Third-Person Effect, Gender and Pornography on the Internet

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Abstract

This study examines the relationship among gender, third-person effect and support for restriction of pornography on the Internet. The results of this study indicate that female respondents tend to perceive greater negative effects of Internet pornography on other males than on other females. More importantly, this study contributes to the growing literature on third-person effect by demonstrating that the magnitude of perceptual bias is not a reliable predictor of support for restriction of pornography on the Internet.

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INTRODUCTION

The rapid growth of the Internet worldwide leads to unprecedented opportunities in applications in business, communication, education, and entertainment (Hagel & Armstrong, 1997; Johnson, 1997; Schwartz, 1998; Tapscott et al., 1998). Commercial interests act as a driving force behind these applications. It is particularly worth noting that pornographic web sites, which now total approximately 170,000, have shown tremendous growth in the past few years, increasing by nearly 300 a day (Chen, 1999) and $700 million a year (Hapgood, 1996). "Cybersex" or "cyberporn" became a new phenomenon accompanying the advent of the age of global interconnectivity.[1] Pornography on the Internet is unique because sexually explicit materials posted on the net differ from traditional forms of pornographic materials such as magazines and videos in several important ways: (1) wide availability in BBS groups and the World Wide Web through database accesses, interactive services, e-mail, Internet Relay Chat (IRC), and real-time data feeds; (2) presentation of materials in multimedia format such as digitized moving images, animated sequences, sexually explicit texts, hot chats, and interactive sexual games; (3) users also become producers known as "*prosumer*" of pornographic materials (i.e., playing the dual role of producer and consumer).[2]

Although pornography in cyberspace draws increasing attention from scholars,

[1] Factors that contribute to the rapid growth of pornography in the Internet include (1) easy access and affordability to users across age groups and geographic boundaries, (2) anonymity of users, (3) opportunities for users to customize materials for downloading and storage, and (4) the safety of "modem sex" (see Cooper, 1998; Rimm, 1995).

[2] Although some argue that pornographic materials on the Internet are no different in nature from those appearing in pornographic magazines and videos because most of the pornographic images on the Internet were taken directly from pornographic magazines, videos and laser disc (Mehta & Plaza, 1997; O'Tool, 1998), we disagree. Internet pornography is not a simply a matter of more of the same kind but more of a different kind.

the research literature is scarce. Almost all of the few existing studies focus on content analyzing pornographic materials posted and distributed on the Internet (e.g., Rimm, 1995; Mehta & Plaza, 1997). Content studies help document the availability, types and scale of pornography on the Internet. Nevertheless, they shed little light on how Internet pornography is used, for what motive, by whom, and with what effect. This study intends to address the gap by examining the actual use and perceived effects of Internet pornography surfing with a third-person effect framework.

During the past decade, research support for the third-person effect has been consistently robust (Perloff, 1993). But until now, very little research has attempted to explore the relationship between gender, third-person effect and support for restriction of pornography. Earlier studies found that women were more likely than men to associate pornographic materials with negative effects and also more likely to support restrictions on pornography (Wilson & Abelson, 1973; Thompson et al., 1990; Thiessen, 1994). More recent studies also found that gender was related to perceived effects of pornography on self and others (Lee & Yang, 1996; Lo & Paddon, 1999). Therefore, in this study we attempt to examine the relationship among gender, third-person effect and support for restriction of pornography on the Internet.

Most of the studies that examined the behavioral component of the third-person effect used magnitude of perceptual bias as a predictor of support for media restrictions. Although use of the magnitude of perceptual bias as a predictor of support for media restriction has strong empirical support, its basic assumptions are questionable because it has failed to distinguish between those who perceive pornography to have high influence on themselves and on others and those who perceive pornography to have low influence on themselves and on others (Lo & Paddon, 1998a). By focusing on the relationships among third-person effect, gender,

and support for restriction of Internet pornography, another purpose of this study is to demonstrate the problem of using magnitude of bias as a predictor of support for pornography restriction.

LITERATURE REVIEW AND HYPOTHESES

Perceived third-person effect

Since Davison (1983) proposed the third-person effect hypothesis, many studies have gathered a significant amount of empirical evidence to support the third-person effect or the perceptual component of the hypothesis using different methodologies such as experiments and surveys. The perceptual component of the third-person effect hypothesis states that people tend to perceive mass media messages to have a greater impact on others than on themselves.

