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Association of Pornography Consumption with Health and Risky Sexual Behaviors of Youngsters in Pakistan: A Quantitative Approach

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ABSTRACT

The present study aimed to examine the association of pornography consumption with the health and risky sexual behaviors of youngsters. Two hundred and twenty-four participants (166 males, 58 females) from the public and private sector educational institutions of Multan, Pakistan, responded to the survey. The participants were selected through snowball sampling as it was an uphill task to identify the participants and persuade them to fill out the questionnaire. The findings indicated a strong correlation between frequent consumption of pornography with health (psychological & physical) and risky sexual behaviors of viewers. Despite a conservative society, heavy consumption of pornography on a daily and weekly basis (72%) is associated with risky sexual behaviors, i.e., using medicines to increase sexual power ($p=0.045$), intercourse with commercial sex workers without protection (condoms) ($p=0.033$), forceful sex with a life partner ($p=0.038$), sexual imitation as watched in pornography ($p=0.005$), and excessive masturbation after every exposure ($p=0.018$). Psychologically, frequent pornography consumption was related to feelings of loneliness and depression, while physically with a higher heartbeat and sweating on the body. The association between pornography consumption by youngsters and their health and risky sexual behaviors has been well established. Further research is warranted to obtain more outcomes and reasons behind the consumption of pornography content to suggest valuable measures to policymakers.

KEY WORDS

Pakistan. Pornography. Psychological Health. Risky. Sexual Behavior.

1 Introduction

The modern age is advanced due to technology and the Internet. Everybody can access anything on the global sphere of the Internet anytime. Now people (specifically youth) are searching for information or content that might not suit their age or that is taboo for a particular society (Lenhart et al., 2010; Mitchell, 2007). Online pornography is being consumed more frequently and early as a result of increased internet accessibility. Simultaneously, a greater incidence of erectile dysfunction is observed in youth. One reason for this increase is that there may be more people using pornography (Solano et al., 2018). The increasing number of young people who consume pornography has caused serious alarm in the scientific community. The negative consequences of teenagers having unrestricted access to online porn can include a skewed impression of their bodies, low self-esteem, and distorted self-image (Rojas-Estrada et al., 2024). Exposure to erotic and porn content has increased in the last years drastically around the globe, especially in youth; they have different reasons to consume the content (Paulus et al., 2024).

Pornography access is banned in Pakistan, but it is still accessed by many individuals, specifically youth, through illegal means, i.e., VPN and proxy servers (Rodríguez-Castro et al., 2021; Rothman et al., 2021). The harmful effects of pornography are growing faster among people of all ages because the Internet is more affluent with the pornography material, and 'Internet-enabled' gadgets in people's hands allow them to create, consume, and share pornography content. Furthermore, in a global context, individuals have free access to pornography websites and the fact they can be accessed privately and anonymously adds to their appeal (Massey et al., 2021; Flood, 2009; Lo & Wei, 2005).

The word pornography falls under a social taboo in Pakistan. People feel so awkward responding to its consumption because of a conservative and complex environment where male-to-female interaction is limited. From a religious perspective, Muslims have been advised in the *Quran* (the sacred book or holy book of Muslims) to avoid nudity and stay away from something shameful (Zafar & Anwer, 2024). In this context, the verse of the *Quran* is interpreted as "Surely God enjoins justice, kindness and the doing of good, to kith and kin; and He forbids all that is shameful, indecent, evil, rebellious and oppressive" (*Surah Al-Nahl* - 1-128 - *Quran.com*, n.d., v. 16:90). Allah (GOD) has prohibited all Muslims from nudity and used a term *Fuhsha* for keeping away from the evil (Amir 2019; Mujahid, n.d.).

Pakistan is an Islamic republic; here, the viewers of pornography are reluctant to share their experiences (feelings, pleasure, and sexual arousal) due to the closed environment of society. Moral values have been maintained considering religion, and no one can openly violate the religion's teachings. There is no concept of sex education from schools to universities. Parents feel ashamed to give children sexual information or knowledge at the family level. Thus, viewers of pornography pretend to be uninterested; however, they watch pornography in private (Zafar & Anwer, 2024).

Pornography content falls under the broad terms of the "obscene" definition and has been blocked by the Pakistan Telecommunications Authority Act. This act was established to regulate the telecom industry of Pakistan. The policy of this act was revised in 2015 in the National Assembly of Pakistan according to section 9.8.3, and the telecom authority was responsible for monitoring and blocking all content related to pornography as it contradicts Islamic beliefs and values. In 2016, the Prevention of Electronic Crimes Act (PECA) was introduced, and internet pornography was also included in illegal content. PTA also established an Internet portal for complaints of immoral content (Iftikhar, 2020). Although Pakistan is an Islamic state, access to pornography content is large in numbers. Even with legal and cultural limitations, there are still a lot of Pakistanis who participate in cybersex. For instance, 67.5% of urban youth frequently watched pornographic material (Bibi et al., 2022; Ehsan et al., 2019). Pakistan secured the top position in the search for porn content on the Internet in the last few years (Qureshi, 2023). The

first time such statistics appeared was in 2011 when Pakistan was first discussed as the leading country in consuming porn content (Khan, 2011). The Supreme Court of Pakistan passed an order in 2016 to block all websites with pornography content. The telecom regulatory authority, PTA, blocked 429,343 websites in collaboration with internet service providers (Baloch, 2016). In 2019, on the instructions of the parliament, PTA banned more than 90,000 websites due to indecent and blasphemous content (Ali, 2019). In the year 2022, the Federal Investigation Agency (FIA) launched cases against 7,000 complaints about indecent content. Not only the state is banning such content, but the people are also complaining about such content. On the other hand, Pakistan is still among the top pornography-consuming countries (DRM, 2022). Recently, in April 2024, PTA banned 1.07 million more websites over the charges of pornographic and blasphemous content (Dawn, 2024).

