

How Science Studies Pornography Impact and What Science Can, and Cannot, Tell Us

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Thank you for calling on me to provide observations concerning the public health effects of online violent and degrading sexually explicit material. I offer these observations as Professor of Psychology at the University of Western Ontario with four decades of research experience in this area, multiple grants in support of my research in this area, and more than two dozen peer reviewed publications concerning pornography and behavior. In my remarks, I will describe the scientific methods that have been used to study the impact of pornography and outline what science can, and cannot, tell us about this subject.

In experimental studies of the impact of sexually explicit material, research participants are assigned to view sexually explicit material or comparator material, and their behavioral (or other) responses are assessed and compared. In this fashion, science seeks to establish the “cause and effect” relationship, if any, between exposure to sexually explicit material and some outcome, generally sexual behavior or aggressive behavior.

Experimental studies of the impact of sexually explicit materials on men’s and women’s sexual behavior typically show that exposure to sexually explicit materials that are nonviolent stimulate short-term increases in the type of sexual activity that individuals are already accustomed to engaging in, in some but

not all of the men and women exposed to such materials (see, for example, US President's Commission on Obscenity and Pornography, 1971; Fisher & Byrne, 1978; Schmidt, 1975; see also Kohut & Fisher, 2013).

Experimental studies of the impact of violent sexually explicit materials on men's aggressive behavior against women were initially seen as indicating that exposure to violent pornography causes men to aggress against women. (Donnerstein & Berkowitz, 1981; Malamuth & Donnerstein, 1984; Zillmann & Bryant, 1989; see Fisher & Barak, 1991, for criticism of this research).

Experimental studies asserting a "cause and effect" relationship between violent pornography and aggression against women typically employ a variant on the following procedures (Donnerstein & Berkowitz, 1981). First, a male participant, almost always a young university student, receives verbal abuse and physical aggression—a series of painful electric shocks—delivered by a young woman. The young man who has been verbally and physically attacked is then shown brief example of violent pornography—five minutes or so—and then he is instructed by the experimenter to send electrical shocks to the woman who has aggressed against him. Male participants who have seen violent pornography generally send stronger electrical shocks to the female who has aggressed against them compared to men who have seen nonviolent sexual materials. I note that male participants in this research are instructed to send electrical shock to the female and the men are not provided with any opportunity to respond in a nonaggressive fashion.

It has been observed that these experimental studies are so artificial and constrained that they tell us little or nothing about the impact of violent pornography in the real world (Fisher & Barak, 1991). In this

research, men who have been verbally abused and physically attacked by a woman and who have seen violent pornography are not provided with the opportunity to respond non-aggressively. Subsequent research shows that when such studies are replicated, with the added provision of an opportunity to respond non-aggressively, essentially none of the male participants who have been aggressed against and who have seen violent pornography choose to aggress against the women (Fisher & Grenier, 1994; see also Fisher & Barak, 1991). Research has also demonstrated that even prolonged exposure to violent pornography over a four-week period does not have an effect on men's tendencies to aggress against a woman when opportunities to aggress were provided a week later (Malamuth & Ceniti, 1986).

Correlational studies of pornography and aggression involve assessment of men's self-reported exposure to pornography and their self-reported sexually aggressive behavior against women. Correlational studies assess the relationship of "A" and "B" but cannot establish cause and effect. When "A" and "B" are found to be related, "A" may cause "B," or equally, "B" may cause "A," or very often, some unmeasured variable—"C"—may cause both "A" and "B." Correlational studies cannot establish causal effects.

Many correlational studies and meta-analyses of correlational studies find a relationship between self-reported pornography exposure and self-reported sexual aggression against women (see, for example, Wright, Tokunaga, & Kraus, 2016; see also Malamuth, Addison, & Koss, 2000 and Malamuth, Hald & Koss, 2012), especially among men predisposed to aggression. A number of things can be noted about correlational studies of self-reported pornography use and sexual aggression against women.

Correlational findings for a relationship between pornography and sexually aggressive behavior are consistent with the possibility that pornography contributes to sexually aggressive behavior. Correlational findings for a relationship between pornography and sexually aggressive behavior are equally consistent with the possibility that sexually aggressive men seek out exposure to pornography. Correlational findings for a relationship between pornography use and sexually aggressive behavior are also consistent with the possibility that some unmeasured third variable—say, men’s sex drive—causes both sexually aggressive behavior and the choice to use pornography.

