



## **Unsolicited online sexual material: What affects our attitudes and likelihood to search for more?**

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**Abstract:** Sexually explicit information can be encountered through the Internet by both active exploration and passive means (e.g., junk mail, email and pop-ups). The present study examined unsolicited exposure to sexually explicit material through email, junk mail and pop-ups by assessing potential variables that might impact on positive attitudes towards such sexually explicit materials and the likelihood to search for them online. In the findings support previously reported gender differences in attitudes and behaviour in relation to sexually explicit materials. Overall, males felt more positive toward online sexual content, and were more likely to explore unsolicited emails and pop-ups than were females. Computer use for a variety of purposes (e.g., downloading files, communication, and entertainment) predicted positive attitudes towards unsolicited sexual pop-ups and junk mail messages, while sheer number of hours spent on the computer predicted searching behaviour for sexual information. Domain-specific curiosity (i.e., curiosity toward online sexual material) positively predicted both positive attitudes and searching behaviours. Implications from this exploratory study are discussed.

**Acknowledgements:** We would like to thank Meghan Bellamy, Jen Caron and Colleen Irvine for their help in conducting this research.

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### **Introduction**

The Internet has become a major media resource for information seeking. Cooper and colleagues (1998) suggested that the power of the Internet was driven by a 'Triple A Engine' consisting of accessibility (any time, anywhere), affordability (most sites allow for free browsing), and anonymity (the ability to protect one's identity). Because the Internet provides anonymous, private access to information 24 hours a day from the convenience of an individual's home, it is an excellent vehicle for searching out sensitive information, such as information dealing with sex. Exploration of sexually related topics can now be conducted instantly, and, apart from a connection fee, is often free of charge. In addition, the privacy afforded by the Internet virtually eliminates shyness or shame that may be associated with searching out sexual material from more traditional sources (Carnes, 2003; McKenna, Green & Smith, 2001). Further, accessibility to sexual material using the Internet is easy. Even the most sexually explicit

material that would not be easily accessible using other media can be retrieved with little effort over the Internet (Cooper, Shapiro & Powers, 1998).

Sexually explicit information is provided through both active and passive means via the Internet. That is, in addition to actively searching for information, today's computer users are often exposed to sexually explicit information through passive means, most notably through unsolicited or unintentional routes including sexually explicit Internet pop-ups (advertisements for various web sites and products) and unsolicited emails or SPAM (unwanted email) (Cameron et al., 2005). Considering that 84% of Canadian computer users access email services (Dryburgh, 2001), the sheer number of users suggests that many individuals are exposed to unsolicited sexually explicit material, perhaps more than ever before. Even with filters and firewalls designed to limit or remove unwanted mail, most users experience receipt of unsolicited sexually explicit material (including pornographic messages and ads



for sexual devices, services, surgeries and sites) (Goodman, Heckerman, & Rounthwaite, 2005).

In a study that investigated exposure to sexual material via email and websites, some adolescents reported receiving on average 10-20 sex related emails daily (Cameron et al., 2005). While sexual material found on the Internet can be educational, informative and interesting, other material is inaccurate and may be considered offensive by some people (Boies, 2002). Given the vast number of people using computers and the Internet, research is needed to understand the use of these technologies for acquiring information, as well as the impact of these technologies on attitudes and subsequent online behaviours concerning sexually explicit material. At present there is limited research examining information actively sought out using the Internet, and even less research targeting reactions to, and attitudes toward, unsolicited material received through regular interactions with the computer (e.g., email and pop-ups). The current study, therefore, examined reactions and attitudes toward sexual material encountered on the Internet through unsolicited sources.

The vast majority of existing research has focused on conventional forms of sexually explicit or pornographic material including magazines, pictures, and videos (Byrne, Fisher, Lamberth & Mitchell, 1974; Fisher & Byrne, 1978; Wallace & Wehmer, 1971). Prior to the 1970s, before film forms became widely available, books and magazines were the most common form of sexually explicit material. With the advent of the VCR, home videos presented a more attractive way of viewing such material. Viewing such material and the Internet has now expanded access to a vast array of sexual content, often unsolicited and perhaps unwanted. The task for researchers is to examine the experiences and attitudes of individuals exposed to unsolicited sexually explicit content through this new medium.

