

## Effects of Erotophobia on the Persuasiveness of Condom Advertisements Containing Strong or Weak Arguments

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Individual differences in erotophobia affect the way people process sexually related information, such as information concerning safer sex. This study tests the hypothesis that people who are erotophobic are less likely to take the central route in information processing about sexual material as described by the elaboration likelihood model. Female college students ( $n = 94$ ) were randomly assigned to view a condom advertisement containing either strong or weak arguments. Consistent with predictions, all women were more persuaded by the advertisement containing strong rather than weak arguments. However, erotophobic women were also relatively more persuaded by weak arguments than were erotophilic women. Erotophobia appears to interfere with central route processing of sexually related messages.

The environment is filled with sexual cues. In fact, it is difficult to watch a movie without some sexual scenario or listen to the radio without some reference to sex. Particularly, advertisers seem to use sex or sexual innuendo to sell a variety of products. "Sex sells" is a phrase often heard with respect to many aspects of persuasion. However, is this approach effective with individuals who are not as comfortable with this nearly unavoidable abundance of sexual cues? It seems that with respect to persuasion the discomfort of these individuals has received relatively little attention.

Research indicates that people react differently to sexual cues based on individual characteristics. One of these characteristics is the level of erotophobia or erotophilia. *Erotophobia* is a general negative reaction to sexual stimuli (Fisher, Byrne, & White, 1983). In contrast to erotophobia, *erotophilia* is described as generally positive feelings toward sexual stimuli.

Overall, erotophobes tend to avoid sexual stimuli (Becker & Byrne, 1985). This avoidance of any type of sexual material may lead the individual to be less likely to plan for any sexual activity. Research shows that erotophobes are less likely to anticipate intercourse in advance (Fisher et al.,

1983) and they tend to avoid buying contraception (Fisher et al., 1979). This would not be as much of a problem if their partners always provided contraception. However, because erotophobes are less likely than erotophiles to initiate discussion of contraception with their partners (Freimuth, Hammond, Edgar, McDonald, & Fink, 1992), this is not likely to happen. As a direct consequence, individuals high in sex guilt, which is highly correlated with erotophobia (Fisher et al., 1983), are less likely to use effective methods of contraception, and they are less likely to use the effective methods of contraception properly (Gerrard, 1977). Due to the fact that erotophobic individuals are less willing to plan for sexual intercourse, they are more likely to rely on spontaneous methods of contraception such as the withdrawal method (Gerrard, Gibbons, & McCoy, 1993). In fact, Gerrard and Luus (1995) found that erotophobes overestimate the efficacy of ineffective methods of birth control, such as the withdrawal method, and underestimate the efficacy of effective methods of birth control, such as the Pill. Erotophobes made lower estimates of the likelihood of pregnancy when using the withdrawal method and higher estimates when using the Pill. This was compared to erotophilic individuals who made more accurate statements (Gerrard & Luus, 1995).

Erotophobic women clearly have different birth control behaviors and different beliefs about birth control effectiveness. However, these different beliefs do not arise from any

difficulties in learning the information. For example, when erotophobic individuals were tested 4 to 6 weeks after viewing information on contraception, they were just as likely as erotophilic women to remember the information (Goldfarb, Gerrard, Gibbons, & Plante, 1988). Gerrard, Kurylo, and Reis (1991) also showed that there was no significant difference between erotophobes and erotophiles in the retention of birth control and AIDS information. A possible explanation for why erotophobes know less about birth control is that they are simply avoiding sexual information. One study supporting this explanation showed that erotophobes spend less time viewing explicit sexual slides than erotophiles when viewing time was self-regulated (Becker & Byrne, 1985).

Erotophobia may also lead to avoidance of issues that are not directly associated with sex. For example, one study showed that highly erotophobic women were less persuaded by breast self-examination brochures that contained pictures of nude breasts (Labranche, Helweg-Larsen, Byrd, & Choquette, 1997). Erotophobic women had higher levels of comprehension when the brochures did not contain any nude pictures. This research indicates that erotophobia may interfere with persuasion if the persuasive message is linked with sexual cues (e.g., a picture of a nude breast).

