure with him or her. These dimensions were all scored binomially (1 = Yes, 0 = No) and were averaged to compose an overall index of involvement with each brochure. The scores for gender-neutral brochures were averaged and used as controls.

Also, we recorded the number of total brochures, as well as the ordinal position (1 to 6) of reading the gender-targeted brochures (i.e., order of exposure to these materials). These two variables were used in some preliminary descriptive analyses. Importantly, all of the observational measures were highly reliable. In fact, reports by the confederate and the client correlated for total number of brochures read ( $r = .78, p < .001$ ) and for number of gender-targeted brochures (male brochure,  $r = .63, p < .001$ ; female brochure,  $r = .56, p < .001$ ). Hence, our ratings were deemed highly reliable.

*Recognition of brochure material.* Recognition of the material in each brochure was measured with 10 items. For each item, participants were first read a statement, such as "The brochure says 'You can't tell by looking if someone has HIV.'" Participants were then asked to indicate whether or not each brochure "says" (scored as 1) or "doesn't say" (scored as 0) a particular statement. These responses were added to a maximum recognition score of 10 when the participant had seen a particular brochure. As with the overall exposure score, the indexes for gender-neutral brochures were averaged.

*Exposure to video.* The confederate first recorded whether or not the participant asked to watch the video (between confederate and participant report,  $r = 1.00, p < .001$ ). The confederate also recorded "how attentively the participant watched the video," including if the participant "ignored" (reverse-scored), "looked at briefly," "watched more than once," "paid careful attention," "commented on," or "asked to watch another video." These dimensions were all scored binomially (1 = Yes, 0 = No) and were averaged to compose an overall index.

*Recognition of video material.* Recognition of the material in the video was measured with 10 items in the cases in which participants watched the video. For each item, participants were read a statement, such as "The video says 'You can get HIV even if you are in a monogamous relationship.'" Participants were asked to indicate whether or not the video "shows" (scored as 1) or "doesn't show" (scored as 0) that information.

*Exposure to counseling.* Finally, the confederate recorded whether or not participants accepted counseling. This measure was scored binomially

(1 = Yes, 0 = No) and showed high interrater reliability (between confederate and participant,  $r = 1.00$ ,  $p < .001$ ). Because the content of the counseling was client-tailored, no recognition measure was included.

## Results

### *Descriptive Results Across Gender*

A description of the sample is presented in Table 1. This sample is characteristic of the impoverished clients of the Alachua County Health Department and the southeastern United States. As described in Table 1, the sample was relatively young, uneducated, African American, poor, and had children. Importantly, the sample was at considerable risk for HIV, as indicated by the number of sexually transmitted infections, frequency of HIV screenings, number of partners, and low condom use. More women than men indicated that they had a main partner and had taken an HIV test. Also, men tended to have more occasional partners than did women. No other differences were found.

### *Exposure Across Gender*

Table 2 presents descriptive analyses for the general exposure variables of interest for the present research. We found that females tended to read more brochures than did males. Also, females were more involved with the brochures than were men. Women were more involved with the video and had better recognition of the video material than did men. There were no significant differences between men and women on exposure to counseling or recognition memory for brochures.

### *Gender-Targeted Brochures*

We hypothesized that gender matching would increase involvement with brochures, as well as memory for the brochures' content. In addition, we expected that gender mismatching would decrease involvement with brochures, as well as memory for the brochures' content. We hypothesized that women would exhibit greater selective exposure based on gender tailoring than would men. These analyses were conducted by comparing exposure and recognition memory for the female-targeted brochure, the male-targeted brochure, and the gender-neutral brochures across the men and women in our