Gender has been an important indicator of sexual attitudes and behaviours related to more conventional sexual material (e.g., magazines and videos) (Buzzell, 2005), and, more recently, related to sexually explicit material found online (Buzzell, 2005; Cooper, Shapiro & Powers, 1998; Goodson, McCormick, &

Evans, 2001; Janghorbani & Lam, 2003). For example, Peter and Valkenburg (2006) found that 71% of male adolescents sought out online sexual material, as compared to 40% percent of female adolescents. Similarly, Boies (2002) found that males were more likely than females to view erotic material online and offline. Males also went online at an earlier age to view sexual material. Furthermore, gender comparisons showed that females found sexually explicit material online to be disturbing, while males found it arousing. In addition, Goodson, McCormick and Evans (2001) also found that female college students tended to feel disgusted and angry toward sexually explicit material on the Internet, while males were more likely to be sexually aroused by such material.

In general, research suggests that males and females differ in how they use computers and the Internet (Ono & Zavodny, 2003). Males more often use the Internet for sexual entertainment (Cooper, Sherer, Boies, & Gordon, 1999) and for downloading files and software (Teo, 2001), where as females more often use the Internet for chat rooms (Cooper et al., 1999) and messaging (Teo, 2001). Overall, males spend significantly more hours surfing the Internet, report being more comfortable using the Internet, and report having superior skill levels and more expertise with computers than females (Harrison & Rainer, 1992; Lewis, Coursol & Khan, 2001; Morahan-Martin, 1998; Schumacher & Morahan-Martin, 2001). In terms of behaviour, males do more browsing and purchasing of products over the Internet than females (Teo, 2001). Several researchers have identified the relationship between familiarity with computers and subsequent use of computers (Anderson, 1996; Bickson & Bickson, 2001; Davis, 1989). Specifically, those who are more familiar are most likely to use computers, and those who report greater use of computers are more likely to report greater comfort with computers and computer applications (Wood, Mueller, Willoughby, Specht, & DeYoung, 2005). In a study investigating motivational factors, self-reported computer usage and self-predicted future usage were correlated with perceived usefulness of computers (Teo, 2001). Whether these findings, from other domains, translate to contexts involving searching for sexually explicit materials, remains to be tested. The present study examines the impact of

computer use on attitudes toward unsolicited sexual materials received through the computer and to searching for sexually explicit materials.

Characteristics of the individual should also be considered when investigating responses to sexually explicit information received through the Internet and the likelihood to search out such materials. In previous research that addressed traditional sources of sexually explicit information (e.g., photographs, magazines and videos), erotic materials were found to generate more curiosity than non-erotic material (Koukounas & McCabe, 1997). Examination of online behaviours has shown that general curiosity was positively related to time spent online and attention paid to advertising information (Menon & Soman, 2002). Most recently, interviews with focus groups identified general curiosity as an important precursor for viewing sexually explicit materials online (Cameron et al., 2005). It is not surprising that curiosity in general would promote greater interest or exploration. Curious individuals would be expected to explore all types of information, sexual or not. The present study extends the existing research by assessing the impact of domain specific curiosity, that is, curiosity toward sexual material, and the impact of domain specific curiosity on attitudes toward unsolicited sexually explicit material and toward active exploration of sexually explicit material online. Previous literature would lead to the expectation that those individuals with greater domain specific curiosity may be more apt to actively seek out and explore domain relevant information. The impact on attitudes toward unsolicited sexually explicit materials is not clear and is thus a focal point in the present research.

In summary, the present study examined responses to unsolicited exposure to sexually explicit material through email, junk mail and pop-ups. Specifically, this exploratory study, investigated variables that might impact on positive attitudes towards sexually explicit materials and the likelihood to search for these types of materials online.

