

BRIEF COMMUNICATION

Is Pornography Use Associated with Sexual Difficulties and Dysfunctions among Younger Heterosexual Men?

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ABSTRACT

Introduction. Recent epidemiological studies reported high prevalence rates of erectile dysfunction (ED) among younger heterosexual men (≤ 40). It has been suggested that this “epidemic” of ED is related to increased pornography use. However, empirical evidence for such association is currently lacking.

Aim. This study analyzes associations between pornography use and sexual health disturbances among younger heterosexual men using four large-scale online samples from three European countries.

Methods. The analyses were carried out using a 2011 cross-sectional online study of Croatian, Norwegian, and Portuguese men (Study 1; $N = 2,737$) and a 2014 cross-sectional online study of Croatian men (Study 2; $N = 1,211$). Chi-square test and multivariate logistic regression were used to explore the associations between pornography use and sexual difficulties.

Main Outcome Measures. In Study 1, erectile difficulties, inability to reach orgasm, and a lack of sexual desire were measured using the Global Study of Sexual Attitudes and Behavior indicators. In Study 2, ED was measured with the abridged International Index of Erectile Function (IIEF-5). Delayed ejaculation and a decrease of sexual desire were assessed with one-item indicators.

Results. In Study 1, only the relationship between pornography use and ED among Croatian men was statistically significant ($\chi^2[2] = 18.76, P < 0.01$). The association was small and inconsistent. Compared with infrequent use of pornography, moderate but not high frequency of pornography use increased the odds of reporting ED (adjusted odds ratio = 0.53, $P < 0.01$). In Study 2, no significant associations both between either the frequency or the recent dynamics of pornography use and male sexual dysfunctions were observed.

Conclusion. We found little evidence of the association between pornography use and male sexual health disturbances. Contrary to raising public concerns, pornography does not seem to be a significant risk factor for younger men’s desire, erectile, or orgasmic difficulties. **Landripet I and Štulhofer A. Is pornography use associated with sexual difficulties and dysfunctions among younger heterosexual men? J Sex Med 2015;12:1136–1139.**

Key Words. Pornography; Pornography Addiction; Sexual Difficulties; Sexual Dysfunctions; Hypoactive Sexual Desire; Erectile Dysfunction; Men

Introduction

Several large-scale epidemiological studies recently pointed to a high prevalence of erectile dysfunction (ED) among younger men. In an Italian study, men aged 17–40 comprised more than a quarter of sexually active patients seeking medical assistance for ED for the first time. Almost half of them reported severe ED [1]. In

Brazilian and Swiss community studies, around a third of men aged 18–40 reported mild or severe ED [2,3]. Similar findings were reported in a study with Croatian and Norwegian men of the same age [4].

Although pornography has long been used as a diagnostic and treatment tool in sexual therapy [5,6], it has been suggested—mainly in popular media—that the current ED “epidemic” and lack

of interest in partnered sex may in fact be driven by pornography use [7]. It has been hypothesized that the contemporary ubiquity and accessibility of online pornography have caused a dramatic increase in its use and, consequently, in the number of pornography-addicted men [8]. In this context, ED and hypoactive sexual desire (HSD) have been hypothesized to reflect a diminished ability to enjoy real-life sex, emotional detachment from one's partner, and sexual satiation caused by pornography use [7].

Study Aims

In the absence of empirical arguments linking pornography use and sexual dysfunctions (the above-mentioned epidemiological studies did not assess pornography use), the aim of this study was to empirically assess the proposed association among younger heterosexual men. In addressing this research question, we used data from two large-scale studies: a 2011 cross-cultural survey of male sexual interest (henceforth, Study 1) and a 2014 Croatian survey focusing on sexual health and pornography use (Study 2).

Method

Participants and Procedure

Study 1 was an online survey of Croatian, Norwegian, and Portuguese men carried out in 2011 [4]. In total, 5,253 men over 18 years of age responded to recruitment banners featured on several health- and dating-related websites. Of those, 2,737 sexually active heterosexual men aged 18–40 with <10% of missing values were included in the analyses ($n_{\text{Croatia}} = 947$, $n_{\text{Norway}} = 219$, $n_{\text{Portugal}} = 1,571$). Participants for Study 2, carried out in 2014 in Croatia, were recruited through Facebook and web banners. Of the 4,597 participants, 1,211 sexually active heterosexual men in the 18–40 age range who filled out >90% of the questionnaire were selected for this study. Participants were not compensated for their participation.

Questionnaire and Measures

In both studies, questionnaires were hosted on a commercial site dedicated to online surveying. IP addresses were not permanently recorded to ensure anonymity. Prospective participants were asked to confirm that they were of legal age and to provide informed consent before accessing the survey. All procedures were approved by university ethical review boards.

Of the *sociodemographic characteristics*, participants were asked about their age and highest level of formal schooling completed.

Pornography use was measured using a one-item indicator of the frequency of pornography use in the past 12 months, anchored on an eight-point scale ranging from never to daily. Pornography was defined as “any kind of material containing explicit depictions of sexual acts (i.e., showing oral, vaginal, or anal penetration).” Because of skewed distribution in all samples, the indicator was categorized into three groups using tertiles as cutoff points.

Study 2 contained an additional one-item indicator that measured the *dynamics of pornography use*. It asked about a change in frequency of pornography use in the past 12 months compared with a period before. Answers ranged from 1 = a lot less frequently to 5 = a lot more frequently. The indicator was dichotomized into 0 = unchanged or decreased frequency of pornography use (1–3) and 1 = increased frequency of pornography use (4–5).