Table 1

*Characteristics of the Sample*

	Overall	Women	Men	Test of differences	<i>p</i>
<i>N</i>	350	260	90		
Age (years)	32	32	33	$F(1, 349) = 0.95$	.33
Education (years)	12.63	12.55	12.84	$F(1, 349) = 1.15$	.28
Ethnicity (%)					
African American	65	68	58	$\chi^2(1, N = 126) = 4.28$	.23
European American	28	27	33		
Latino	3	3	2		
Other	4	3	7		
Participants with annual income under \$10,000 (%)	61	66	54		
Number of children	1.76	1.88	1.64	$F(1, 349) = 1.29$	.26
Number of STIs last year	0.16	0.17	0.14	$F(1, 349) = 0.16$	.70
Participants who had an HIV test (%)	90	93	86	$\chi^2(1, N = 179) = 4.69$	.05
People who have a main partner (%)	87	91	77	$\chi^2(1, N = 168) = 12.67$	.001
Number of occasional partners in the last 3 months	1.94	1.54	2.35	$F(1, 349) = 3.77$	.057
Percentage of condom use (over intercourse occasions) with occasional partners in last 6 months	29	32	27	$F(1, 305) = 0.96$	.33
Percentage of condom use (over intercourse occasions) with main partners in last 6 months	72	76	68	$F(1, 105) = 0.90$	.35

*Note.* Unless otherwise indicated, entries are means. STI = sexually transmitted infection.

Table 2

*Exposure Variables*

Independent variable	Overall	Women	Men	<i>F</i> (1, 340)	<i>p</i>	$\eta^2$
<b>Brochures</b>						
Number of read brochures	1.85	1.95	1.56	3.50	.062	.010
Overall exposure	2.50	2.67	2.00	4.68	.031	.014
Brochures recognition	2.58	2.65	2.37	<1		
<b>Video</b>						
Exposure	0.30	0.31	0.25	8.89	.003	.025
Recognition	9.67	9.98	8.76	4.53	.034	.013
Counseling exposure	0.28	0.28	0.25	<1		

*Note.* Unless otherwise indicated, entries are means.

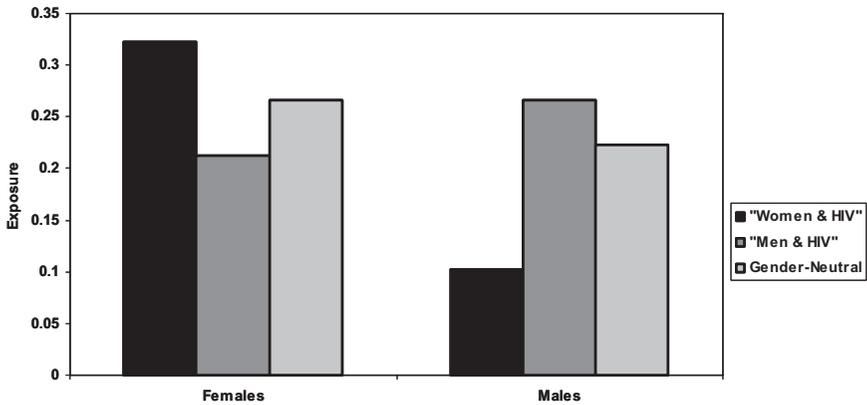


Figure 1. Overall exposure by brochure type and gender.

group. These analyses were conducted using ANOVAs with type of brochure as a repeated measure and gender as a between-subjects variable.

*Brochure exposure.* A summary of percentages of brochure exposure (e.g., involvement with brochure) by type of brochure and gender appear in Figure 1. As expected, a repeated-measures ANOVA reveals a significant Gender  $\times$  Brochure Type (female-targeted, male-targeted, or gender-neutral)