## Methods

### Participants

Participants were 482 undergraduate introductory

psychology students ( $M$  age = 19,  $SD$  = 1.73). In total, 236 males students ( $M$  age = 19,  $SD$  = 1.83) and 246 females students ( $M$  age = 18,  $SD$  = 1.58) participated, with ages ranging from 17 to 37. Participants were recruited through a research participant pool and received credit toward their introductory psychology course for their participation. In terms of ethnic background, 1.6% of participants identified themselves as Black, 13.4% Asian, 58% European, 2% Hispanic, 0.8% Native, and 24.1% other. Demographically, 10.7 % of participants indicated living in a rural area, 48.6% in an urban area, and 40.7% in a suburban area. The mean number of years of formal education was 14 ( $SD$  = 1.55 years). Participants were treated in accordance with APA ethical guidelines.

### Measures

All participants completed one paper-and-pencil survey. The survey was comprised of three sections. The first section assessed demographic variables (e.g., gender, age, ethnicity, education). The second section assessed general computer and Internet use and expertise. The third section addressed attitudes about sexual material on computers and the Internet. The measures employed a variety of question types including 7-point Likert-type scales, dichotomous (yes or no) response options, and short, open-ended, fill-in-the-blanks.

### Measures of computer use and expertise

The second section of the measure assessed general computer use and expertise (15 questions) as well as comfort with computers and the Internet (4 questions). For example, for use and expertise, participants were asked how knowledgeable they were about using computer software (with response options ranging from 1 (*very knowledgeable*) to 7 (*not at all knowledgeable*), with 4 (*neutral*) as the midpoint, and on average how many hours they spent using a computer for various purposes (personal use, school related use, and work use) The responses for these questions were provided in minutes or hours per week. Similarly, participants used a 1 (*very comfortable*) to 7 (*very uncomfortable*) scale with a midpoint of 4 (*neutral*) to indicate how comfortable they felt when using computers. This section also assessed where participants accessed the Internet and the amount of time they spent on the Internet. For



example, participants were given a list of possible locations (home, parents home, friend's home, school, library, and café) and were asked to indicate how often they accessed the Internet from these sources using a 1 (*never*) to 7 (*daily*) scale, with 4 (*about half of the time*) as the midpoint.

### **Internet use and attitudes towards sexually explicit materials online**

The third section of the survey consisted of 16 items that assessed Internet use, and attitudes towards sexually explicit material (i.e., unsolicited emails, pop-ups) found on the Internet. Participants were asked about their attitudes and feelings toward unsolicited sexual material found in email inboxes, junk mail and through pop-ups. For example, participants were asked to indicate how appropriately a series of 7 affective labels described their response to unsolicited sexual material (e.g. feel indifferent, find it enjoyable, find it offensive). The response options ranged from 1 (*never true of me*) to 7 (*absolutely true of me*), with a midpoint of 4 (*somewhat true of me*). Among the 7 affective 3 reflected positive attitudes, 3 negative. Since scores for the latter proved to be reverse images of the former for each type of unsolicited material, only the positive scores are reported in the analyses.

In addition, participant behaviour was assessed, with items asking about both the likelihood of searching for sexually explicit material over the Internet (e.g. How likely are you to explore a sexually explicit pop-up site?) and actual searching behaviours (e.g. How often do you solicit or seek out Internet information that is sexually explicit?). In these items participants were asked how likely they were to explore sexually explicit pop-ups and unsolicited emails in particular. The response options for these items ranged from 1 (*not at all likely*) to 7 (*definitely likely*), with a midpoint of 4 (*somewhat likely*). Participants were also asked how often they had intentionally accessed sexually explicit material on the Internet. The response options ranged from 1 (*never*) to 7 (*always*), with a midpoint of 4 (*sometimes*). Participants were also asked about their levels of curiosity when encountering sexually explicit materials online. For example, participants were asked to rate how curious they were about sexually explicit pop-ups they received. The response options ranged from 1 (*never curious*) to

7 (*always curious*), with a midpoint of 4 (*sometimes*).

