
CONSUMPTION OF PORNOGRAPHIC MATERIAL, GENDER DIFFERENCES AND HIV RISKY SEXUAL BEHAVIOUR

Mayungbo, O.A.*

Department of Sociology and Psychology, Lead City University, Ibadan, Nigeria.

Sunmola, A.M., Morakinyo, A., Oyinlola, A., Famakinde, O., and Obosi, A.

Department of Psychology, University of Ibadan. Ibadan, Nigeria

Opayemi, A.S.

Department of Psychology, University of Ilorin, Kwara State, Nigeria

ABSTRACT: *Pornography viewing is gradually becoming a part of life in many countries around the world, including Nigeria. However, the role of the extensive consumption of pornography among the Nigerian youths has not been given much attention in the investigation of HIV risky sexual behaviour in Nigeria. This study examines the predictive strength of pornography viewing and gender differences on HIV risky sexual behaviour among university students. Using a survey design, 596 university students were selected from 12 departments across three faculties, with simple random technique. A questionnaire focusing on socio-demographic profile and HIV risk behaviour scale ($r=0.81$) was administered to the participants. Data were analyzed using descriptive statistics, correlation analysis, *t*-test and regression analysis at 0.05 level of significance. Two hypotheses were tested. The results revealed that pornography viewing and gender differences jointly and independently predicted HIV risk behavior ($R^2 = .18$; $F = 59.01$; $p < .01$). Pornography viewing is crucial for a comprehensive examination of HIV risk behaviour.*

KEYWORDS: Pornography, Gender differences, HIV risky behaviour, University students, Nigeria

INTRODUCTION

Consumption of pornographic material refers to viewing of contents that create sexual feelings or thoughts and contains explicit images of sexual acts involving vaginal or anal intercourse, oral sex, masturbation and so on. (Reid et al. 2011). Pornographic materials are known for displaying behaviours that many adults consider unacceptable and highly risky in terms of sexual health (Arrington-Sanders, Harper, Morgan, Ogunbajo, Trent & Fortenberry, 2015). Research evidence has indicated that pornography is becoming a prevalent part of life in many countries around the world, including Nigeria. Cooper, Delmonico and Burg (2000) asserted that sex is the most frequently searched topic on the Internet and the rapid increase in pornography consumption has influenced the youths in an unprecedented way (Lofgren-Martenson & Mansson, 2010). The technological advancement, the availability of personal computers, smart phones and the unlimited access to the Internet, have made it easy to access and consume pornography (Buzzell, 2005). The availability of these Internet-enabled devices has made it possible for people of all ages to consume

and distribute sexually explicit contents and the trend is common to youths all over the world (Flood, 2007; Sanberg; Wolak, Mitchell, & Finkelhor, 2007). Pornography viewing issue is further complicated by the fact that Internet is constantly accessed and even made a priority in the lives of many youths (Lenhart, Ling, Campbell, & Purcell, 2010). This increase in access to pornography has resulted in concerns that it might have a negative influence on the sexual behaviour of young people.

LITERATURE/ THEORETICAL UNDERPINNING

Research findings on the influence of pornography consumption on the youth population are mixed (Peter & Valkenburg, 2016). While some researchers have observed positive influence of pornography consumption on young people, others have suggested negative consequences. For example, Wright, Sun, Steffen and Tokunaga (2014) maintained that pornography consumption may affect the sexual socialisation of young people by influencing their understanding of appropriate sexual behaviour. Bridges, Johnason and Ezzell (2014) have suggested that excessive viewing of pornography among men may result in their dependence on pornography to get sexually aroused and consequently, not enjoying sex. Some studies have indicated that some young men who view pornography tends to pressurise some young women to engage in anal intercourse, which is depicted in some pornographic scenes (Svedin, Akerman, Priebe, 2011; Marston, Lewis, 2014). Lim, Carrotte and Hellard (2015) noted that the investigation of the potential impact of pornography on sexual health, sexual behaviour and mental health is fast developing.

Pornography viewing has also been linked with sexual problems and violence. Wilson (2014) indicated that pornography addiction was associated with sexual dysfunction. The APA, (2007) observed a relationship between viewing of violent pornography and men's attitudes towards rape and aggressive behaviour. Some pornographic scenes involve physical aggression such as gagging and spanking of female actors (Klaassen, & Peter, 2014), which has been seen as an association between pornography viewing and support of violence against women (Hald, Malamuth, & Yuen, 2010). Pornography viewing has also been linked with body dissatisfaction and negative body appreciation in men (Tylka, 2015). Lo and Wei (2005) indicated that consumption of sexually explicit material will increase the chances of engaging in sexually permissive behaviours among young people. Williams, Cooper, Howell, Yuille and Paulhus (2009) noted that when individuals watch pornography that suits their preferences, they are likely to engage in a similar behaviour, when involved in real sexual experiences. Similarly, Braun-Courville and Rojas (2009) noted that individuals who watch pornography are more likely to engage in risky sexual behaviour, than their counterparts who do not consume it.