Exposure to pornography could affect the sexual attitude of youngsters, which further influences their sexual behavior (Dwulit & Rzymiski, 2019). Furthermore, those who get access to the Internet at an early age get exposure to pornography at a very young age as compared to those who came to the world of the web at older age (Hassan et al., 2023; Kraus & Russell, 2008). These results are further endorsed by Brown and L'Engle's (2009) research, who found that with youngsters who are exposed to pornography at early age (10-14 years) there is increased likelihood of engaging in sexual intercourse earlier than is the case with their non-exposed peers. These research findings share a standard view that individuals exposed to pornography content engage in various sexual behaviors, a few of which could be risky and problematic. Adolescents exposed to pornography content were more inclined towards risky sexual behaviors such as alcohol and drug addiction during sex, anal sex (without condoms), and sex with multiple partners (Braun-Courville & Rojas, 2009). Adolescence is a time of developing sexuality, growing romantic relationships, and starting a sexual relationship. Adolescents may investigate pornographic material or other sexual resources to further explore their sexuality. Adolescent boys who were exposed to media regularly had a considerably higher chance of being exposed to pornography than those who were exposed to it infrequently or never. Prioritizing life skills training and comprehensive sexuality education is necessary (Srivastava et al., 2023). The majority of the teenagers are aware that most pornographic content is inflated and fake. Pornography is frequently used as a source of sexual information, particularly by minority groups, in addition to being watched for curiosity and sexual excitement. There is ample evidence of numerous impacts that hinder children's growth. This review's findings are frequently at odds with one another. Thus, additional replication research is required (Paulus et al., 2024).

Pakistani society is rigid due to its cultural and religious dynamics. Here, the concept of living relationships and multiple sex partners is prohibited because of the spiritual teachings of Islam. Sexual intercourse is allowed after getting married to a partner. However, the concept of marriage and sexual interaction is highly discouraged before the age of 18. As mentioned, no sex education is given to people during their academic careers. Individuals between the ages of 14 to 17 (before 18) who watch pornography content are more likely to engage in sexual intercourse with commercial sex workers because of penile stimulation and premature ejaculation (Young-Petersen et al., 2024). Ultimately, it enhances the chances of sexually transmitted diseases (STDs) among them due to their intercourse without a condom as they do not have sufficient sex education and awareness at this stage. Therefore, the following hypothesis will be tested in this study:

(H1): Exposure to pornography at an early teenage would predict a greater likelihood of sexual intercourse with commercial sex workers.

Sexual aggression refers to the sexual activity of engaging a person in sexual behavior without their consent through the use of force, drugs, alcohol, argument, and authority. Both males and females can be the victims of sexual aggression (Basile & Saltzman, 2002). Alexy, Burgess, and Prentky (2009) examined sexually reactive children and adolescents. They found that the

individuals with frequent exposure to pornography were more likely to engage in forced vaginal penetration, violent sexual acts, including oral penetrations, and sex with animals to express their sexual aggression than the non-exposed individuals. In a qualitative study, Häggström-Nordin, Hanson and Tydén (2005) interviewed eighteen participants (8 males, 10 females), aged 16 to 23, selected from a local youth center in Sweden. They found that respondents were influenced negatively by pornography consumption and discussed the double standard depiction of pornography: women having multiple sex partners were considered promiscuous, while men having multiple sex partners were depicted as reverend. The consumption of pornography is positively associated with the low socio-economic status of people (Brown et al., 2005) and lower parental education (Bikila et al., 2021). In Pakistan, people have multiple problems, i.e., unemployment, poverty, and poor health, that create frustration among them. Pornography consumption often stimulates their aggression. To release and satisfy their emotions of frustration, they tend to engage in forceful sexual intercourse with their partner. Many people take some medicines before engaging in sexual activity to avoid early sensation and ejaculation and increase sexual power. Given the above points, the following hypotheses will be tested:

(H2): Greater consumption of pornography content would fantasize individuals towards sexual style imitation in real life.

(H3): More frequent exposure to pornography content is related to greater forceful sexual intimacy.

(H4): Greater exposure to pornography content would instigate individuals towards risky sexual behavior, especially medicine usage, to increase sexual power.

Pornography consumption has diverse effects on the human brain, and many researchers have advanced the concept that heavy exposure to pornography might be a risk for abnormal developmental trajectories. For example, few perspectives regarding pornography consumption's effect on adolescents' psychological thinking have advanced from different research works in developmental psychology (Casey et al., 2008). It can be said that pornography and erotic images are differently processed in the brain and leave deeper impressions rather than verbal stimulation. Many clinical studies exist in the literature that depict a stronger relationship between pornography and the mental conditions of viewers. Ybarra and Mitchell (2005), and Wolak, Mitchell, and Finkelhor (2007) have associated depressive minds with online pornography-seeking and unwanted exposure. People in Pakistani society face many socioeconomic problems in their routine, which is the biggest reason for psychological depression. Most often, they encounter loneliness while fighting their depression, and this condition urges them to access pornography to satisfy their depressed emotions. To explore this fact, the following hypothesis has been tested in the study:

(H5): Psychological feelings of loneliness, depression, and anxiety are related to the higher consumption of pornography.

The present study is purely based on a quantitative method for multiple reasons. First, the nature of the data collection instrument is a close-ended questionnaire. Second, it was impossible to go for detailed interviews with the participants because of the sensitivity of this issue and socio-cultural constraints in Pakistan.

2 Materials and Method

The survey research design was most suitable to explore the association of pornography consumption with the health and risky sexual behaviors of youngsters. Students were selected as a sample from two educational institutions upon approval for a survey from review boards of institutions. 224 respondents participated in the survey, including both males and females.

Their age group was divided into 18-26 and 26-30 years. Gender-wise, 166 (74.10%) were males, and 58 (25.89%) were females. The female sample ratio was low compared to males due to the social and religious constraints in Pakistan, as they are not responsive and are not allowed to answer such sensitive issues. Among the sample of students, most respondents were males (students from multiple faculties), while most females were medical professionals (medical students). The reason for this sample selection (female medical students) was the flexibility of their response to this issue. Being medical professionals, they were aware of the hazards and sensitivity of issues related to the consumption of pornography by youngsters of Pakistan in its social, cultural, and religious paradigms.

