

Sexism and Pornography Use: Toward Explaining Past (Null) Results

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ABSTRACT. Empirical research has failed to provide a clear understanding of the relationship between pornography use and sexism. Study 1 showed an inverse correlation between modern sexism and pornography use, such that participants who used pornography more frequently displayed less sexist attitudes. Study 2 found a positive correlation between pornography use and benevolent sexism, such that participants who used pornography more frequently displayed more benevolent sexism. Our studies provide insight into the largely inconclusive findings of previous research on pornography use and sexist attitudes toward women. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2004 by The Haworth Press, Inc. All rights reserved.]*

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The subject of pornography has long generated controversy. Historically, antipornography arguments have focused on potentially adverse effects of viewing pornographic material for individuals and society as a whole (Petersen, 1999). More recent feminist theorizing (e.g., Dworkin, 1988; Hill, 1987; MacKinnon, 1986; Millett, 1970; Morgan, 1980; Russell, 1998) argued that virtually all sexually explicit material has detrimental effects on women. In contrast, other feminists (e.g., Steinem, 1998; Tong, 1989) distinguished between pornography that is erotic and sexually stimulating for both men and women, and pornography that contains images of women that are degrading and objectifying.

Part of the controversy over the potential harmful effects of pornography involves the definition of pornography. Although the dictionary typically defines pornography as “the depiction of erotic behavior . . . intended to cause sexual excitement” (e.g., *Webster’s Seventh New Collegiate Dictionary*, 1972), scholars note that the term “pornography” connotes a “negatively valenced judgmental tone and implies immoral motive or intent” (e.g., Lopez and George, 1995, p. 275). In the present research, we use the term pornography, like Lopez and George (1995), to describe material intended to produce sexual excitement independent of any judgment of morality.

Given the potential serious social consequences of pornography consumption, it is not surprising that the topic has been a focal point for a significant body of social science research. What is surprising, however, given the conventional wisdom that pornography consumption is potentially harmful to the well-being of women, is the difficulty that researchers have had in showing a link between pornography use and negative attitudes and behaviors toward women.

Although certain feminist perspectives (e.g., Boyle, 2000; Brownmiller, 1975; Dworkin, 1988; Hill, 1987; MacKinnon, 1986) argue that exposure to pornography leads men to develop hostile beliefs about and behavior toward women, empirical analyses of the relationship between pornography use and men’s attitudes toward women convey an equivocal picture. There appears to be little evidence that men’s exposure to nonviolent sexually explicit material is related to their attitudes toward women (Demare, Lips, & Briere, 1993; Gray, 1982; Linz, 1989). In fact, a few studies (e.g., Baron, 1990; Davies, 1997) have found that increased pornography use was associated with more favorable attitudes toward women.

It is important to note that in the present paper, the focus of our literature review and research is on pornography represented by examples such as *Playboy*, sexually explicit but nonviolent videos, and adult movie channels. We concentrate on these types of pornography because available evidence (e.g., Barron & Kimmel, 2000) suggests that the vast majority of commercially produced pornography does not contain images of violence. As such, we chose to study the type of pornography that would make our findings more generalizable. Another reason for avoiding violent pornography is the confound produced by

conflating violence with sexual components. As such, even if an effect is obtained, it is difficult to determine whether the effect stems from the violence, the sexual content, or some interactive contribution of both.

The purpose of the present research is to address inconsistencies between conceptualizations of pornography as inspired by, and often perpetuating, sexist attitudes toward women with empirical evidence that has failed to find a pornography-sexism link. The key component of our argument is that sexism toward women is a multidimensional phenomenon (Benokraitis & Feagin, 1986, 1995). Thus, to understand the relationship between sexist attitudes and pornography use, it is necessary to recognize different forms of sexism. We suggest that a link between pornography use and sexism can be obtained if sexism is appropriately measured.

THE EFFECTS OF PORNOGRAPHY ON RESPONSES TOWARD WOMEN

Social critics (e.g., Dworkin, 1988; Lederer, 1980; MacKinnon, 1986; Morgan, 1980) have asserted that consumption of pornography is associated with increased sexism, hostility, and violence toward women. Contrary to what these perspectives suggest, empirical evidence does not show a clear relationship between viewing pornography and attitudes toward women. In an early review article, Gray (1982) found that the consumption of hard core pornography had little effect on men's aggressive behavior. Linz's (1989) review of research on exposure to pornography and attitudes toward rape also reported weak or non-existent effects. Davis and Bauserman (1993) reached a similar conclusion.

Most subsequent studies have reported null findings. Bauserman (1998) examined attitudinal responses toward women after exposure to three types of sexually explicit scenes that varied in their level of sexism and aggression. He failed to find significant effects on variables designed to measure attraction to sexual aggression (Malamuth, 1989a, 1989b) or rape myth acceptance and adversarial sexual beliefs (Burt, 1980). He reported some differences across conditions for gender egalitarianism, such that exposure to aggressive stimuli produced a marginally significant decrease in egalitarianism. Similarly, Jansma, Linz, Mulac, and Imrich (1997) reported no effects of exposure to several different types of sexually explicit videos on men's judgments of a woman's intellectual competence, sexual interest, sexual attractiveness, or sexual permissiveness (they did obtain an interaction between men's sex-role orientation and film type on judgments of intellectual competence and sexual interest).

Using a sophisticated structural equation modeling approach, Demare et al. (1993) found that use of nonviolent pornography did not uniquely contribute toward potential or actual sexual aggression toward women. Similarly, Fisher and Grenier (1994) conducted two experiments that exposed a total of 87 male

college students to violent pornography intended to increase their level of aggressive fantasies, attitudes, and behaviors toward women. They measured men's self-reported sexual arousal, attitudes toward women, and acceptance of interpersonal violence and rape, and found no evidence that men exposed to violent pornography developed more anti-women attitudes, as assessed by these instruments. In reflecting upon their results, they stated, "Thus, effects of violent pornography on fantasies and attitudes toward women may be highly unreliable, and effects of violent pornography on aggression toward women may be artifacts of the artificial and constrained conditions that have been used to study them" (p. 36).

More recently, researchers considered the influence of exposure to computer-based pornography on judgments of women. Barak, Fisher, Belfry, and Lashambe (1999) assessed attitudes toward women, a willingness to sexually harass women, and acceptance of rape myths as a function of exposure to Internet pornography. Results failed to provide evidence that exposure to increased amounts of Internet pornography had a significant effect on measures of misogynistic attitudes. Likewise, Barak and Fisher (1997) found that computer-mediated exposure to erotica did not have a significant effect on attitudes toward women, rape myth acceptance, or aggression toward women.

A few studies have, in fact, reported significant results in the opposite direction; i.e., that pornography use is associated with more positive views of women. For example, Padgett, Brislin-Slutz, and Neal (1989) found that patrons of an adult theatre held more positive views of women than a control group of male and female college students. Moreover, a subsequent study reported in the same paper, which exposed 75 participants to either psychology-related or sexually explicit videos, failed to find that exposure to pornography had a reliable effect on attitudes toward women. Garcia (1986) found that exposure to sexually explicit material was associated with more liberal attitudes toward women in terms of sexual behavior.

Davies (1997) examined the relationship between men's frequency of renting pornographic videos and their support for women's rights. Counter to what might be expected from feminist theory (e.g., Cowan & Dunn, 1994; Dworkin, 1988; Russell, 1998), she found no relationship between number of videos rented and opposition to the Equal Rights Amendment or laws providing women with protection in cases of marital or date rape. In addition, the reported level of support for these issues was relatively high (ranging from 69%-82%). In a summary of her findings, Davies (p. 136) said, "Men who view sexually explicit videos of their choosing are not necessarily likely to have negative attitudes toward feminism or condone violence toward women." Her conclusion is consistent with Baron's (1990) finding that American states with higher circulations of men's magazines also had greater gender equality, as measured by the Gender Equality Index.