However, contrary to the above views, some researchers have observed some benefits of pornography use. Rothman, Kaczmarzsky, Burke, Jansen and Baughman (2015) argued that young people have reported pornography viewing as a form of sexual education. Several other studies have contended that young people could learn sexual behaviour from observing the behaviours displayed in sexually explicit materials (Alexy, Burgess, & Prentky, 2009; Hanson, & Larsson, 2009; Hunter et al., 2009). According to Haggstrom-Nordin et al. (2006), young people believe that sexually explicit material might serve as a source of knowledge to them. McElroy (1997)

noted that from educational point of view, pornography benefits women and that by suppressing pornography, women would be impoverished. Similarly, Watson and Smith (2012) suggested that pornography consumption may reduce sexual anxiety and dysfunction and encourage sexual expression and satisfaction. Pornography viewing has been linked with more open views towards sex. McKee (2014) suggested that pornography has more positive effects than negative effects, which includes having an improved sex life, being more comfortable and open-minded about sex and paying more attention to one's partner's sexual pleasure. Similarly, Weinberg, Williams and Cleaner (2010) associated pornography viewing with the willingness of a partner to explore new sexual behaviour which is seen as a source of empowerment and confidence among female viewers. Luder et al., (2010) argued that pornography consumption was not only negative but also not related to HIV risky sexual behaviour.

HIV risky sexual behaviour refers to sexual activities that may expose individuals to the risk of HIV and other sexually transmitted infections (STIs), such as, unprotected sex, early sexual debut, using alcohol or drugs before sexual intercourse, multiple sexual partners, changing sexual partners frequently, having oral, vaginal or anal sexual contact without using condom, forced sexual intercourse, payment for sexual intercourse, engaging non discriminating sex partners and having sex immediately after watching pornography (Underwood, Skinner, Osman & Schwandt, 2011; Zeitsch, Verweij, Bailey, Wright, & Martin, 2012; Cherie & Berhane 2012). Prevention of HIV/AIDS is rated as the most important foundational factor against the transmission of the disease (UNPF, 2003). Therefore, preventive measures against HIV are crucial considering that Nigeria has the second highest number of HIV related deaths and 3.5% prevalence level among young people (UNAIDS 2014). National data suggests that 1.3% of young women and 0.7% of young men are living with HIV with unprotected sex responsible for about 80% of new HIV infections in Nigeria (UNAIDS, 2014). Given that unsafe sex has been globally reported to be the second among the top ten risk factors of all diseases (WHO, 2006) and a large number of new HIV infections occur in young people, who are the most sexually active group of the population (UNAIDS, 2013), addressing the issue of HIV-risky sexual behaviour within the youth population is therefore important in reducing the menace of the disease.

Risky sexual behavior is a health challenge that may lead to long-term infertility (Grodstein, Goldman, & Cramer, 1993), pelvic inflammatory diseases and HIV (Van Der Pol, Kwok, Pierre-Louis, Rinaldi, Salata & Chen, 2008). HIV risky sexual behaviour can also result in unexpected consequences for both the individuals who engage in them and for the society at large. In addition to the risk of HIV infection, unwanted pregnancy could result from risky sexual behavior. Unwanted pregnancy could lead to an unplanned child birth or abortion and make academic success or employment difficult for the affected Mother (Miller et al., 2004). HIV risky sexual behaviour among young people has been attributed to poverty and lack of knowledge about HIV/AIDS and gender inequality (Avert, 2010; Fako, 2010)). Research evidence has revealed that many young people engage in watching pornography or sexual explicit material and it affects their sexual attitudes and the origin of their sexual behaviour (Brown & L'Engle, 2009). Pornography consumption has been viewed as a risk factor for HIV and STDs (Wright & Randall, 2012).

The social cognitive theory (Bandura, 1986) has been used to explain how consumption of explicit sexual material may affect young people's sexual risky behaviour. In the opinions of Seto, Maric, & Barbaree (2001), sexual behaviour may be learnt from sexually explicit material because such material provides information about the rewards and punishments of sexual behaviour. Therefore, when individuals associate little punishment and large amount of reward to a particular behaviour in sexually explicit material, such as, unsafe sex, such individuals are likely to learn such behaviour. For example, the reward of unsafe sex is emphasized in pornography while the negative consequences are neglected (Brosius, Weaver, & Staab, 1993; Jensen & Dines, 1998). Safe sex is usually absent in sexually explicit material. Vannier, Currie and O'Sullivan (2014) noted that actors in sexual explicit material use condoms in only 3% of scenes depicting penile-vaginal intercourse. Therefore, the use of condoms or any form of safe sex does not appear to be compatible with the pleasure of sex, as being displayed in sexually explicit material. Social cognitive theory therefore, suggests that young people may learn unsafe sex from sexually explicit material because such materials portray sex as a physical game between partners who do not have affection and commitment (Ertel, 1990; Jensen & Dines, 1998).

Research evidence has also identified gender differences in HIV risky sexual behaviour. Rangel and Garcia (2010) have suggested that men and women differ in the way they express their sexuality and their risky sexual practices. Research also revealed that the relationship between substance use and risky sexual practices differ across gender (Kingree & Betz, 2003). Similarly, some studies have noted that males who are sexually active are more likely to engage in sexual activity at a much earlier age than their female counterparts (Gillmore, 2002; Shisana & Simbayi, 2003). Hooke, Capewel and Whyte (2000) also identified gender differences in relation to prevention of pregnancy in sexual relationships and suggest that females tend to be more responsible for birth control than males. Sayles et al (2006) asserted that men have a greater tendency to engage in high-risk sexual behaviour than women. Many researchers have argued that men engage more in drug-related HIV risk behaviour compared to women while other researchers have suggested that women are more likely to engage in unprotected sex (Binswanger, Mueller, Beaty, Min & Corsi, 2014; Adams, Kendall, Smith, Quigley, Stuewig, & Tangney, 2013). Therefore, the findings are inconclusive regarding gender differences and HIV risky sexual behavior.