The elaboration likelihood model is one model that may be useful in understanding how erotophobic individuals process sexual material. This model describes two routes to persuasion, the central route and the peripheral route (Petty & Cacioppo, 1986). In the central route, individuals draw on past experiences and knowledge to evaluate certain arguments. When the information is relevant to the person making the judgments, that person will be more motivated to learn about the subject and, therefore, more likely to look at the facts and critically analyze the arguments presented. In the peripheral route, individuals are persuaded by cues that produce an affective state or cues that follow from a simple inference. An example of a simple inference is that "experts are correct." Although this statement is not always true, it is easier to accept the statement than to try to evaluate it, especially if the topic is unfamiliar to the person making the judgments. In fact, the peripheral route is often used when the material presented is not as personally relevant, and the individual is not personally motivated to analyze the facts presented (Petty, Gleicher, & Jarvis, 1993).

The elaboration likelihood model is important in terms of advertising. Potential buyers may take different routes as they view particular advertisements. One study investigated the elaboration likelihood model in terms of advertising effectiveness and found that those with high involvement were more influenced by the quality of arguments than were those under low involvement (Petty, Cacioppo, & Schumann, 1983). Individuals low in involvement were apparently more likely to take the peripheral route; their attitudes were more influenced by celebrity endorsers than were the individuals high in involvement.

To date, only one attempt has been made to link erotophobia—erotophilia to the persuasiveness of condom advertisements (Alden & Crowley, 1995). In that study, individuals with high sex guilt or with low sex guilt were asked to look at a condom advertisement that was either self-referencing or other referencing. Self-referencing advertisements stated that the condom would benefit the purchaser, whereas other-referencing advertisements stated the product would benefit others. Overall, there were few effects of self-referencing versus other referencing. However, individuals high in sex guilt were more likely to have negative thoughts about the advertisement and about the brand of condom, and they found the advertisement less informative than individuals with low sex guilt. Although this study suggests that erotophobes and erotophiles may respond differently to advertisements with sexual content, it does not directly address whether these individuals process such advertisements differently.

In sum, the literature on persuasion and erotophobia would lead us to expect that erotophobic individuals respond differently than erotophilic individuals when exposed to sexually related persuasive materials. This study examines the moderating effect of erotophobia on the persuasion of condom advertisements. Information regarding contraceptive use is often presented visually, such as in educational brochures and advertisements. Although it is possible to have different amounts of visual or sexual cues, all such materials likely contain some. Erotophobic women may not attend to such messages because they want to avoid the sexual cues present. Thus, one would expect that erotophobic women would be equally persuaded by strong and weak arguments and erotophilic women would be more persuaded by strong than weak arguments. In short, we predicted that erotophilic women would take the central route to persuasion and erotophobic women would not. Peripheral processing was not manipulated or measured. To hold level of motivation or involvement constant, only women who had had intercourse and had used condoms in the past were included in this study.

## METHOD

### Overview

Erotophobic and erotophilic women were asked to read a condom advertisement that presented either strong or weak arguments. The experimental design was a 2 (erotophobia: high vs. low)  $\times$  2 (argument strength: strong vs. weak) between-subject factor. The dependent measures focused on attitude favorability toward the advertisements and condom.

*Prescreening.* College students in an introductory general psychology course were given the Sexual Opinion Survey (SOS) as part of a questionnaire packet. Each item in

the SOS is designed to measure erotophobia and erotophilia, and research has shown that the measure is valid and reliable (Fisher, Byrne, White, & Kelley, 1988). Cronbach's alpha was .92. Female students with SOS scores in the highest third and the lowest third were selected as possible participants and contacted by telephone. As expected, women high in erotophobia had higher scores ( $M = 4.58$ ,  $SD = 0.38$ ) than did women low in erotophobia ( $M = 2.62$ ,  $SD = 0.55$ ).