EXPLAINING MOSTLY NULL FINDINGS

As shown by our review, as a whole, prior research has failed to provide a evidence of a significant relationship between pornography use and attitudes about women. One way to explain this null finding is in terms of how sexism is conceptualized, and, subsequently, how attitudes toward women are measured. For example, items from the Attraction to Sexual Aggression Scale (Malamuth, 1989a, 1989b), which have been used to assess the relationship between pornography use and attitudes toward women (e.g., Bauserman, 1998), focus on arousal associated with extreme conditions such as rape and murder, as well as other less extreme conditions like bondage, heterosexual intercourse, and spanking. Given the taboo nature of such acts, it is unlikely that experimental exposure to sexually explicit material would alter long-standing and deeply held prohibitions against rape and murder. As such, these measures would produce floor effects and create little variability to account for pornography use.

Another way in which attitudes toward women have been conceptualized in research on pornography use (e.g., Fisher & Grenier, 1994) is beliefs about role-appropriate behavior. A commonly used scale used to measure sexism that focuses on women's role-appropriate behavior is the Attitudes Toward Women Scale (ATWS) (Spence, Helmreich, & Stapp, 1973). Recently, researchers (e.g., Spence & Hahn, 1997) have noted a decline in the endorsement of overtly sexist attitudes as measured by the ATWS. This decline may be due in part to respondents' reluctance to admit to more obviously sexist statements, and thus fails to capture the more subtle but still prevalent forms of sexism that exist. Therefore, research on pornography use that utilizes measures such as the ATWS is less likely to detect a relationship between pornography use and sexism. In the present research, we chose alternative conceptualizations of sexism related to measures that we believed would be capable of assessing subtle, rather than overt, forms of prejudice against women.

DIVERSE APPROACHES TO SEXISM

Researchers have recognized distinct types of sexism that vary in their level of overtness (e.g., Benokraitis & Feagin, 1986, 1995). The Attitudes Toward Women Scale (Spence, Helmreich, & Stapp, 1973) assesses the degree to which people accept inequality between men and women (by endorsement of gender-appropriate roles), and can be characterized as a measure of *overt* sexism. For example, the sentiment "a woman's place is in the home" explicitly excludes women from many opportunities that occur outside the home, such as attending college or holding an executive position. In contrast, *covert* sexism can be thought of as behaving in sexist ways in contexts where such be-

havior is tolerated, despite recognizing that the behavior is inherently unfair. Telling a woman applicant she will be seriously considered for a position when the employer thinks hiring a woman would be a mistake is an example of covert sexism. Finally, *subtle* sexism refers to holding sexist beliefs without awareness that those beliefs help maintain inequality between men and women. A well-intentioned guidance counselor displays subtle sexism when he discourages a female student from pursuing a career in engineering because he genuinely believes women are less capable in science than men.

Recent conceptualizations have focused on measuring covert and subtle forms of sexism, i.e., what can be considered contemporary sexism (Masser & Abrams, 1999). Tougas, Brown, Beaton, and Joly (1995) defined contemporary sexism in terms of the conflict between residual negative feelings toward women and egalitarian values. In developing one form of contemporary sexism, Swim and her associates (e.g., Swim, Aikin, Hall, & Hunter, 1995; Swim & Cohen, 1997) distinguished between *modern* and *old-fashioned* sexism. Old-fashioned sexism can be thought of as containing two beliefs about women's role-appropriate behavior: (1) women should only act out traditional roles such as wife and mother and (2) women as less capable than men in traditionally masculine domains, such as business and decision making. In other words, old-fashioned sexism assesses a more overt form of discrimination against women.

In contrast, modern sexism, as a less overt form of discrimination, contains three distinct beliefs: (1) a denial of continuing discrimination, (2) antagonism toward women's demands for equality, and (3) resentment about special treatment of women, e.g., affirmative action efforts intended to help instill equality between men and women. Modern sexism measures the extent to which people believe that sexism is no longer a problem because of strides that have been made toward equality between men and women. Swim et al. (1995) have argued that although old-fashioned sexism seems to be on the decline, there is still considerable prejudice against women, as measured in more subtle forms, such as modern sexism.

Modern sexism, as defined in terms of the three distinct beliefs described above, can be considered a form of sexist prejudice because objective evidence indicates that there are several important domains where men and women have not achieved parity. For example, although men endorse egalitarian values, there is still evidence (e.g., Sigel, 1996) that men are reluctant to take on domestic and child-rearing chores. In addition, the Equal Employment Opportunity Commission (EEOC) reported a 60% increase in discrimination class action suits between 1991 and 1995 (EEOC, 1995). Finally, available evidence on comparable worth (e.g., Allen & Sanders, 2002) indicates that women are less well compensated than men for performing the same work.

Swim et al. (1995) provided several forms of validation data to support their claim that modern sexism represents a measure of sexist attitudes and behaviors. First, they showed that men scored higher than women on the measure

of modern sexism. Second, they found that individuals high in modern sexism were more likely to overestimate the number of women in male-dominated professions. In addition, when asked to explain why men dominate certain professions (e.g., police officers, lawyers, engineers), individuals higher in modern sexism were more likely to explain differences in terms of biological reasons rather than prejudice against women. Third, they showed that modern sexism scores could predict preferences for voting for a female senate candidate, with individuals lower in modern sexism more willing to endorse the female candidate. Finally, the judgments of women showed a correlation between modern sexism and the endorsement of nonegalitarian values; surprisingly, however, there was not a significant effect for men. A more recent study by Yoder and McDonald (1997) provided some additional evidence for the convergent validity of modern sexism with measures of personality traits, attitudes, work experience, and gender identity.

THE PRESENT RESEARCH

This paper presents two studies that examine the relationship between sexism toward women and exposure to pornography. The first study uses multiple measures of sexism to explore the possibility that the relationship between pornography exposure and sexism may depend on the way sexism is conceptualized. The second study uses the results from the first study to further refine the linkage between pornography use and sexism.

Swim et al. (1995) developed the Modern Sexism Scale (MSS) to assess less overt forms of sexist attitudes. Research (e.g., Swim & Cohen, 1997) has shown that this measure is conceptually distinct from other measures of sexism such as the Attitudes Toward Women Scale (ATWS; Spence, Helmreich, & Stapp, 1973) and the Old-Fashioned Sexism Scale (OFSS; Swim et al., 1995; Swim & Cohen, 1997).

Modern sexism is a more subtle form of sexism that allows an individual to maintain a hostile attitude toward women. By failing to recognize the existing inequality between men and women, an individual who displays modern sexism can then justify maintaining a system that disadvantages women. In short, then, the modern sexist, by insisting that men and women have achieved equality, can explain a particular woman's adverse circumstance in terms of her own failings. Thus, to the extent that women are equal to men, if women appear to be in situations that are subordinate to men, this status would not reflect societal bias against women.

Given that modern sexism is more subtle, it is likely that an individual with negative attitudes toward women would be more willing to express them in terms of modern sexism than in an overtly hostile fashion. In hopes of capturing this more subtle form of sexism, we chose to measure sexism using the MSS. We expected that the MSS would be a more sensitive measure of sexism relative to the ATWS and the OFSS and thus be better able to account for variance in reported

pornography use.¹ A subsequent prediction concerned the direction of the relationship expected between modern sexism and pornography use. On the basis of arguments about misogyny and pornography use, there was reason to expect greater modern sexism would be associated with greater pornography use.

One consistent finding in the literature (e.g., Gardos & Mosher, 1999; Mosher, Barton-Henry, & Green, 1988; Mosher & MacLan, 1994; Mosher & O'Grady, 1979) is that men report greater interest in, use of, and satisfaction with pornography relative to women. Given the extent to which men's preferences for pornography exceed women's, gender was expected to account for a significant proportion of variance in pornography exposure. Thus, in the present research, our goal was to determine whether sexism would account for a significant portion of variance above that explained by gender.

