CyberPsychology & Behavior
Volume 11, Number 2, 2008

DOI: 10.1089/cpb.2007.0054

Early Sexual Experiences: The Role of Internet Access and Sexually Explicit Material

SHANE W. KRAUS, M.A.[1] and BRENDA RUSSELL, Ph.D.[2]

ABSTRACT

The current study investigated whether viewing X-rated movies, Internet access in the home, and gender of the participant would differ between age of first initiation for oral sex, age of first initiation for sexual intercourse, and number of sexual partners. An online sample of 437 participants with an average age of 29.46 participated in the study. Each participant completed a survey that assessed early sexual behaviors and Internet and X-rated material exposure. Results discovered males with Internet access during the ages of 12 to 17 reported significantly younger ages for first oral sex compared to males without Internet access. In addition, male and female participants with Internet access, between the ages 12 to 17, reported younger ages for first sexual intercourse compared to participants without Internet access. Study limitations and implications are discussed.

INTRODUCTION

Early sexual experiences: The role of Internet access and sexually explicit material

Presently, adolescents throughout the United States are engaging in sexual activity at early ages, often reporting multiple sexual partners. One largely uncharted contributing factor may be exposure to sexually explicit mass media.[1] Numerous studies have explored the relationship between sexually explicit material (SEM) and its influence on adult attitudes and behaviors.[2–3] Unfortunately, there have been modest empirical studies collected on adolescents.[1,4–6] The term *sexually explicit material* is a nonspecific term that presents sexual content without deliberately censoring it. SEM is often used as a euphemism for pornography, including sexual intercourse and uncovered genitalia (e.g., video, written material, photography, art).[7]

Empirical research has, for the most part, overlooked the effects of SEM on adolescents in terms of multiple sexual-related outcomes such as early initiation of sexual intercourse, number of sexual partners, sexual beliefs, and intentions of having sex.[1] Although current rates for adolescent first sexual intercourse have slightly decreased over the last decade (53% in 1993 to 47% in 2003),[8] there is still no definitive reason why so many youth are engaging in sexual intercourse. Equally, the practice of oral sex has steadily increased in the last 15 years among adolescents.[9] New findings released by the Centers for Disease Control and Prevention (2005) indicated that 54% of female adolescents and 55% of male adolescents have engaged in oral sex. The report also suggested that participating in oral sex behaviors is now slightly more common than sexual intercourse among adolescents (15 to 19 years old).[10]

At present, there does not appear to be any well-documented evidence evaluating the effects of SEM exposure on oral sex practices among adolescents.[1] The accessibility of the Internet has allowed ado-

[1]Psychology Department, Castleton State College, Castleton, Vermont.
[2]Psychology Department, Penn State–Berks, Reading, Pennsylvania.

lescents unprecedented access to media,[11] including SEM.[6] Research has not clearly investigated whether sexual behaviors and attitudes (e.g., earlier ages for sexual intercourse, oral sex, and more sexual partners) differ in homes with or without Internet access.

Medias' influence on adolescents: Television, X-rated movies, and the Internet

A fair body of literature has explored the effects of mass media on a variety of age groups, demonstrating that age plays a significant factor in how information is processed and internalized.[12–14] Steele[14] discovered that teenagers are affected by the way they use, understand, or oppose suggestions from the media, often allowing the media to define sex, love, and relationships for them. A recent study by the Kaiser Family Foundation[11] on the lives of 2,032 students ranging from 3rd to 12th grade discovered that adolescents are gaining an unprecedented amount of media in their homes, their bedrooms, and through portable media devices (e.g., 68% have TV in their room, 37% have cable or satellite, 31% have a computer, and 20% have Internet access).[11] Collins et al.[13] surveyed 1,792 adolescents (12 to 17 years old) on television viewing habits and sexual experiences, and discovered that viewing sex on television may predict and increase the probability of adolescents engaging in sexual intercourse in the following year. More importantly, findings indicated adolescents who watched the highest amounts of sexual content on television were twice as likely to engage in sexual intercourse in the following year.[13]

Research has indicated that individuals exposed to X-rated movies (i.e., SEM) are more accepting of premarital sex, more likely to misjudge the prevalence of sexual activity, less likely to value the concept of marriage and monogamy, and more likely to consider sexual activity without emotional commitment.[15–16] Wingood et al.[5] surveyed 522 adolescent African American females (14 to 18 years old) and found 29.7% of their sample had viewed X-rated movies, and exposure to X-rated movies was related to more negative attitudes toward using condoms and more positive attitudes toward having multiple sexual partners and having sex frequently. Determining the extent to which the Internet may or may not affect initiation of early sexual behaviors in adolescents has not been clearly defined.

