

Research Article Open Access

The relationship between religious orientation and pornography use among students at Kashan University of Medical Sciences in 2023

Majid Hasanzadeh 10 1, Zahra Zanjani 10 2, Abdollah Omidi 10 2*

- ¹ Department of Addiction studies, Medical Faculty, Kashan University of Medical Sciences, Kashan, Iran
- ² Department of Clinical Psychology, Medical Faculty, Kashan University of Medical Sciences, Kashan, Iran

Received: 4 November 2023 Revised: 28 November 2023 Accepted: 2 December 2023 e-Published: 1 August 2024

Abstract

Objectives: This study aims to investigate the role of religious orientation in relation to pornography use.

Methods: This research was a cross-sectional, descriptive-correlational study conducted among students at Kashan University of Medical Sciences during the 2022-2023 academic year. A total of 201 participants from various faculties were selected through a cluster sampling method. Each participant completed the Allport Religious Orientation Questionnaire and the Problematic Pornography Use Scale (PPCS). **Results:** A total of 201 students participated in this study, comprising 125 (62.2%) males and 76 (37.8%) females. All participants reported having access to the internet, with 67.7% using it for 2 to 5 hours per day. The results indicated that 88.4% of the students reported watching pornography, with 11.9% exhibiting problematic viewing behaviors. Additionally, the findings revealed a significant negative correlation between pornography viewing and internal religious orientation among students (r=-0.155, p=0.028). However, no significant relationship was found between pornography viewing and external religious orientation (r=-0.043, p=0.543).

Conclusion: Given the relatively high rate of pornography use among students, possessing internal religious beliefs may play a role in reducing pornography use.

Keywords: Pornography, Religious orientation, Students.

Introduction

The internet is a communication and information network with unprecedented influence; no other medium is as accessible to people worldwide. [1] More than 50% of all Internet traffic is related to sexual content. This is particularly concerning given the significant increase in pornography use among adults, youths, teenagers, and even children over the past few decades. [2]

In general, pornography refers to written or visual material of an explicit sexual nature intended to arouse sexual feelings in the reader or viewer. [3] Failure to control pornography use can lead to emotional problems, such as feelings of guilt, shame, and regret, and is often characterized as problematic pornography use (PPU). [4]

The proliferation of computers and smartphones has facilitated anonymous and unrestricted access to pornographic content 24 hours a day. [5] Consequently, teenagers and young adults may feel safer online, as their

identities remain concealed, allowing them to seek out information about sexual relationships without fear of judgment.

According to statistics from a prominent pornography website, over 42 billion visits were recorded in 2019.^[6] Additionally, studies estimate the prevalence of pornography use to range between 19% and 84% across different countries.^[7]

Research indicates that gender is one of the strongest predictors of pornography use, with men more likely to engage with such content than women. [1,4,8] For instance, a study conducted in Sistan and Baluchistan, Iran, revealed that among a student population with an average age of 22.35 years, 74% of men and 35% of women reported using pornography in the past year. [9]

Despite the high prevalence of pornography use, there is limited research on protective factors that may mitigate its use among teenagers and young adults. Some identified

^{*} Corresponding author: Abdollah Omidi, Department of Clinical Psychology, Medical Faculty, Kashan University of Medical Sciences, Kashan, Iran. Email: abomidi20@yahoo.com

protective factors include higher parental education levels, school greater socio-economic status, stronger attachment, healthier family relationships, and more active family religious practices.[10]

There is also growing evidence linking adolescent pornography viewing to negative health outcomes, including substance use, risky sexual behavior, aggression, sexual victimization, low self-esteem, depression, delinquency, objectification of women, and sexual deviance.[10]

Religion has long been considered a protective factor against pornography use. Religious teachings often highlight the addictive and harmful nature of pornography, the moral degradation it can cause, and its negative effects on spiritual well-being.[11] Several studies have reported that religiosity-encompassing thoughts, feelings, and behaviors related to religious beliefs-serves as a protective factor against pornography use.[1,12,13] However, some studies suggest that religiosity may not always act as a deterrent against pornography use.[14]