CONTRIBUTIONS OF THE PRESENT RESEARCH

The present research makes three contributions. First, we attempt to explain why previous studies have failed to obtain a significant relationship between attitudes toward women and pornography use. Second, our study represents a bridge between feminist positions (e.g., Cowan & Dunn, 1994) that view pornography only in terms of its capacity to suppress women and women's rights and third-wave feminist positions (e.g., Concepcion, 1999; McElroy, 1995; Pally, 1994) that recognize pornography's potential for women to express their sexuality. Finally, our paper recognizes that men's use of pornography may not be related to misogyny.

STUDY 1

Method

Participants

Ninety-one male and forty female college students participated in the study. Students were recruited from general psychology courses at a large Southwestern university and received course credit for their participation. Participants ranged in age from 18 to 45 ($M = 19.16$; $SD = 2.72$). The racial composition of the sample was 82.0% Caucasian; 6.5% African American; 5.8% Hispanic; 4.3% Asian; 1.4% Other. Ninety-six percent of the sample was single. All participants were heterosexual, with 85.6% reporting a Judeo-Christian religious affiliation.

Design

The present study employed a correlational design to account for frequency of pornography use, measured using the Exposure to Sexual Materials Ques-

tionnaire (ESMQ; Frable, Johnson, & Kellman, 1997), as a function of participant's gender and scores on three measures of sexism: Old-Fashioned Sexism Scale (OFSS), Modern Sexism Scale (MSS), and Attitudes Toward Women Scale (ATWS).

Procedure

After signing an informed consent, participants completed a questionnaire packet containing a demographic information form, the ESMQ, the MSS, the OFSS and the ATWS. Upon completion, participants returned the questionnaire packets to the experimenter. All responses were given anonymously.

Measures

The *Exposure to Sexual Materials Questionnaire* (ESMQ; Frable et al., 1997) is a 20-item, unidimensional questionnaire designed to assess self-reported frequency of exposure to and use of a variety of sexually explicit materials (e.g., read *Penthouse* magazine; seen X-rated films with a group of friends; looked at pornography on the Web). Respondents use a frequency scale to indicate how many times the participant engaged in these behaviors. Possible choices included (1) 0 times; (2) 1-2 times; (3) 3-5 times; (4) 6-10 times; (5) 11-50 times; (6) 51-100 times; and (7) more than 100 times.

Coefficient alpha values are reported to be between .78 and .85 in various studies conducted by Frable et al. (1997), who consider the measure to have "reasonable psychometric properties that replicate across samples" (p. 320).

For our study, four items were omitted because of outdated or obscure references. These items were substituted with the following: watched pornography that degrades women, looked at pornography on the Web, watched *Playboy* or other adult cable channel, and watched or looked at porn containing anal sex. In addition, the following 5 items were added: watched or looked at porn containing lesbian sex, watched or looked at porn containing gay sex, watched or looked at porn containing group sex, watched or looked at porn containing sex with double penetration, and looked at or purchased *Playgirl*. Thus, the final measure contained a total of 25 items.

Although the distance between each of the seven points of the rating scale is not equal, i.e., the scale could be seen as an ordinal measure, subjects' mean responses to the 25 items could range from 1-7. A score of 1 would indicate that the participant was never exposed to any pornography at all in the past three years. A score of 7 would indicate that the participant had been exposed to more than 100 instances of each item in the scale. However, because participants' scores could include any number between 1 and 7, in our results section we treated our data as interval-level data. Scores were computed by averaging across each of the 25 items.

The *Old-Fashioned Sexism Scale* (OFSS; Swim et al., 1995) is a 5-item unidimensional scale designed to measure overtly sexist attitudes toward women. Internal consistency of scale items is adequate, with reported alpha coefficients ranging from .65 to .66. Items reflects a degree of support for gender-role stereotypes of women (e.g., Women are generally not as smart as men; I would be equally as comfortable having a woman or a man as a boss; Women are just as capable of thinking logically as men).

The *Modern Sexism Scale* (MSS; Swim et al., 1995) is an 8-item unidimensional scale designed to measure a subtle form of sexism that takes the form of believing gender inequality is no longer a social problem (e.g., It is rare to see women treated in a sexist manner on television; Women often miss out on good jobs due to sexual discrimination; Discrimination against women is no longer a problem in the United States). Cronbach alpha coefficients are reported to be between .74 and .82.

Swim et al. (1995) in their initial development of the Modern and Old-Fashioned Sexism scales used both a 5-point and 7-point rating scale to measure participants' responses.

The *Attitudes Toward Women Scale* (ATWS) (Spence, Helmreich, & Stapp, 1978) is a 15-item unidimensional scale designed to measure levels of egalitarianism in attitudes toward women (e.g., Swearing and obscenity are more repulsive in the speech of a woman than a man; Women should worry less about their rights and more about becoming good wives and mothers; It is ridiculous for a woman to run a locomotive and for a man to darn socks). A historical overview of the Attitudes Toward Women Scale by Spence and Hahn (1997) reports that Cronbach alpha coefficients for the scale are .80 and higher and have satisfactory levels of test-retest reliability. Originally, the scale was scored using a 4-point Likert scale anchored with agree strongly and disagree strongly at its extremes. More recently, a 5-point Likert scale has been used because it is more psychometrically sound.

In order to compare across the different sexism measures utilized in this research, we opted to use the same 7-point Likert scale for measuring Modern Sexism, Old-Fashioned Sexism, and Attitudes Toward Women, anchored with disagree strongly (1) and agree strongly (7).

RESULTS

Descriptive Information About Correlates of Pornography Use

Subsequent to scoring each scale as indicated in the literature, the following Cronbach alpha coefficients were obtained for the three sexism scales. For men, alpha coefficients were .68 for the ATWS, .61 for the MSS, and .52 for the OFSS. For women, coefficients were .76 for the ATWS, .75 for the MSS,

and .38 for the OFSS. Mean values were calculated for each of the scales and used as variables in a series of regression analyses.²

We conducted a 2 (gender: male, female) x 3 (sexism scale: Modern, Attitudes Toward Women, Old-Fashioned) multivariate analysis of variance (MANOVA) on participants' sexism scores. In this analysis, the three different sexism scales served as three levels of a factor that represented "type of sexism." The dependent variable was the degree of sexism reported on each sexism scale. Because the responses to the items for all three scales used the same seven-point Likert scale, it was possible to compare scores across the three sexism scales. The means for this analysis are reported in Table 1. We obtained a main effect for gender, such that males consistently reported a higher level of sexism relative to females, $F(1, 126) = 36.53, p < .001$. As such, men indicated a greater level of sexism for Modern Sexism, $t(126) = 4.78, p < .001$, Old-Fashioned Sexism, $t(126) = 4.89, p < .001$, and the Attitudes Toward Women Scale, $t(126) = 4.83, p < .001$. As predicted, we also obtained a main effect for sexism scale, $F(2, 252) = 48.36, p < .001$. Participants reported a greater level of sexism on the Modern Sexism Scale than on both the Attitudes Toward Women Scale, $t(126) = 4.45, p < .001$, and Old-Fashioned Sexism scale, $t(126) = 8.50, p < .001$. The pattern that Modern Sexism scores were higher than Attitudes Toward Women and Old-fashioned Sexism scores was obtained for both males and females. The gender x scale interaction was not significant, $F(2, 125) = .59, ns$.

Dependent Variable

Participants' reported level of exposure to pornography was assessed using the 25-item ESMQ. The ESMQ alpha coefficient for men was .90; for women the coefficient was .83. We computed a composite ESMQ score by calculating the mean response to the 25 items. The composite ESMQ score was the main dependent variable in a hierarchical regression analysis.

Bivariate Correlations

Table 2 contains bivariate correlations among the ESMQ and three measures of sexism by gender. As expected from previous research (e.g., Morrison, Morrison, Pope, & Zumbo, 1998), the different measures of sexism were positively correlated to a moderate degree. It is important to note that Modern Sexism and Old-Fashioned Sexism were least correlated for both men and women, thus supporting the contention that they are assessing different aspects of sexism (Morrison et al., 1998; Swim et al., 1995).