However, despite the documented increase of pornography consumption and its negative consequences on the youths, little attention has been given to the topic in Nigeria. Most research on HIV/AIDS in Nigeria are focused on family life HIV education (Abah, 2013), HIV risk among female sex workers (Ankomah, 2011), HIV among injecting drug users (Eluwa, 2013), and so on. Only a few studies on HIV risk behaviour have focused on pornography consumption in Nigeria. Most studies on pornography were conducted in the Western cultures and therefore, more attention needs to be given to the influence of pornography consumption on the youths in non-Western cultures such as Nigeria. It is therefore important to examine the Impact of pornography because in the opinion of Slap, Lot, Huang, Daniyam, Zink and Succop (2003) culture no longer has a grip on the youths in Nigeria, the society appears to be plagued with decayed moral codes and values and the sense of right and wrong has vanished. Furthermore, there is no consensus among researchers in the findings concerning the association between pornography consumption and

HIV risk behaviour. The present study investigates the joint and independent predictive strength of pornography viewing and gender differences on HIV risk behaviour. The study is relevant in the prevention of chronic diseases such as HIV/AIDS and STDs. The following research questions are raised: Can pornography viewing predict HIV risk behaviour? Can gender differences predict HIV risk behaviour? Two hypotheses would be tested:

1. Pornography viewing and gender will jointly and independently significantly predict HIV risk behaviour.
2. Male viewers of pornography will engage more in HIV risk behaviour than their female counterparts.

METHODS

Design and Sampling

The study was a survey research design. The Independent variables investigated were pornography viewing and gender differences while the dependent variable is HIV risky behaviour. A multi stage sampling technique was adopted to recruit participants into the study. Three faculties: Faculties of Law, Education and the Social Sciences, were purposively selected from the list of faculties of a Federal University in the South Western part of Nigeria. 12 departments were randomly selected from three faculties. Two lecture rooms were randomly selected from each department, across all students' levels; both undergraduate and post graduate levels. All unmarried participants in the selected lecture rooms were included in the study while those who were married were excluded .

Participants and setting

The sample size of the study consists of a total number of 596 randomly selected university students. The age of the sample ranged between 17 and 38 years with a mean of 23.28 and a standard deviation of 3.03. Three hundred and sixteen (53%) males and 280 (47%) females participated in the study. All participants were single. 511 (85%) participants were Christians, 75 (12.6) were Muslims, 7 (1.2%) had no religion while 3 (0.5%) reported practicing other religions. The study took place at the University of Ibadan, South Western part of Nigeria.

Research Instrument

The main instrument for sourcing information for this research was a structured questionnaire which consists of two sections: A and B. Section A consists of the social demographic characteristics of participants such as, age, gender, marital status, department, level of education, educational aspiration, highest degree they planned to attain, level of family discipline, level of family income and pornography viewing. Pornography viewing was assessed with an item adapted from the Sexual Behaviour Inventory of Sexual Knowledge and Attitude Test (SKAT), developed by Lief, Fullard and Devlin (1990). Participants were asked the question, "How frequently do you view pornographic material in your daily activities?" Responses for this item were measured on a 4-point scale ranging from 0=Not at all, 1=Once in a while, 2=Most days and 3=All days. High scores by participants indicate high frequency of pornography viewing and vice versa. Section B is a 14 item scale of HIV risk behaviour adapted from the HIV risk behavior scale developed by

Jarama et al, (2011). Items are focused on the potential risk of participants to contract HIV infections. Items tap information on whether participants have ever been forced or pressured into having sex and whether they find it difficult to use condoms every time they have sex and so on. Inter-correlations among the items ranged from .19 to .87. A Cronbach's alpha of .81 was obtained. Scale scores were the sum of all item responses. High scores by participants represent high levels of HIV risk behavior and vice versa.

Procedure for data collection

Having obtained the necessary permission from the university authorities and having randomly selected the departments and lecture rooms where the study would take place, instructions were read aloud to all the participants at the beginning of the study. Participants were made to understand that the purpose of the research was purely academic and they were informed to respond to the questions honestly. Having been assured of the anonymity and confidentiality of their responses, participants' consents were sought and obtained. The questionnaires were distributed to students who were present, by trained research assistants and participants were not given any incentive for participation. Given the sensitive nature of the questions, participants were well spaced from one another within the lecture rooms. Each participant was requested to concentrate on his or her own questionnaire and no communication was allowed among them for the duration of administration of questionnaires. All questionnaires were administered in English and all participants completed the questionnaires by themselves during class time, except two, who indicated they were not willing to complete the questionnaire for personal reasons. Seven other questionnaires were discarded because they were not properly filled to provide sufficient information on key variables. The research assistants were available during the process to attend to the questions posed by the students. A total of 605 questionnaires were administered, and 596 students completed their questionnaires properly. The completed copies were scored and analysed with Statistical Package for the Social Sciences (SPSS) software.

