An Investigation into the Use of Internet Pornography Among Young Internet Users in Singapore

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Abstract

Introduction:
The present study investigated the patterns and motivations of internet pornography use among young internet users in Singapore. Specifically, it was hypothesized that males would show (a) greater prevalence, (b) earlier age of exposure, (c) more frequent viewing, (d) more deviant usage, and (e) more sexual activities accompanying the use of pornography. Furthermore, (f) sexual curiosity would be the most common reason for initial use of internet pornography.

Method:
Participants comprised of 283 undergraduates (132 males), aged 18-26 years, from the three public universities in Singapore. They completed an online self-report of their initial and recent internet pornography use patterns and motivations. The categorical data were presented in percentages and gender differences were analysed using the Mann-Whitney-U-Test (Mann & Whitney, 1947).

Result:
Our profile of internet pornography use found support for four out of six of our hypotheses. Gender differences were observed in the prevalence, age of exposure and frequency of internet pornography use, and sexual curiosity was the most common reason cited for initial exposure to internet pornography. Implications of the profile on the maintenance of internet pornography use and the need to promote appropriate channels of sexual discussions were discussed and recommendations were made to promote more effective management of pornography use among young internet users in Singapore.
Introduction

Research on pornography is replete with evidences of its harmful effects. In areas of sexual offending, pornography use has been identified as a risk factor regardless of the offender’s recidivism risk level (Kingston et al., 2008). Studies among sexual offenders have found pornography use motivating sexual offending behaviour through the distortion of sexual realities (Eldridge, 2000; Marshall, 2000; Print & Morrison, 2000) and reduction in empathy towards victims of sexual aggression (Allen, D'Alessio, & Brezgel, 1995). Furthermore, studies among non-offenders have reported the disinhibition of sexual offending behaviours through pornography’s association with the increased acceptance of sexual harassment (Bonino, Ciairano, Rabaglietti, & Cattelino, 2006) and promotion of sexual aggression (Malamuth N. M., 2003; Vega & Malamuth, 2007). Additionally, pornography use has been suggested to negatively impact sexual relationships. And studies of non-offenders reported evidences of its associations with poorer relationship quality (Stewart & Szymanski, 2012) and more sexually permissive attitudes and behaviour (Carroll et al., 2008; Lo & Wei, 2005; Peter & Valkenburg, 2008; Rogala & Tyden, 2003).

Despite its harmful effects, pornography use remains prevalent around the world and distinct gender differences were reported across its patterns of use. For instance, among 813 American college students, 87% of male and 31% of female reported using pornography (Carroll et al., 2008). Males also reported using pornography on a monthly to weekly basis while females, yearly to monthly (Carroll et al., 2008). Boies (2002) also reported similar patterns of gender differences in his sample of 760 Canadian college students with prevalence among 72% of males and 24% of females. In addition, sexual reasons like sexual arousal and sexual curiosity were most prevalent motivations for college students’ pornography use (Boies, 2002).

However, little is still understood about pornography use in Singapore. Our review of the literature only returned two studies. Choi (2008) reported that 15% of 526 respondents aged 13 years used the Internet to look for websites with sexual content while a survey by Touch Cyber Wellness revealed that 50% of 836 Singaporean youths aged 13 to 15 years had exposure to internet pornography (Tai, 2014). Nevertheless, the findings suggest the limited effectiveness of present regulations restricting access to and possession of pornographic materials (e.g. Penal Code, 2008; MDA, 2013). Hence, to better influence legal and social decisions, it is paramount for research to inform on the patterns and motivations of pornography use in Singapore.