Our research group has recently published findings that are consistent with the possibility that a generally unmeasured variable causes both pornography use and sexually aggressive behavior (Baer, Kohut, & Fisher, 2015). When examining the relationship of self-reported pornography exposure and sexually aggressive behavior, we found that a measure of men’s sex drive is related to both their use of violent pornography and their sexually aggressive behavior. Men with a stronger sex drive reported more use of sexually violent material and more sexually aggressive behavior. Moreover, when we statistically predict men’s sexually aggressive behavior on the basis of their sex drive, their pornography use, and their preexisting personality characteristics, it is the combination of men’s sex drive and their personality characteristics that predicts sexually aggressive behaviors, and pornography use does not play a role.

Studies of Sex Offenders

Over the years, a number of studies of sex offenders' use or nonuse of pornography have been undertaken (Able, Becker, & Mittleman, 1985; Bauserman, 1996; Becker & Stein, 1991; Gebhard, Gagnon, Pomery, & Christianson, 1965; Goldstein, 1973; Langevin et al., 1988; Marshall, 1988). A number of these studies (Gebhard et al., 1965; Goldstein et al., 1973; Langevin et al., 1988) found that convicted sex offenders report less use of pornography than comparator samples. Another study (Abel et al., 1985) found that only 1% of a sample of 259 sex offenders were influenced by pornography in the commission of their offense. One study stands as an exception with a finding that sex offenders reported greater exposure to pornography than offenders who have not committed a sex crime, but found at the same time that the nature of offenders' sex crimes did not correspond to the content of the pornography they have used (Marshall, 1988). A review of this literature (Bauserman, 1996) concluded that "...sex offenders typically do not have earlier or more unusual exposure to pornography in childhood or adolescence, compared to non-offenders" (p. 405). Studies of sex offenders and pornography thus offer little support for a link between pornography use and sex crime.

Further evidence concerning pornography and sex crime comes from studies of sex crime in settings in which there is more, or less, exposure to pornography in entire populations. One such study, in Japan, reported that Japan has the highest rate of exposure to rape theme pornography and the lowest rate of reported sex crime in the industrialized world (Abramson and Hayashi, 1984). Another study found that increasing availability of explicit pornography in Japan occurred over the same interval of time that juvenile sexual assault rates declined (Diamond and Uchiyama, 2000)

Comparisons of rates of sex crime within the same country, before and after that country legalized pornography, are also informative. Denmark legalized most forms of pornography in 1969. Rape offenses reported to the police showed little change after legalization of pornography (Kutchinsky, 1991). This effect was replicated in Sweden, which legalized pornography in 1970 and West Germany, which legalized pornography in 1973 (Kutchinsky, 1991).

Comparison of rates of sexual assault in Canada and the U.S., before and after the onset of Internet access to all forms of pornography by essentially the entire Canadian and US populations, is also informative.

Rates of sexual assault in the U.S. have been decreasing over time and have continued to decrease after Internet access to all forms of pornography became widespread in the mid-1990s (see Fisher, Kohut, Lisha, DiGiacchino, & Federoff, 2013, and U.S. Department of Justice, 2014). Note that this findings appears in reports of rape to police and is replicated in victimization surveys that do not rely on reports to police. Canadian sexual assault victimization surveys show a steady pattern of no increase in rates of sexual assault assessed in victimization surveys in 1999 2004 2009 2014—across a decade and a half of unlimited access to all forms of Internet pornography by virtually the entire Canadian population.

We can also look at the relationship, if any, of the availability of Internet pornography and rates and outcomes of sexual activity among Canadian and American youth. Findings show that rates of adolescent pregnancy and childbirth in Canada have been declining for decades and these declines have continued since the onset of widespread access to Internet pornography (McKay, 2012). Canadian rates of adolescent sexual intercourse, sexual intercourse with multiple partners, and condom use have not

changed from 2003 to 2010, an era of widespread exposure to Internet pornography (Rotterman, 2014). The U.S. Centers for Disease Control and Prevention (2015) report that—during the era of widespread adolescent access to all forms of Internet pornography, the proportion of U.S. adolescents who have had sexual intercourse *decreased* from 1995 to 2011-2013 and the proportion of sexually active U.S. adolescents who use condoms has increased during the past decade.