Statistical analysis

The statistical tools employed in this study were descriptive statistics, correlation analysis, linear regression and t- test for independent samples.

Ethical approval and consent

Ethical approval was obtained from the Social Sciences Ethics Committee, University of Ibadan. Both verbal and written consents were obtained from each participant before the questionnaires were administered.

RESULTS

Table 1.1. Zero - Order correlation showing the relationship among the variables of study.

	1	2	3	Mean	S.D
1 Gender	-			.53	.50
2 Pornography Viewing	.29**	-		2.87	1.18
3 HIV Risk Behaviour	.29**	.38**	-	3.44	3.25

**correlation significant at 0.01 level two tailed.

Correlation analysis was conducted to determine the relationship among all the variables of the study in table 1.1 above. Results show that gender ($r = .29, p < .01$) and pornography viewing ($r = .38, p < .01$) were significant and positive correlates of HIV risk behavior.

Table 1.2. Summary of linear regression showing the independent and joint predictive strengths of gender differences and pornography viewing on HIV risk behavior.

Model	R	R ²	ΔR^2	F	Sig	B	T	Sig
Gender						.20	4.95	.00
	.43	.18	.18	59.01	< .01			
Porn Viewing						.32	7.87	.00

The results of the linear regression displayed in table 1.2 above reveals that gender differences and pornography viewing significantly and jointly predicted HIV risk behavior ($R^2 = .18; F = 59.01; p < .01$). Gender and pornography viewing accounted for 18% of the variance observed in the prediction of HIV risk behavior. The table also shows that gender ($\beta = .20, p < .01$) and pornography viewing ($\beta = .32, p < .01$) significantly independently predicted HIV risk behaviour.

Table 1.3 - Summary of T-test showing gender differences on HIV risk behaviour.

Gender	N	Mean	SD	t	df	Sig
Male	307	4.33	3.39			
			7.29	581	.00	
Female	276	2.45	2.78			

The results of the t – test reveal the difference between the mean scores of males and females on HIV risk behavior scale. The mean scores indicate that male participants (mean= 4.33, SD= 3.39, $p < .01$) significantly engaged more in HIV risk behaviour than their female counterparts (mean= 2.45, SD= 2.78).

DISCUSSION

The findings of this study indicated that pornography viewing jointly and independently significantly predicted HIV risky behavior among the participants of study. This outcome corroborates the conclusions of other existing studies. Stenhammar, Ehrsson & Akerud (2015) reported a significant relationship between increased pornography consumption and early sexual debut, multiple sexual partners and casual sex partners. Vannier, Currie & O’Sullivan (2014) found that pornography viewing was associated with the increasing popularity of heterosexual anal sex, which is displayed in some pornographic scenes. Similarly, Diamond (2009) documented some

evidence to suggest that pornography is related to sexual aggression among participants. The results are consistent with the findings of Peter and Valkenburg (2016) who reported an association between pornography use and more permissive sexual attitudes with stronger gender-stereotypical sexual beliefs. Sun, Bridges, Johnson and Ezzell, (2016), also link viewing of violent pornography to increased tendencies for sexually aggressive behaviour. The conclusion of this study also confirms the submission of Donevan and Mattebo (2017) who observed that people who view hard core pornography frequently, are more likely to engage in various kinds of sexual activities, get involved in sexual fantasies and show signs of being occupied with sexual activity. It is also in agreement with researchers who identified an association between regular viewing of pornography and engagement in sexual force and abuse by boys (Stanley, Barter, Wood, Aghtaie, Larkins, Lanau & Overlien, 2016). The prediction of HIV sexual risky behaviour by pornography consumption has been explained by Williams, et al (2009) who suggested that watching pornography encourages viewers to replicate the types of behaviours they view. Jenkins (2007) also believes that the evolving cognitive and psychosocial development of young people may make them vulnerable to sexual curiosity and experimentations.

This study also revealed significant gender differences in HIV risky sexual behavior among participants. This result confirms the conclusion of Petersen and Hyde (2001) who reported gender differences in prevalence of heterosexual activity, masturbation and sex fantasies. Further analysis reveals that male participants engaged in HIV risky behavior more than their female counterparts. This is also in line with previous findings. Shisana and Simbayi (2003) reported that sexually active boys engaged in sexual activity at a much earlier age than their female counterparts. Amoateng and Kalule-Sabiti (2013) indicated that a greater percentage of male were sexually experienced compared to female and they also initiated sexual intercourse earlier than their female counterparts. Dunkle and Decker (2013) documented that a larger percentage of male reported having experienced sexual intercourse and having multiple sexual partners than their female participants. Similarly, Kaestle and Allen (2011), identified a higher percentage of male university students had masturbated compared to their female participants. Many other studies have revealed that boys are more likely to initiate sexual intercourse, higher prevalence rate, more frequent sexual behaviors and much higher risky behaviour than girls (Li, Huang, Cai, Xu, Huang & Shen, 2009; Zuo, Lou, Gao, Cheng, Niu & Zabin, 2012). However, the reason why men seem to be more engaged in HIV risky sexual behaviour than women has been attributed to cultural beliefs relating to men being expected to initiate sexual activity while women are expected to remain virgins till they are married and be less sexually initiating than men (Pan, 2008). Women's engagement in premarital sexual activity tends to result in social and emotional sanctions by the society (Song, Zhang & Zhou, 2006). Women are also blamed and stigmatized when sexual encounters leads to pregnancy or STIs (Higgins & Sun, 2007). In many cultures, men appear to have more freedom for premarital sexual activity than women (Lyons, Giordano, Manning, & Longmore, 2011).