Perloff (1993) reported that 13 of 14 studies on the third-person effect between 1983 and 1992 found support for the perceptual component of the hypothesis. Recent research has found that the third-person effects are even stronger when the communication is seen as socially less desirable or potentially harmful: rap music (McLeod et al., 1997), pornography (Gunther, 1995; Rojas et al., 1996), television violence (Salwen & Dupagne, 1999), and press coverage of the O.J. Simpson trial (Salwen & Driscoll, 1997). Similar research conducted in Taiwan (Lo & Paddon, 1999) shows that both males and females perceived pornography to have greater negative influence on others than on themselves.

Based on these findings, we predicted the following:

H_1: Both male and female respondents will perceive Internet pornography to have greater negative effect on others than on themselves.

Gender differences in third-person effect

In this study, we propose that gender would be related to perceived negative effects of Internet pornography on others. This expectation is based on results reported in previous studies on pornography.

Pornographic materials depict women routinely as sexual objects or a sexual commodity who enjoy suffering or humiliation (Dworkin, 1989). Women are also presented in situations that are humiliating, demeaning and subjugating (Dobson, 1997). In a qualitative analysis of 14 pornographic videos and 20 pornographic novels, Dines et al. (1998: 90-98) found the following four elements central to the representation of sexuality in pornography: (1) *hierarchy* (the power imbalance was overwhelming, routinely placing women at the bottom of a hierarchy); (2) *objectification* (women were depicted as objects or treated as less than human by their sexual partners); (3) *submission* (women were portrayed as learning to comply with the orders and desires of men who had power over them); and (4) *violence* (violent acts were presented as an acceptable method of ensuring sexual cooperation from women). Because women are routinely presented as sexual objects in scenarios of degradation, injury, abasement, or torture (Easterbrook, 1997), pornography is seen as "a method to motivate, orchestrate, justify, and guide sexual abuse and violence against women" (Russo, 1998: 29). As Dworkin (1988: 264-265) argues, "Pornography is the material means of sexualizing inequality; and that is why pornography is a central practice in the subordination of women."

Previous empirical research on pornography further suggests that pornography is produced and used primarily by men (Mehta & Plaza, 1997; Dines et al., 1998; Lin, 1999). In fact, past studies indicate that women are less likely than men to consume frequently, to be less sexually aroused by, and to have less favorable attitudes toward pornography (Greenberg et al., 1993; Lo & Paddon, 1999; Malamuth, 1996).

In a nationwide survey in the U.S., Wilson and Abelson, (1973) reported that 84% of men as compared with 69% of women said they had been exposed to one or more kinds of pornographic material. More men (52%), compared to women (37%), also disclosed that they had seen pictorial depictions of an explicit sexual nature in the two years prior to the interview. In a more recent study, Thompson et al. (1990) found that men were three times more likely than women to watch X-rated or sexually explicit movies on pay TV, on VCRs or in theaters. Research conducted in Taiwan (Lo et al., 1999) also found that males had much higher levels of exposure to pornography than females.

Furthermore, the Wilson and Ableson (1974) study found that women were more likely than men to associate pornography with negative effects. Women were also less accepting of the arousal and entertainment values of these materials. Thiessen (1994) also noted that women expressed negative affect toward use of pornography and were less willing to volunteer for studies of erotica. The researchers concluded that greater negative affective reactions would seem both to result from and in turn contribute to the lower exposure rates of women to pornography.

Because pornographic scripts tend to instigate negative affect in many women, we expected women to be more likely than men to perceive greater negative effects of pornography on males. Therefore, we hypothesized that:

H_2: Female respondents will be more likely than male respondents to perceive that Internet pornography will exert a greater negative effect on other male respondents.

H_3: Female respondents will perceive Internet pornography to have greater negative effect on other male respondents than on other female respondents.

Moreover, we also propose that females would be more likely to support restricting pornography on the Internet. This expectation is based on previous research

on pornography as well. Because pornography is degrading to women (Easterbrook, 1997), viewing pornography was found to make women more tense, anxious, angry, and hostile (Senn, 1993). Empirical research indicates that women not only view less erotic media, but they also have told researchers that they are more willing to seek restrictions on it. In their development of an Attitudinal Censorship Questionnaire, Hense and Wright (1992) found that although no gender differences were found on the General Censorship factor, females were more willing to censor pornography than were males. Lee and Yang (1996) found that females were more likely than males to support censorship of sexual violence and sexually explicit materials on television. Thompson et al. (1990) reported that women were more supportive than men of anti-pornography legislation. In a recent survey of 1858 Taiwan high school students, Lo and Paddon (1999) found that female students were more likely to support restriction of pornography than male students. Based on these previous research findings, we predicted that:

H_4: Female respondents will be more likely to support restriction of pornography on the Internet than male respondents.