All the participants were briefed in detail about the purpose of the study. Those who were willing to participate were included in the sample. Further, they were asked if they had significant exposure to pornography, and upon their consent, we identified them as an accurate sample for our research. They have been told that the present study is purely based on an academic purpose, and their participation as a sample does not bind them to present their identities, e.g., name, phone number, and address. To access participants, we have done snowball sampling, and all respondents were ensured of their anonymity as sampled participants in the study. After their positive consent, they were requested to identify their friends or peers who consume pornography content so that the maximum sample subjects could be approached.

A questionnaire was selected as an instrument to collect data from the respondents. However, there was a hurdle in distributing questionnaires to obtain responses from female participants. Pakistan has a complex and conservative social system in which people are hesitant to express their opinions about this issue; specifically, females are highly restricted due to social and religious perspectives. That is why the services of female research assistants were hired, keeping in mind the nature of the research so that the survey from female respondents could be administered conveniently.

2.1 Measures

2.1.1 Demographic Characteristics

To assess participants by socio-demographic characteristics, we considered their age, education level, and marital status. These variables were dichotomized into 18-26, 26-30 graduate, post-graduate, and single, married. Participants were already given dichotomized options in a questionnaire despite several limitations. But it is important to note that no questions were asked that could leak their identity, i.e., name.

2.1.2 Pornography Consumption

Seven variables were explored related to the consumption of pornography among participants, and all items in the variables were given different options accordingly. The first item was "consumption frequency", and respondents were given the options of daily, weekly, monthly, and occasional. The second item was "first exposure age". Participants were asked to select options of 10 to 14, 14 to 16, and 16 to 18. The third item was related to the "first experience form of pornography" (with whom participants explored pornography first), and respondents were given the options of friends, siblings, net café, and self. The fourth was "source of exposure", and participants were asked to select options of CD/DVD, the Internet, TV, magazine, cinema, and mobile. The fifth item was "duration of watching videos", and they were given options of less than 3 minutes, less than 30 minutes, and more than 30 minutes. The sixth item was related to the "most liked porn category", and there were options of hardcore, softcore, scandal, erotic & romantic, and leaks. These categories were also defined respectively. The last one was the "most liked form of pornography", where participants were asked to mark one option among sex stories, static pictures, silent videos, videos with seductive voices, and real videos.

2.1.3 Risky Sexual Behavior

Five variables were assessed for risky sexual behavior (Cronbach's $\alpha = .89$). Participants were asked about their behaviors after exposure by developing a 5-point Likert scale ranging from *strongly agree* to *strongly disagree* (mean = 15.3, $SD = 3.74$), including items of sexual imitation with partner in real lives (follow love making styles as watched in pornography), forceful sex, intercourse with commercial sex workers without protection (condom), using of medicine to increase sexual power, and excessive masturbation after every exposure towards pornography.

2.1.4 Personality and Behavior Variables

Sensation seeking was examined by two items that combine the assessment of sensation seeking (Hoyle, Fejfar, & Miller, 2000) and impulsivity (Donohew et al., 2000); these items were measured on a 5-point Likert scale named from *strongly agree* to *strongly disagree* (mean = 7.16, $SD = 2.24$). The two items comprised the statements, "I like to do scary things and usually explore pornography content at unsafe or public places at any time" and "Exploring pornography makes me feel good and provides an exciting experience". Higher scale scores indicated higher sensation among participants.

2.1.5 Health Outcomes

When considering participants' health, it is essential to consider their psychological and physical health. There were three items related to psychological health after watching pornography; these were summed and averaged (Cronbach's $\alpha = .77$) by developing the same above 5-point Likert scale named from *strongly agree* to *strongly disagree* (mean = 8.85, $SD = 2.78$). The three statements about psychological health were "I get a release of negative emotions after watching pornography", "Pornography helps me to get relief from feelings of loneliness, depression, and anxiety", and "I usually get worried about my health after having masturbation caused by pornography".

Two items explored physical health variables. These items were "I feel sweating on my body after watching pornography content" and "I usually feel a higher heartbeat after watching pornography". These items were summed and averaged (Cronbach's $\alpha = .71$) to create a scale score and measured on a 5-point Likert scale from *strongly agree* to *strongly disagree* (mean = 4.96, $SD = 1.87$).

2.1.6 Attention towards Pornography

Three variables were assessed first to know attention towards pornography in the context of consumption (Cronbach's $\alpha = .73$) as it produces health effects on individuals (Rideout, 2001). These were explored by developing a 5-point Likert scale from *strongly agree* to *strongly disagree*, comprising of the statements "I usually prefer to watch pornography on a weekly or regular basis", "I rewind videos to explore pornography content keenly", and "I skip some scenes during exposure towards pornography".

3 Results

Variables	Male (n = 166)	Female (n = 58)	Total
Pornography consumption frequency			
Daily	5.8	0.0	5.8
Weekly	14.3	4.9	19.2
Monthly	13.4	9.8	23.2
Occasionally	40.6	11.2	51.8
First exposure age			
10 to 14	3.6	0.4	4.0
14 to 16	30.8	12.1	42.9
16 to 18	39.7	13.4	53.1
First experience form of pornography			
Friend	30.8	13.8	44.6
Sibling	6.7	0.0	6.7
Net cafe	19.2	6.3	25.4
Self	17.4	5.8	23.2
Source of exposure			
CD/DVD	3.1	0.9	4.0
The Internet	51.8	12.9	64.7
TV	1.3	0.0	1.3
Glamour Magazine	2.2	0.0	2.2
Cinema	0.4	0.4	0.9
Mobile	15.2	11.6	26.8
Duration of watching videos			
Less than 3 mins	22.8	6.7	29.5
Less than 30 mins	33.9	12.1	46.0
More than 30 mins	17.4	7.1	24.6
The most liked category of pornography			
Hardcore	11.2	2.2	13.4
Softcore	27.2	10.3	37.5
Scandal	7.1	3.6	10.7
Erotic and romantic	23.2	8.5	31.7
Leaks	5.4	1.3	6.7
Most liked form of pornography			
Sex stories	19.6	7.1	26.8
Static pictures	12.9	2.7	15.6
Silent videos	8.9	2.7	11.6
Videos with seductive voices	17.9	10.3	28.1
Real videos	14.7	3.1	17.9