**Participants.** Participants were recruited by telephone and, when they arrived for the study, were randomly assigned to view a condom advertisement containing either strong or weak arguments. Initially, 146 female students participated. Only data from sexually active women who had used a condom in the past were analyzed, resulting in a sample of 94 women (average age = 18 years old).

## Procedure

Once participants arrived for the study, they were informed of anonymity and informed consent was obtained. Participants were then given a background questionnaire, followed by one of the two condom advertisements containing strong or weak arguments. Participants were given a few minutes to peruse the advertisement and were then given the questionnaire containing the dependent measures. After completing the second questionnaire, participants were debriefed. Individuals received course credit for their participation.

## Materials

Materials consisted of the SOS, two paper-and-pencil questionnaires, and a condom advertisement. The background questionnaire consisted of questions regarding past sexual experience, frequency of intercourse, and history of contraceptive use. Participants were first asked if they had ever had sexual intercourse and if they had ever used a condom. Participants were then asked questions pertaining to their sexual behaviors. They were first asked what percentage of the time they used condoms during intercourse in the past year. Individuals who had not had intercourse in the past year indicated this and moved on to the next question. Participants were then asked whether they or their partner usually provided the condoms. This was answered on a 7-point scale ranging from 1 (*always me*) to 7 (*always my partner*). Information was also requested regarding what percentage of the time participants had used any type of reliable birth control in the past year. Again, those who had not had intercourse in the past year were told to move on to the next question. Frequency of intercourse was assessed by asking participants how many times they had sexual intercourse in the last 3 months and when the last time they had sexual intercourse was. Individ-

uals were asked to indicate the last time they had intercourse (i.e., *this past week, this past month, within the last 6 months, within the last year, or more than a year ago*) and which method of birth control was used during the last time the participants had intercourse (i.e., *none, condom, the Pill, rhythm, diaphragm, or other*; a blank space was provided next to the choice marked *other* for participants to indicate their choice of birth control). Extent of sexual history was also determined by asking participants to provide the number of past sexual partners. Participants who were not sexually active were asked to complete two filler scales instead to ensure that all participants were taking about the same amount of time. A need-for-cognition scale (Cacioppo & Petty, 1982) was also included in the first questionnaire for all participants to complete. Cronbach's alpha was .86. Need for cognition was not correlated with erotophobia and did not interact with erotophobia or argument strength, so it is not discussed any further.

**Manipulated variable: Argument strength.** There were two versions of the condom advertisement: one consisting of strong arguments and one consisting of weak arguments. The strong arguments elaborated on four points: (a) extra-strength latex, (b) nonoxynol-9, (c) prevention of pregnancy and sexually transmitted diseases, and (d) extra comfort. The weak arguments elaborated on four different, more insignificant points: (a) ease of use, (b) easy instructions, (c) fashionable colors, and (d) discreet packaging. Although these may superficially appear to be good arguments, they were not when examined more closely. For example, the "easy to use" point included "to open the package, all you need is a pair of scissors." Aside from the content of the arguments presented, the two advertisements were identical. The name of the condom brand appeared at the top, a picture of a package of condoms appeared at the bottom, and pictures of individual condom packages appeared scattered around the advertisements.

**Manipulation check.** The argument strength manipulation was checked by asking the participants to rate the strength or weakness of the arguments presented. Responses were scored on a 7-point scale ranging from 1 (*very weak*) to 7 (*very strong*). Responses for the number of desirable characteristics of the condom brand portrayed in the advertisement were also scored on a 7-point scale ranging from 1 (*few*) to 7 (*many*). These two items were highly correlated,  $r(94) = .77$ ,  $p < .001$ , and thus were averaged. Finally, we assessed personal motivation to read the condom ad by having participants rate how personally interested they were in knowing about different brands of condoms (*not at all interested* to *very interested*). This was included to ascertain whether the erotophobic and erotophilic participants differed in their personal motivation to read the condom ad. Due to the fact that

all the women were sexually active and had previously used a condom, we predicted that erotophobic and erotophilic women would report similar levels of personal motivation.