Finally, we propose that the magnitude of perceptual bias will not be a reliable predictor of support for restricting Internet pornography. Most of the previous studies examining the behavioral component of the third-person effect used the magnitude of perceptual bias, or the magnitude of the difference in perceived effects on self and perceived effects on others, as a predictor of support for media restrictions (Gunther, 1995; Gunther & Ang, 1996; Lee & Yang, 1996; McLeod et al., 1997; Rojas et al., 1996; Salwen & Driscoll, 1997). However, a recent study of Lo and Paddon (1998a) shows that magnitude of perceptual bias is not a good predictor of support for the restriction of pornography. This is because the concept does not distinguish between

those who perceive pornography to have high influence on themselves and on others and those who perceive pornography to have low influence on themselves and on others.

To illustrate, Figure 1 demonstrates the problem of using magnitude of perceptual bias as a predictor of support for pornography restriction. Respondent A represents the individuals who perceive pornography to have a high negative effect on themselves and on others. Respondent B represents those who estimate pornography to have a low negative effect on themselves and on others. Respondent C represents those who perceive pornography to have a low negative effect on themselves but a high negative effect on others.

[Insert Figure 1 about here.]

If the magnitude of perceptual bias is a good predictor of support for censorship, one would expect Respondent A to display the same censorship attitudes as Respondent B. Respondent C would display the strongest pro-censorship attitude or behavior. But there is no reason to expect that Respondent A, who perceives pornography to have a highly harmful effect on self and on others, is likely to display the same censorship attitude as Respondent B, who sees little harm on self and others. Lo and Paddon (1998a) found that those who perceived high effects on self and others (i.e., Respondent A) were more likely to support restricting pornography than did those who perceived low effects on self and others (i.e., Respondent B). They also found that there was no significant difference between those who perceived high effects on self and others (i.e., Respondent A) and those who perceived high effects on self and low effects on others (i.e., Respondent C).

In sum, we argue that the magnitude of perceptual bias is not a reliable predictor of support for restriction of pornography. Accordingly, we anticipate that perceived

negative effects on other males will be a better predictor of support for restriction of pornography on the Internet than the magnitude of perceptual bias.

Furthermore, past research suggests indeed that it was the perceived effect on others that motivated people to support media restrictions (Davison, 1983; Cohen et al., 1988; Gunther, 1991; Lo & Paddon, 1998a). Salwen (1997) found that perceived effect on others was positively related to support for restrictions on unfair election news coverage. Lo and Paddon (1998a) also found that perceived effect on others was a significant predictor of support for restriction of pornography. In this study, we propose that people are motivated to support restrictions on Internet pornography in order to protect other males, rather than other females, from harmful effects of cyberporn.

Why are men more likely to be affected? Because pornography is primarily produced and used for men (Dines et al., 1998; Lin, 1999). Men are more likely than women to consume frequently, to be at greater risk of being negatively affected by, and to have more favorable attitudes toward pornography (Zillmann & Bryant, 1982; Greenberg et al., 1993; Malamuth, 1996). Past research also indicates that pornography would likely cause negative attitudes toward women (Zillmann & Bryant, 1989). Exposure to pornography promotes insensitivity toward victims of sexual violence and contributes to men's acceptance of rape myth (Allen et al., 1995). Prolonged consumption of pornography was also found to breed men's sexual callousness toward women (Zillmann & Weaver, 1989).

Thus, people tend to perceive pornography to have greater negative influence on other males than on other females. Since people will consider other males as more vulnerable to the harmful effects of pornography, it is reasonable to assume that it is the perceived negative effects on other males, rather than the perceived effects on other females, that leads people to support censorship of pornography. Accordingly,

we expected that:

H_5: Perceived effects of Internet pornography on other males will be a better predictor of support for restriction of pornography on the Internet than will magnitude of perceptual bias.

H_6: Perceived effects of Internet pornography on other males will be a better predictor of support for restriction of pornography on the Internet than will perceived effects on other females.