CONCLUSION

This study found that pornography viewing and gender differences independently and jointly predicted HIV risky behavior among the participants. Identifying pornography viewing and gender differences as contributing factors to HIV risky behaviour therefore raises some important public health issues, particularly among the youth population. The findings also revealed that male participants significantly engaged in HIV sexual risky behavior than their female counterparts.

IMPLICATION AND RECOMMENDATION

The above findings suggest that participants' gender and use of pornography should be considered when examining HIV risky sexual behavior. It has contributed to existing knowledge relating to the attitudes of youth concerning sexual activity and HIV risky behaviour. Given the negative consequences of pornography on the youth population, the findings could be used to review school curriculum on sex education. It is therefore recommended that policy makers should ensure that measures are taken to regulate youth indiscriminate access or censor pornographic material. Consistent efforts should be made to educate the youth and create adequate awareness on the consequences of risky sexual behavior for the purpose of combating the menace of sexually transmitted diseases and HIV/AIDS.

LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

The participants for this study were selected from a single public university, future research may consider a cross sectional study to include other public and private universities. Additional Independent variables should be considered in order to explore other factors that could contribute to HIV risky behaviour. Future research may also consider the influence of different levels of pornography viewing such as high, low or moderate levels of consumption of pornography on HIV sexual risky behaviour. This will allow for a deeper understanding of the subject matter.

REFERENCES

- Abah, R. C. (2013). The universal basic education programme and the family life HIV education in Nigeria. *International Journal of Development and Sustainability*, 2(2)
- Absalon, J., Fuller, C.M., Ompad, D.C., Blaney, S., Koblin, B., Galea, S & Vlahov, D. (2006). Gender differences in sexual behaviors, sexual partnerships, and HIV among drug users in New York City. *AIDS and Behavior*, 10, 707-715.
- Adams, LM, Kendall, S, Smith, A, Quigley, E, Stuewig, JB, & Tangney, JP. (2013). HIV risk behaviors of male and female jail inmates prior to incarceration and one year post-release. *AIDS Behaviour*, 17(8), 2685-94.

- American Psychological Association. (2007). Report of the APA task force on the sexualization of girls. Washington, DC. Retrieved from www.apa.org/pi/wpo/sexualization.html
- Amoateng, A.Y. and Kalule-Sabiti, I. (2013). Social Structure and Sexual Behaviour of Black African Adolescents in the North West Province, South Africa. *South African Review of Sociology*, 44 (1): 131-157.
- Ankomah, A. (2011). HIV-related risk perception among female sex workers in Nigeria' *HIV/AIDS. Research and Palliative Care*. 3:93-100.
- Arrington-Sanders, R., Harper, G.W., Morgan, A., Ogunbajo, A., Trent, M., & Fortenberry D. (2015) The role of sexually explicit material in the sexual development of same-sex-attracted Black adolescent males. *Arch Sex Behav*.2015;44:597-608.
- Avert .(2014). HIV/AIDS in Sub Saharan Africa. Accessed 20th September, 2014. Available: <http://www.avert.org/hiv-aids-sub-saharanafrica.htm>
- Avert. A. (2010). Sex education that works. Downloaded from www.avert.org/sex-education.
- Alexy, E. M., Burgess, A. W., & Prentky, R. A. (2009). Pornography use as a risk marker for an aggressive pattern of behavior among sexually reactive children and adolescents. *Journal of the American Psychiatric Nurses Association*, 42, 442–453.
- Bandura, A. (1986). Social foundations of thought and action. A social cognitive theory. Upper Saddle River, NJ: Prentice Hall.
- Binswanger, IA, Mueller, SR, Beaty, BL, Min, SJ, & Corsi, KF. (2014). Gender and risk behaviors for HIV and sexually transmitted infections among recently released inmates: a prospective cohort study. *AIDS Care*, 26(7), 872–881. doi:10.1080/09540121.2013.859650.
- Braun-Courville, D. K., & Rojas, M. (2009). Exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors. *Journal of Adolescent Health*, 45, 156–162.
- Bridges A, Johnason J, Ezzell M. (2014). Pornography and the male sexual script: an analysis of consumption and sexual relations. *Arch Sex Behaviour*. Published Online: 3 Dec 2014.
- Brosius, H.B., Weaver, J. B., & Staab, J. F. (1993). Exploring the social and sexual reality of contemporary pornography. *Journal of Sex Research*, 30, 161–170.
- Brown, J. D., Keller, S., & Stern, S. (2009). Sex, sexuality, sexting, and sexed: Adolescents and the media. *The Prevention Researcher*, 16(4), 12–16.
- Brown, J. D., & L'Engle, K. L. (2009). X-Rated: Sexual attitudes and behaviours associated with U.S. early adolescents' exposure to sexually explicit media. *Communication Research*, 36, 129–151.
- Buzzell, T. (2005a). Demographic characteristics of persons using pornography in three technological contexts. *Sexuality & Culture*, 9, 28-48.
- Cherie, A., & Berhane, Y. (2012). Peer Pressure Is the Prime Driver of Risky Sexual Behaviors among School Adolescents in Addis Ababa, Ethiopia. *World Journal of AIDS* 2: 159–164.
- Cooper, A., Delmonico, D. L., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. *Sexual Addiction and Compulsivity*, 7, 5-29.
- Diamond, M. (2009). Pornography, public acceptance and sex related crime. A review. *International Journal of Law and Psychiatry*.32:304–314.