TABLE 1: Pornography consumption patterns of participants

Source: own processing, 2024

As expected, male respondents were more exposed to pornography than females. Surprisingly, most respondents (51.8%), including males and females, were exposed to pornography occasionally. Participants were asked about a category of pornography that they liked the most. They were given the options of hardcore, softcore, scandals, erotic & romantic,

and leaks. Participants were given definitions of each type of pornography. 13.4% of people liked hardcore content, and it was defined as “video footage or content which includes sexual act’s depiction like oral, vaginal or anal intercourse, fingering, ejaculation and anilingus actions in which a person stimulates another person anus by putting an object or by a mouth with the tongue, lips, and teeth”. More than one-third (37.5%) of total respondents liked softcore pornography content, which typically includes a nude or seminude actor who remained involved in making love scenes and intended to arouse another sexually by any means. This category is considered less intrusive than hardcore as it does not include intercourse penetration or ejaculation activities. 10.7% of respondents liked scandals that are based on reality. It may be exposed to disgrace any person intentionally or unintentionally. It contains cloth and unclothed, both types of bodies which arouse someone towards sexual desire or romantic love. Very few respondents (6.5%) liked to watch leaked content described as videos usually recorded by hidden cameras against the will of other sexual partners.

Variables	Consume pornography on daily and weekly basis %		
	Male (n = 166)	Female (n = 58)	p-value (Sig.)
Age Group			
18 to 26	40.3	22.4	.007
26 to 30	35.5	37.9	.830
Marital Status			
Married	15.6	13.8	.039
Single	60.2	46.5	.027
Education Level			
Graduate	43.3	29.3	.442
Post-Graduate	31.9	31.0	.741
Risky Sexual Behavior			
Sexual imitation in real	45.7	25.8	.005
Forceful sex with a partner	26.5	17.2	.038
Use medicine for sexual power	55.1	54.2	.045
Intercourse with commercial sex workers without a condom	40.6	0.00	.033
Always do masturbation	32.5	29.3	.018
Sensation Seeking			
Like to do scary things	15.0	15.5	.029
Provide exciting experience	25.3	12.0	.011
Psychological Health			
Release of negative emotions	28.9	24.1	.013
Relief from loneliness & depression	33.1	34.4	.007
Get worried due to masturbation	46.9	31.0	.021
Physical Health			
Feel sweating on body	40.9	27.5	.009
High heartbeat	32.5	25.8	.002

*Chi-square tests were conducted separately for each gender within each category, and all are significant at $p < 0.05$ (2-tailed) except where indicated.

**Chi-square tests analyzing the association of frequent pornography viewers with age 26 to 30 and education level were found non-significant.

TABLE 2: Eighteen-to-thirty-years old males and females’ consumption of pornography on a weekly and daily basis by demographics, risky sexual behavior, sensation seeking, and post-exposure psychological and physical health

Source: own processing, 2024

People falling into the young age group of 18 to 26, including males (40.3%) and females (22.4%), were more exposed to pornography content ($=14.156^a$, $df=1$, $p=.007$). Surprisingly, married participants (15.6% male, 13.7% female) also consumed pornography on daily and weekly basis and these results were found to be significantly associated. ($=4.278^a$, $df=1$, $p=.039$). As expected, the significant majority, including (60.2%) of males and (46.5%) of females, were unmarried and exposed to pornography daily and weekly. Education level was found to be insignificant with pornography consumption as no correlation was established, because a chi-square was found for graduates ($=0.591^b$, $df=1$, $p=.442$) and ($=0.599^d$, $df=1$, $p=.741$) for post-graduate. Similarly, the chi-square test $=10.167$, $df=1$, $p=.038$ has shown that people with frequent exposure were involved in having forceful sex with their partner, which approve hypothesis 3 of this study. In almost every category of pornography consumption, male respondents were more likely to be exposed to pornography. A very slight difference has been found among males (51.1%), and females (54.2%) who used medicines to enhance their sexual power caused by frequent consumption (daily & weekly basis) of pornography. These results support hypothesis 4 of this study which predicted the relationship between risky sexual behavior (a medicine used for increasing sexual power) and consumption of pornography, a positive correlation was found, and chi-square was calculated $=8.506^a$, $df=1$, $p<0.05$. Similarly, frequent pornography consumption among (23.4% of males and 17.2% of females) was found to be positively associated $=10.508^a$, $df=1$, $p<0.05$ with the risky sexual behavior of intercourse with commercial sex workers without protection (condom). Furthermore, daily and weekly basis consumption of pornography was found to be significantly associated with feelings of loneliness, depression & anxiety, and these findings support hypothesis 5 of this study ($=14.146^a$, $df=1$, $p=.007$).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Sexual imitation in real life		.030	-.076	-.041	.065	.144*	.073	.104	-.012	-.058	-.054	.001	.110	-.002	.066
2. Forceful sex with a partner	.030		.147*	.012	.046	.037*	.184**	.029	.008	.030	.032	.049	-.019	-.002	-.076
3. Use medicine for sexual power	-.076	.147*		.104	.228**	.048*	.034	-.055	.138*	-.014	.017	.170*	.110	-.093	-.047
4. Intercourse with commercial sex workers without protection	-.041	.012	.104		.027	.022*	.025	.050	.081	.012	.010	-.004	.012	.036	-.084
5. Always do masturbation	.065	.046	.228**	.027		.096*	-.119	.077	-.003	-.110	.119	.078	-.053	-.085	.096
6. Watch porn daily and weekly	.144*	.037*	.048*	.022*	.096*		.027	.140*	-.069*	-.072*	-.031*	.039*	.079*	.148*	-.110*
7. Rewind videos for keen exposure	.073	.184**	.034	.025	-.119	.027		.195**	.061	.088	.110	.058	.221**	.113	-.038
8. Skip scenes during watching	.104	.029	-.055	.050	.077	.140*	.195**		-.005	.111	.214**	.014	.112	.220**	.008
9. Like to do scary things	-.012	.008	.138*	.081	-.003	-.069*	.061	-.005		.084	.064	.055	.088	.021	.022
10. Get an exciting experience	-.058	.030	-.014	.012	-.110	-.072*	.088	.111	.084		.128	.039	.227**	.193**	.039
11 Release of negative emotions	-.054	.032	.017	.010	.119	-.031*	.110	.214**	.064	.128		-.057	.237**	.119	-.029
12. Relief from loneliness & depression	.001	.049	.170*	-.004	.078	.039*	.058	.014	.055	.039	-.057		.047	.054	-.090
13. Get worried due to masturbation	.110	-.019	.110	.012	-.053	.079*	.221**	.112	.088	.227**	.237**	.047		.149*	.041
14. Feel sweating on the body	-.002	-.002	-.093	.036	-.085	.148*	.113	.220**	.021	.193**	.119	.054	.149*		.025
15. High heartbeat	.066	-.076	-.047	-.084	.096	-.110*	-.038	.008	.022	.039	-.029	-.090	.041	.025	