METHODS

Numerous surveys in a large number of countries show that users of the Internet are characteristically young and well-educated. They belong to the so-called "net generation" (Tapscott et al., 1998). The Internet medium particularly appeals to this group largely because of its members' high level of computer literacy and higher social economic status. Therefore, our study targeted this group.

Respondents in this study were drawn from 20 randomly selected high schools and colleges located in Taipei, the capital city of Taiwan. Three classes were randomly chosen from each school. The self-administered questionnaires were distributed in classes during a four-week period from mid-April to mid-May 1999. Trained senior undergraduate students from a large national university served as field supervisors.

Of the total 2713 students, 2628 (96.9%) completed the questionnaire. Among them, 1414 were males(55%) and 1182 were females(45%). Of the sample, 1335 (50.8%) were high school students and 1293 (49.2%) were college students.

Measurement of key variables

Computer use. We used two measures of computer use. First, respondents were asked to indicate the number of days per week that they used the computer. Then, they were asked to estimate the average daily amount of time spent using a computer. A

computer use index was created by multiplying the number of days computing per week and the amount of computing time per day. Thus, the index provides an overall measure of computer use (mean=448, SD=495).

Exposure to Internet pornography. Exposure to Internet pornography was measured with a single question. Respondents were asked how often they surfed pornographic web sites. The response categories ranged from "1" (meaning "never") to "5" (meaning "frequently"). Thus, the greater the score, the more frequent the exposure to pornographic sites (mean=1.73, SD=1.02). Exposure to Internet pornography was used as a control variable in the regression analyses, because previous studies indicated that pornography exposure was related to perceived effect of pornography on self and others and support for restriction of pornography (Lo & Paddon, 1998b; Thompson et al., 1990).

Perceived negative effects on self and others. To measure perceived negative effects of Internet pornography on self and others, we asked respondents to estimate the likely negative effects of "surfing pornographic web sites" on moral values, attitudes toward the opposite sex, sexual knowledge, sexual attitudes, and sexual behavior. The scale we used was a 5-point scale, where "1" means "no negative effect at all," and "5" means "a strong negative effect."

To determine whether the items for self, other male students and other female students would indeed measure three different underlying dimensions, principal component factor analysis was performed. Results showed that the self, other male students and other female students items were clearly grouped in three distinct factors (see Table 1). The three-factor solution explained 83.5% of the total variance. In the next step, the five "self" items were added and divided by five to create a measure of "perceived negative effects on self" (alpha=.94, mean=2.28). Similarly, the five "other

male students" items were added and divided by five to construct a measure of "perceived effects on other male students" (alpha=.96, mean=3.31). The five "other female students" items were also added and divided by five to build a measure of "perceived effects on other female students" (alpha=.95, mean=2.78). The higher the score, the greater the perceived negative effects on self and others.

[Insert Table 1 about here.]

Magnitude of perceptual bias. Difference scores between perceived effects on self and each of the two comparison groups (i.e., other male students and other female students) were computed to measure magnitude of perceptual bias. Thus, the higher the score, the greater the magnitude of perceptual bias between the perceived negative effects on self and the perceived negative effects on other males and females.

Support for restrictions of pornography on the Internet. Support for restrictions of pornography on the Internet was measured by five behavior intention items. If pornographic web sites cause grave public concern, we asked respondents how likely they would be to take the following action: signing a petition for regulating pornographic sites, calling the Internet service providers to block pornographic sites, writing to lawmakers to prompt legislation to ban pornographic sites, engaging in protests against pornographic sites, and boycotting pornographic sites. The scale ranged from "1" (as "very unlikely") to "5" (as "very likely").

Principal component analysis showed that the five items were grouped in a single factor, thus indicating that they measured the same underlying concept. The one-factor solution explained 69% of the total variance. A composite measure of support for restrictions of pornography on the Internet was created by adding the five items and dividing the sum by five (alpha=.88, mean=2.67).

Demographics. Finally, respondents were asked about their sex, years in school,

grade average, and religious belief. Years in school were coded into two categories: high school and college. Grade average points were coded into four categories ranging from upper quartile to lower quartile. Religious belief was coded into four ordinal categories ranging from “1” (meaning “no religious belief”) to “4” (meaning “strong religious belief”). These four demographic variables were also used as controls in the regression analyses, because previous studies indicated that they were related to support for censorship of pornography (Gunther, 1995; Lo & Paddon, 1998a; Rojas et al.,1996).