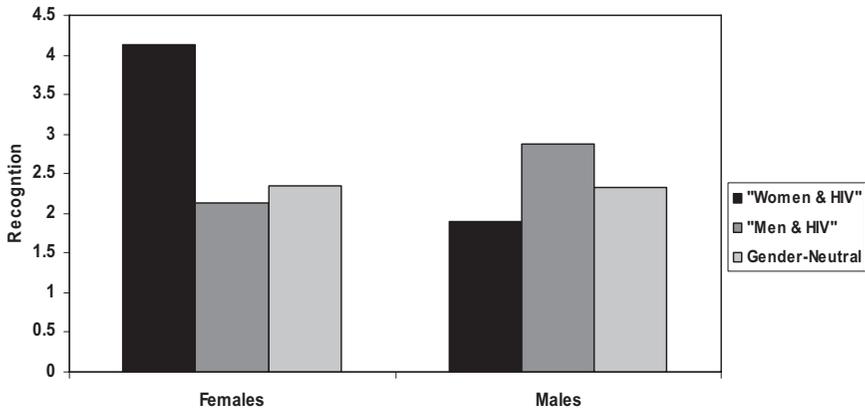


Figure 2. Recognition memory by brochure type and gender.

interaction,  $F(2, 690) = 19.49, p < .001, \eta^2 = .053$ . Post hoc comparisons were performed using Sidak's adjustment for multiple comparisons.

Among women, there was a significant preference for the female-targeted brochure over the male-targeted brochure ( $M = 0.32, SD = 0.39$  vs.  $M = 0.21, SD = 0.34, p < .001$ ) and over the gender-neutral brochures ( $M = 0.27, SD = 0.25, p = .03$ ). Moreover, women showed significant avoidance of the male-targeted brochure over the gender-neutral brochures ( $p = .04$ ). Among men, there was a significant avoidance of the female-targeted brochure over the gender-neutral brochures ( $M = 0.10, SD = 0.25$  vs.  $M = 0.22, SD = 0.24, p = .004$ ). Although men had a preference for the male-targeted brochure ( $M = 0.27, SD = 0.38$ ) over the female-targeted brochure ( $p < .001$ ), men showed no preference for the male brochure over the gender-neutral brochures ( $p = .54$ ). These results imply that women showed approach to female-targeted materials, as well as avoidance of male-targeted materials; whereas men showed avoidance of female-targeted materials.<sup>4</sup>

*Recognition memory.* We analyzed recognition memory for the brochures as a function of gender and brochure type (female-targeted, male-targeted, or gender-neutral). As predicted, we found a significant interaction,  $F(2, 696) = 22.06, p < .001, \eta^2 = .06$  (see Figure 2).<sup>5</sup> Comparisons reveal that females had significantly better recognition for the female-targeted brochures than the male-targeted brochure ( $M = 4.12, SD = 4.49$  vs.  $M = 2.12,$

<sup>4</sup>A repeated-measures ANOVA was run on order of exposure to brochures, and neither a significant effect of order nor an interaction with gender was found.

<sup>5</sup>Using a measure of recognition with non-exposed (to brochures) as missing yielded the same pattern of data, but the sample size was very small for males; hence, the decision to present these results.

$SD = 3.37, p < .001$ ) and the gender-neutral brochures ( $M = 2.39, SD = 2.39, p < .001$ ). However, recognition for the male-targeted and gender-neutral brochures did not differ for females ( $p = .42$ ). Hence, the results suggest that in addition to females being more likely to expose themselves to the female-targeted brochure, they also pay more attention to and, therefore, have better retention of the female-targeted brochure information than the other brochures. For males, recognition was not significantly different between the male-targeted brochure and the female-targeted brochure ( $M = 2.87, SD = 3.68$  vs.  $M = 1.90, SD = 3.52, p = .08$ ), nor was recognition for the male-targeted brochure better than for the gender-neutral brochures ( $M = 2.34, SD = 2.68, p = .64$ ). Largely mirroring the effects found with exposure, the benefits of gender framing on retention of material appear limited for men, yet ample for women.