**Correlation is significant at a 0.01 level (2-tailed)

*Correlation is significant at a 0.05 level (2-tailed)

TABLE 3: Zero-Order Correlations (Pearson's *r*) among variables
Source: own processing, 2024

Table 3 suggests several relationships exist among variables of health and risky sexual behaviors after pornography consumption by participants. Hypothesis 2 of the study predicted an association between frequent pornography exposure and sexual imitation in real life. It is evident in the table that there is a correlation between forceful sex with a partner and using of medicine to increase sexual power. Thus, it can be said People who use medication for sexual power are more likely to have forceful sex with their partners as a significant association was established. Hypothesis 3 of the study predicted an association between frequent consumption of pornography and forceful sexual intimation; results in the above table were found to be significantly associated and approved this hypothesis – people who use medicines for sexual power are associated with masturbation.

Participants who watched pornography by rewinding the videos were more inclined to have forceful sex with their partners, as these variables are significantly correlated in Table 4. Frequent pornography consumption has also been found to be associated in Table 3 and Table 4 with the risky sexual behavior of intercourse with commercial sex workers without protection (condoms).

Figure 1 reflects participants' responses about their first exposure age towards pornography and their intercourse with commercial sex workers. Results show that early-age exposure to pornography was found insignificant with the assumption of sexual intercourse with commercial sex workers without protection. This variable was found insignificant here, but it has been found significantly associated with frequent consumption of pornography in Table 3 and Table 4. Here, very few people aged 10 to 14 agreed with the statement about having intercourse with commercial sex workers, and most of this age group denied risky behavior of sex at an early age. Therefore, hypothesis 1 of our study, which predicted the relationship between early age exposure and intercourse with commercial sex workers, has not been supported by the results.

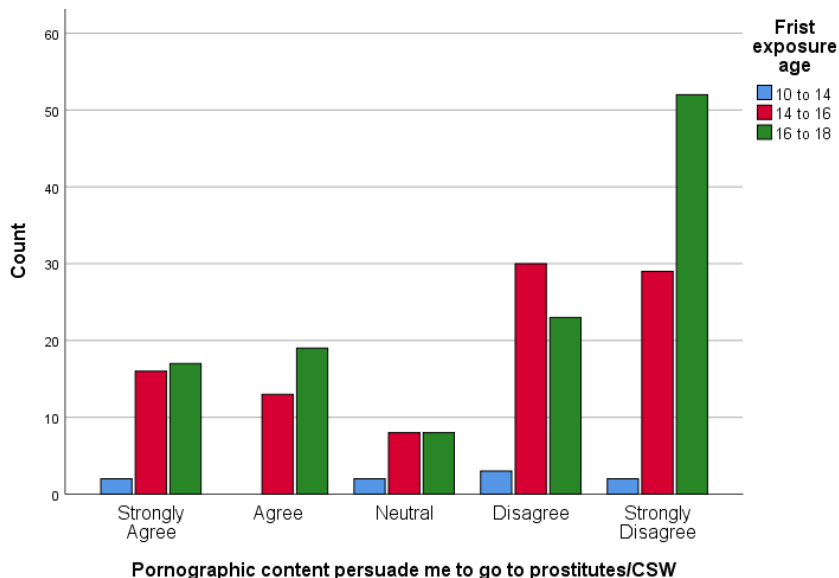


FIGURE 1: Relationship between first exposure age and intercourse with commercial sex workers

Source: own processing, 2024

	Consumption frequency pornography	First exposure age	First experience form	Source of exposure	Videos duration of watching	Type of pornography	Form of pornography
Sexual imitation in real life	-.031	-.018	-.039	.155*	.046	.020	-.037
Forceful sex with a partner	-.061	.130	.125	.101	.025	.119	.001
Use medicine for sexual power	-.051	.167*	.107	.009	-.220**	-.015	-.036
Intercourse with commercial sex workers without protection	.123	.063	.138*	.002	-.078	-.040	-.051
Always do masturbation	.047	-.059	.020	-.015	.010	.078	-.002
Watch porn daily and weekly	-.030	-.114	-.023	-.157*	.144*	.035	-.047
Rewind videos for keen exposure	.150*	.057	.152*	.198**	.023	.118	-.038
Skip scenes during watching	.255**	.119	.081	.016	.026	.083	-.011
Like to do scary things	.112	.075	.059	.005	-.143*	.110	.054
Pornography provides an exciting experience	.060	.047	.142*	.012	-.090	.145*	-.018
Release of negative emotions	.105	-.028	.056	.035	-.065	.130	-.012
Relief from loneliness & depression	.046	.128	.110	.037	-.039	.215**	-.052
Get worried due to masturbation	.079	.010	-.006	.273**	-.092	.034	-.022
Feel sweating on body	-.031	.036	.053	.033	-.059	.085	-.147*
High heartbeat	-.021	-.027	-.009	-.075	.059	-.008	.029