Present Study

This paper aims to investigate the patterns and motivations of pornography use in Singapore. Pornography was defined as “sexually explicit media designed to sexually arouse the consumer” (Vega & Malamuth, 2007). The patterns of use were explored in terms of its prevalence, use of deviant genres, age of exposure, frequency of use, and accompanied sexual activities. Comparisons between genders were made and participants’ motivations to use pornography were further investigated.
H1: More males would report exposure to internet pornography than females
H2: More males would report exposure to deviant pornographic genres than females
H3: Males start viewing pornography at an earlier age than females
H4: Males view pornography on a more frequent basis than females
H5: Males would report more sexual activities accompanying their use of pornography than females
H6: Sexual curiosity would be the most cited reason for the use of pornography

Method

Sample

The sample consisted of 292 Singaporean undergraduates from the three public universities and were aged 18 to 26 years. Most participants (68.5%) were recruited through the National University of Singapore’s research participant pool while the remaining 31.5% were through social media sites. For their participation in the study, those from the research participant pool were awarded extra credit points in their undergraduate psychology courses. No incentives were provided for the other participants.

Procedure

A self-administered questionnaire format was adopted for the present study. Information on participant’s (a) exposure to deviant and non-deviant pornography, (b) education age during first exposure, (c) reasons for first exposure, (d) frequency of recent pornography use, and (e) sexual activities accompanying pornography use were collected. Deviant pornography was defined in the study as child and violent pornography. And sexual activities accompanying pornography were responded based on the categories: doing nothing, masturbation, sex with a consenting partner, others. The 33-item Marlowe-Crowne Social Desirability Scale was also included in the study to examine the influence of social desirability bias on the self-reported scores. Items 3, 5, 6, 9 10, 11, 12, 15, 19, 22, 23, 28, 30 and 32 were reverse coded and a total social desirability score was computed.

Results

Demographics

Nine participants were removed due to incomplete data. The final sample of 283 participants comprised 92.6% (262) Chinese, 2.1% (6) Malay, 3.2% (9) Indian, 2.1% (6) others. Gender distribution of the sample was 46.6% (132) males, 53.4% (151) females. Mean age for males was 22.0 years old (SD = 1.54) and for females, 19.7 years old (SD = 1.36).
Social Desirability

No evidence of social desirability bias was obtained. A two-tailed independent samples t-test found differences in social desirability scores between participants who have and have not been exposed to internet pornography to be non-significant ($t(281) = -.866, p > .05$). Spearman’s rho correlation coefficient also revealed non-significant correlations between social desirability scores and the frequency of the recent use of internet pornography ($rs = .005, p > .05$). Hence, participants did not respond in a socially desirable manner.

Analysis of Dataset

The patterns of pornography use were analysed for genders differences. As the data in the present study were categorical in nature, findings were presented in percentages and analysed using a non-parametric test, the Mann-Whitney-U-Test (Mann & Whitney, 1947).

Patterns of Pornography use

Exposure to internet pornography was reported by 55.6% of participants. This was more prevalent among male participants with 87.1% of males reporting exposure compared to 28.5% of females, supporting our first hypothesis.

The distribution of participants’ age of exposure across gender shown in figure 1 indicates that the majority of male pornography users (53.9%) were first exposed in their lower secondary education, while females were divided between lower secondary (34.9%) and pre-university or polytechnic (39.5%). The Mann-Whitney-U-Test found education age during first exposure to pornography significantly different across the genders ($U = 1879, p = .01$), with males reported earlier exposure (Mdn = lower secondary) than females (Mdn = pre-university/polytechnic). This finding was in support of our third hypothesis.

Figure 1. Education age during first exposure for male and female pornography users
Following their initial exposure to pornography, most males (93.0%) and females (76.7%) continued to view its contents in the past 1 to 2 years, with a frequency ranging from daily to yearly. Figure 2 shows the distribution of participants’ frequency of pornography use across gender. Support was found for our fourth hypothesis with significant differences between the genders in frequency of recent use of internet pornography ($U = 1288, p < .001$). Males displayed significantly higher frequencies of recent internet pornography use ($Mdn = \text{weekly}$) than females ($Mdn = \text{yearly}$).