Over the past 10 years, Internet use has skyrocketed. In 2006, it was estimated that 74% of U.S. citizens had access to the Internet at home.[17] On average, 9- to 17-year-old youths use the Internet about four days a week, around two hours each time,[18] and it was estimated in 2003 that 90% of U.S. adolescents (12 to 18 years old) had Internet.[19] At present, few studies have examined rates of adolescent exposure to SEM while online. Mitchell et al.[20] surveyed youths (10 to 17 years old) and found that 25% of regular Internet users reported at least one or more exposures to sexually explicit pictures while online. Similarly, in a U.S. sample of 1,501 children and adolescents, Ybarra and Mitchell[4] discovered that 15% of regular Internet users reported deliberate (i.e., wanted) exposure to pornographic material in the previous year. Surprisingly, they discovered only a quarter of parents surveyed reported using parental control software for computers.[4] Recent findings have also suggested that seekers of pornography both online and offline were more likely to be male, older in age, sexually curious, and experienced with computer Internet access.[4,21]

Wolak et al.[6] found 42% of adolescents (10 to 17 years old) surveyed had been exposed to online pornography in the past year. Of those, 66% reported unwanted exposure. Adolescents reporting wanted exposure were typically adolescent boys. Findings indicated that 38% of male Internet users aged 16 to 17 deliberately visited an X-rated Web site within the past year. Forms of prevention to reduce unwanted exposure have increased to include law enforcement presentation regarding Internet safety and filtering, blocking, or monitoring software. However, these strategies have had a modest protective effect.[6]

Current research

The current study investigated whether viewing X-rated movies, access to Internet in the home, and participant gender would differ among dependent variables including age of first initiation for oral sex, age of first initiation for sexual intercourse, and number of sexual partners. We predicted males with exposure to X-rated movies and Internet access would have a significantly lower age of initiation for oral sex, age of first sexual intercourse, and a greater number of sexual partners compared to both females and males not exposed to X-rated movies. These findings would support the notion that individuals with Internet access (where SEM is readily available), coupled with exposure to X-rated material, may report younger ages for early sexual behaviors than participants without Internet access or X-rated movies exposure.

METHODS

Participants

A convenience sample of 437 participants was collected online (275 females [63%] and 172 males [37%]). The average age for participants was 29.46 (SD = 11.76). The majority of the sample identified themselves as Caucasian (82%) and heterosexual (92%). Only 41 (9.4%) participants reported never having sex (virgins), and 48 (11%) respondents reported never having participated in oral sex.

Materials

Variables of interest. Five individual items developed by the first author were used to measure exposure to X-rated movies, Internet access, and early sexual history. The first two items assessed exposure and accessibility to SEM between the ages of 12 and 17. Participants responded to forced-choice questions with answer options of yes or no. Items consisted of "When I was between the ages of 12 to 17, there was a computer with Internet access in the home," and "When I was between the ages of 12 to 17, I viewed X-rated movies with friends." The next three items were designed to measure dependent variables of interest, including age of first oral sex, age of first sexual intercourse, and number of sexual partners. Example questions consisted of "What approximate age were you when you first had sexual intercourse?" and "How many sexual partners have you had in your lifetime?" Survey items had a drop-down menu for participants to select the approximate response. Demographic information was also collected to obtain information about each participant (e.g., gender, age, education, sexual orientation).