Hierarchical Regression

We conducted a series of regression analyses to test our main hypothesis that the Modern Sexism Scale would be more strongly correlated with expo-

TABLE 1. Study 1: Mean Sexism by Gender and Type of Scale

Gender	Type of Sexism Scale			Mean
	ATWS	OFSS	MSS	
Male	2.04 (.75)	1.67 (.93)	2.37 (.70)	2.03
Female	1.38 (.65)	.87 (.68)	1.72 (.76)	1.32
Mean	1.84	1.43	2.17	

Note. ATWS = Attitudes Toward Women Scale, OFSS = Old-Fashioned Sexism Scale, MSS = Modern Sexism Scale. Scales ranged from 0-5, and a higher number indicates greater sexism. Standard deviations are in parentheses.

TABLE 2. Study 1: Intercorrelations Between Sexism Scales and the ESMQ

	MSS	ATWS	OFSS	ESMQ
MSS	–	.36*	.28*	–.18
ATWS	.56*	–	.60*	–.08
OFSS	.29	.58*	–	.00
ESMQ	–.29	–.26	–.15	–

Note. Correlations for men are above the diagonal. Correlations for women are below the diagonal. ATWS = Attitudes Toward Women Scale, OFSS = Old-Fashioned Sexism Scale, MSS = Modern Sexism Scale, ESMQ = Exposure to Sexual Materials Questionnaire.

Males: $n = 91$; females: $n = 40$.

* $p < .01$

sure to pornography relative to either the Attitudes Toward Women Scale or Old-Fashioned Sexism Scale. The results of these analyses are presented in Table 3. In the first step, we entered the main effect for gender. In the second step, we added Attitudes Toward Women Scale scores and Old-Fashioned Sexism Scale scores. In the final step, we added Modern Sexism Scale scores.

Participants' gender was the most significant correlate of pornography use, accounting for 25% of the variability in participants' use of pornography, $F(1, 124) = 40.48, p < .001$. The analysis showed that men reported using pornography more frequently than women ($M = 2.14, SD = .65$; $M = 1.45, SD = .31$, respectively).

Our main prediction was that Modern Sexism Scale scores would account for significantly more variability in pornography use than more traditional forms of sexism as assessed by the Attitudes Toward Women and Old-Fashioned Sexism Scales. Consistent with previous research that has failed to find a reliable relationship between pornography use and sexism, the addition of the ATWS and the OFSS did not account for a significant increase in variabil-

TABLE 3. Study 1: Summary of Hierarchical Regression Analysis for Accounting for Variance in Pornography Use from Gender and Sexism Scales (N = 126)

Variable	B	SE B	β
Step 1			
Gender	-.70	.11	-.50**
Step 2			
Gender	-.74	.12	-.53**
ATWS	-.11	.10	-.13
OFSS	.03	.08	.05
Step 3			
Gender	-.79	.13	-.56**
ATWS	-.05	.10	-.06
OFSS	.05	.08	.07
MSS	-.15	.08	-.17*

Note. Rsq = .25 for Step 1 ($p < .001$); Δ Rsq = .01 for Step 2 (*ns*); Δ Rsq = .02 for Step 3 ($p < .08$). ATWS = Attitudes Toward Women Scale, OFSS = Old-Fashioned Sexism Scale, MSS = Modern Sexism Scale, ESMQ = Exposure to Sexual Materials Questionnaire.

** $p < .001$.

* $p < .08$.

ity in pornography use. Thus, more blatant measures of sexism did not appear to be related to pornography use.

In contrast, adding Modern Sexism after gender and the other two sexism scales produced a near significant increase in variance accounted for in pornography use $F\Delta(1, 121) = 3.165, p = .078$. As shown in Table 3, the negative weight ($B = -.15$) for Modern Sexism indicated that as pornography use increased, Modern Sexism decreased. In other words, even after controlling for participants' gender, pornography use was associated with less, rather than more, sexism. It is important to note that the increase in variance accounted for was relatively small (about 2%).

DISCUSSION

Most results were consistent with our expectations. Not surprisingly, men reported more pornography use than women (cf. Mosher & MacIan, 1994). In addition, men, relative to women, endorsed a higher level of sexism across the three measures (cf. Swim et al., 1995). The Modern Sexism Scale showed a higher level of sexism relative to other measures, a finding consistent with evidence that the display of more overt forms of sexism may be on the decline (Spence & Hahn, 1997).

Although the size of the effect was small (only 2% of the variance), we obtained a marginally significant relationship between Modern Sexism and variability in pornography use. One important aspect of our finding is that modern sexism accounted for variability in pornography use after controlling for gender. Thus, it is reasonable to argue that even women's degree of modern sexism would be correlated with a tendency to expose themselves to pornographic material.

The most intriguing aspect of our data is that greater pornography use was associated with less sexist attitudes. Although this finding may seem counterintuitive at first, it is consistent with previous research reports (e.g., Davies, 1987; Padgett et al., 1989). In fact, positive attitudes about both pornography and women's rights could be explained by a general factor of political tolerance (Baron, 1990) that would support both feminism and pornography use.

Another way to explain this finding is to recognize that items on the MSS do not address women's sexual preferences or practices. As such, the MSS cannot measure sexist attitudes about women's sexual behavior. It is plausible that although an individual might sexualize women and thus be thought sexist, he or she may not apply sexist attitudes to judgments about women in other domains, specifically those assessed by the MSS. In keeping with this idea, Burns (2001) found that habitual consumers of Internet pornography who saw themselves as possessing high levels of masculine personality characteristics described women in sexual terms and viewed them in a manner consistent with traditionally feminine roles. However, these same men also perceived women in positive terms. In other words, these men possessed both sexist yet positive views of women.

As an example of how this process could operate, consider the case of a very protective boyfriend who cares deeply about his girlfriend and is supportive of her attempts to gain an education and have a rewarding career. At the same time, he may still view her sexual assertiveness in a negative manner. One way to characterize this boyfriend is as benevolent and paternalistic, rather than hostile, toward his girlfriend. The purpose of Study 2 was to explain the inverse correlation between modern sexism and pornography use by applying a more fine-grained conceptualization on the basis of the distinction between benevolent and hostile sexism.

STUDY 2

One attempt to capture a "positive" element of sexism has been developed by Glick and Fiske (1996) in their work on *ambivalent sexism*. According to their approach, prejudice and antipathy are not necessarily associated. As such, it is possible to distinguish two forms of sexism. *Hostile sexism* is a negative affective response toward women and involves discrimination and de-

rogatory beliefs. Hostility toward women is based on three sources. Dominative paternalism consists of the desire to dominate and control women. Competitive gender differentiation refers to the inclination to emphasize differences between men and women that devalue women. Hostile heterosexuality contains negative reactions to women on the basis of the belief that they control men's access to (heterosexual) sex and use this source of power as the basis for manipulating men. Hostile sexism would appear to be what previous researchers have been interested in assessing when studying the relationship between pornography use and hostility and aggression toward women.

Benevolent sexism reflects a seemingly positive judgment of women, as it is characterized by positive affect and can elicit pro-social (i.e., protective) behaviors. Benevolent sexism stems from three underlying sources. Protective paternalism refers to the desire to protect and treasure women. Complementary gender differentiation focuses on the differences between men and women but, in contrast to competitive gender differentiation, emphasizes those differences that favor women (e.g., women have a superior moral sensibility). Heterosexual intimacy consists of strong desire and need for women and a highly worshipful view of women. Although benevolent sexism reflects the needs to be protective of, idealize, and desire intimate relationships with women, it is at the same time prejudicial because it restricts one's view of women to cultural stereotypes.

The convergent, discriminant, and predictive validity of the Ambivalent Sexism Inventory as a measure of ambivalent sexism has been demonstrated in a variety of ways. In a series of five studies, Glick and Fiske (1996) found that factor analysis supported the existence of two separate subscales (i.e., hostile and benevolent) of the Ambivalent Sexism Inventory. The discriminant validity of the measure was demonstrated by the positive correlation between hostile sexism and other existing measures of sexism; in contrast, the benevolent sexism component of the Ambivalent Sexism Inventory was not strongly correlated with other measures of sexism. In addition, Glick and Fiske (1996) showed that Ambivalent Sexism Inventory scores were predictive of ambivalence toward women and negative attitudes toward women. Glick et al. (2000) showed that the two factors of benevolent and hostile sexism were obtained in 19 diverse cultures with the total number of respondents in excess of 15,000. They also showed that benevolent sexism in women was positively related to the level of sexism in one's culture.