Correlational evidence that is relevant to the association of pornography and attitudes towards women is available in both large scale recent studies and smaller scale past research. Kohut and colleagues (Kohut, Baer, & Watts, 2016) have analyzed nationally representative U.S. General Social Survey data from 1975 to 2010, finding that individuals who report pornography use in the preceding year have more egalitarian attitudes towards women than individuals who have not used pornography. These results are consistent with findings that, for example, men who frequently rent sexually explicit videos hold more egalitarian views of women and are more supportive of punitive punishment for sexual assault than are men who less frequently rent sexually explicit videos (Padgett et al, 1989; see also Davies, 1997, Reiss, 1986, 1989).

Recent media claims raise the possibility that pornography has a detrimental effect on the couple relationship. Our research group has found that these media claims far exceed scientific data to support them (Montgomery-Graham, Kohut, Fisher, & Campbell, L. (2015). Our research group has also conducted two studies of men and women who are in couples in which one or both members uses pornography. When asked what effects, if any, pornography has had on the couple relationship, the majority of informants answered “none,” followed by quite common reports of positive effects and

fairly rare reports of negative effects. Also quite relevant to the impact of pornography on the couple relationship, we note that in both Canada (Kelly, 2012) and in the U.S. (Centers for Disease Control and Prevention, 2015), rates of divorce per 1,000 marriages have been declining sharply and have continued to decline since the inception of widespread access to Internet pornography.

Let me conclude by reviewing these observations concerning what science can, and cannot, tell us about the impact of violent and degrading pornography on children, women, and men. Experimental research on the effects of violent pornography took place in artificially constrained settings that could only lead to confirmation of a pornography—aggression link. When an experiments modeled the real world and provided men with the choice to not aggress after exposure to violent pornography, males did not aggress.

Experimental studies of a month's massive exposure to violent pornography showed no impact on aggression against women a mere week after exposure.

Correlational studies cannot show cause and effect. Correlational studies showing a relationship of pornography and aggression are consistent with the view that pornography causes aggression, they are consistent with the view that aggressive men like pornography, and they are consistent with the view that high sex drive men both like pornography and are inclined to sexual aggression.

Population-level studies show that countries with considerable pornography available have low rates of sexual aggression; that the legalization of pornography is not linked with increases in sexual aggression,

and that the unlimited availability of all forms of internet pornography has not been associated with increases in sexual aggression or sexual activity by youth or by increased divorce of married couples.

In added oral testimony to the Committee, Dr. Fisher identified a common denominator on all sides of the pornography debate. Whatever one's opinions are concerning the role of pornography in the sexual mistreatment of women or men, we are agreed that sexual misconduct of any kind is completely unacceptable. Therefore, let us work together in education, legislation, and prosecution to directly prevent and punish sexual aggression against any victim of nonconsensual sexual activity.

References

- Abel, G.G., Becker, M.V., & Mittleman, M.S. (1985) Sex offenders. Paper presented at the 11th meeting of the International Academy of Sex Research, Seattle, Washington.
- Abramson, P. & Hayashi, H. (1984) Pornography in Japan: Cross-cultural and theoretical considerations. In N. Malamuth, E. Donnerstein (Eds.), *Pornography and sexual aggression*. Academic Press, Orlando, Florida.
- Baer, J., Kohut, T. & Fisher, W.A. (2015). Is pornography use associated with anti-woman sexual aggression? Re-examining the confluence model with third variable considerations. *Canadian Journal of Human Sexuality*, 24: 160-173.
- Bauserman, R. (1996) Sexual aggression and pornography: A review of correlational research. *Basic and Applied Social Psychology*, 18: 405-427.
- Becker, & Stein, J.M. (1991) Is erotica associated with sexual deviance in adolescent males? *International Journal of Law and Psychiatry*, 14:85-95.
- Davies, K.A., (1997) Voluntary exposure to pornography and men's attitudes toward feminism and rape. *Journal of Sex Research*, 34: 131-137.
- Diamond, M., & Uchiyama, A. (1999) Pornography, rape and sex crimes in Japan. *International Journal of Law and Psychiatry*, 22: 1-22
- Fisher, W. A., & Barak, A. (1991). Pornography, erotica, and behavior: More questions than answers. *International Journal of Law and Psychiatry*, 14: 65-83.
- Fisher, W. A., & Byrne, D. (1978a). Individual differences in affective, evaluative, and behavioral responses to an erotic film. *Journal of Applied Social Psychology*, 8: 355-365.
- Fisher, W. A., & Byrne, D. (1978b). Sex differences in response to erotica? Love versus lust. *Journal of Personality and Social Psychology*, 36, 117-125.
- Fisher, W. A., & Grenier, G. (1994). Violent pornography, antiwoman thoughts, and antiwomen acts: In search of reliable effects. *Journal of Sex Research*, 31: 23-38.
- Fisher, W.A., Kohut, T., Lisha, A., DiGioacchino, A., & Federoff, P. (2013). Pornography, sex crime, and paraphilia. *Current Psychiatry Reports*. 15:362, 1-8.
- Gebhard, P.H., Gagnon, J.H., Pomeroy, W.B., & Christianson, C.V. (1965). *Sex offenders*. New York: Harper & Row.