**Dependent measures.** Participants were first asked to list what they were thinking about while they were looking at the advertisement. Five boxes were provided and participants were asked to list only one thought per box. Participants were then asked to return to the thought listings and to code each one as positive, negative, or neutral in relation to the advertisement. Attitudes toward the advertisement were then addressed. Eight other dependent variables were scored using a 7-point scale. The eight items addressed were:

1. Perceived effectiveness of the advertisement (*not at all effective to extremely effective*).
2. Persuasiveness of the advertisement (*not at all persuasive to extremely persuasive*).
3. General attitude toward the condom brand (*negative to positive*).
4. Attitude toward the advertisement (*unpleasant to pleasant*).
5. Appeal of advertisement (*not at all appealing to very appealing*).
6. Level of comfort while looking at the advertisement (*slightly uncomfortable to very comfortable*).
7. Purchase intentions (*not at all likely to very likely*).
8. Comparison of advertised brand to other condom brands (*much worse to much better*).

## RESULTS

### Manipulation Checks

The manipulation of argument strength was quite successful. Specifically, a 2 (erotophobia: high or low)  $\times$  2 (argument strength: weak or strong) analysis of variance (ANOVA) revealed that participants in the strong arguments condition rated the arguments as stronger ( $M = 5.56$ ,  $SD = 1.09$ ) than participants in the weak arguments condition ( $M = 3.36$ ,  $SD = 1.55$ ),  $F(1, 90) = 63.79$ ,  $p < .001$  ( $\eta^2 = .41$ ). Analysis also revealed a marginally significant effect of erotophobia,  $F(1, 90) = 3.28$ ,  $p = .07$  ( $\eta^2 = .04$ ), with erotophobic women ( $M = 4.73$ ,  $SD = 1.54$ ) being marginally more likely than erotophilic women ( $M = 4.29$ ,  $SD = 1.86$ ) to rate the arguments as strong. These main effects were qualified by a marginally significant interaction,  $F(1, 90) = 3.64$ ,  $p = .06$  ( $\eta^2 = .04$ ). When the message strength was weak, erotophobic women thought the arguments were stronger ( $M = 3.90$ ,  $SD = 1.56$ ) than did erotophilic women ( $M = 2.90$ ,  $SD = 1.41$ ),  $t(44) = 2.29$ ,  $p < .05$  ( $\eta^2 = .05$ ). However, when the message was strong, erotophobic women ( $M = 5.55$ ,  $SD = 0.99$ ) and erotophilic women ( $M = 5.57$ ,  $SD = 1.19$ ) did not differ in

their perceptions of strength,  $t(46) = -0.08$ ,  $p > .05$  ( $\eta^2 = .001$ ). The effect of erotophobia and the interaction between erotophobia and argument strength were unexpected. However, the effects were notably weaker than the main effect of argument strength.

Finally, we predicted that the women would not differ in their motivation to read about condoms because they were all sexually active and had used condoms in the past. The same 2  $\times$  2 ANOVA using "personally interested to know about different kinds of condoms" as a dependent variable, revealed no significant main effects or interaction, all  $F_s(1, 90) < 0.41$ ,  $p_s > .29$  ( $\eta^2 < .006$ ).

### Persuasiveness of Ads

We submitted the eight persuasion items to a principal components factor analysis with varimax rotation. The factor analysis yielded two factors with eigenvalues greater than 1. The first factor accounted for 59% of the variance and consisted of six items, with factor loadings of .81 or greater. The six items included how effective, appealing, and persuasive the ad was, the overall view of the brand of condoms advertised, how the brand compared to other condom brands, and willingness to buy the brand. Cronbach's alpha was .93, and we labeled this factor *persuasiveness*. The second factor accounted for 18% of the variance and consisted of the remaining two items: How comfortable the participants felt looking at the ad (loading = .89), and the pleasantness of the ad (loading = .69), with Cronbach's alpha at .49. We labeled this factor *comfort*.