- Donevan, M., & Mattebo, M. (2017). The Relationship between Frequent Pornography Consumption, Behaviors, and Sexual Preoccupancy among Male Adolescents in Sweden, Sexual & Reproductive Healthcare. DOI: 10.1016/j.srhc.2017.03.002
- Dunkle, K.L, Decker, M.R. (2013). Gender-based violence and HIV: Reviewing the evidence for links and causal pathways in the general population and high-risk groups. *American Journal of Reproduction*. 69: 20-26.
- Eluwa, G. I. (2013). A profile on HIV prevalence and risk behaviours among injecting drug users in Nigeria: Should we be alarmed?' *Drug and Alcohol Dependence*. 127(1-3):65-71.
- Ertel, H. (1990). Erotica and pornography. Representative survey and psychophysiological longitudinal study on consumption and effects. Munich, Germany: PVU.
- Fako, T.T. (2010). The Connection between Poverty, Sexual Activity, Knowledge about HIV/AIDS and Willingness to Test for HIV Infection among Young People. *European Journal of Social Sciences* 15: 115–128.
- Flood, M. (2007). Exposure to pornography among youth in Australia. *Journal of Sociology*, 43, 45–60. *Public Health Nursing*, 28 (4), pp. 366-378.
- Grodstein, M.B., Goldman, D.W. & Cramer, D.M.(1993). Relation of tubal infertility to history of sexually transmitted diseases. *American Journal of Epidemiology*, 137 (5) (1993), pp. 577-584
- Hald, G. M., Malamuth, N., & Yuen, C. (2010). Pornography and attitudes supporting violence against women: Revisiting the relationship in nonexperimental studies. *Aggressive Behaviour*, 36, 14-20.
- Haggstrom-Nordin, E., Sandberg, J., Hanson, U., & Tide, T. (2006). “It’s everywhere!” Young Swedish people’s thoughts and reflections about pornography. *Scandinavian Journal of Caring Science*, 20, 386–393.
- Harkness, E.L., Mullan, B.M., & Blaszczyński, A. (2015). Association between pornography use and sexual risk behaviors in adult consumers: A systematic review. *Cyberpsychol Behav Soc Netw*. 18:59-71.
- Higgins, L. T., & Sun, C. (2007). Gender, social background, and sexual attitudes among Chinese students. *Culture, Health, and Sexuality*, 9, 31–42.
- Hooke, L., Capewel, S., & Whyte, M. (2000). Gender differences in Ayrshire teenagers attitudes to sexual relationships, responsibility and unintended pregnancies. *Journal of Adolescence*. 23: 477-486.
- Hunter, J. A., Figueredo, A. J., & Malamuth, N. M. (2010). Developmental pathways into social and sexual deviance. *Journal of Family Violence*, 25,141–148.
- Jarama L., Stultz NA., Parillo KM., Snyder F. & Young P. (2011). Development of an HIV/STD Screening Index to Measure HIV/STD Risk in Adolescents, *Journal of HIV/AIDS & Social Services*, 10:3, 230-247, DOI:10.1080/15381501.2011.596766
- Jenkins, R. R. (2007). Delivery of health care to adolescents. In: Kliegman RM, Behrman, R.E, Jenson, H.B, editors. *Nelson Textbook of Pediatrics*. 18th ed. Philadelphia, PA: Saunders.
- Jensen, R., & Dines, G. (1998). The content of mass-marketed pornography. In G. Dines, R. Jensen, & A. Russo (Eds.), *Pornography. The production and consumption of inequality* (pp. 65–100). New York: Routledge.