### **Procedure**

At the outset, participants were given with a letter of introduction and asked to provide their consent. Participants completed the survey in separate cubicles under the general supervision of a researcher in a designated lab room within the Psychology department. Sessions were conducted with small groups of participants ranging from 3 to 8 people at a time. Cubicles separated participants from their neighbours and limited the chance of someone seeing their answers. Given the importance of confidentiality for survey materials, all participants were assured that their data would be stored anonymously.

### **Results**

#### **Composite computer use, curiosity, searching and attitude subscales**

The critical items from the overall survey were compiled into eight composite subscales including: Total Hours Per Week using the Computer (5 items), Positive Attitudes toward sexually explicit unsolicited pop-ups (3 items), Positive Attitudes toward sexually explicit unsolicited inbox messages (3 items), Positive Attitudes toward sexually explicit unsolicited junk mail messages (3 items), Comfort and Expertise with Computers (4 items), Overall Computer Use (10 items), Curiosity with Sexually Explicit Material Online (2 items), and Searching for Sexually Explicit Materials Online (5 items). Table 1 presents means, standard deviations, and alpha levels for each of these subscales. All of the alpha levels suggest moderate to high reliability for these measures (ranging from a low of .73 to a high of .91).

Three aspects of the data presented in Table 1 were examined. Experience with computers was assessed as a function of gender. Positive attitudes toward sexually explicit material received through their email inbox, junk mail, and pop-ups were examined. Third, predictors of searching for sexually explicit material online were examined.

#### **Experience with computers and gender**

To determine whether gender differences existed in the amount of exposure to computer applications and the amount of time spent on computers, two between



subjects t-tests were conducted. With respect to amount of use, assessed as the number of applications used by males and females, there were significant gender differences for using the computer for entertainment purposes  $t(1, 480) = 4.50, p = .001$  ( $M_{\text{males}} = 12.31$  and  $M_{\text{females}} = 10.87$ ). In contrast, when comparing the reported amount of time spent using computers each week there were no differences as a function of gender  $t(1, 480) = .626, p = .53$  ( $M_{\text{males}} = 36.63$  and  $M_{\text{females}} = 35.03$ ).

**Positive attitudes toward sexually explicit materials online**

At the outset it was important to determine whether responses to the three different sources of sexually explicit information (email, pop-ups, junk mail) differed significantly from one another. A repeated measures analysis of variance (ANOVA) was conducted to examine whether positive attitudes towards sexually explicit materials found on the Internet via pop-ups, inbox messages, junk mail messages varied from one another. The within subjects factor was the type of the sexually explicit material (i.e., pop-ups, inbox messages and junk mail messages). There was a significant main effect  $F(2, 481) = 33.44, p < .001$ . Overall, unsolicited pop-ups and unsolicited email inbox messages were perceived more favourably than unsolicited junk mail messages ( $M = 5.15, M = 5.6$  and  $M = 4.3$  for pop-ups, email and junk mail, respectively). Given the amount of power in the analyses even very small differences in means could be significantly

different. To assess the degree to which each of the means differed from one another, effect sizes were calculated. The difference between pop-ups and inbox email messages yielded a small effect size of  $d = .13$  (see Cohen, 1988). Pop-ups and junk mail messages, and inbox email messages and junk mail messages yielded medium effect sizes of  $d = .29$  and  $d = .37$ , respectively (see Cohen, 1988). Although the one effect size is relatively small, given the moderate effect sizes for the remaining comparisons, all subsequent analyses of positive attitudes were conducted independently for each source.

Three linear regression analyses were conducted, one for each source of unsolicited sexual material encountered online (i.e., pop-ups, inbox email messages and junk email messages). Each regression examined how each of five variables contributed to the prediction of positive attitudes. The following five variables were entered simultaneously as predictor variables: Gender, total hours per week using the computer, comfort and expertise with computers, general computer use, and curiosity with sexually explicit material online. Inter-correlations of each subscale are shown in Table 2.