A 2 (erotophobia: high or low)  $\times$  2 (argument strength: weak or strong) ANOVA of the persuasiveness factor yielded a significant effect of argument strength,  $F(1, 90) = 65.16$ ,  $p < .001$  ( $\eta^2 = .42$ ). Participants were more persuaded when the arguments were strong ( $M = 5.31$ ,  $SD = 1.13$ ) than when the arguments were weak ( $M = 3.31$ ,  $SD = 1.36$ ). Analysis also yielded a significant effect of erotophobia,  $F(1, 90) = 6.32$ ,  $p < .02$  ( $\eta^2 = .07$ ), indicating that erotophobic women found the ads more persuasive ( $M = 4.62$ ,  $SD = 1.43$ ) than did erotophilic women ( $M = 4.00$ ,  $SD = 1.71$ ). As seen in Figure 1, the analysis also yielded a significant interaction of argument strength and erotophobia,  $F(1, 90) = 5.09$ ,  $p < .03$  ( $\eta^2 = .05$ ). Erotophobic women judged the strong arguments as more persuasive ( $M = 5.34$ ,  $SD = 1.15$ ) than the weak arguments ( $M = 3.91$ ,  $SD = 1.34$ ),  $t(40) = -3.72$ ,  $p < .001$  ( $\eta^2 = .09$ ), as did the erotophilic women (strong:  $M = 5.28$ ,  $SD = 1.14$ ; weak:  $M = 2.73$ ,  $SD = 1.14$ ),  $t(50) = -5.28$ ,  $p < .001$  ( $\eta^2 = .06$ ). However, erotophobic women did this to a lesser extent. A Fisher's  $z$  transformation of the  $t$  values from these tests revealed that the effect was significantly stronger among erotophilic than erotophobic women,  $E(z) = 1.93$ ,  $p < .05$  (one tailed).

The importance of argument strength in producing the primary interaction can be demonstrated by covarying out per-

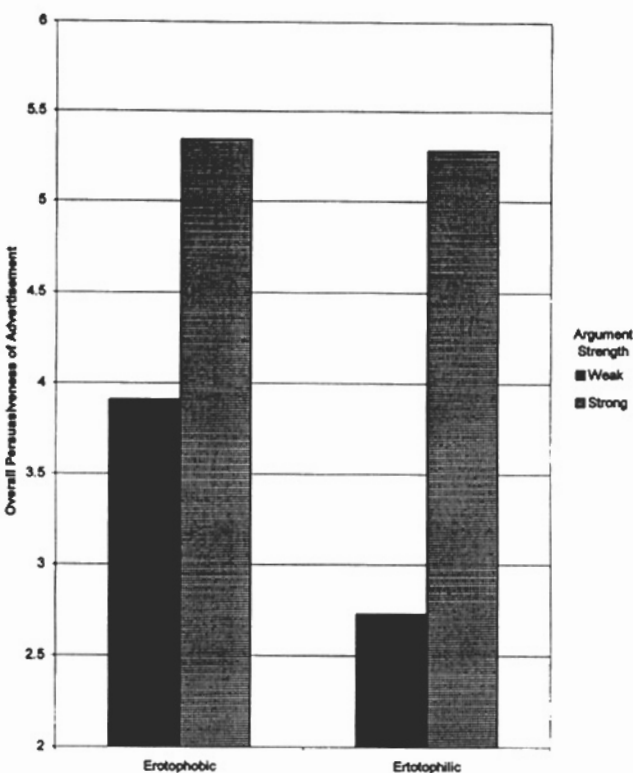


FIGURE 1 Overall reactions toward the advertisement as a function of erotophobia and argument strength.

ceived argument strength from the primary interaction. A 2 (erotophobia: high or low)  $\times$  2 (argument strength: weak or strong) analysis of covariance was conducted covarying out perceived argument strength along with the covariate interactions (Erotophobia  $\times$  Perceived Argument Strength and Manipulated Argument Strength  $\times$  Perceived Argument Strength). The dependent variable was persuasion. If perceived strength of argument was primarily responsible for causing the interaction, the interaction should become nonsignificant once perceived argument strength (and the two associated interactions) was controlled statistically. This is exactly what we found. The analysis revealed a nonsignificant Erotophobia  $\times$  Argument Strength interaction,  $F(1, 87) = 0.66, p = .45 (\eta^2 = .007)$ . In other words, the argument strength manipulation influenced perceived argument strength, which in turn influenced persuasiveness.