- Kaestle, C., & Allen, K. (2011). The Role of Masturbation in Healthy Sexual Development: Perceptions of Young Adults. *Arch Sex Behav*. 40(5):983–994. doi: 10.1007/s10508-010-9722-0.
- Kingree, J.B. & Betz, H. (2003). Risky sexual behaviour in relation to marijuana and alcohol use among African-American male adolescent detainees and their female partners. *Drug and Alcohol Dependence*. 72:197–203.
- Klaassen, M.J., & Peter, J. (2014). Gender (In) equality in internet pornography: a content analysis of popular pornographic internet videos. *Journal of Sex Res Published Online*: 24 Nov 2014.
- Lenhart, A., Ling, R., Campbell, S., & Purcell, K. (2010). *Teens and mobile phones*. Washington, D.C.: Pew Research Center. Retrieved from <http://pewinternet.org/media/Files/Reports.pdf>.
- Lief, H.I., Fullard, W., & Devlin, S.J. (1990). A New Measure of Adolescent' Sexuality: SKAT-A. *Journal of Sexuality Education and Therapy*. 16, 79-91
- Li, S.H., Huang, H., Cai, Y., Xu, G., Huang, F.R., Shen, X.M. (2009). Characteristics and determinants of sexual behavior among adolescents of migrant workers in Shanghai (China) *BMC Public Health*. 9:195. doi: 10.1186/1471-2458-9-195.
- Lim, M.S., Carrotte, E.R., & Hellard, M.E. (2015). The impact of pornography on gender-based violence, sexual health and well-being: What do we know? *Journal of Epidemiology Community Health*. 70 (1):3-5.
- Lo, V. H., & Wei, R. (2005). Exposure to Internet pornography and Taiwanese adolescents' sexual attitudes and behavior. *Journal of Broadcasting and Electronic Media*, 49, 221–237.
- Lofgren-Martenson, L., & Mansson, S. (2010). Lust, love, and life: A qualitative study of Swedish adolescents' perceptions and experiences with pornography. *Journal of Sex Research*, 47, 568–579.
- Luder, M. T., Pittet, I., Berchtold, A., Akre, C., Michaud, P. A., & Suris, J. C. (2010). Associations between online pornography and sexual behavior among adolescents: Myth or reality? *Archives of Sexual Behavior*. Advanced online publication.
- Lyons, H., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2011). Identity, peer relations, and adolescent girls' sexual behavior: An exploration of the contemporary double standard. *Journal of Sex Research*, 48, 437–449.
- Marston, C., & Lewis, R. (2014). Anal heterosex among young people and implications for health promotion: A qualitative study in the UK. *BMJ Open* . 4(8):e004996.
- McElroy. (1997) Banning pornography endangers women. *ISIL Educational Pamphlet Series*. Benicia, CA: International Society for Individual Liberty.
- McKee A. (2014). The relationship between attitudes towards women, consumption of pornography, and other demographic variables in a survey of 1,023 consumers of pornography. *Int J Sex Health* 2014;19:31–45.
- Miller, J. D., Lyman, D., Zimmerman, R. S., Logan, T. K., Leukefeld, C., & Clayton, R. (2004). The utility of the Five Factor Model in understanding risky sexual behavior. *Personality and Individual Differences*, 36, 1611- 1626. doi:10.1016/j.paid.2003.06.009
- Mitchell, K. J., Wolak, J., & Finkelhor, D. (2007). Trends in youth reports of sexual solicitations, harassment and unwanted exposure to pornography on the Internet. *Journal of Adolescent Health*, 40, 116–126.

- Nigeria National Agency for the Control of AIDS (2014) 'Country Progress Report 2014'
- Owolabi, A.T., Onayade, A.A., Ogunlola, I.O., & Ogunniye, K. O. (2005). Sexual behaviour of secondary school adolescents in Ilesa, Nigeria: Implications for the spread of STIs including HIV/AIDS. *Journal of Obstetrics and Gynaecology*; 25(2):174-178. DOI: 10.1080/01443610500051460.
- Ouytsel, J. V., Ponnet, K., & Walrave, M., (2014). The associations between adolescents' consumption of pornography and music videos, and their sexting behavior. *Cyberpsychology, Behavior and Social Networking*, 17 (12), 772-778.
- Pan, S.M., (2008). Sexual value and sexual behavior among college students in contemporary China. Retrieved from <http://blog.sina.com.cn/s/blog>.
- Peter, J., & Valkenburg, P. M. (2010). Adolescents' use of sexually explicit Internet material and sexual uncertainty: The role of involvement and gender. *Communication Monographs*, 77, 357–375.
- Peter, J., & Valkenburg, P.M. (2011). The use of sexually explicit Internet material and its antecedents: A longitudinal comparison of adolescents and adults. *Arch Sex Behaviour* 40(5):1015-25.
- Peter, J., & Valkenburg, P.M. (2016). Adolescents and pornography: A review of 20 years of research. *Journal of Sex Research*. 53:509-31.
- Petersen, J.L., Hyde, J.S., (2001). Gender Differences in Sexual Attitudes and Behaviors: A Review of Meta-Analytic Results and Large Datasets. *Journal of Sex Research*. 48(2–3):149–165.
- Rangel, Y.Y, García, R. M. (2010). Influence of gender role on the sexual behavior of university students. *Index Enferm*. 19: <http://dx.doi.org/10.4321/S1132-12962010000300003>.
- Reid, R. C., Li, D. S., Gilliland, R., Stein, J. A., & Fong, T. (2011). Reliability, validity, and psychometric development of the Pornography Consumption Inventory in a sample of hypersexual men. *Journal of Sex & Marital Therapy*, 37(5), 359–385.
- Rothman, E.F., Kaczmarzky, C., Burke, N., Jansen, E., & Baughman, A.(2015). Without porn...I wouldn't know half the things I know now : A qualitative study of pornography use among a sample of urban, low-income, black and Hispanic youth. *Journal of Sex Research*.52(7):736-46.
- Sayles, J.N., Pettifor, A.E., Wong, M.D., MacPhail, C., Lee, S.J., Hendriksen, E., Rees, H.V., & Coates, T. (2006). Factors associated with self-efficacy for condom use and sexual negotiation among South African youth. *Journal of Acquired Immune Deficiency Syndrome*. 43: 226-233.
- Seto, M. C., Maric, A., & Barbaree, H. E. (2001). The role of pornography in the etiology of sexual aggression. *Aggression and Violent Behavior*, 6, 35–53.
- Shisana, O. & Simbayi, L. (2003). Nelson Mandela/HSRC Study of HIV/AIDS: South African National HIV Prevalence, Behavioural Risks and Mass Media; Household Survey 2002. Cape Town: Human Sciences Research Council.
- Slap, G.B., Lot, L., Huang, B., Daniyam, C.A., Zink, T.M., & Succop, P.A. (2003). Sexual behaviour of adolescents in Nigeria: Cross sectional survey of secondary school students. *BMJ* ;326:15. DOI: 101136/bmj.236.7379.15.