**Correlation is significant at a 0.01 level (2-tailed)

*Correlation is significant at a 0.05 level (2-tailed)

TABLE 4: Zero-Order Correlations (Pearson's *r*) between pornography consumption patterns and sexual attitudes and behaviors

Source: own processing, 2024

Table 4 reflects the correlations among pornography consumption patterns with participants' post-exposure health and behavioral outcomes. The table shows that several relationships exist among these variables. The source of pornography exposure (the Internet, CD/DVD, mobile, etc.) has been associated with the sexual imitation of respondents in real life. It is interesting to note that a significant association has been proved between first exposure age to pornography and using of medicines for increasing sexual power. It can be said that people who watch pornography regularly or weekly skip some scenes while watching pornography. In Table 4, a strong relationship has been established between consumption frequencies and skipping scenes during exposure to pornography.

4 Discussion

The primary purpose of the study was to explore the association of pornography consumption with the health and risky sexual behaviors of youngsters in Pakistan. We found that relationships exist between frequent consumption (daily & weekly) of pornography content, health, and behavioral variables. The social system and religiosity in Pakistan forbid any Muslim to consume pornography content. Pakistan is a Muslim-majority country, but other religious minorities (Christians, Sikhs, and Hindus) also do not allow their followers to consume pornography content. People don't only watch, but also imitate that content in the shape of lovemaking and sex in real life. Frequent pornography consumption has been associated with using medicines to enhance sexual power and intercourse with commercial sex workers without protection (condoms). These results support the previous findings of Braun-Corville and Rojas (2009), in which they found a relationship between pornography and risky sexual behaviors of viewers. Psychological feelings of loneliness, depression, and anxiety were associated with frequent exposure to pornography (Prasad & Subramanian, 2024). These results strongly support a previous study (Wolak et al., 2007), which established a positive relationship between loneliness and frequent pornography consumption. As discussed above, individuals (but only males) approached commercial sex workers after regular exposure to pornography and intercoursed without protection, spreading sexually transmitted diseases (STD), Hepatitis, and AIDS. Due to no sexual education being provided at any stage frequent consumption of pornography could be a high-risk factor for viewers in Pakistan, where STDs and AIDS are increasing daily (National Institutes of Health, n.d.).

Along with the male respondents, females have significant exposure to pornography content, which is surprising because Pakistani society is male-dominated, where cross-gender interaction varies everywhere but is limited in general. However, the literature suggests that males have more exposure to pornography than females (Young-Petersen et al., 2024; Rodríguez-Castro et al., 2021). We understand that this study's female sample is disproportionate (25%). Still, the rationale behind this is Pakistan's conservative and complex society, where pornography is an extreme taboo for females. In the Islamic state of Pakistan, females have a glorious and respectable position in society (Ali & Hassan, 2016). Any question about pornography is considered obnoxious and immoral due to religious and cultural boundaries. We faced the biggest hurdle in administering a survey with female participants. Therefore, female research assistants were hired who performed their tasks confidentially and committed to female participants to keep their identities disguised. Thus, consuming pornography being a Pakistani female is much more surprising and must be given closer attention. Among 25% of total females, 13.4% were first exposed to pornography after age 16.

People explored pornography content even after getting married, which is quite astonishing and a question mark over a couple's relationship and the teachings of Islam. It is essential to clarify that people were given the options in the questionnaire about their marital status (single, married). Therefore, the present study has contributed to the literature as it is suggested that

demographic factors must be considered while assessing the impact of pornography content on youngsters (Bernstein et al., 2023; Peter & Valkenburg, 2016). We found pornography consumption among married respondents and their association with frequent exposure (daily and weekly) was also positive. The reason behind the focus on the results of married participants is Pakistan's religious and cultural boundaries. Spiritual teachings of Islam do not allow someone to watch nudity or obscenity, and people are tied to the sacred bond of marriage to avoid the sin of sexual activity with an unmarried person. But even after marriage, pornography consumption is alarming in Pakistan's religious society due to health (psychological & physical) hazards and subsequent behaviors. Concerning these results, it is suggested that people should be socialized about relationships and the hazardous effects (risks) of interacting with sex workers. Media literacy and sex education are vital for awareness about the consumption of sensitive content and the consequences of excessive consumption of erotic content (Noll et al., 2022). Ideological State Apparatuses (ISA), i.e., family, media, and education institutions need to educate people about immoral actions such as pornography consumption, intercourse with commercial sex workers, and medicine usage for sex. People should know that the fantasy of pornography content does not apply in real life. The study contributed in the context of Pakistan to the study of the relationship between exposure to pornography and psychological effects among youth. There is very little research on the issue in the context of Pakistan.

Furthermore, parental guidance should be there at children's early ages (10 to 18). Information technology experts should take immediate measures to prevent proxy servers, which might help to block porn websites and sexually violent content. Otherwise, youth will be addicted to pornography, which can cause numerous psychological and mental health problems in the future.

4.1 Strengths and Limitations

The present study has sufficient value and merit in Pakistan because very few studies have been conducted by scholars in this country on pornography consumption and risky sexual behavior. The research has gone through the challenging task of data collection from the participants, managed somehow by the authors. However, there were some impossibilities. Therefore, the study bears several limitations justified in the present context. First, the data was collected from the participants through snowball sampling because it was the biggest hurdle in identifying and persuading respondents to participate in the study. Additional research is warranted by applying generalized sampling methods to assess the impact of pornography consumption on viewers. Second, the female-participant ratio was lower than males because of cultural and religious boundaries. Third, the study has been conducted in the Pakistani context; hence, the findings are not generalizable to other parts of the world.

Ethical Approval: The researchers got approval from the departmental ethical research committee and submitted all the data to the committee for approval.