The analysis of participants' comfort with the ad was also examined in a 2 (erotophobia)  $\times$  2 (strength) ANOVA. The analysis revealed a single significant main effect of erotophobia,  $F(1, 90) = 4.54, p < .02 (\eta^2 = .05)$ . Erotophilic women felt more comfortable with the ads ( $M = 5.76, SD = 0.88$ ) than did erotophobic women ( $M = 5.35, SD = 0.98$ ). There were no other significant effects,  $F_s < 1.34, p_s > .25$ .

In sum, erotophobic and erotophilic women were equally persuaded by the advertisement containing strong arguments,  $t(46) = 0.19, p > .05 (\eta^2 = .004)$ . However,

erotophobic women were more persuaded than erotophilic women by the advertisement containing weak arguments,  $t(44) = 3.23, p < .05 (\eta^2 = .07)$ .

### Process Analyses

We examined participants' thought listings to assess the extent to which participants engaged in central processing when reading the ads. Analysis of the total number of thoughts reported revealed only a significant effect of erotophobia,  $F(1, 90) = 7.32, p < .01 (\eta^2 = .08)$ . Erotophobic women listed fewer thoughts ( $M = 3.42, SD = 0.89$ ) than did erotophilic women ( $M = 3.92, SD = 0.93$ ). The finding that erotophobic women had fewer thoughts overall is consistent with the literature on erotophobia showing that erotophobic individuals avoid thinking about sexual materials or sexual issues.

We next analyzed the proportion of positive thoughts and negative thoughts reported by participants. Analysis of positive thoughts revealed an effect of argument strength,  $F(1, 90) = 32.91, p < .001 (\eta^2 = .27)$ . Participants reported a higher proportion of positive thoughts when the advertisement contained strong arguments ( $M = 56\%$ ) than when it contained weak arguments ( $M = 18\%$ ). Analysis of negative thoughts also revealed an effect of strength,  $F(1, 90) = 45.29, p < .001 (\eta^2 = .33)$ . Participants reported a higher proportion of negative thoughts when the advertisement contained weak arguments ( $M = 62\%$ ) than when the advertisement contained strong arguments ( $M = 20\%$ ). Thus, it appears that the strength of the arguments strongly influenced the positivity or negativity of the thoughts for both erotophilic and erotophobic women.

The number of thoughts listed is a relatively crude measure of whether participants are engaging in central processing. Thus, we coded the thought listings in a manner that would better reveal central processing. Specifically, participants received a score of 1 if they reported nothing new (relative to the information provided in the ad) and no opinion, a 2 if they reported something new or an opinion, and a 3 if they reported something new and an opinion. The two coders showed 95% agreement in their coding ( $\kappa = .93$ ),  $p < .001$ . Three cases of disagreement were resolved by the primary coder. A 2 (erotophobia: high or low)  $\times$  2 (argument strength: weak or strong) ANOVA of this content measure showed a marginally significant interaction,  $F(1, 90) = 2.96, p = .09 (\eta^2 = .03)$ . Erotophobic women processed weak ( $M = 2.14, SD = 0.36$ ) and strong ( $M = 2.19, SD = .60$ ) messages similarly,  $t(40) = -0.31, p > .05$ . Erotophilic women, by contrast, showed more central processing for weak ( $M = 2.48, SD = .51$ ) than strong messages ( $M = 2.15, SD = .60$ ),  $t(40) = 2.14, p < .05 (\eta^2 = .04)$ . Thus, it appears that erotophilic women are less persuaded by the weak messages than erotophobic women because erotophilic women are more likely to exert thought when evaluating the weak message.