Other authors have also provided validation data regarding the Ambivalent Sexism Inventory. These researchers have shown that scores on the hostile and benevolent subscales of the Ambivalent Sexism Inventory are related to other judgments and behaviors that might be expected to related to sexist beliefs. As such, these studies also provide convergent evidence about the Ambivalent Sexism Inventory as a measure of sexism. Franzoi (2001) found that women who endorsed benevolent sexist attitudes used more cosmetics when getting ready for a date and also expressed more positive views of their sexual attrac-

tiveness. Greenwood and Isbell (2002) reported data that indicated individuals high in hostile sexism rated “dumb blonde” jokes as significantly more amusing and less offensive than individuals low in hostile sexism. In addition, they found that among individuals low in hostile sexism, men high in benevolent sexism rated the jokes more positively than women high in benevolent sexism. Viki, Abrams, and Hutchison (2003) found that benevolent sexism was positively correlated with “paternalistic chivalry,” i.e., attitudes that are courteous but place restrictions on women’s behavior during courtship; however, hostile sexism was uncorrelated. Glick, Sakal-Ugurlu, Ferreira, and de Souza (2002) reported that attitudes toward wife abuse in Turkey and Brazil were correlated with hostile and benevolent sexism.

It is possible, then, that men who use pornography might have a benevolent sexist attitude but not possess hostile sentiments toward women. The purpose of Study 2 was to test the hypothesis that pornography use would be positively correlated with benevolent sexism but not with hostile sexism. This prediction is consistent with research by Eagly and Mladinic (1993) that indicates stereotypes about women are generally perceived in a highly favorable manner. In a manner consistent with Study 1, we initially used participants’ gender to account for variability in exposure to pornography. We expected that above and beyond the variance accounted for by gender, benevolent, but not hostile, sexism would account for variation in pornography use. As with Study 1, we expected greater evidence of sexism from men relative to women.

METHOD

Participants

Forty-nine male and ninety-five female college students participated in the study. Students were recruited from general psychology courses at a large Southwestern university and received course credit for their participation. Participants ranged in age from 18 to 24 ($M = 18.56$; $SD = 1.14$). The racial composition of the sample was 76.4% Caucasian; 4.3% African American; 11.4% Hispanic; 3.6% Asian; 4.3% Other. Ninety-six percent of the sample was single. Ninety-eight percent of participants were heterosexual, with 74.3% reporting a Judeo-Christian religious affiliation.

Design

The present study employed a correlational design to account for variability in pornography use as measured by the Exposure to Sexual Materials Questionnaire (ESMQ; Frable et al., 1997) using the hostile and benevolent sexism subscale scores of the Ambivalent Sexism Inventory (ASI).

Procedure

After signing an informed consent form, participants completed a questionnaire packet containing a demographic information form, the ESMQ and the ASI. Upon completion of the questionnaires, participants returned their packets to the experimenter. All answers were given anonymously.

Measures

The Exposure to Sexual Materials Questionnaire (Frable et al., 1997) used in Study 1 was also used in this study. Participants responded to items using a frequency scale to indicate how many times the participant engaged in a certain behavior (e.g., purchased *Penthouse*). Possible choices included (1) 0 times; (2) 1-2 times; (3) 3-5 times; (4) 6-10 times; (5) 11-50 times; (6) 51-100 times; and (7) more than 100 times.

The Ambivalent Sexism Inventory is a two-factor, 22-item measure designed to assess two distinct types of sexism: hostile sexism and benevolent sexism (Glick & Fiske, 1996). Items are related to three underlying factors: paternalism, gender differentiation, and sexual relations. Higher scores on the hostile sexism subscale indicate a tendency to hold negative stereotypes about women who fail to conform to traditional female roles and behaviors (e.g., feminists, career women). Examples of items from the hostile sexism subscale are: Most women interpret innocent remarks or acts as being sexist (dominative paternalism); Feminists are seeking for women to have more power than men (competitive gender differentiation); Many women get a kick out of teasing men by seeming sexually available and then refusing male advances (hostile heterosexuality). Higher scores on the benevolent sexism subscale indicate a positive disposition toward women who engage in traditional gender roles (e.g., homemakers, mothers). Items on this subscale are constructed so that agreement with each statement does not reflect a hostile disposition toward women who reject those roles. Examples of items from the benevolent subscale are: Women should be cherished and protected by men (protective paternalism); Many women have a quality of purity that few men possess (complementary gender differentiation); Every man ought to have a woman whom he adores (heterosexual intimacy). Benevolent and hostile sexism scores are obtained by summing the respective individual items. Responses to items are made using a 6-point scale anchored with 0 (disagree strongly) and 6 (agree strongly). A larger score indicates a greater degree of sexism.

In a series of five studies reported by Glick and Fiske (1996), Cronbach alpha coefficients for the ASI have been reported to range from .83 to .92 for total scale scores; .80 to .92 for hostile sexism subscale scores; and .73 to .85 for benevolent sexism subscale scores.

RESULTS

Descriptive Information About Correlates of Pornography Use

Subsequent to scoring each Ambivalent Sexism Inventory as indicated in the literature, we computed Cronbach alpha coefficients for hostile and benevolent sexism subscales. Alpha coefficients for the hostile sexism subscale were .78 for men and .67 for women. For the benevolent sexism subscale, alpha coefficients were .46 for men and .34 for women.² Table 4 presents mean scores for the two subscales of the Ambivalent Sexism Inventory by gender.

We conducted a 2 (gender: male, female) x 2 (subscale: benevolent, hostile) MANOVA on participants' hostile sexism and benevolent sexism scores. We treated hostile and benevolent sexism as two levels of a dichotomous variable which represented "type of sexism." Because hostile and benevolent sexism were assessed using the same 6-point Likert scale, it was possible to compare the relative sizes of a participant's two scores. The analysis revealed a main effect for gender, $F(1, 142) = 4.01, p < .05$, such that men displayed a higher level of sexism than women. For both genders, participants endorsed benevolent sexism more strongly than hostile, $F(1, 142) = 4.77, p < .05$. Although men and women differed in their level of hostile sexism, $t(142) = 1.99, p < .05$, but did not differ in their level of benevolent sexism, $t(142) = .89, ns$, there was no evidence of a significant subscale x gender interaction, $F(1, 142) = 1.02, ns$. It should be noted, however, that men's benevolent sexism scores were higher, but not to a significant degree. This pattern of findings is consistent with prior research on hostile and benevolent sexism (e.g., Glick & Fiske, 1996; Glick et al., 2000). In an examination of 19 countries (Glick et al., 2000), men's average hostile sexism scores were significantly higher than women's. In their initial report of the Ambivalent Sexism Inventory, Glick and Fiske (1996) reported smaller gender differences for benevolent, in contrast to hostile, sexism. In a subsequent and extensive cross-cultural study, Glick et al. (2000) found that about half of the countries studied failed to find a difference in benevolent sexism scores between men and women. Although it seems

TABLE 4. Study 2: Mean Sexism by Gender and Ambivalent Sexism Subscales

Gender	Sexism Subscale		Mean
	Benevolent	Hostile	
Male	3.12 (.63)	3.01 (.88)	3.06
Female	3.01 (.72)	2.72 (.80)	2.87
Mean	3.05	2.82	

Note. Benevolent and Hostile refer to subscales of the Ambivalent Sexism Inventory. Scales ranged from 0-5, and a higher number indicates greater sexism. Standard deviations are in parentheses.

counterintuitive that men and women would not differ in benevolent sexism, it is important to note that the benevolent sexism items contain favorable stereotypes about and encourage a protected status for women. There is evidence (Kilianski & Rudman, 1998) that a significant minority of women (44%) can be defined as “equivocal egalitarians,” who display approval of a benevolent sexist while, simultaneously, disapprove of a hostile sexist.