RESULTS

Hypothesis 1 predicted that both male and female respondents would perceive Internet pornography to have greater negative influence on others than on themselves. Table 2 shows the results of paired t-tests that supported the third-person effects for both male and female respondents. As expected, the third-person effect differentials were significant for comparisons of self to other male students, and self to other female students in the pooled sample, the male sample and the female sample as well. Overall, the respondents perceived other males and females as more influenced by Internet pornography than themselves. Hypothesis 1 was supported.

[Insert Table 2 about here.]

Hypothesis 2 stated that female respondents would be more likely than male respondents to perceive that Internet pornography would exert a greater negative effect on other male students. As Table 2 further shows, t-test results yielded strong support for this hypothesis. Female respondents were more likely than male respondents to apprehend other male students to be more negatively influenced by Internet pornography ($t = 21.54$, $p < .001$).

Hypothesis 3 predicted that female respondents would perceive Internet pornography to have greater negative influence on other male students than on other female students. Results of the paired t-test showed that female respondents perceived other male students to be more negatively influenced by Internet pornography than other female students ($t=36.44$, $p< .001$).

In Hypothesis 4, we predicted that female respondents would be more likely than male respondents to support restriction of pornography. To test this hypothesis, a hierarchical regression analysis was performed in which demographic variables were entered first, followed by computer use and exposure to Internet pornography. The final block of the regression equation entered perceived effects of Internet pornography on self, on other males, and other females. Results of the regression analysis revealed that gender was the most powerful predictor of support for restriction of pornography on the Internet (Beta=-.25, $p < .001$; see Column 1 in Table 3). This particular finding indicates that females were much more likely than males to support regulating Internet pornography. Hypothesis 4 was supported.

[Insert Table 3 about here.]

Hypothesis 5 predicted that perceived effects of Internet pornography on other males would be a better predictor of support for restriction of pornography on the Internet than would magnitude of perceptual bias. To test it, we ran three separate hierarchical regression analyses (including the one used to test Hypothesis 4). In the first hierarchical regression analysis (see Column 1 in Table 3), the first block of the regression equation entered sex, years in school, grade point average, and religious belief as control variables. It turns out that gender, years in school, and religious belief were significantly related to the support for restrictions of Internet pornography. The second block included computer use and exposure to Internet pornography. Only

exposure to Internet pornography was significantly but negatively related to support for restrictions of pornography on the Internet. The final block of the regression equation included perceived effects of Internet pornography on self, on other males, and on other females. Results indicate that both perceived effects on self and perceived effects on other males were positively related to support for restriction of Internet pornography (see first Column in Table 3).

In the second hierarchical regression analysis (see Column 2 in Table 3), similarly, demographic variables were entered first, followed by computer use and exposure to Internet pornography. The final block included the two magnitude of perceptual bias variables. As anticipated, the two magnitude of perceptual bias variables were not significantly related to support for restriction of pornography on the Internet. Hypothesis 5 was supported.

In the third hierarchical regression analysis (see Column 3 in Table 3), we used a procedure similar to that adopted by several earlier studies (e.g., Gunther, 1995; Gunther & Ang, 1996; Lee & Yang, 1996) in which demographic variables were entered first, and computer use and Internet pornography exposure were entered next. Variables entered the final block were perceived effects on self and the two magnitude of perceptual bias variables. As results of the third regression analysis (see Column 3 in Table 3) show, when perceived effects on self and the two perceptual bias variables were simultaneously entered into the equation, the estimated standardized regression coefficients of perceived effects on self and the two magnitude of perceptual bias variables increased substantially.

Because magnitude of perceptual bias is defined as the difference between perceived effects on self and perceived effects on others, it was inevitably related to perceived effects on self. This relationship suggests that it was the effects of

multicollinearity that lead to substantial changes in the estimated standardized regression coefficients of perceived effects on self and the two magnitude of perceptual bias variables in the third regression analysis.

Table 4 shows the results of Pearson's correlation coefficients between gender, the third-person variables, the magnitude of perceptual bias variables, and support for restriction of pornography on the Internet. Magnitude of perceptual bias (between perceived effects on self and perceived effects of other males) was significantly related to support for pornography restriction at the zero-order level, but was reduced to non-significance after controls for the first two blocks in the second regression analysis. In the third regression analysis, when perceived effects on self were entered in the equation, it became a significant predictor of support for restriction of Internet pornography (Beta=.11, $p < .001$).