*Outcomes of gender-tailored brochures.* Separate regressions were run to see if exposure to brochures (overall brochures, female-targeted, male-targeted, gender-neutral) predicts exposure to the video. To understand the role of gender more specifically, we separated the analyses by gender and ran each regression again. Exposure to brochures (overall) predicted exposure to the HIV-prevention video,  $\beta = 0.14, t(344) = 2.56, p = .011$ ; and this association only held for females,  $\beta = 0.14, t(255) = 2.21, p = .027$ . Exposure to the female-targeted brochure also predicted exposure to the video,  $\beta = 0.16, t(344) = 2.95, p = .003$ ; and this relation was significant only for females,  $\beta = 0.18, t(255) = 2.88, p = .004$ . Although exposure to the male-targeted brochure did not predict exposure to the video, exposure to the gender-neutral brochures did predict exposure to the video,  $\beta = 0.11, t(344) = 2.12, p = .035$ ; however, this association, too, only held for women,  $\beta = 0.14, t(255) = 2.56, p = .025$ .

Next, we analyzed whether any of the brochure-exposure variables predicted acceptance of the counseling session. Importantly, neither overall exposure to brochures nor either of the gender-targeted brochures predicted acceptance of the counseling session. However, exposure to the video predicted acceptance of the counseling session,  $\beta = 0.21, t(342) = 3.89, p < .001$ ; and this relation held for both genders. Hence, for women, the gender-neutral brochure and female-targeted brochures facilitated involvement with the video. The video, in turn, facilitated exposure to counseling. No such pattern occurred for men. This finding implies that the advantage of gender tailoring that was found for women (and not for men) ultimately increased exposure to the counseling session.

## Discussion

Understanding and applying the principle of selective exposure to HIV-prevention interventions is essential to make interventions effective. Our aim

was to fill out the picture on gender tailoring for such interventions. First, we asked whether gender tailoring increases exposure to interventions. Second, we asked whether gender tailoring works to the same degree in men and women. Third, we asked whether involvement with gender-specific aspects of the intervention (e.g., gender-targeted brochures) has any consequences for involvement in other aspects of the intervention (e.g., accepting an HIV-prevention video).

As a result of social barriers, women usually drop out of multi-session interventions more than do men (Durantini & Albarracín, 2006; Janson, Alioto, & Boushey, 2001). Fortunately, however, in this single-session study, there was more commitment to the brochures, the video, and the counseling program among females than among males. Women in this study were mostly Black, with low education and from a low-income neighborhood. Despite their many unfulfilled needs, these women used their available study breaks to participate in HIV-prevention interventions.

Consistent with our hypotheses, women were more likely than were men to approach gender-matched brochures selectively. Women as well as men were also likely to avoid gender-mismatched brochures. Importantly, overall involvement with or exposure to the female-specific brochure predicted accepting the video element of the intervention. This pattern was only the case for females, and not for males or for the male-specific brochure. Taken together, these results suggest that gender tailoring of brochures is more useful for women than for men, and that this tailoring has effects down the line (e.g., accepting the motivational video).

We found overwhelming gender differences in exposure to the intervention. Women read more brochures, were more involved in reading, and retained more information from all six brochures than did men. Women also were more deeply absorbed by the video and retained more information from it than did men. We suspect that women may be more willing to seek help because they are used to appearing weaker than men (Carrington, 2004; European Men's Health Forum, 2003; Pearson, 2003).

However, an alternative reason that men might have been less willing to accept the video is that they might have thought that it might prolong their time at the session. Although there is no way of answering this question in the present study, future studies might probe whether men's and women's time-expenditure concerns differ. Furthermore, because more women than men in our study had been tested for HIV in the past, it might be that the topic of HIV prevention is more salient to them than it is to men. This idea does not preclude other possibilities; rather, it offers another explanation.

Given that exposure to a gender-targeted brochure is a stepping stone to other intervention elements, we suggest a few ways that the choice of a

particular brochure may be facilitated. One possible way is to manipulate its cover design, size, or spatial placement. Classic research by Wilson and Nisbett (1978) showed that spatial placement of materials has consequences for selection. In Wilson and Nisbett's experiment, individuals at a department store were asked to select among four identical pairs of stockings. A significant position effect was found such that the two "rightmost" objects in the array were selected most often. Thus, placing brochures in such a configuration before the observer (e.g., on a table in a waiting room) may lead to the selection of the two rightmost brochures. In this case, putting brochures that speak to gender or cultural groups at the rightmost end of the array may further encourage selection and, consequently, the reading of these brochures.