Dependent Variable

Participants’ reported level of exposure to pornography was assessed using the 25-item ESMQ. Because there were relatively high inter-item correlations for men and for women (.69 and .87, respectively), we computed a composite ESMQ score by calculating mean response to the 25 items. The mean ESMQ score was the main dependent variable in a hierarchical regression analysis.

Bivariate Correlations

Table 5 contains bivariate correlations among the ESMQ and the two sexism subscales by gender. As expected, the two sexism subscales are relatively uncorrelated; thus, each subscale appears to measure a unique construct.

Hierarchical Regression

We computed a series of regression analyses to test our main hypotheses that pornography use would be more strongly related to benevolent sexism relative to hostile sexism. The results of these analyses are presented in Table 6. In the first step, we entered the main effect for gender. In the second step, we entered hostile sexism; in the third step, benevolent sexism was added.

Participants’ gender accounted for the most variance in pornography use. As would be expected from the results of Study 1, as well as previous research

TABLE 5. Study 2: Intercorrelations Between the ESMQ and Hostile and Benevolent Subscales of the Ambivalent Sexism Inventory

	Hostile	Benevolent	ESMQ
Hostile	–	–.01	.11
Benevolent	.15	–	.38*
ESMQ	.08	.06	–

Note. Correlations for men are above the diagonal. Correlations for women are below the diagonal.

Males: $n = 49$; females: $n = 95$.

* $p < .01$.

TABLE 6. Study 2: Summary of Hierarchical Regression Analysis for Accounting for Variance in Pornography Use from Gender and Subscales from the Ambivalent Sexism Inventory (N = 139)

Variable	B	SE B	β
Step 1			
Gender	-.68	.09	-.55**
Step 2			
Gender	-.66	.09	-.54**
Hostile	.05	.05	.08
Step 3			
Gender	-.65	.09	-.53**
Hostile	.04	.05	.06
Benevolent	.13	.06	.15*

Note. $Rsq = .30$ for Step 1 ($p < .001$); $\Delta Rsq = .01$ for Step 2 (*ns*); $\Delta Rsq = .02$ for Step 3 ($p < .05$).

** $p < .001$.

* $p < .05$.

(e.g., Mosher & MacIan, 1994), men ($M = 2.05$; $SD = .72$) indicated a greater use of pornography than women ($M = 1.38$; $SD = .32$). On the basis of the ESMQ scale, participants' average use of pornography was approximately 1-2 times across the 25 items. If entered first in a regression equation, gender accounted for 30.00% of the variability in participants' use of pornography, $F(1, 138) = 59.18$, $p < .001$.

Adding hostile sexism did not significantly improve upon gender in the model, $F\Delta(1, 137) = .29$, *ns*. As expected, however, adding benevolent sexism produced a significant increase in variance accounted for ($Rsq\Delta = .023$), $F\Delta(1, 136) = 4.62$, $p < .05$. It is important to note that, although significant, the amount of variance accounted for in pornography use by benevolent sexism was about 2%. The sign of the benevolent sexism regression coefficient ($B = .13$) indicated that participants' self-reported use of pornography increased as their level of benevolent sexism increased.

Inspection of Table 5 indicates that the correlation between the ESMQ and benevolent sexism was greater for men than for women. For males, the correlation between the ESMQ and benevolent sexism was .38, whereas for females, the correlation was only .06. Given this finding, we centered benevolent sexism scores and gender, computed an interaction term, and entered it into the regression equation. The interaction term significantly increased variance accounted for in pornography use, $Rsq\Delta = .05$, $F\Delta(1, 135) = 10.69$, $p < .005$.³ Pornography use was positively correlated with benevolent sexism to a greater degree with men than with women.

Discussion

As expected, we found that pornography use as measured by the ESMQ was related to benevolent sexism, but not to hostile sexism. Greater pornography use was associated with higher scores on the benevolent sexism subscale. This finding lends support to the idea that there is a significant relationship between pornography use and sexism when sexist attitudes are conceptualized as positive, albeit, paternalistic. The benevolent x gender interaction indicated that the correlation between pornography use and benevolent sexism was stronger for men than for women.

One important qualification of Study 2 is the unexpectedly low correlations among items on the benevolent sexism subscale. Our low Cronbach alphas were inconsistent with prior research on the Ambivalent Sexism Inventory. The fact that our sample of participants did not demonstrate the same response pattern as other samples might call into question the generalizability of our results. On the other hand, it is possible to argue that the low intercorrelations are not a serious problem because by summing across items, we increased error variance in our measure and, thus, merely made it more difficult to reject the null hypothesis. If this latter case is true, then the relationship between reported pornography use and sexism might be stronger than we observed. Further research is required to better understand the nature of benevolent sexism.

Another limitation of Study 2 is the possibility that social desirability concerns may make participants more willing to express benevolent sexism relative to hostile sexism. As such, the null finding may not reflect the lack of a relationship between hostile sexism and self-reported pornography use but, rather, a reporting bias. The finding that participants endorsed benevolent sexism to a greater degree than hostile sexism is consistent with this interpretation. At the same time, however, we note that participants did endorse some elements of hostile sexism, and men reported a higher level of hostile sexism than women. Thus, participants were not uniformly unwilling to reveal sentiments of hostile sexism. Further research on the relationship between pornography use and attitudes toward women should take into account participants' differential sensitivity to revealing hostile, as opposed to benevolent, sexism.

GENERAL DISCUSSION

Two studies have demonstrated a significant, albeit small, relationship between pornography use and sexism. The results of Study 1 showed that a more subtle form of sexism (assessed using the Modern Sexism Scale) was related to pornography use, whereas more overt forms of sexism, based on the endorsement of role-appropriate behaviors (assessed using the Attitudes Toward Women Scale and the Old-Fashioned Sexism Scale), were not. Surprisingly, however, we obtained an inverse relationship between Modern Sexism and

pornography use, i.e., our less sexist participants indicated greater use of pornography. The results of our second study helped understand this finding. Using a different characterization of sexism (in terms of benevolent and hostile components, as measured by the Ambivalent Sexism Inventory), we found that sexism conceptualized as antipathy toward women was unrelated to pornography use. In contrast, sexism conceptualized as prejudicial but favorable views of women was positively correlated with pornography use.

Taken together, our results suggest that pornography use may be motivated by other than misogynistic attitudes about women. At the same time, however, the findings indicate that sexism and pornography use are not unrelated. Men who use pornography appear to like women but still treat them as members of a stereotypic category. Although we acknowledge that the magnitude of the association between sexism and pornography use was small, it is important to note that our findings have identified a way to make sense of past null and reverse findings on the relationship between attitudes toward women and pornography use: The sexism involved in pornography use is more subtle than previous investigators have assumed.⁴

One way to explain this counterintuitive finding is to consider the forms of pornography that our participants were asked about using. These studies employed “mainstream” pornographic referents such as *Playboy* and cable-channel adult films. Although mainstream pornography (e.g., films, magazines) most often adopts a male perspective, it rarely involves a presentation of women experiencing pain or suffering. As such, it would not be surprising for someone to endorse benevolent sexist attitudes, subjectively positive and protective in nature, while at the same time enjoying sexualized images of women.

The above reasoning can provide a possible explanation for the null relationship between attitudes toward women and pornography use obtained in prior research. Previous studies have often measured attitudes toward women with items that involved extreme animosity toward women (e.g., sexual aggression or violence), i.e., in terms of hostile sexism. It is unlikely that consumers of traditional “mainstream” erotic images (e.g., *Playboy*, *Penthouse*, and even nonviolent hard core pornography) endorse such strong anti-women sentiments. As such, the lack of variability in the attitude measure would have reduced statistical power and made it difficult to find evidence of a correlation between attitudes toward women and use of pornography, even if the effect were there.