Procedure

To recruit participants, a campuswide e-mail was sent throughout a small, northeast state-funded liberal arts college. Additionally, the survey was available online and posted on several Web sites (e.g., Hanover College Psychological Research Online) designed to recruit participants for psychological research. The researcher also recruited participants using the StudyResponse Project. Participants recruited from StudyResponse were sent an e-mail outlining the purpose of the study and requesting participation. StudyResponse participants were assigned participant numbers to prevent duplicate entries and to be used by StudyResponse for an incentive drawing. As another precaution, the Internet protocol (IP) for each participant was tracked to prevent duplicate submissions. Participants recruited from the StudyResponse Project received the opportunity to win two $75 gift certificates.

Participants began the study by completing an electronic informed consent form. Once the online consent form was checked, participants were presented with the survey. Upon completion, participants selected the enter button, anonymously storing their responses. All instructions corresponded to the American Psychological Association code of ethics.

RESULTS

A filter question was used to assess SEM exposure during adolescence: "When I was between the ages of 12 to 17, I saw SEM." Participants responded yes or no. The majority of study participants (n = 366, 83.8%) reported seeing some form of SEM.[a] Participants who did not report any exposure to SEM were precluded from answering the X-rated movies item and therefore removed from subsequent analyses.

Due to unequal cell sizes, a unique sum of squares was used for subsequent analyses. As a result of the sensitivity to outliers, 10 participants were eliminated from further analysis because of extreme outliers in either age of first oral sex, age of first sexual intercourse, or number of sexual partners. In addition, because age played a large role in determining Internet and SEM accessibility, age was used as a covariate in all analyses. Dependent variables of interest (e.g., age of first initiation for oral sex, age of first initiation for sexual intercourse, and number of sexual partners) were significantly correlated from $r = 0.10$ to $r = 0.66$ ($p < 0.05$).

Gender, oral sex, sexual intercourse, and number of sexual partners

A one-way factorial between-subjects MANCOVA was conducted to examine whether gender

[a]The researchers examined whether gender and SEM exposure would influence dependent variables age of first oral sex, first sexual intercourse, and number of sexual partners. A 2 × 2 (SEM exposure: yes or no × participant gender: male or female) factorial between-subjects MANCOVA was conducted, controlling for age. Results indicated that the covariate age was significant, Wilks's $\Lambda = 839$, $F(1, 425) = 26.78$, $p = 0.001$, partial $\eta^2 = 0.16$, and there was no interaction for gender and SEM exposure, nor any main effects for age of first oral sex, first intercourse, and number of sexual partners, Wilks's $\Lambda = 0.997$, $F(1,435) = 0.425$, $p = 0.74$, partial $\eta^2 = 0.003$. Study findings illustrated that no significant difference was found between participants with or without exposure to SEM between the ages of 12 to 17.

would differ between the dependent variables of interest—age for first oral sex, sexual intercourse, and number of sexual partners—with participant age as a covariate. Results demonstrated that gender was not statistically significant, $F(1, 425) = 1.71$, $p = 0.165$, partial $\eta^2 = 0.012$. Mean age for initiation of sexual intercourse, oral sex, and number of sexual partners were similar for both males ($M = 15.55$, $SD = 7.11$; $M = 15.33$, $SD = 6.64$; $M = 8.40$, $SD = 11.30$ respectively) and females ($M = 15.14$, $SD = 6.20$; $M = 15.99$, $SD = 5.62$; $M = 6.94$, $SD = 7.39$ respectively).

Gender, Internet access, and exposure to X-rated movies

Researchers then examined whether males with exposure to X-rated movies and access to Internet during the ages of 12 to 17 would differ from females with regard to initiation of oral sex, age of first sexual intercourse, and number of lifetime sexual partners. A 2 × 2 ×2 (gender × access to Internet during ages of 12 to 17: yes or no × exposure to X-rated movies: yes or no) factorial between-subjects MANCOVA was conducted, with participant age as a covariate. Results revealed a gender by Internet access interaction, $F(3, 336) = 2.97$, $p = 0.03$, partial $\eta^2 = 0.03$. Univariate followups indicated a significant interaction effect for age of oral sex, $F(3, 448) = 5.83$, $p = 0.02$, partial $\eta^2 = 0.018$. Means for age of oral sex was significantly different for males with Internet access. Males with access to the Internet had oral sex at a significantly younger age ($M = 12.96$, $SD = 6.49$) than males without access to the Internet ($M = 16.89$, $SD = 7.02$). Mean scores for age of oral sex for females with access to Internet ($M = 15.06$, $SD = 6.36$) did not differ from females without access to Internet ($M = 15.52$, $SD = 5.66$).