Alport considers religion to be a potentially significant factor in mental health. He distinguishes between internal and external religious orientations. In the case of internal religious orientation, faith is viewed as a transcendent value. Individuals with an internal religious orientation tend to live in harmony with their beliefs, which fosters greater social security and stability. Conversely, external religious orientation treats religion as a tool for fulfilling individual needs, such as status and security. In this context, individuals use religion as a means to achieve their personal goals. According to Allport and Ross, external religion is believed to have fewer therapeutic and preventive benefits compared to internal religion. [15,16]

It is important to note that the phenomenon of pornography and its relationship to religiosity has been explored only in a limited manner, with most studies focusing predominantly on Christian populations.[17]

Given the varying results of studies regarding the role of religious beliefs in pornography use, it is crucial to understand the reasons behind this inconsistency. Many studies have primarily included Christian participants, leaving out other religions such as Islam, Judaism, Buddhism, and others. A broader exploration is necessary to provide a comprehensive understanding of how religiosity relates to pornography use across different faiths.

Objectives

Therefore, the current research aims to investigate the relationship between internal and external religious orientations and pornography use within the Muslim population. Future studies should expand their scope to include various religious values, particularly those related to religiosity, in order to gain a deeper understanding of why individuals engage with pornography, especially considering that the majority of people identify as religious.

Methods

The current study is a descriptive-analytical crosssectional investigation involving students from various faculties of Kashan University of Medical Sciences during the academic year 2022-2023. The sample was selected using a cluster sampling method from different faculties. Inclusion criteria for participants required them to be students, Muslims, and over 18 years old. Exclusion criteria included incomplete or distorted questionnaires.

Data collected comprised demographic information, two Allport religious orientation questionnaires, and the Problematic Pornography Use Scale (PPUS). The sample size was calculated using the formula proposed by Tabachnick and Fidell (8M + $50 \ge N$), where N represents the sample size and M denotes the number of predictor variables. Given that this study included two predictor variables, the minimum sample size was estimated to be 66 participants. To account for potential incomplete responses, a total of 210 questionnaires were distributed.

The questionnaires distributed among students included: a) Problematic Pornography Use Scale (PPUS): This 18item tool, developed by Booth et al. in 2018, [18] assesses the extent of pornography use over the past six months. Respondents rate their answers on a 7-point Likert scale ranging from 1 (never) to 7 (always). The minimum possible score on this scale is 18, while the maximum is 126, with a cut-off score of 76 indicating problematic use. The reliability coefficient of this scale, assessed using Cronbach's alpha, is estimated at 0.93, and its validity has been supported through confirmatory factor analysis (GFI=0.97 and RMSEA=0.06). Hosseinzadeh and Hosseinabadi^[19] reported reliability coefficients for the subscales of clarity and vividness (0.71), tolerance and resilience (0.84), mood change (0.88), recurrence and return (0.80), withdrawal (0.68), conflict (0.94), and the overall scale (0.94). They also confirmed its validity through confirmatory factor analysis (GFI=0.97 and RMSEA=0.05).

b) Allport Religious Orientation Scale: Developed by Allport and Ross in 1967, this scale measures internal and external religious orientations. According to Allport's theory, internal religion is characterized by organized and

internalized principles, while external religion serves as a tool to satisfy individual needs such as status and security.^[20] Early studies indicated a correlation of -0.21 between external and internal orientations. The questionnaire consists of 20 items, with 11 items related to external religious orientation and 9 items pertaining to internal religious orientation. In 1964, Feigen created a 21item version of this test that can be administered in groups without a time limit.