![Figure 2. Frequency of recent use among male and female pornography users](image)

Interestingly, gender differences were less apparent in terms of exposure to deviant pornographic genres. Among pornography users, 44.3% of males and 39.5% of females reported deviant exposure. Gender differences in sexual activities accompanying the use of pornography were also not significant. Figure 3 shows the distribution of sexual activities and apart from doing nothing ($U = 6380.50, p = .004$), the likelihood of engaging in masturbation ($U = 6983, p = .152$), consensual sex ($U = 7330, p = .243$) and acting out in other ways ($U = 7578.50, p = .374$) were not significantly different across gender. Thus, our second and fifth hypotheses were not supported.

![Figure 3. Sexual activities among male and female users accompanying their pornography use](image)
Motivations for Pornography use

A total of 174 reasons for initial exposure to pornography were extracted and coded into the following categories: out of boredom, by chance, sexual curiosity, sexual desire, entertainment, stress relief, peer influence, and sexual knowledge. The distribution of participants’ reasons for initial exposure is shown in Figure 4. Consistent with our sixth hypothesis, majority of our participants (65.2%) cited sexual curiosity as the reason for their first exposure to internet pornography. Influence from peers surfaced as the second most cited reason (13.8%), followed by accidental exposure to pornography while surfing the internet (7.6%).

Figure 4. Reasons for initial exposure to pornography

Implications and Future Directions

Distinct gender difference in prevalence, age of exposure and frequency of pornography use were reported in the present study. The patterns of pornography use in the study were consistent with findings in the literature (e.g. Boies, 2002, Carroll et al., 2008 and Tai, 2014) with an exception of a later age of exposure reported among females. According to the Touch Cyber Wellness Survey, most females reported their first exposure to pornography in their secondary education (Tai, 2014). However, the survey did not sample beyond secondary school students and hence might not have captured the later age of exposure that we found with our sample. Nonetheless, the clear gender differences reported across studies suggested a universal male susceptibility to pornography use.

The present study also found sexual curiosity as the most cited reason for initial exposure to internet pornography. Most individuals were curious about the contents of pornography and the process of sex. However, there appears to be lack of appropriate channels for such discussions and many young internet users have turned to pornography to address their sexual curiosity. Therefore current regulatory methods which are more effective against accidental exposure to pornography on the internet, may become irrelevant in dealing with motivated pornography use on the internet.
From the patterns and motivations of pornography use, it is paramount to educate internet users at an early age of the negative implications of pornography. Lower secondary education would be a critical developmental period, especially among males, and efforts should be made to address areas of sexual curiosity. Education for individuals with prior exposure to pornography should also leverage on modifying the system of reinforcement maintaining the use of internet pornography. However, for individuals with prior exposure to pornography, the initial motivation of sexual curiosity may change with the continued pornography use. Hence, future studies may want to explore the reasons for internet pornography use among these individuals and a different set of intervention may be required.

In addition, most pornography users persisted in their pornography use from adolescence to young adulthood. The maintenance of their pornography use stems from a system of sexual reinforcement. This is evidenced by the high occurrence of masturbation with pornography use, where masturbation provides the sexual rewards and reinforces pornography use as a sexually gratifying activity. Similarly, deviant sexual behaviours can become reinforced through the system and the preliminary findings of substantial deviant exposure and masturbatory behaviours accompanying pornography use suggest that pornography users could be at risk of engaging in deviant sexual behaviours.

A limitation of the present study was that it was based on self-reports from a convenience sample of young internet users in Singapore. The sample largely consisted of undergraduates and similar age peers as they were recruited through the research participant pool and social media sites. Therefore, the sample size will not be fully representative of young internet users in Singapore. Future studies may wish to include a more diverse sample of participants and also consider implementing psychophysiological measures to obtain more objective data regarding pornography use patterns and reactions.

**Conclusion**

Pornography use is prevalent among young internet users in Singapore. Clear gender differences have emerged from the patterns of pornography use with greater prevalence, earlier exposure and more frequent use among males. And a system of sexual reinforcement maintains the use of pornography from adolescence to young adulthood. In recommendation, more appropriate channels for sexual discussions at the lower secondary education would be required to curb exposure to internet pornography.
References