Results also indicated a significant main effect for gender and age of first sexual intercourse, $F(3, 348) = 4.56$, $p = 0.03$, partial $\eta^2 = 0.03$. Both males and females with access to Internet had significantly lower ages of first sexual intercourse than those without Internet access. Males with Internet access reported a significantly younger mean age of first sexual intercourse ($M = 12.33$, $SD = 6.92$) than males with no Internet access ($M = 16.92$, $SD = 5.73$). Similarly, females with Internet access had sexual intercourse at significantly younger ages ($M = 14.92$, $SD = 6.21$) compared to females without Internet access ($M = 16.61$, $SD = 4.14$). There were no significant differences for number of sexual partners.

An Internet access by X-rated movies interaction was found, $F(3, 348) = 5.83$, $p = 0.02$, partial $\eta^2 = 0.033$. Univariate followups found respondents with access to the Internet and who reported watching X-rated movies initiated oral sex at a significantly older age compared to those who did not watch X-rated movies but had access to the Internet, $F(3, 348) = 5.90$, $p < 0.02$, partial $\eta^2 = 0.017$. Table 1 demonstrates that participants with no access to the Internet, and who watched or did not watch X-rated movies, were generally older when they initiated oral sex.

Table 1. Mean Ratings of Age of Oral Sex for Internet Access and X-Rated Movies

Internet access	*Watched X-rated movies*	*Mean*	*SD*
Yes	Yes	15.41[a]	5.15
Yes	No	12.59[a]	7.40
No	Yes	15.85	5.10
No	No	16.51	6.50

$p < 0.02$, $F(3, 348) = 5.83$, partial η^2=0.017, covariate = 29.00 years old.

Note: Subscript indicates a significant difference.

Univariate followups also showed significant differences in ages of first intercourse, $F(3, 348) = 10.95$, $p < 0.001$, partial $\eta^2 = 0.03$. Interestingly, participants with access to the Internet but who were not exposed to X-rated movies were significantly younger at age of first intercourse ($M = 11.72$, $SD = 7.98$) than participants with access to Internet and exposure to X-rated movies ($M = 15.52$, $SD = 5.17$) or those with only access to X-rated movies ($M = 16.41$, $SD = 4.20$) or no access to Internet or X-rated movies ($M = 17.11$, $SD = 4.90$).

DISCUSSION

The primary focus of this study explored whether age of first oral sex, first sexual intercourse, and number of sexual partners would differ by gender, Internet access, and exposure to X-rated movies between the ages of 12 to 17. It was expected that males with exposure to X-rated movies and Internet access would be significantly younger for initiation of oral sex and for first sexual intercourse and would have a higher number of sexual partners compared to females or males not exposed to X-rated movies. Our results did not support the expected three-way interaction; instead it illustrated two separate two-way interactions.

A gender by Internet access interaction indicated males with Internet access reported younger ages

for oral sex compared to males with no Internet access. These findings suggest that Internet access for males may influence earlier initiation of oral sex behaviors. Both males and females with Internet access were also found to report significantly lower ages of first sexual intercourse than participants without Internet access. Similarly, Collins et al.[13] discovered that adolescents with high exposure to sexually explicit media on television reported early ages for sexual intercourse initiation. The researchers speculate the same phenomenon may be occurring with adolescents who use of the Internet, especially due to the accessibility of SEM online.[6] Furthermore, we postulate that the Internet, which often promotes and sells SEM, may be acting as an accelerant for earlier reported ages for first oral sex and first sexual intercourse. We also believe that our results partially mirror the findings of Collins and her colleagues.[13]

Results discovering an Internet access by X-rated movie interaction also showed that participants with Internet access and exposure to X-rated movies reported older ages for initiation of first oral sex compared to participants with Internet access alone. Even when controlling for age, this effect might infer Internet access alone, and not the combination of Internet and X-rated movies, plays a crucial role in age of initiation of first oral sex. Similarly, results found participants with only Internet access also reported significantly younger ages for first sexual intercourse than participants who had Internet access and viewed X-rated movies or had no Internet access or exposure to X-rated movies.