Responses are scored on a scale from completely agree to completely disagree, with scores ranging from 1 to 4. The sum of scores from items 1 to 12 indicates the degree of external religious orientation, while the sum of scores from items 13 to 21 reflects internal religious orientation. The validity of the questionnaire has been reported by Janbozorgi among Tehran University students, with a Cronbach's alpha coefficient of 0.74. [20]

Data analysis

The continuous variables were expressed as the mean \pm SD, and the categorical variables were presented as a percentage and frequency. The relations between parameters were evaluated using the Pearson correlation coefficient. All statistical analyses were performed with SPSS (version 17.0, SPSS Inc, Chicago, IL, USA). A "Pvalue" less than 0.05 was considered significant.

Ethical considerations

The study was conducted in accordance with the Declaration of Helsinki. All information collected was done anonymously to ensure that the participants' true identities remained confidential. Only the researchers involved in this study had access to the data. Prior to answering the research questions, participants provided informed consent, during which they received explanations regarding various aspects of confidentiality. They were assured that their information would only be used for the purposes of this research. This study was approved by the Ethical Committee at Kashan University Medical Sciences (Ethical code: IR.KAUMS.REC.1401.215)

Results

A total of 201 students participated in this study, comprising 62.2% (125) males and 37.8% (76) females. Among the participants, 93% were single, 6.5% were married, and 0.5% were divorced. The participants' ages ranged from a minimum of 18 years to a maximum of 36 years, with an average age of 21.68 years. In terms of educational level, 58.7% were enrolled in doctoral

programs (medical students and PhD candidates), while 48.3% were pursuing bachelor's or master's degrees. All students reported having daily access to the Internet, with 63.7% indicating that they spent more than ten hours online each day.

According to the results presented in Table 1, 88.4% of all students reported watching pornography (99.2% of boys and 77.6% of girls).

Table 1. Pornography viewing by gender

Gender	Porn	Frequency	Percentage
Boy	I have not seen at all	1	0.8
	I have seen	124	99.2
	Total	125	100
Girl	I have not seen at all	17	22.4
	I have seen	59	77.6
	Total	76	100

As shown in Table 2, 28.8% of male students visited pornographic websites daily or several times a week. In contrast, none of the female participants reported visiting such sites daily, and only 5.3% indicated they did so several times a week.

Table 2. Frequency of pornography viewing by time and gender

Gender	Visit porn time	Frequency	Percentage
Boy	Once in 6 months	25	20
	Once a month	29	23
	Once a week	34	27.2
	Several times a week	26	20.8
	Every day or almost	10	8
	every day		
	Total	125	100
Girl	Once in 6 months	41	53.9
	Once a month	11	14.5
	Once a week	4	5.3
	Several times a week	4	5.3
	Every day or almost	0	0
	every day		
	Total	76	100

Using the Problematic Pornography Use Scale, which has a minimum score of 18 and a maximum score of 126, a score of 76 or higher is considered indicative of problematic use. The results revealed that 11.9% of students scored above this cut-off point, suggesting problematic pornography use, with a higher prevalence observed among boys compared to girls (p=0.001) [Table 3].

The results of the Pearson correlation test [Table 4] indicated that internal religious orientation has a negative relationship with the frequency of pornography viewing

(r=-0.155, p=0.028), while external religious orientation did not show a significant relationship (r=-0.043, p=0.543).

Table 3. Prevalence of pornography addiction among students by gender

Groups			Problematic pornography		Total	X2
			No	Yes		(sig)
Gender	Boy	Frequency	103	22	125	0.001
		Percentage	82.4%	17.6%	100%	
	Girl	Frequency	74	2	76	
_		Percentage	97.4%	2.6%	100 %	
	Total	Frequency	177	24	201	
		Percentage	88.1%	11.9%	100 %	

Table 4. Mean, Standard deviation, and correlation between pornography use and religious orientation

Topic	Mean	Standard	r		
		deviation	1	2	3
1-Porn	47.28	22.74	1	.043	-0.155 *
2-External religious orientation	29.52	5.62	-0.043	1	-0.697 **
3-Internal religious orientation	20.35	4.03	-0.155*	-0.697**	1

sig<0.05*

Discussion

The primary aim of this study was to investigate whether religiosity serves as a protective factor against exposure to pornography. It was hypothesized that teenagers with stronger religious beliefs and motivations would exhibit more conservative attitudes toward pornography use.