The regression analyses examining predictors of positive attitudes toward pop-ups ( $R^2 = .35, F(5, 476) = 51.44, p < .001$ ) and junk mail messages ( $R^2 = .19, F(5, 476) = 22.00, p < .001$ ) were both significant. In both analyses general computer use, curiosity about sexually explicit materials online,

**Table 1 Means, standard deviations and alpha values for composite subscales assessing computer use, attitudes, curiosity and searching behaviours online**

Subscale (range of possible scores)	N	M	SD	Alpha (á)	Obtained minimum and maximum scores
Total hours per week using the computer (in hrs)	486	35.81	29.20	0.73	1 - 168
Positive attitudes toward pop-ups (1 to 21)*	486	5.14	2.99	0.82	3 - 16
Positive attitudes toward inbox (1 to 21)*	486	5.60	4.17	0.91	1 - 21
Positive attitudes toward junk mail (1 to 21)*	486	4.33	2.54	0.85	1 - 14
Comfort and expertise with computers (1 to 28)	486	9.51	4.34	0.85	4 - 28
Overall computer use (1 to 70)	486	34.15	7.14	0.74	1 - 64
Curiosity with online SEM (1 to 14)	486	3.41	2.06	0.81	2 - 14
Searching for SEM (1 to 35)	486	9.06	4.85	0.82	5 - 35

\* Scores for the measure of negative attitudes toward each of the three types of unsolicited material were reverse images of those for positive attitudes. Hence, only positive attitude scores are reported here and in the analyses.



Table 2 Pearson intercorrelations for composite subscales assessing computer use, attitudes, curiosity and searching behaviours online

Subscale	Positive attitudes (pop-ups)	Positive attitudes (inbox)	Positive attitudes (junk mail)	Total hrs/wk using computer	Comfort with computer	General computer use	Curiosity with online sexually explicit material	Search behav.	Gender
Positive Attitudes (pop-ups)	1.00								
Positive Attitudes (inbox)	0.43**	1.00							
Positive Attitudes (junk mail)	0.58**	0.47**	1.00						
Total hours/week using the computer	-0.01	-0.06	-0.01	1.00					
Comfort with computers	-0.06	0.04	-0.02	-0.20**	1.00				
General computer use	0.11*	0.04	0.10*	0.26**	-0.01*	1.00			
Curiosity with online sexually explicit material	0.52**	0.20**	0.36**	0.01	-0.08	0.03	1.00		
Searching behaviour	0.46**	0.22**	0.31**	0.09	-0.17**	0.03	0.57**	1.00	
Gender	-0.38**	-0.20**	-0.30**	0.02	0.18**	-0.07	-0.21**	-0.54**	1.00

\*\* Correlation is significant at the 0.01 level (two-tailed), \* Correlation is significant at the 0.05 level (two-tailed)

and gender were all significant predictors of positive attitudes towards sexually explicit pop-ups ( $\beta = .09, p = .02$ ,  $\beta = .46, p < .001$ ,  $\beta = -.29, p < .001$  for pop-ups, and  $\beta = .08, p = .05$ ,  $\beta = .31, p < .001$ , and  $\beta = -.23, p < .001$ , for junk mail messages for computer use, curiosity and gender, respectively). In both analyses, higher levels of general computer use and higher levels of curiosity predicted more positive attitudes toward sexually explicit pop-ups and junk mail messages. In addition, males felt more positive about these materials than did females.

The overall model for the regression examining predictors of positive attitudes toward inbox messages also was significant,  $R^2 = .08, F(5, 476) = 7.79, p < .001$ . However, only curiosity about sexually explicit materials online, and gender were significant predictors of positive attitudes towards sexually explicit inbox messages ( $\beta = .17, p < .001$ , and  $\beta = -.17, p < .001$ , for curiosity and gender respectively). Similar to the findings for pop-ups and junk mail messages, higher levels of curiosity predicted more positive attitudes toward sexually explicit inbox messages and males felt more positive about these materials than did females.