Main Outcome Measures

In Study 1, *sexual difficulties* were measured using the Global Study of Sexual Attitudes and Behavior dichotomous (no/yes) items [9] indicating difficulties with achieving or maintaining erection, inability to climax, and lack of sexual desire lasting for at least 2 months in the past year. In Study 2, ED was measured with the abridged, 5-item International Index of Erectile Function (Cronbach's alpha = 0.84). The suggested cutoff score of ≤ 21 was used to classify participants as having ED [10]. Delayed ejaculation (DE) was indicated by “difficulties in reaching orgasm (inability to climax) during sexual intercourse in the past 6 months.” A five-point scale ranging from 1 = never to 5 = always was used to anchor answers. The indicator was dichotomized into 0 = no DE (1–2) and 1 = DE (3–5). The following dichotomous measure was used to assess HSD: “In the past 12 months, have you experienced a loss or significant reduction in sexual desire that lasted for at least three months in continuity?”

Results

In both studies, a considerable number of participants were characterized by frequent pornography use. About 40% of men from the Portuguese sample and between 57% and 59% of men from the Norwegian and Croatian samples reported using pornography from several times a week to daily. Very few participants indicated never using

pornography (1.4–3.5%). Almost a quarter of participants (22.4%) in Study 2 reported increased pornography use in the past 12 months.

In Study 1, 14.2–28.3% of participants reported ED, 16.3–37.4% reported HSD, and 6.2–19.9% DE. The lowest prevalence of sexual dysfunction was consistently observed in the Portuguese and the highest in the Norwegian sample. In Study 2, 30.8% of men were classified as having ED, while 12.8% reported HSD and 9.3% DE.

At bivariate level, no statistically significant associations between frequency of pornography use and the three indicators of sexual health disturbances were observed in the Portuguese and Norwegian samples in Study 1. In the Croatian sample, only the relationship between pornography use and ED was significant ($\chi^2(2) = 18.76, P < 0.01$), but the effect was small (Cramer's $V = 0.14$). Controlling for age and education, these findings were confirmed in multivariate analyses (Table 1). Compared with infrequent use, moderately frequent pornography use increased the odds of reporting erectile difficulties (adjusted odds ratio = 0.53, $P < 0.01$) only among Croatian men.

In Study 2, we observed no significant associations between pornography use and sexual health disturbances. Furthermore, when compared with men who reported decreased or stable frequency of pornography use in the past 12 months, those with increased pornography use were not characterized by higher odds of reporting ED, HSD, or DE.

Discussion and Conclusions

Using two large-scale samples of men from three European countries, we found little evidence for the alleged association between pornography use and some sexual dysfunctions among younger heterosexual men. The only significant relationship was observed in the 2011 Croatian sample (Study 1) between pornography use and ED. The direction of this association is unclear, as pornography use may also be a way to cope with sexual difficulties or decreased sexual satisfaction. The relationship, however, was not confirmed in Study 2, which used a more complex and extensively validated measure of ED than Study 1.

In spite of some limitations, such as non-probability sampling and not taking into account the pornography genre and duration of pornography use, these study findings suggest that the raising public concerns about the link between

Table 1 Frequency of pornography use as a predictor of erectile, orgasm, and sexual desire difficulties in Studies 1 and 2 (results from multivariate logistic regression analyses)

	Study 1						Study 2					
	Croatian sample (n = 941)			Norwegian sample (n = 218)			Portuguese sample (n = 1,559)			Croatian sample (n = 1,211)		
	ED	DE	HSD	ED	DE	HSD	ED	DE	HSD	ED	DE	HSD
	AOR			AOR			AOR			AOR		
	95% CI			95% CI			95% CI			95% CI		
Age	1.02	1.00	1.04**	1.00	1.02	1.01	1.00	0.97	1.05**	1.00	0.99	1.01
	0.99–1.05	0.96–1.03	1.01–1.07	0.96–1.05	0.96–1.08	0.97–1.06	0.98–1.03	0.94–1.01	1.03–1.08	0.97–1.03	0.95–1.02	0.97–1.06
College education	1.01	1.18	0.63**	0.89	0.89	0.68	1.13	1.02	1.07	0.59**	1.00	0.53*
	0.75–1.37	0.80–1.75	0.47–0.85	0.48–1.65	0.44–1.79	0.39–1.21	0.84–1.52	0.66–1.58	0.80–1.43	0.40–0.86	0.66–1.52	0.30–0.93
Pornography use	1	1	1	1	1	1	1	1	1	1	1	1
1st third (ref.)												
2nd third	0.53**	0.60	0.97	0.51	0.37	1.35	0.87	0.68	0.76	1.46	0.78	0.61
	0.36–0.78	0.39–1.05	0.67–1.40	0.21–1.25	0.14–1.01	0.56–3.22	0.62–1.21	0.41–1.15	0.55–1.05	0.99–2.14	0.51–1.19	0.35–1.04
3rd third	1.13	0.72	1.00	0.81	0.64	1.08	0.99	1.22	0.85	1.16	0.94	0.90
	0.78–1.65	0.44–1.18	0.68–1.48	0.34–1.91	0.25–1.62	0.45–2.59	0.69–1.41	0.76–1.97	0.61–1.20	0.83–1.63	0.64–1.38	0.57–1.41
Increased pornography use	/	/	/	/	/	/	/	/	/	0.69–1.70	0.69–1.93	0.35–1.10

* $P < 0.05$; ** $P < 0.01$
 95% CI = 95% confidence interval; AOR = odds ratios adjusted for the contribution of other indicators in the regression model; DE = delayed ejaculation; ED = erectile dysfunction; HSD = hypoactive sexual desire (lack of desire)

pornography use and sexual dysfunctions might be misplaced. Recent epidemiological studies suggest that unhealthy lifestyles, substance abuse, stress, depression, intimacy deficit, and misinformation about sexuality [1–4] are more likely factors behind male sexual dysfunctions than pornography use.

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Statement of Authorship

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