Surprisingly, the number of sexual partners did not differ by Internet access, exposure to X-rated movies, or participant gender. This result contradicts previous studies[5,15–16] indicating individuals exposed to X-rated movies are more likely to misjudge the prevalence of sexual activity, less likely to value the concept of marriage and monogamy, and more likely to consider sexual activity without emotional commitment. This finding was not expected and may suggest that number of sexual partners does not theoretically differ in people because of Internet access, exposure to X-rated movies, and participant gender. This finding may be attributable to other factors, such as sex beliefs, adversarial sex roles, and family upbringing.

Limitations

The current research has several limitations. First, using the Internet to obtain participants has its restrictions. Nevertheless, online research has several key benefits, including the ability to collect a large variety of data from a homogenous population,[22] and it allows for the use of a standardized set of procedures that would for possible experimenter effects.[23] Just as psychology undergraduate students are not considered representative of all undergraduate students, online participants are not representative of all greater population.[23] Gosling et al.[24] found that even though Internet samples are not always the most representative of the population at large, they may be more representative than the samples published in highly selective psychology journals that primarily use college students as participants.

It should also be noted that by using an Internet sample for this research, we may be missing an important population of individuals who do not have access to computer or who choose not to complete Internet research studies. These individuals may simply use other media outlets to watch SEM or may not have been exposed to SEM. Nonetheless, while we found that individuals reporting exposure to SEM during the ages of 12 to 17 did not differ from participants reporting no SEM exposure on dependent variables of interest, it is important to compare the current research results with predictors of sexual behaviors for those individuals who do not have access to computers or SEM exposure during adolescence. In this study, participants were asked to recall when they were between the ages of 12 to 17 years old. Recall can be problematic and lead to inaccurate reporting, particularly for older adults, and therefore results should be not be viewed as conclusive. The true difference between SEM and Internet access on adolescent sexual behavior must be furthered explored. The unavailability of the Internet to many older individuals can be a limitation despite that the current research used age as a covariate to reduce potential error. This research also did not measure participants' exposure to X-rated movies before the age of 12 or after the age of 18. Likewise, the study measured only one specific behavior (viewing X-rated movies with friends), and did not include other possible behaviors such as viewing X-rate movies by oneself or with siblings.

Lastly, study findings also reported relatively small values of effect size (partial η^2) for both MANCOVAs, suggesting that the independent variables did not appear to act as crucial roles in early sexual experiences. Additional factors such as sexual attitudes, sex roles, family environment, and values may explain this large, unexplained variance. The dependent variables used in this study consisted of individual survey items (e.g., age of oral sex, intercourse, and number of sexual partners). Future research should examine attitudinal and personality

constructs that may be potential contributors to our research findings. Furthermore, future research should examine a greater spectrum of early sexual behaviors and establish corresponding reliability and validity. Controlling for social desirability and impression management for study participants may have provided for greater accuracy for the measures used in this study.

The current research also did not assess whether computer safeguards (e.g., parental software, V-chip) were installed on computers and televisions to guard against SEM exposure. Therefore, it is unknown whether participants had legitimate Internet access to SEM. Bross[25] found that twice as many parents do not use "guard" software as use it, and research recently has indicated that software and parental controls might not be as effective in preventing unwanted exposure or participation with SEM.[10,22] However, Wolak et al.[6] recently found that using parental software reduced unwanted exposure by 40% when monitored properly. Therefore, future research should consider examining such prevention safeguards. Furthermore, the study sample contained more women (275) than men (172). Although statistics conducted attempted to control for this using a unique sum of squares, the gender asymmetry of the sample suggests caution be used when interpreting the results of this study.