### Predictors of searching for sexually explicit materials online

A linear regression analysis was conducted to examine which variables predicted searching behaviour. Searching behaviour was characterized by the likelihood to search and actual searching behaviour for unsolicited inbox emails or pop-ups (e.g. "How likely are you to explore a sexually explicit pop-up site?" and "How often have you intentionally accessed sexually explicit material on the Internet?", respectively). The following seven variables were entered simultaneously as predictor variables: Gender, total amount of time per week using the computer, comfort and expertise with computers, general computer use, positive attitudes toward pop-ups and junk mail, positive attitudes toward inbox messages, and curiosity with sexually explicit material online. Searching for sexual material online served as the dependent variable. Note: The choice was made to aggregate positive attitudes toward pop-ups and inbox email messages due to the very small effect size ( $d = .13$ ). While in the



previous analysis these were compared separately, this was a function of having the third source junk mail as a comparison group as well. Junk mail was not a part of the searching questions.

Results indicated that the overall model was significant,  $R^2 = .52$ ,  $F(8, 473) = 65.02$ ,  $p < .001$ . Curiosity about sexually explicit materials online, total hours per week using the computer, and gender were all significant predictors of searching for sexual material online ( $\beta = .45$ ,  $p < .001$ ,  $\beta = .10$ ,  $p < .001$ , and  $\beta = -.42$ ,  $p < .001$ , for curiosity, total time spent on the computer and gender respectively). Greater curiosity toward sexual material was related to a greater likelihood of searching for sexual material online. Moreover, more time spent on the computer was related to a greater likelihood of seeking out sexual materials online. Lastly, males were more likely to actively search for these types of materials.

## Discussion

The current study clearly demonstrated the important role that gender continues to have with respect to attitudes and behaviours toward sexual material. Consistent with previous research examining gender differences with traditional media (e.g., videos, pictures and magazines) (e.g., Buzzell, 2005; Leiblum et al., 1993; Lopez & George, 1995) and online computer applications (Boies, 2002; Cooper, Shapiro & Powers, 1998; Khoo & Senn, 2004; Goodson et al., 2001; Janghorbani & Lam, 2003), females in the present study held less positive attitudes toward the unsolicited sexually explicit material for all three online sources, inbox messages, junk mail messages, and pop-ups, when compared to their male counterparts. In previous studies, female participants found such material to be offensive. It is also possible that females find sexual material online to be degrading to females, and therefore feel more negatively when encountering such material.

Of interest, the mean scores for male positive attitudes approached ceiling level for both pop-ups ( $M = 6.3$ , maximum score = 7) and inbox email messages ( $M = 6.5$ ), and are well beyond the midpoint even for junk mail ( $M = 5.1$ ). Males in the present study, then, not only had supportive positive attitudes toward this unsolicited material, they

indicated that these positive attitudes were “absolutely true” and completely applicable to them. Such high endorsements suggest that males were very receptive to receiving this kind of material. This was supported in the analysis of searching behaviour where males were much more likely than females to actively seek out sexually explicit materials online. In both attitudes and behaviour, then, males were more likely than females to endorse sexually explicit materials encountered online.

Although early research on computer use demonstrated considerable differences in the use of computers by males and females (Harrison & Rainer, 1992), more recent literature indicates that although males and females engage computers for different purposes (e.g., downloading files, online communication, entertainment etc.), both use the computer equally (Teo & Lim, 2000; Teo, 2001). Our findings were consistent with these more recent findings, in that males and females did not differ in the frequency of activities that they engaged in on computers, nor in the amount of time that they used a computer. Computer experience, however, was an important predictor of positive attitudes toward sexually explicit material. Specifically, more experienced computer users, those who more frequently use more diverse applications, were more receptive towards the sexually explicit material. This was the case when material appeared in pop-ups and junk mail but not for inbox messages. Individuals who explore and use more applications on computers are probably more likely to encounter pop-ups, and may have acquired strategies to limit them or close them. This allows the user to explore material when they are prepared to do so, and when they feel interested. Similarly, junk mail is also under control of the user. Typically, junk mail is only explored if the mail appears interesting or has some information in the title that would suggest that the content is of value. Experienced computer users may be more judicious in selecting when and what to open. Inbox email differs from these two sources. Users typically search their email for messages that they wish to receive and may be less accepting of intrusive, unwanted material in this particular outlet.