Table 1 displays the residual correlation matrix containing correlations between all dependent variables removing the effect of the manipulated strength of the arguments.

TABLE 1  
Residual Correlation Matrix Among Dependent Measures  
Controlling For Manipulated Argument Strength

Measure	1	2	3	4	5	6	7
Perceived argument strength	—	.78*	.28*	-.17	.48*	-.50*	-.08
Persuasiveness of ad		—	.28*	-.17	.48*	-.48*	-.06
Comfort with ad			—	-.02	.24*	-.19	-.13
Total number of thoughts listed				—	-.02	.11	.18
Percentage of positive thoughts					—	-.58*	.03
Percentage of negative thoughts						—	.08
Central processing							—

\* $p < .05$ .

## DISCUSSION

Both erotophobic and erotophilic women were more persuaded by strong arguments than weak arguments. However, erotophilic women made a stronger distinction between strong and weak arguments than erotophobic women did. This finding is consistent with, although not identical to, our prediction that erotophobic individuals would be equally persuaded by strong and weak arguments. We argue that this difference in persuasion occurs because erotophobic women do not attend to the sexually related message. In support of this process, we found that erotophobic women considered the weak arguments stronger than did erotophilic women, and erotophobic women spent less thought processing the weak arguments that did erotophilic women.

Consistent with this argument we found a different pattern of responses for persuasion as opposed to comfort with the ad. With respect to persuasion, we found evidence that erotophobic women were not processing the sexually related material and the weak arguments therefore appeared relatively stronger. With respect to reported comfort with the ad we found that erotophobic women were less comfortable with the ads than were erotophilic women. This is consistent with the literature on erotophobia that shows that erotophobic women are uncomfortable with sexually related material and avoid it whenever they can. One would not expect the same interaction for the comfort variable because central processing of the message should influence only their persuasion and not their level of comfort.

Erotophobic individuals are uncomfortable with sexuality and sexual cues and thus avoid thinking about sex related to sex information (Becker & Byrne, 1985). The elaboration likelihood model suggests that people who are less likely to critically analyze the facts presented are also less likely to

take the central route to persuasion (Petty et al., 1993). Thus, we expected that erotophobic women would be less likely to take the central route to persuasion. This may manifest itself by erotophobic women finding weak and strong messages equally persuasive (what we predicted), but it could also manifest itself by erotophobic women not noticing the weakness of a weak argument (what we found). Recall that the strengths and weaknesses of the arguments presented in the experimental materials were extreme. For example, the weak arguments listed less important reasons for using the advertised brand of condoms (easy to use, easy instructions, fashion colors, and discreet packaging) than the strong arguments (extra-strength latex, nonoxynol-9, prevention of pregnancy and sexually transmitted diseases, and extra comfort). In addition, the weak ads gave very weak support for the main points provided (e.g., instructions took 15–20 min to read and scissors were required to open the packages), but one would have to read all the text in the ad to notice the content of the arguments. Due to the fact that the weak arguments were extreme in this study, it may follow that a critical analysis was not necessary to result in differential persuasion between strong and weak arguments. If the weak arguments had been more moderate, the findings may have been closer to the predicted pattern.

Although the results diverge somewhat from the predictions, they nevertheless are consistent with the proposed process. Erotophobic women were more persuaded by the weak arguments than were erotophilic women. In addition, the thought listing revealed that erotophobic women were less likely to follow the central route to persuasion for weak and strong arguments. For strong arguments, less thought may be required to determine that the arguments were, in fact, strong. However, to erotophobic women, weak arguments may have appeared stronger than they actually were because of the superficial processing.

We suggest that the superficial processing reflects an effort by erotophobes to avoid or escape information with a sexual content. It is also possible, however, that the erotophobic women did not pay attention to the messages because they did not find the advertisement relevant to them personally. Although this explanation cannot be dismissed entirely, it seems unlikely for two reasons. First, we only included participants who were sexually active and had previously used a condom. Second, responses to the manipulation check items revealed that the women did not differ in terms of interest in knowing more about different condom brands.