Future research should expand on and control for some of the limitations mentioned in this study. Replication should be conducted to compare results and allow for additional variables to be examined that may contribute to study findings. Constructs can be created to better assess early sexual experiences. The role of parental software and appropriate techniques for monitoring adolescent online behavior needs to be explored further. It may be prudent for educational programs to begin addressing appropriate online behaviors for adolescents, including ways for youth to stay safe online. Such instruction may reduce both unwanted and wanted exposure to SEM. In sum, the researchers strongly recommend that parental guardians open dialogue with their children about healthy sexual behaviors instead of simply prohibiting computers with Internet access.

REFERENCES

1. Escobar C, Tortolero SL, Markham SR, Low CM, Eitel BJ, Thickstun P. Impact of media on adolescent sexual attitudes and behaviors. Pediatrics 2005; 16:303–27.
2. Boies SC. University students uses of and reactions to online sexual information and entertainment: links to online and offline sexual behavior. The Canadian Journal of Human Sexuality 2002; 11:77–81.
3. Morrison TG, Bearden A, Harriman R, Morrison MA, Ellis SR. Correlates of exposure to sexually explicit material among Canadian post-secondary students. The Canadian Journal of Human Sexuality 2004; 13:143–56.
4. Ybarra M.L, Mitchell KJ. Exposure to Internet pornography among children and adolescents: a national survey. CyberPsychology & Behavior 2005; 8:473–86.
5. Wingood GM, DiClemente RJ, Harrington K, Davies S, Hook EW, Kim M. Exposure to X-rated movies and adolescents' sexual and contraceptive related attitudes and behaviors. Pediatrics 2001; 107:1116–19.
6. Wolak J, Mitchell K, Finkelhor D. Unwanted and wanted exposure to online pornography in a national sample of youth Internet users. Pediatrics 2007; 119:247–57.
7. Fisher WA, Barak A. Internet pornography: a social psychological perspective on Internet sexuality. Journal of Sex Research 2001; 38:312–23.
8. Kaiser Family Foundation (2005). U.S. Teen Sexual Activity. www.kff.org/youthhivstds/upload/U-S-Teen-Sexual-Activity-Fact-Sheet.pdf (accessed February 1, 2007).
9. Francoeur R. (2004). Premarital sex before age 15. In Francoeur R, Noonan RJ, eds., *The continuum complete international encyclopedia of sexuality*. New York: Continuum International Publishing Group, pp. 1187–96.
10. Mosher WD, Chandra A, Jones J. Sexual behavior and selected health measures: men and women 15–44 years of age, United States, 2002. National Health Statistics. Vital and Health Statistics 2005; 362:1–56.
11. Kaiser Family Foundation. (2005). Generation M: media in the lives of 8–18 year-olds. www.kff.org/content/reports.cfm (accessed September 19, 2006).
12. Brown J. Adolescents' sexual media diets. Journal of Adolescent Health 2000; 27:35–40.
13. Collins RL, Elliott MN, Berry SH, Kanouse DE, Kunkel D, Hunter SB, Miu A. Watching sex on television predicts adolescent initiation of sexual behavior. Pediatrics 2004: 114:280–9.
14. Steele JR. Teenage sexuality and media practice: factoring in the influence of family, friends, and school. Journal of Sex Research 1999; 36:331–41.
15. Zillman D, Bryant J. Effects of prolonged consumption of pornography on family values. Journal of Family Issues 1988; 9:518–44.
16. Zillman D, Bryant J. Pornography's impact on sexual satisfaction. Journal of Applied Social Psychology 1988; 18:438–53.
17. Nielsen/NetRatings. (2006). Two-thirds of active U.S. web population using broadband, up 28 percent year-over-year to an all-time high, according to Nielsen/NetRatings. www.neilsen-netratings.com (accessed April 2006).
18. American Academy of Pediatrics, Committee on Public Education, American Academy of Child Adoles-