The findings indicated that individuals with a more internal religious orientation tend to use pornography less frequently. This result aligns with previous research demonstrating a negative correlation between religiosity and pornography use. [12, 21-23]

Additionally, the study revealed that external religious orientation did not have a significant relationship with harmful pornography use, a finding consistent with other studies.^[14,8]

In general, religious teachings promote conservative views on sexuality, which likely foster negative attitudes toward pornography use. Individuals with an internal religious orientation are more likely to adhere to these conservative values, potentially viewing pornography as morally wrong.^[24]

According to Allport and Ross, individuals with extrinsic religious orientations often use religion as a means to fulfill basic needs, employing it for non-religious purposes such as coping with challenges and enhancing their lives. In contrast, those with an internal religious orientation view religion as an end in itself. For these individuals, religion serves as a framework for social life, enabling them to better understand and navigate immoral situations. [16]

Consequently, it can be concluded that external religious orientation does not act as a protective factor against pornography use.

Furthermore, Cooper et al., [25] identified three factors-Internet access, affordability, and anonymity-that may explain why extrinsic religious orientation does not provide protection against pornography viewing. Specifically, individuals with an external religious orientation who utilize religion primarily to meet social needs may feel less threatened by the anonymity of the internet, leading them to engage in behaviors that do not align with their religious values. As a result, this type of religious orientation may lack a protective role regarding harmful pornography use.

Overall, the current study found that a higher internalized religious orientation is associated with a lower likelihood of using pornography. However, it is important to note that the correlation between internal religious orientation and pornography use was weak, suggesting that numerous other factors may influence this relationship, warranting further investigation in future research. Additionally, this study did not differentiate between intentional and unintentional pornography use; some participants may have encountered explicit content accidentally. Future studies should consider this distinction.

Given the relatively high prevalence of pornography viewing among students despite religious teachings in this area, further research is essential to explore why individuals with an internal religious orientation still engage in pornography use.

The results of this study indicate that 88.4% of participants reported having visited pornographic websites. The prevalence of pornography use was notably higher among boys (99%) compared to girls (77.6%). Various studies have reported differing rates of pornography use. For instance, research conducted at a Dutch university found that 83.8% of students viewed pornography, with exposure rates of 78.4% for females and 79% for males. [26] Additionally, a systematic review covering the years 1995 to 2015 reported that the prevalence of pornography use among teenagers ranged from 19% to 84%.[27] These findings highlight the significant prevalence of pornography use among students.

The current generation of students has grown up in the digital age, which may contribute to their increased exposure to pornographic content due to easy access to the Internet. Given that sexual exploration and the pursuit of intimate relationships typically occur during late adolescence and young adulthood, it is not surprising that students utilize the Internet for these purposes.

It is important to note that variations in results may stem from differences in study populations and cultural backgrounds. The high prevalence of pornography use observed in this study may also be attributed to increased Internet access among students during and after the COVID-19 pandemic, compared to earlier research periods.

Another significant finding of this study is that 11.9% of participants reported problematic pornography use, with a higher prevalence among boys (17.6%) compared to girls (2.6%). This aligns with previous research on the topic. [30-^{32]} Summer-Emerson et al., ^[33] attempted to explain these gender differences from an evolutionary perspective, suggesting that men's higher aggression levels may lead to increased pornography use compared to women. They noted that these differences could be influenced by biological factors, such as elevated testosterone levels in men, as well as social issues or cultural restrictions affecting both genders. Additionally, sexual neuroimaging studies indicate that women exhibit a weaker response to visual erotic stimuli.[33]

Finally, it is important to acknowledge that data for this study were collected using a self-report questionnaire, which may have led participants to respond in a manner they perceived as socially desirable. Therefore, future research should consider employing alternative methods, such as interviews, to obtain more accurate results. Given

that the sample consisted solely of university students, it would also be beneficial to expand this research to include individuals from diverse age groups and educational backgrounds to enhance the validity of the findings. Another limitation of this study is the lack of consideration for psychiatric disorders, as well as its cross-sectional and correlational design, which limits the ability to establish causal relationships.