- Song, S. Q., Zhang, Y., & Zhou, J. (2006). Comparison on sex knowledge, attitude, behavior, and demand between common high school students and occupational high school students. *Maternal and Child Health Care of China*, 21, 507–509.
- Stanley, N., Barter, C., Wood, M., Aghtaie, N., Larkins, C., Lanau, A., & Overlien, C. (2016). Pornography, Sexual Coercion and Abuse and Sexting in Young People's Intimate Relationships. *Journal of Interpersonal Violence*. 1-26. DOI: 10.1177/0886260516633204
- Stenhammar, C., Ehrsson, Y.T., & Akerud, H. (2015). Sexual and contraceptive behaviour among female university students in Sweden. *Acta Obstet Gynecol Scand* .94:253–9.
- Sun, C., Bridges, A., Johnson, J., & Ezzell, M. (2016). Pornography and the male sexual script: An analysis of consumption and sexual relations. *Archives of sexual behavior*, 1-12. DOI: 10.1007/s10508-014-0391-2
- Svedin, C.G., Akerman, I., & Priebe, G. (2011). Frequent users of pornography. A population based epidemiological study of Swedish male adolescents. *Journal of Adolesc* 34:779-88.
- Tylka, T. L. (2015). No harm in looking right? Men's pornography consumption, body image, and wellbeing. *Psychology of Men and Masculinity*, 16(1), 97-107.
- UNAIDS. UNAIDS report on the global AIDS epidemic (2013). http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/UNAIDS_Global_Report_2013_en.pdf. Accessed 31 Oct 2015.
- UNAIDS (2014) Joint United Nations Programmes on HIV/AIDS. *The Gap Report*.
- United Nations Population Fund (2003) State of World Population 2003; Making 1 Billion Count: Investing in Adolescents' Health and Rights. UNFPA.
- Underwood, C., Skinner, J., Osman, N., & Schwandt, H. (2011). Structural Determinants of Adolescent Girls' Vulnerability to HIV: Views from Community Members in Botswana, Malawi, and Mozambique. *Social Science & Medicine* 73: 343–350. *Journal of Research on Adolescence*, 11 (2) (2001), pp. 151-176
- Van Der Pol, C., Kwok, B., Pierre-Louis, A., Rinaldi, R.A., Salata, P.L., Chen, T. (2008). *Trichomonas vaginalis* infection and human immunodeficiency virus acquisition in African women. *Journal of Infectious Diseases*, 197 (4) (2008), pp. 548-554
- Vandenbosch, L., & Eggermont, S. (2013). Sexually explicit websites and sexual initiation: Reciprocal relationships and the moderating role of pubertal status. *J Res Adolesc* ;23:621-34.
- Vannier, S.A., Currie, A.B., & O'Sullivan, L.F. (2014). School girls and soccer moms: A content analysis of free “teen” and “MILF” online pornography. *Journal of Sex Research*.51:253-64.
- Watson, M.A., & Smith, R.D. (2012). Positive porn: educational, medical, and clinical uses. *American Journal of Sex Education* .122–45.
- Weinberg MS, Williams CJ, & Kleiner S.I.(2010). Pornography, normalization, and empowerment. *Arch Sex Behaviour* ;39:1389–401
- WHO (2006) Sexual Health : Definition and Answer.
- Williams, K. M., Cooper, B. S., Howell, T. M., Yuille, J. C., Paulhus, D. L. (2009). Inferring sexually deviant behavior from corresponding fantasies: The role of personality and pornography consumption. *Criminal Justice and Behavior*, 36(2), 198-222, doi:10.1177/0093854808327277

- Wilson, G. (2014). *Your brain on porn: internet pornography and the emerging science of addiction*. Commonwealth Publishing.
- Wolak, J., Mitchell, K., & Finkelhor, D. (2007). Unwanted and wanted exposure to online pornography in a national sample of youth Internet users. *Pediatrics*, *119*, 247–257.
- Wright, P. J. & Randall, A. K. (2012). Internet pornography exposure and risky sexual behavior among adult males in the United States. *Computers in Human Behavior*, *28*, 1410-1416.
- Wright, P.J., Sun, C., Steffen, N.J., & Tokunaga, R.S. (2014). Pornography, alcohol, and male sexual dominance. *Commun Monogr*.82:252-70.
- Zeitsch, B. P., Verweij, K. J. H., Bailey, J. M., Wright, M. J., & Martin, N. G. (2010). Genetic and environmental influences on risky sexual behavior and its relationship with personality. *Behavioral Genetics*, *20*(1), 12-21. doi:10.1007/s10519-009-9300-1.
- Zuo, X.Y., Lou, C.H., Gao, E., Cheng, Y., Niu, H.F., & Zabin, L.S. (2012). Gender Differences in Adolescent Premarital Sexual Permissiveness in Three Asian Cities. *Journal of Adolescent Health*. *50*:S18–S25.