The study is not without limitations. First, although we found that erotophobic women used the central route less when processing the ad, we do not know if erotophobic women were using the peripheral route more. Second, although the erotophobic and erotophilic women appeared to be differentially persuaded, we did not assess condom purchase behaviors. Thus, we do not know if the differences in persuasion translated into differences in preventive behaviors.

These findings suggest that erotophobic and erotophilic people may react differently to certain arguments. These differences may have important implications for advertising companies and agencies promoting healthy behaviors in choosing how to present sexually related information. If the goal is to persuade as many people as possible, then the findings suggested by this study are important. Erotophobic individuals are less likely to use contraception than erotophilic individuals, and they are less likely to use effective methods of contraception correctly (Gerrard, 1977). Therefore, the way in which erotophobic people process information is crucial to developing an ad campaign to persuade them to have safer sex. Ironically, these data suggest that erotophobic individuals may be easier to persuade (at least with weak arguments). However, it is unclear whether their greater persuasion translates into taking preventive action.

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### REFERENCES

- Alden, D. L., & Crowley, A. E. (1995). Sex guilt and receptivity to condom advertising. *Journal of Applied Social Psychology, 25*, 1446-1463.
- Becker, M. A., & Byrne, D. (1985). Self-regulated exposure to erotica, recall errors, and subjective reactions as a function of erotophobia and type A coronary-prone behavior. *Journal of Personality and Social Psychology, 48*, 760-767.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116-131.
- Fisher, W. A., Byrne, D., Edmunds, M., Miller, C. T., Kelley, K., & White, L. A. (1979). Psychological and situation-specific correlates of contraceptive behavior among university women. *Journal of Sex Research, 15*, 38-55.
- Fisher, W. A., Byrne, D., & White, L. A. (1983). Emotional barriers to contraception. In D. Byrne & W. A. Fisher (Eds.), *Adolescents, sex, and contraception* (pp. 207-239). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Fisher, W. A., Byrne, D., White, L. A., & Kelley, K. (1988). Erotophobia-erotophilia as a dimension of personality. *Journal of Sex Research, 25*, 123-151.
- Freimuth, V. S., Hammond, S. L., Edgar, T., McDonald, D. A., & Fink, E. L. (1992). Factors explaining intent, discussion and use of condoms in first-time sexual encounters. *Health Education Research: Theory and Practice, 7*, 203-215.
- Gerrard, M. (1977). Sex guilt in abortion patients. *Journal of Consulting and Clinical Psychology, 45*, 708.
- Gerrard, M., Gibbons, F. X., & McCoy, S. B. (1993). Emotional inhibition of effective contraception. *Anxiety, Stress, and Coping, 6*, 73-88.
- Gerrard, M., Kurylo, M., & Reis, T. (1991). Self-esteem, erotophobia, and retention of contraceptive and AIDS information in the classroom. *Journal of Applied Social Psychology, 21*, 369-379.
- Gerrard, M., & Luus, C. A. (1995). Judgments of vulnerability to pregnancy: The role of risk factors and individual differences. *Personality and Social Psychology Bulletin, 21*, 160-171.
- Goldfarb, L., Gerrard, M., Gibbons, F. X., & Plante, T. (1988). Attitudes toward sex, arousal, and the retention of contraceptive information. *Journal of Personality and Social Psychology, 55*, 634-641.
- Labranche, E. R., Helweg-Larsen, M., Byrd, C. E., & Choquette, R. A. (1997). To picture or not to picture: Levels of erotophobia and breast self-examination brochure techniques. *Journal of Applied Social Psychology, 27*, 2200-2212.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research, 10*, 135-146.
- Petty, R. E., Gleicher, F., & Jarvis, W. B. (1993). Persuasion theory and AIDS prevention. In J. B. Pryor & G. D. Reader (Eds.), *The social psychology of HIV infection* (pp. 155-182). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.