[Insert Table 4 about here.]

It seems that it was the effects of multicollinearity on regression coefficients that made the magnitude of perceptual bias (between perceived effects on self and perceived effects on other males) a significant predictor of support for regulating Internet pornography in the third regression analysis.

Hypothesis 6 predicted that perceived effects of Internet pornography on other males would be a better predictor of support for restriction of pornography on the Internet than would perceived effects on other females. The final block of the regression equation has the testing results (refer back to Column 1 in Table 3). Perceived negative effects on other males were significantly related to support for restriction of pornography on the Internet (Beta=.11, $p < .001$), while perceived effects on other females were not (Beta=.03, non-significant). Accordingly, Hypothesis 6 was also supported.

CONCLUSIONS AND DISCUSSION

The results of this study lead us to conclude that respondents, regardless of gender, perceived Internet pornography to have a greater negative influence on others than on themselves. Such a finding provides more empirical support for Davison's third-person effect hypothesis. Moreover, our findings help expand the third-person hypothesis by successfully demonstrating that gender is related to perceived effects on others and support for restriction of pornography. Women are indeed more likely than men to perceive greater negative effects of Internet pornography on other males, and more willing to support restrictions of pornography on the Internet.

The results of this study also indicate that gender appears to have a mediating effect on the relationship between the concept of "social distance" (i.e., the similarity or differences between oneself and others) and third-person effect. Past research suggests that the strength of the third-person effect increases with social distance (Cohen et al., 1988; Gunther, 1991; McLeod et al., 1997), and the social distance of the same-gender is closer than that of opposite-gender (Lee & Yang, 1996). The results of our study show that on the one hand, females tend to perceive a greater negative effect of Internet pornography on other males than on other females, while on the other hand, males do not estimate Internet pornography to have greater negative effects on other females than on other males. It seems that females are more likely to believe their attitudes are more similar to those of other females than to males. Future research can focus on examining the relationships among gender, social distance, and third-person effect on topics in which females are usually victimized by males, such as violence on television.

More importantly, this study contributes to the growing third-person literature by

showing that the *magnitude of perceptual bias* is not a reliable predictor of support for restriction of pornography on the Internet. Previous research that examines the behavioral component of the third-person effect fails to distinguish between those who perceive pornography to have high influence on themselves and on others and those who perceive Internet pornography to have low influence on themselves and on others when using the concept. Existing studies suggested that the magnitude of perceptual bias was significantly related to support for censorship of pornography (Gunther, 1995; Lee & Yang, 1996; Gunther & Ang, 1996; Rojas et al., 1996). The results of our study show that the magnitude of perceptual bias only becomes a significant predictor of support for pornography restrictions when it is tested simultaneously with *perceived effects on self.* Apparently, it was the effects of multicollinearity that led to substantial increases in the regression coefficients of the magnitude of perceptual bias. As perceived effects on self and the magnitude of perceptual bias were collinear variables, it was, therefore, difficult to determine their separate effects on support for pornography restrictions (Neter et al., 1983; Hamilton, 1992). Our study, therefore, helps explain why the magnitude of perceptual bias was reported as a significant predictor of media restriction in several previous studies.

Given these mixed findings, it is obvious that the theoretical relationships among perceived effects on self, perceived effects on others, and support for media restriction merit further vigorous testing. This study should be replicated in different countries on different topics such as news coverage, voting behavior, political advertising or media violence for the purpose of pursuing conclusive results.

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Table 1. Principal Component Factor Analysis of Perceived Negative Effects of Internet Pornography on Self, Other Males, and Other Females (Varimax Rotation)

Items:	Factor 1	Factor 2	Factor 3
Others: male students			
Sexual attitudes	**.89**	.26	.20
Sexual behavior	**.87**	.27	.19
Attitudes toward the opposite sex	**.86**	.27	.24
Sexual knowledge	**.84**	.27	.25
Moral values	**.79**	.30	.30
Others: female students			
Sexual attitudes	.29	**.87**	.23
Sexual behavior	.30	**.85**	.22
Attitudes toward the opposite sex	.26	**.84**	.24
Sexual knowledge	.28	**.84**	.24
Moral values	.24	**.82**	.28
Self			
Sexual attitudes	.22	.23	**.88**
Sexual behavior	.22	.21	**.85**
Attitudes toward the opposite sex	.24	.23	**.83**
Sexual knowledge	.25	.22	**.83**
Moral values	.17	.25	**.82**
Eigenvalue	8.91	1.98	1.65
% of variance explained	59.4	13.2	11.0
Alpha	.96	.95	.94

Note: Scale ranges from "1" meaning "no negative effect at all" to "5" meaning "a strong negative effect."