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Bibliography

- Alexy, E. M., Burgess, A. W., & Prentky, R. A. (2009). Pornography use as a risk marker for an aggressive pattern of behavior among sexually reactive children and adolescents. *Journal of the American Psychiatric Nurses Association*, 14(6), 442-453. <https://doi.org/10.1177/1078390308327137>
- Ali, K. (2019, September 27). 900,000 websites blocked over content, says PTA. *Daily Dawn*. <https://www.dawn.com/news/1507590>
- Ali, S., & Hassan, A. A. U. (2016). Representation of women and Pakistani media: Mapping objectification phenomena in TV commercials. *Journal of Social Sciences and Humanities*, 24(2), 79-108.
- Amir, H. (2019). *The prevalence of pornography and its effects on Muslim students. How can Islamic education handle this topic?* [Master's thesis]. Newman University.
- Baloch, F. (2016, January 26). Pakistan to block over 400,000 porn websites. *Tribune*. <http://tribune.com.pk/story/1034224/objectable-content-isps-ordered-to-block-400000-pornography-websites>
- Basile, K. C., & Saltzman, L. E. (2002). *Sexual violence surveillance; uniform definitions and recommended data elements*. National Center for Injury Prevention and Control Atlanta, Georgia. https://stacks.cdc.gov/view/cdc/6545/cdc_6545_DS1.pdf
- Bernstein, S., Warburton, W., Bussey, K., & Sweller, N. (2023). Mind the gap: Internet pornography exposure, influence and problematic viewing amongst emerging adults. *Sexuality Research and Social Policy*, 20, 599-613. <https://doi.org/10.1007/s13178-022-00698-8>
- Bibi, K., Fatima, A., Amin, R., & Rowland, D. L. (2022). Understanding serial mediators of problematic pornography use in Pakistani men and women. *International Journal of Environmental Research and Public Health*, 19(21), 14336. <https://doi.org/10.3390/ijerph192114336>
- Bikila, T. S., Dida, N., Bulto, G. A., Debelo, B. T., & Temesgen, K. (2021). Adolescents' communication on sexual and reproductive health matters with their parents and associated factors among secondary and preparatory school students in Ambo Town, Oromia, Ethiopia. *International Journal of Reproductive Medicine*, 2021. <https://doi.org/10.1155/2021/6697837>
- Braun-Courville, D. K., & Rojas, M. (2009). Exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors. *Journal of Adolescent Health*, 45(2), 156-162. <https://doi.org/10.1016/j.jadohealth.2008.12.004>
- Brown, J. D., Halpern, C. T., & L'Engle, K. L. (2005). Mass media as a sexual super peer for early maturing girls. *Journal of Adolescent Health*, 36(5), 420-427. <https://doi.org/10.1016/j.jadohealth.2004.06.003>
- Brown, J. D., & L'Engle, K. L. (2009). X-rated: Sexual attitudes and behaviors associated with U.S. early adolescents' exposure to sexually explicit media. *Communication Research*, 36(1), 129-151. <https://doi.org/10.1177/0093650208326465>
- Casey, B. J., Getz, S., & Galvan, A. (2008). The adolescent brain. *Developmental Review*, 28(1), 62-77. <https://doi.org/10.1016/j.dr.2007.08.003>
- Dawn. (2024, April 5). PTA blocks 1.07m 'objectionable' web links, PHC informed. *Daily Dawn*. <https://www.dawn.com/news/1825730>
- Donohew, L., Zimmerman, R., Cupp, P. S., Novak, S., Colon, S., & Abell, R. (2000). Sensation seeking, impulsive decision-making and risky sex: Implications for risk-taking and design of interventions. *Personality and Individual Differences*, 28(6), 1079-1091. [https://doi.org/10.1016/S0191-8869\(99\)00158-0](https://doi.org/10.1016/S0191-8869(99)00158-0)
- DRM. (2022, April 15). PTA unveils system to block 'immoral content' online. <https://digitalrightsmonitor.pk/pta-unveils-system-to-block-immoral-content-online/>