Another interpretation of our results involves a potential third variable that influence both the willingness to use pornography and more favorable attitudes toward women. For example, a general construct of liberalness could explain our finding that pornography use was associated with more favorable attitudes toward women. Liberal individuals may be favorably disposed toward both pornography and egalitarianism for women. Another possible third variable is erotophilia (Fisher, Byrne, White, & Kelley, 1988), which can be defined as an individual possessing primarily positive responses to sexual stimuli. There is evidence that erotophilic people are lower in authoritarianism and greater in

androgyny than are people who are erotophobic (i.e., those with a negative response to sexual stimuli; Fisher et al., 1988). Possessing a primarily positive attitude toward sexual stimuli would likely be correlated with willingness to expose oneself to pornography. In addition, being low in authoritarianism might predispose one favorably toward women's rights. Future research is necessary to discover what role potential third variables could play in better understanding the relationship between attitudes toward women and the use of pornography.

Our research also identified an important omission in extant measures of sexism. Existing measures fail to take into account the possibility of sexist attitudes regarding women's sexuality. There are face valid reasons for considering the possibility of such a construct. Consider, for example, men who frequent strip clubs. Evidence (e.g., Erickson & Tewksbury, 2000; Pasko, 2002; Tewksbury, 1994; Wood, 2000) suggests that patrons often have very favorable views of women they encounter. Recently, Beggan and Allison (2003) reported that men have very positive impressions of *Playboy* Playmates. It is possible that such men would endorse policies that encourage equality between the sexes, despite their efforts to seek out sexualized images of women. It might be fruitful to determine whether a measure of sexist attitudes about women's sexuality would be related to men's use of pornography.

We recognize that our research has a number of limitations. First, our findings apply only to self-reported use of pornography. Second, because items on the Exposure to Sexual Materials Questionnaire (ESMQ; Frable et al., 1997) do not explicitly distinguish between violent and nonviolent pornography, there is ambiguity about whether our results would apply to exposure to both violent and nonviolent forms. We suspect, but cannot offer definitive proof, that our findings would be most applicable to nonviolent pornography because available evidence (e.g., Barron & Kimmel, 2000) indicates that serious violence (such as assault, rape, or murder) is relatively rare in pornography. As such, it is that much less likely that our participants encountered much, if any, violent pornography. A third limitation is that participants were relatively young college students from one university located in the southwestern United States, and their responses may not represent individuals from other geographic regions, economic backgrounds, or ages. Fourth, given the correlational nature of our study, it cannot shed light on pornography use and the development of sexist attitudes toward women.

The existing literature on pornography use and attitudes toward women has almost exclusively focused on how pornography affects men's views of women. A few studies (e.g., Boynton, 1999) have recognized the possibility that exposure to pornography can affect how women see other women. What is missing from the picture is research on how viewing pornography shapes men's and women's views of men's sexuality. One goal of future research would be to examine the representation of men in pornography and how that representation influences the social construction of masculinity.

Finally, one source of conflict in romantic relationships may concern the different ways that men and women appear to think about sexually explicit material. It may be premature to assume that viewing pornography reflects a desire to objectify women in a degrading and disrespectful way (see Loftus, 2002). Our findings suggest that men's motivation to view pornography may stem from what men believe to be an appreciation and admiration of women. By extension, any attempt to reconcile different theoretical or philosophical orientations toward pornography must recognize the possibility of provisionally positive reasons for using pornography. Our studies, which have tried to carefully clarify the relationship between pornography use and different forms of sexism, are a step in this direction.

NOTES

1. We recognize that our correlational design does not permit us to make definitive causal statements. Thus, we tried to avoid the use of the "predict" to refer to a variable's ability to account for variance in a dependent variable. Instead, we express our predictions in terms of "variance accounted for" or in terms of "correlates." This issue is discussed in greater detail by Pedhazur (1997).

2. We found lower Cronbach alphas than those found by the authors who developed the measures of sexism. Despite the low reliabilities, we chose to score the sexism measures as suggested by their developers in order to make our research congruent with the findings of the extant literature. A similar decision was made with regard to Study 2, where we obtained an unexpectedly low alpha value on the benevolent sexism scale of the Ambivalent Sexism Inventory.

3. In light of the significant sexism by gender interaction in Study 2, we tested the data from Study 1 for interactions between gender and the sexism measures. Our results failed to find evidence of any interactions.

4. It is important to keep in mind how the Modern Sexism Scale and the benevolent subscale of the Ambivalent Sexism Inventory are scored. In Study 1, we obtained an inverse correlation between Modern Sexism and pornography use. Hence, our less sexist participants reported more use of pornography. In contrast, in Study 2, we found a positive correlation such that more sexism (as measured in terms of benevolence) was associated with more pornography use. The key fact is that both correlations showed that positive attitudes toward women were associated with more pornography use but that a positive attitude was operationalized in opposite directions across the two studies.

REFERENCES

- Allen, J., & Sanders, K. (2002). Gender gap in earnings at the industry level. *European Journal of Women's Studies*, 9, 163-180.
- Barak, A., & Fisher, W. A. (1997). Effects of interactive computer erotica on men's attitudes and behavior toward women: An experimental study. *Computers in Human Behavior*, 13, 353-369.

- Barak, A., Fisher, W. A., Belfry, S., & Lashambe, D. R. (1999). Sex, guys, and cyberspace: Effects of Internet pornography and individual differences on men's attitudes toward women. *Journal of Psychology and Human Sexuality, 11*, 63-91.
- Baron, L. (1990). Pornography and gender equality: An empirical analysis. *The Journal of Sex Research, 27*, 363-380.
- Barron, M., & Kimmel, M. (2000). Sexual violence in three pornographic media: Toward a sociological explanation. *The Journal of Sex Research, 37*, 161-168.
- Bauserman, R. (1998). Egalitarian, sexist, and aggressive sexual materials: Attitude effects and viewer responses. *The Journal of Sex Research, 35*, 244-253.
- Beggan, J. K., & Allison, S. T. (2003). "What sort of man reads *Playboy*?" *The Journal of Men's Studies, 11*, 189-206.
- Benokraitis, N. V., & Feagin, J. R. (1986). *Modern sexism*. Englewood Cliffs, NJ: Prentice-Hall.
- Benokraitis, N. V., & Feagin, J. R. (1995). *Modern sexism* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Boyle, K. (2000). The pornography debates: Beyond cause and effect. *Women's Studies International Forum, 23*, 187-195.
- Boynton, P. M. (1999). "Is that supposed to be sexy?" Women discuss women in "top shelf" magazines. *Journal of Community and Applied Social Psychology, 9*, 449-461.
- Brownmiller, S. (1975). *Against our will: Men, women and rape*. New York: Simon and Schuster.
- Burns, R. J. (2001). Male Internet pornography users and their attitudes toward men and women. Dissertation Abstracts International Section A: *Humanities & Social Sciences, 62*, 1622.
- Burt, M. R. (1980). Cultural myths and support for rape. *Journal of Personality and Social Psychology, 38*, 217-130.
- Concepcion, C. M. (1999). On pornography, representation and sexual agency. *Hypatia, 14*, 97-100.
- Cowan, G., & Dunn, K. F. (1994). What themes in pornography lead to perceptions of the degradation of women? *The Journal of Sex Research, 31*, 11-21.
- Davies, K. A. (1997). Voluntary exposure to pornography and men's attitudes toward feminism and rape. *Journal of Sex Research, 34*, 131-137.
- Davis, C. M., & Bauserman, R. (1993). Exposure to sexually explicit materials: An attitude change perspective. *Annual Review of Sex Research, 4*, 121-209.
- Demare, D., Lips, H. M., & Briere, J. (1993). Sexually violent pornography, anti-woman attitudes, and sexual aggression: A structural equation model. *Journal of Research in Personality, 27*, 285-300.
- Dworkin, A. (1988). *Letters from a war zone: Writings, 1976-1987*. New York: Dutton.
- Eagly, A. H., & Mladinic, A. (1993). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 5, pp. 1-35). New York: Wiley.
- Equal Employment Opportunity Commission. (1995). National enforcement plan. Washington, DC: Government Printing Office.