Table 2. Mean Estimates of Perceived Negative Effects of Internet Pornography on Self, Other Males, and Other Females

Samples	N	Comparison Groups		
		Self	Other males	Other females
All	2,628	2.28 (1.19)	3.31 (1.17)	2.78 (1.11)
Males	1,414	2.21 (1.13)	2.89 (1.11)	2.93 (1.13)
Females	1,214	2.36 (1.25)	3.79 (1.04)	2.83 (1.09)

Notes: Figures in parentheses are standard deviations. All differences between self and the two comparison groups are significant at the $p<.001$ level.

Table 3. Hierarchical Regression Analysis Predicting Support for Restriction of Pornography on the Internet

Independent variables	1st Regression	2nd Regression	3rd Regression
Block 1: Demographics			
Gender	-.25***	-.29***	-.25***
Years in school	.04*	.03	.04*
GPA	-.02	-.02	-.02
Religious belief	.06***	.07***	.06***
Adjusted R^2	.17	.17	.17
Block 2: Computer use			
Computer use	.03	.02	.03
Exposure to Internet pornography	-.23***	-.24***	-.23***
Incremental adjusted R^2	.04	.04	.04
Block 3: Third-person variables			
Perceived effects on self	.09***		.23***
Perceived effects on other males	.11***		
Perceived effects on others females	.03		
Perceptual bias (other males-self)		.02	.11***
Perceptual bias (other females-self)	-.04	.03	
Incremental adjusted R^2	.03	.00	.03
Total adjusted R^2	.24	.21	.24

Notes: Beta weights are from final regression equation with all blocks of variables in the model. N=2628. Variables coded, or recoded, as follows: gender (0=female, 1=male); Years in school (0=high school, 1=college); religious belief ranged from 1 (no religious belief) to 4 (strong religious belief); exposure to Internet pornography ranged from 1 (never) to 5 (frequently); perceived effects on self and others ranged from 1 (no negative effect) to 5 (a strong negative effect). Support for restriction of pornography on the Internet ranged from 1 (very unlikely) to 5 (very likely).

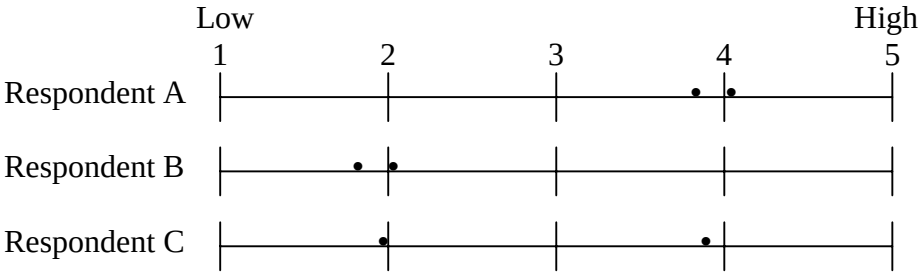
*** $p < .001$; ** $p < .01$; * $p < .05$.

Table 4. Correlations between Gender, Perceived Effects on Self, Perceived Effects on Other Males and Females, Magnitude of Perceptual Bias, and Support for Restrictions of Pornography on the Internet

	1	2	3	4	5	6
1. Gender (Male=1)						
2. Perceived effects on self	–.06**					
3. Perceived effects on other males	–.39***	.54***				
4. Perceived effects on other females	–.04*	.55***	.61***			
5. Perceptual bias (other males-self)	–.33***	–.50***	.47***	.05**		
6. Perceptual bias (other females-self)	.03	–.53***	.04*	.42***	.59***	
7. Support for restriction of Internet pornography	–.40***	.19***	.33***	.17***	.13***	.04*

Notes: *p<.05,**p<.01,***p<.001, N=2628.

Figure 1: Perceived Effects of Pornography on Self and Others



- Perceived effects on others
- Perceived effects on self