- Goldstein, M.J. (1973). Exposure to erotic stimuli and sexual deviance. *Journal of Social Issues*, 29: 197-219.
- Donnerstein, E., & Berkowitz, L. (1981). Victim reaction in aggressive erotic films as a factor in violence against women. *Journal of Personality and Social Psychology*, 41: 710-724.
- Kelly, M.B. (2012). Divorce cases in civil court 2010/2011. Statistics Canada.
- Kohut, T., Fisher, W. A., & Campbell, L. (2017). Perceived effects of pornography use on relationships: Results from a large scale qualitative study. *Archives of Sexual Behavior*, on line ahead of print.
- Kohut, T., Baer, J.L., & Watts, B. (2016). Is pornography really about “making hate to women”? Pornography users hold more gender egalitarian attitudes than nonusers in a representative American sample. *Journal of Sex Research*, 53:1, 1-11.
- Kohut, T., & Fisher, W. A. (2013). The impact of brief exposure to sexually explicit video clips on partnered female clitoral self-stimulation, orgasm and sexual satisfaction. *Canadian Journal of Human Sexuality*, 22, 40-50.
- Kutchinsky, B. (1991) Pornography and rape: Theory and practice? Evidence from crime data in four countries where pornography is easily available. *International Journal of Law and Psychiatry*, 14: 47–64.
- Langevin, R., Lang, R.A., Wright, P., et al., (1988). Pornography and sex offenses. *Annals of Sex Research*, 1: 335-362.
- McKay, A. (2012). Trends in Canadian national and provincial/territorial teen pregnancy rates: 2001-2010. *Canadian Journal of Human Sexuality*, 21(3-4). 161-175.
- Malamuth, N.M, & Ceniti, J. (1986). Repeated exposure to violent and nonviolent pornography: Likelihood of raping ratings and laboratory aggression against women. *Aggressive Behavior*, 12: 129-137.
- Malamuth, N.M., & Donnerstein, E. (1984). *Pornography and sexual aggression*. New York: Academic Press.
- Malamuth, N. M., Addison, T. & Koss, M. (2000). Pornography and sexual aggression: Are there reliable effects and can we understand them? *Annual Review of Sex Research*, 11, 26–91.
- Malamuth, N. M., Hald, G. M. & Koss, M. (2012). Pornography, individual differences in risk, and men's acceptance of violence against women in a representative sample. *Sex Roles*, 66, 427–439.
- Marshall, W.L. (1988). The use of sexually explicit materials by rapists, child molesters, and nonoffenders. *Journal of Sex Research*, 25:267-288.
- Montgomery-Graham, S., Kohut, T., Fisher, W. A., Campbell, L. (2015). How the popular media rushes to judgment about pornography and relationships while research lags cautiously behind. *Canadian Journal of Human Sexuality*, 24, 243-256
- Padgett, V.R., Brislin-Slütz, J.A., & Neal, J.A. (1989) Pornography, erotica, and attitudes toward women: The effects of repeated exposure. *The Journal of Sex Research*, 26: 479-491.
- Reiss, I. L. (1986). *Journey into sexuality: An exploratory voyage*. Englewood Cliffs, New Jersey.
- Rotermann, M. (2015) Sexual behaviour and condom use of 15- to 24-year-olds in 2003 and 2009/2010. Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/82-003-x/2012001/article/11632-eng.htm>.
- Schmidt, G. (1975). Male-female differences in sexual arousal and behavior during and after exposure to a sexually explicit stimuli. *Archives of Sexual Behavior*, 4:353-364.
- Statistics Canada (2014) Criminal victimization in Canada 2014. Retrieved from: <http://www.statcan.gc.ca/pub/85-002-x/2015001/article/14241-eng.htm#a1>
- U.S. Centers for Disease Control and Prevention 2015. Sexual Activity, Contraceptive Use, and Childbearing of Teenagers Aged 15–19 in the United States. Retrieved from: <https://www.cdc.gov/nchs/products/databriefs/db209.htm>.