- Erickson, D. J., & Tewksbury, R. (2000). The "gentlemen" in the club: A typology of strip club patrons. *Deviant Behavior, 21*, 271-293.
- 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.
- Fisher, W. A., & Grenier, G. (1994). Violent pornography, antiwoman thoughts, and antiwoman acts: In search of reliable effects. *Journal of Sex Research, 31*, 23-38.
- Frable, D. E. S., Johnson, A. E., & Kellman, H. (1997). Seeing masculine men, sexy women, and gender differences: Exposure to pornography and cognitive construction of gender. *Journal of Personality, 65*, 311-355.
- Franzoi, S. L. (2001). Is female body esteem shaped by benevolent sexism? *Sex Roles, 44*, 177-188.
- Gardos, P. S., & Mosher, D. L. (1999). Gender differences in reactions to viewing pornographic vignettes: Essential or interpretive? *Journal of Psychology and Human Sexuality, 11*, 65-83.
- Garcia, L. T. (1986). Exposure to pornography and attitudes about women and rape: A correlational study. *Journal of Sex Research, 22*, 378-385.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491-512.
- Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., Adetoun, B., Osagie, J. E., Akande, A., Alao, A., Brunner, A., Willemsen, T. M., Chipeta, K., Dardenne, B., Dijksterhuis, A., Wigboldus, D., Eckes, T., Six-Materna, I., Expósito, F., Moya, M., Foddy, M., Kim, H.-J., Lameiras, M., Sotelo, M. J., Mucchi-Faina, A., Romani, M., Sakalli, N., Udegbe, B., Yamamoto, M., Ui, Ferreira, M. C., & López López, W. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology, 79*, 763-775.
- Glick, P., Sakalh-Ugurlu, N., Ferreira, M. C., & de Souza, M. A. (2002). Ambivalent sexism and attitudes toward wife abuse in Turkey and Brazil. *Psychology of Women Quarterly, 26*, 292-297.
- Gray, S. H. (1982). Exposure to pornography and aggression toward women: The case of the angry male. *Social Problems, 29*, 387-398.
- Greenwood, D., & Isbell, L. M. (2002). Ambivalent sexism and the dumb blonde: Men's and women's reactions to sexist jokes. *Psychology of Women Quarterly, 26*, 341-350.
- Hill, J. M. (1987). Pornography and degradation, *Hypatia, 2*, 39-54.
- Jansma, L. L., Linz, D. G., Mulac, A., & Imrich, D. J. (1997). Men's interactions with women after viewing sexually explicit films: Does degradation make a difference? *Communication Monographs, 64*, 1-24.
- Kilianski, S. E., & Rudman, L. A. (1998). Wanting it both ways: Do women approve of benevolent sexism? *Sex Roles, 39*, 333-352.
- Lederer, L. (Ed.) (1980). *Take back the night: Women on pornography*. New York: William Morrow.
- Linz, D. (1989). Exposure to sexually explicit materials and attitudes toward rape: A comparison of study results. *Journal of Sex Research, 26*, 50-84.
- Loftus, D. (2002). *Watching sex: How men really respond to pornography*. New York: Thunder's Mouth Press.

- Lopez, P. A., & George, W. H. (1995). Men's enjoyment of explicit erotica: Effects of person-specific attitudes and gender-specific norms. *The Journal of Sex Research, 32*, 275-88.
- MacKinnon, C. A. (1986). Pornography: Not a moral issue. Special issue: Women and the law. *Women's Studies International Forum, 9*, 63-78.
- Malamuth, N. M. (1989a). The Attraction to Sexual Aggression Scale: Part one. *The Journal of Sex Research, 26*, 26-49.
- Malamuth, N. M. (1989b). The Attraction to Sexual Aggression Scale: Part two. *The Journal of Sex Research, 26*, 324-354.
- Masser, B., & Abrams, D. (1999). Contemporary sexism: The relationship among hostility, benevolence, and neosexism. *Psychology of Women Quarterly, 23*, 503-517.
- McElroy, W. (1995). *XXX: A woman's right to pornography*. New York: St. Martin's Press.
- Merriam-Webster's collegiate dictionary* (7th ed.). (1972). Springfield, MA: Merriam Company.
- Millett, K. (1970). *Sexual politics*. Garden City: Doubleday.
- Morgan, R. (1980). Theory and practice: Pornography and rape. In L. Lederer (Ed.), *Take back the night: Women on pornography* (pp. 134-140). New York: William Morrow.
- Morrison, M. A., Morrison, T. G., Pope, G. A., & Zumbo, B. D. (1998). An investigation of measures of modern and old-fashioned sexism. *Social Indicators Research, 48*, 39-50.
- Mosher, D. L., Barton-Henry, M., & Green, S. E. (1988). Subjective sexual arousal and involvement: Development of multiple indicators. *The Journal of Sex Research, 25*, 412-425.
- Mosher, D. L., & MacIan, P. (1994). College men and women respond to X-rated videos intended for male or female audiences: Gender and sexual scripts. *Journal of Sex Research, 31*, 99-113.
- Mosher, D. L., & O'Grady, K. E. (1979). Sex guilt, trait anxiety, and females' subjective sexual arousal to erotica. *Motivation and Emotion, 3*, 235-249.
- Padgett, V. R., Brislin-Slutz, J. A., & Neal, J. A. (1989). Pornography, erotica, and attitudes toward women: The effects of repeated exposure. *Journal of Sex Research, 26*, 479-491.
- Pally, M. (1994). *Sense and sensibility: Reflections on forbidden mirrors and the will to censor*. Hopewell, NJ: Ecco Press.
- Pasko, L. (2002). Naked power: The practice of stripping as a confidence game. *Sexualities, 5*, 49-66.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Fort Worth, TX: Harcourt Brace.
- Petersen, J. R. (1999). *The century of sex*. New York: Grove Press.
- Russell, D. E. H. (1998). *Dangerous relationships: Pornography, misogyny and rape*. Thousand Oaks, CA: Sage.
- Sigel, R. S. (1996). *Ambition and accommodation: How women view gender relations*. Chicago: University of Chicago Press.
- Spence, J. T., & Hahn, E. D. (1997). The Attitudes Toward Women Scale and attitude change in college students. *Psychology of Women Quarterly, 21*, 17-34.

- Spence, J. T., Helmreich, R., & Stapp, J. (1973). A short version of the Attitudes Toward Women Scale (AWS). *Bulletin of the Psychonomic Society*, 2, 219-220.
- Steinem, G. (1998). Erotica and pornography: A clear and present difference. In R. M. Baird & S. E. Rosenbaum (Eds.), *Pornography: Private right or public menace?* (pp. 89-93). Buffalo: Prometheus Books.
- Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old-fashioned and modern prejudices. *Journal of Personality and Social Psychology*, 68, 199-214.
- Swim, J. K., & Cohen, L. L. (1997). Overt, covert, and subtle sexism: A comparison between attitudes toward women and modern sexism. *Psychology of Women Quarterly*, 21, 103-118.
- Tewksbury, R. (1994). A dramaturgical analysis of male strippers. *The Journal of Men's Studies*, 2, 325-342.
- Tong, R. (1989). *Feminist thought: A comprehensive introduction*. Boulder: Westview Press.
- Tougas, F., Brown, R., Beaton, A. M., & Joly, S. (1995). Neo Sexism: Plus ca change, plus c'est pareil. *Personality and Social Psychology Bulletin*, 21, 842-849.
- Viki, G. T., Abrams, D., & Hutchison, P. (2003). The "true" romantic: Benevolent sexism and paternalistic chivalry. *Sex Roles*, 49, 533-537.
- Wood, E. A. (2000). Working in the fantasy factory: The attention hypothesis and the enacting of masculine power in strip clubs. *Journal of Contemporary Ethnography*, 29, 5-31.
- Yoder, J., & McDonald, T. W. (1997). The generalizability and construct validity of the Modern Sexism Scale: Some cautionary notes. *Sex Roles*, 36, 655-663.