Other factors that might influence how and why certain intervention elements are chosen are multifinality and equifinality (see Kruglanski et al., 2002). For instance, a participant is presented with multiple sources of materials about HIV risk and prevention. If each source is equally good (i.e., provides adequate information), then the sources are said to be *equifinal*. Under such circumstances, people normally have difficulty choosing among the multiple sources. However, if one source satisfies more than one need (e.g., need to find out about HIV and need to validate self-worth), this source is said to be *multifinal*, and, consequently, this source should be chosen over the others. In this light, researchers and practitioners should consider the possible goal fulfilled by intervention components for different populations. Maximizing the number of fulfilled goals should increase exposure. In the present study, it could be that women perceived the female-targeted brochure as serving multiple needs (i.e., multifinal); hence, the increased exposure to this brochure.

In the present research, accepting the video appeared to be a precursor to accepting counseling. As involvement with or reading of the female-targeted brochure predicted watching the video, what other variables might potentially lead a person to watch it? One source of help might be derived from the literature on goal-dependent automaticity, wherein someone might be primed to behave in a certain way, without being aware of it, only if that behavior falls in line with a current or ever-present goal (e.g., Bargh, 1989, 1990).

A simple example of this phenomenon is the work of Strahan, Spencer, and Zanna (2002). They demonstrated that participants who were thirsty (i.e., had the goal to relieve their thirst) and were presented with words related to thirst were much more likely to choose a thirst-quenching drink (as opposed to one that restored electrolytes) than were those who were thirsty but were not presented with those words. The results of this study suggest that for subliminal messages to influence behavior, people must have a latent

goal, and the situation (in this case, primes relating to the concept of thirst) must activate this goal.

Now, consider this idea of goal-dependent automaticity in terms of getting people to accept watching the video or participating in a counseling session. If the female-targeted brochure elicited goals in the female participants (e.g., taking charge of one's health), then ideally, the intervention should create or identify a need. Then, the fodder for its resolution should be presented. In practical terms, clients could be told that they may be asked later in the session to write a short paragraph about how they might contract HIV. After this information, they could be offered an opportunity to watch a video regarding people's personal experiences with HIV. In this context, watching the video is helpful in writing one's own testimony. Thus, the anticipated request might increase exposure to the video.

There are limitations to the present research. The main objective was to examine the benefits of gender tailoring for exposure to HIV-prevention interventions. Although we found that women benefit more from specific tailoring than do men, are there any potential problems associated with gender tailoring for either gender? One case would be when the full gamut of gender is not addressed. For example, Bockting, Robinson, and Rosser (1998) studied HIV prevention among transgender individuals. They found that affirmation of transgender identity was an integral component to an effective intervention. In this case, the absence of brochures for transgendered women would be a liability.

Also, in our study, sexual preference was not addressed, as the only relevant question was whether or not the participant had vaginal sex in the past 3 months. In addition, one might expect gay men to be particularly sensitive to tailoring to their group. Further, for straight men, male tailoring may be interpreted as "gay-men" tailoring. Therefore, the possible relevance of the male brochure could have been undermined by these perceptions. These questions may be addressed in the future.

To our knowledge, there has been no prior study on exposure to HIV-prevention materials or the role of gender tailoring in increasing exposure. Even when the inclusion of gender-targeted brochures in intervention strategies is a very popular resource (Wingood & DiClemente, 1996), its valuable role in intervention exposure remains unknown. We found that, compared to men, women were more likely to choose brochures tailored to their gender. This result had consequences for further involvement in HIV risk-reduction strategies, such as viewing an HIV-prevention video. As the incidence of HIV is rising in the female population, understanding how to facilitate women's participation in effective HIV risk-reduction interventions is crucial to public health.

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