Alternatively, it could also be the case that more experienced computer users have already



encountered and been exposed to an array of sexually explicit materials, and this familiarity with the material affords them a level of comfort with it. Studies examining the effects of repeated exposure to a stimulus have shown that desensitization occurs (e.g., Bartholomew, Sestir & Davis, 2005). A parallel may be drawn to online cases, whereby users who are more accustomed to using the computer and the Internet, may not be as shocked or offended by unsolicited sexual content, especially when the content is encountered in less personal domains such as pop-ups or junk mail. As the frequency of exposure to sexually explicit material increases, the less surprised, and more comfortable the user becomes (Goodson et al., 2001). Essentially, as more and more online unsolicited sexual material is presented, the user becomes desensitized and responds more positively to the material.

Positive attitudes, did not predict whether participants would search out sexually explicit material online. Apart from gender, it was curiosity and the amount of time participants spent on computers that were critical. Specifically, as the number of hours spent on the computer increased, so did the likelihood to search for sexually based material. This result may be a function of greater opportunity. Specifically, the more time users spend online, the greater the opportunity to encounter sexually explicit either accidentally or intentionally. For example, some seemingly innocuous search terms yield sexually explicit content, providing an opportunity to explore materials that would otherwise not have been encountered. In addition, over time, repeated exposure to such materials may desensitize users to the content and this, in turn, may promote further exploration. People who are online often and for long periods would have more opportunity for exposure and more opportunity to initiate searches.

It was expected that individuals who were curious about sexual material, would seek out this type of material when on the Internet. In the present study, curiosity about sex predicted whether individuals opened or explored emails or pop-ups even when these materials were intrusive. The Internet, clearly serves as a convenient source for pursuing sexually explicit information (both actively and passively) if the information is perceived as familiar, interesting

or arousing (Cameron et al., 2005; Goodson et al., 2001; Wallmyr & Welin, 2006). This has important implications for how individuals choose to spend their time while on the Internet, and for predicting who is most likely to experience the impact of unsolicited sexually explicit material.

In summary, Internet users run the risk of being exposed involuntarily to unsolicited forms of sexually explicit content. Although, receiving and accessing sexually explicit material through the Internet is different from walking into a store to purchase an erotic magazine or to rent a pornographic video, males and females react to unsolicited sexually explicit material on the Internet in much the same way as for traditional sources. That is, gender differences in reactions to sexually explicit material hold true, regardless of whether these materials are encountered in an online setting or in a real life setting (e.g. erotic video store, magazine or book). The current research demonstrated that the predictors of positive attitudes toward online sexual content do not wholly overlap with the predictors for behaviours related to sexual material online. Although much research identifies the consistency between attitudes and behaviours (e.g., Goodson et al., 2001), the contribution of the present study was to identify common contributors to attitudes and unique contributors to behaviours that relate to unsolicited sexual material online. In sum, we now have a clearer, more in-depth understanding of factors that impact on attitudes and reactions to unsolicited sexual material encountered online. Specifically, factors such as domain specific curiosity and specific aspects of computer use (e.g., amount of exposure to computer applications and amount of time spent on computers), help us to better understand how attitudes and reactions to unsolicited sexual content online differ from reactions to traditional sources such as pornographic magazines and erotic videos. Our findings highlight the importance of further investigation into the impact of exposure to sexually explicit materials through passive means such as through pop-ups, and junk mail, especially as the prevalence of computers continues to rise in all sectors of society.



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