- Dwulit, A. D., & Rzymiski, P. (2019). The potential associations of pornography use with sexual dysfunctions: An integrative literature review of observational studies. *Journal of Clinical Medicine*, 8(7), 914. <https://doi.org/10.3390/jcm8070914>
- Ehsan, S. M., Ahmed, S., Asim, A., Devi, M., & Ahmad, F. (2019). Association between lack of sex education and watching of adult themed content amongst youngsters in Pakistan. *Pakistan Journal of Medicine and Dentistry*, 8(4), 87-93. <https://doi.org/10.36283/PJMD8-4/015>
- Flood, M. (2009). The harms of pornography exposure among children and young people. *Child Abuse Review*, 18(6), 384-400. <https://doi.org/10.1002/car.1092>
- Häggström-Nordin, E., Hanson, U., & Tydén, T. (2005). Associations between pornography consumption and sexual practices among adolescents in Sweden. *International Journal of STD & AIDS*, 16(2), 102-107. <https://doi.org/10.1258/0956462053057512>
- Hassan, A. A. U., Amin, R. U., & Iqbal, M. Z. (2023). Media and self-objectification of women in Pakistan: Exploring the role of culture and religion. *Research Journal for Societal Issues*, 5(4), 45-57. <https://doi.org/10.56976/rjsi.v5i4.162>
- Hoyle, R. H., Fejfar, M. C., & Miller, J. D. (2000). Personality and sexual risk taking: A quantitative review. *Journal of Personality*, 68(6), 1203-1231. <https://doi.org/10.1111/1467-6494.00132>
- Iftikhar, T. (2020, January 10). *PTA tackling harmful content online* [Press release]. <https://www.pta.gov.pk/category/pta-tackling-harmful-content-online-936682363-2023-06-01>
- Khan, M. (2011, December 30). *Pakistan top charts for searching sex on google*. <https://propakistani.pk/2011/12/30/pakistan-tops-charts-for-searching-sex-on-google/>
- Kraus, S. W., & Russell, B. (2008). Early sexual experiences: The role of internet access and sexually explicit material. *Cyberpsychology & Behavior*, 11(2), 162-168. <https://doi.org/10.1089/cpb.2007.0054>
- Lenhart, A., Ling, R., Campbell, S., & Purcell, K. (2010, April 20). *Teens and mobile phones*. <https://www.pewresearch.org/internet/2010/04/20/teens-and-mobile-phones/>
- Lo, V. H., Wei, R., & Wu, H. (2010). Examining the first, second and third-person effects of Internet pornography on Taiwanese adolescents: Implications for the restriction of pornography. *Asian Journal of Communication*, 20(1), 90-103. <https://doi.org/10.1080/01292980903440855>
- Massey, K., Burns, J., & Franz, A. (2021). Young people, sexuality and the age of pornography. *Sexuality & Culture*, 25, 318-336. <https://doi.org/10.1007/s12119-020-09771-z>
- Mitchell, K. J., Wolak, J., & Finkelhor, D. (2007). Trends in youth reports of sexual solicitations, harassment and unwanted exposure to pornography on the internet. *Journal of Adolescent Health*, 40, 116-126. <https://doi.org/10.1016/j.jadohealth.2006.05.021>
- Mujahid, A. A. (n.d.). *Islam on pornography: A definite no*. <https://www.soundvision.com/article/islam-on-pornography-a-definite-no-no>
- National Institutes of Health. (n.d.). National AIDS Control Programme. (2019). <https://www.nih.org.pk/public/national-aids-control-programme>
- Noll, L. K., Harsey, S. J., & Freyd, J. J. (2022). Assessment of attitudes toward internet pornography in emerging adults using the internet pornography questionnaire. *Computers in Human Behavior*, 131, 107231. <https://doi.org/10.1016/j.chb.2022.107231>
- Paulus, F. W., Nouri, F., Ohmann, S., Möhler, E., & Popow, C. (2024). The impact of internet pornography on children and adolescents: A systematic review. *L'Encephale*. <https://doi.org/10.1016/j.encep.2023.12.004>
- Peter, J., & Valkenburg, P. M. (2016). Adolescents and pornography: A review of 20 years of research. *The Journal of Sex Research*, 53(4-5), 509-531. <https://doi.org/10.1080/00224499.2016.1143441>
- Prasad, A., & Subramanian, K. (2024). Mapping the landscape of internet pornography, loneliness, and social media addiction: A CiteSpace bibliometric analysis. *International Journal of Mental Health Addiction*. <https://doi.org/10.1007/s11469-024-01293-1>

- Qureshi, M. A. (2023). *A qualitative study exploring awareness and perceptions of Sexually Transmitted Infections (STIs) amongst a male university student population in Islamabad, Pakistan* [Doctoral dissertation]. Swinburne.
- Rideout, V. (2001). *Generation Rx.com. How young people use the internet for health information*. The Henry J. Kaiser Family Foundation. <https://www.kff.org/wp-content/uploads/2001/11/3202-genrx-report.pdf>
- Rodríguez-Castro, Y., Martínez-Román, R., Alonso-Ruido, P., Adá-Lameiras, A., & Carrera-Fernández, M. V. (2021). Intimate partner cyberstalking, sexism, pornography, and sexting in adolescents: New challenges for sex education. *International Journal of Environmental Research and Public Health*, 18(4), 2181. <https://doi.org/10.3390/ijerph18042181>
- Rojas-Estrada, E.-G., Vizcaino-Verdú, A., & Bonilla-del-Río, M. (2024). Sexual (mis)information: Pornography and adolescence in the digital space. In M. Buenestano-Fernández, A. Jiménez-Millán, & F. J. Palacios-Hidalgo (Eds.), *Comprehensive sexuality education for gender-based violence prevention* (pp. 265-284). IGI Global. <https://doi.org/10.4018/979-8-3693-2053-2.ch015>
- Rothman, E. F., Beckmeyer, J. J., Herbenick, D., Fu, T.-C., Dodge, B., & Fortenberry, J. D. (2021). The prevalence of using pornography for information about how to have sex: Findings from a nationally representative survey of U.S. adolescents and young adults. *Archives of Sexual Behavior*, 50, 629-646. <https://doi.org/10.1007/s10508-020-01877-7>
- Solano, I., Eaton, N. R., & O'Leary, K. D. (2018). Pornography consumption, modality and function in a large internet sample. *The Journal of Sex Research*, 57(1), 92-103. <https://doi.org/10.1080/00224499.2018.1532488>
- Shrivastava, S., Chauhan, S., Patel, R., Marbaniang, S. P., Kumar, P., Dhillon, P., & Pandey, N. (2023). Exposure to pornographic content among Indian adolescents and young adults and its associated risks: Evidence from UDAYA survey in Bihar and Uttar Pradesh. *Archives of Sexual Behavior*, 52, 361-372. <https://doi.org/10.1007/s10508-022-02411-7>
- Surah An-Nahl - 1-128 - Quran.com. (n.d.). <https://quran.com/16>
- Wolak, J., Mitchell, K., & Finkelhor, D. (2007). Unwanted and wanted exposure to online pornography in a national sample of youth internet users. *Pediatrics*, 119(2), 247-257. <https://doi.org/10.1542/peds.2006-1891>
- Ybarra, M. L., & Mitchell, K. J. (2005). Exposure to internet pornography among children and adolescents: A national survey. *CyberPsychology & Behavior*, 8(5), 473-486. <https://doi.org/10.1089/cpb.2005.8.473>
- Young-Petersen, B., Willoughby, B. J., Otani, J. K., & Seedall, R. B. (2024). The impact of timing of pornography exposure on adulthood outcomes of life satisfaction, sexual attitudes, and sexual behavior. *Sexual Health & Compulsivity*, 31(2), 123-141. <https://doi.org/10.1080/26929953.2024.2322745>
- Zafar, N., & Anwer, H. M. J. (2024). The digital desire, real consequences: Pornography & sexual abuse in Pakistan. *Journal of Social Sciences Development*, 3(2), 220-234. <https://doi.org/10.53664/JSSD/03-02-2024-18-220-234>

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