cent Psychiatry, American Psychological Association. 2001. Sexuality, contraception, and the media. Pediatrics 107:191–4.
19. UCLA Center for Communications Policy. (2003). UCLA Internet report-year three. UCLA Center for Communication Policy.
20. Mitchell KJ, Finkelhor D, Wolak J. The exposure of youth to unwanted sexual material on the Internet: A national survey of risk, impact, and prevention. Youth & Society 2003; 34:330–58.
21. Peter J, Valkenburg PM. Adolescents' exposure to sexually explicit material on the Internet. Communication Research 2006; 33:178–204.
22. Kraut R, Olson J, Banaji, M, Buckman A, Cohen J, Couper M. Psychological research online: report of board of scientific affairs advisory group on the conduct of research on the Internet. American Psychology 2004; 59:105–17.
23. Birnbaum, MH. (2004). Methodological and ethical issues in conducting social psychological research via the Internet. In Sansone C, Morf CC, Panter AT, eds., *Handbook of methods in social psychology*. Thousand Oaks, CA: Sage, pp. 359–82.
24. Gosling SD, Vazire S, Srivastava S, John O. Should we trust Web-based studies: a comparative analysis of six preconceptions about Internet questionnaires. American Psychologist 2004; 59:93–104.
25. Bross DC. Invited commentary: minimizing risks to children when they access the World Wide Web. Child Abuse & Neglect 2005, 29:749–52.

Address reprint requests to:
Shane W. Kraus
Psychology Department
Castleton State College
Black Science Building
Castleton, Vermont 05735

E-mail: swkraus@gmail.com

This article has been cited by:

1. Jennifer Riemersma, Michael Sytsma. 2013. A New Generation of Sexual Addiction. *Sexual Addiction & Compulsivity* **20**:4, 306-322. [CrossRef]
2. J. Michael Wilkerson, Alex Iantaffi, Derek J. Smolenski, Keith J. Horvath, B. R. Simon Rosser. 2013. Acceptability of HIV-Prevention Messages in Sexually Explicit Media Viewed by Men Who Have Sex With Men. *AIDS Education and Prevention* **25**:4, 315-326. [CrossRef]
3. Siu-ming To, Steven Sek-yum Ngai, Siu-mee Iu Kan. 2012. Direct and mediating effects of accessing sexually explicit online materials on Hong Kong adolescents' attitude, knowledge, and behavior relating to sex. *Children and Youth Services Review* **34**:11, 2156-2163. [CrossRef]
4. B. R. Simon Rosser, Jeremy A. Grey, J. Michael Wilkerson, Alex Iantaffi, Sonya S. Brady, Derek J. Smolenski, Keith J. Horvath. 2012. A Commentary on the Role of Sexually Explicit Media (SEM) in the Transmission and Prevention of HIV among Men who have Sex with Men (MSM). *AIDS and Behavior* **16**:6, 1373-1381. [CrossRef]
5. Eric W. Owens, Richard J. Behun, Jill C. Manning, Rory C. Reid. 2012. The Impact of Internet Pornography on Adolescents: A Review of the Research. *Sexual Addiction & Compulsivity* **19**:1-2, 99-122. [CrossRef]
6. James B. Weaver III, Stephanie Sargent Weaver, Darren Mays, Gary L. Hopkins, Wendi Kannenberg, Duane McBride. 2011. Mental- and Physical-Health Indicators and Sexually Explicit Media Use Behavior by Adults. *The Journal of Sexual Medicine* **8**:3, 764-772. [CrossRef]
7. Caroline Heldman, Lisa Wade. 2010. Hook-Up Culture: Setting a New Research Agenda. *Sexuality Research and Social Policy* **7**:4, 323-333. [CrossRef]
8. Sjoerd Beugelsdijk, Arjen Slangen. 2010. The Impact of National Cultural Distance on the Number of Foreign Web Site Visits by U.S. Households. *Cyberpsychology, Behavior, and Social Networking* **13**:2, 201-205. [Abstract] [Full Text HTML] [Full Text PDF] [Full Text PDF with Links]
9. References 253-295. [CrossRef]
10. Shu-Sha Angie Guan, Kaveri Subrahmanyam. 2009. Youth Internet use: risks and opportunities. *Current Opinion in Psychiatry* **22**:4, 351-356. [CrossRef]