Conclusions

The results of this study indicate a high prevalence of students visiting pornographic websites and engaging in problematic pornography use. Conversely, the findings suggest that internalized religious beliefs may serve as a protective factor against pornography use. To further understand this relationship, we recommend exploring the specific aspects of religious beliefs that influence pornography use among these populations.

Acknowledgment

The authors would like to thank the Clinical Research Development Unit of Kashan Shahid Beheshti hospital.

Competing interests

The authors declare that they have no competing interests.

Abbreviations

Problematic Pornography Use Scale: PPCS; problematic pornography use: PPU; Coronavirus disease 2019: COVID-19.

Authors' contributions

All authors read and approved the final manuscript. All authors take responsibility for the integrity of the data and the accuracy of the data analysis.

Funding

This study was funded by the Vice Chancellor of Research at Kashan University of Medical Sciences.

Role of the funding source

None.

Availability of data and materials

The data used in this study are available from the corresponding author on request.

Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki. This study was approved by the Ethical Committee at Kashan University of Medical Sciences (Ethical code: IR.KAUMS.REC.1401.215). All participants signed an informed consent form.

Consent for publication

By submitting this document, the authors declare their consent for the final accepted version of the manuscript to be considered for publication.

References

- 1. Cooper AL, Delmonico DL, Griffin-Shelley E, Mathy RM. Online sexual activity: An examination of potentially problematic behaviors. Sex Addict Compuls. 2004;11(3):129-43 doi:10.1080/10720160490882642
- 2. Lewczuk K, Wójcik A, Gola M. Increase in the prevalence of online pornography use: Objective data analysis from the period between 2004 2016 in Poland. Arch Sexual Behavior. 2019:1-5. doi:10.31234/osf.io/tmn4r
- 3. Kraus SW, Sturgeon JA, Potenza MN. Specific forms of passionate attachment differentially mediate relationships between pornography use and sexual compulsivity in young adult men. Sex Addict Compul. 2018;25(4):380-95. doi:10.1080/10720162.2018.1532362
- 4. Grubbs JB, Volk F, Exline JJ, Pargament KI. Internet pornography use: Perceived addiction, psychological distress, and the validation of a brief Marital Ther. 2015;41(1):83-106. measure. Ţ Sex doi:10.1080/0092623X.2013.842192 PMid:24341869
- 5. Döring N, Mohseni MR. Are online sexual activities and sexting good for adults' sexual well-being? Results from a national online survey. Int J Sex Health. 2018;30(3):250-63. doi:10.1080/19317611.2018.1491921
- The 2019 Year in Review Pornhub Insights [Internet]. [cited 2023 Sep 24]. Available from: https://www.pornhub.com/insights/2019-year-in-review
- 7. Peter J, Valkenburg PM. Adolescents and pornography: A review of 20 research. Sex Res. 2016;53(4-5):509-31 doi:10.1080/00224499.2016.1143441 PMid:27105446
- 8. O'Reilly S, Knox D, Zusman ME. College student attitudes toward pornography use. Coll Stud J. 2007;41(2):402-7.
- Darvish Molla M, Shirazi M, Nikmanesh Z. The role of difficulties in emotion regulation and thought control strategies on pornography use. Practice Clin Psychol. 2018;6(2):119-28. doi:10.29252/nirp.jpcp.6.2.119
- 10. Hardy SA, Steelman MA, Coyne SM, Ridge RD. Adolescent religiousness as a protective factor against pornography use. J Appl Dev Psychol. 2013;34(3):131-9. doi:10.1016/j.appdev.2012.12.002
- 11. Khaleghian A, Sajjadian I, Fatehizade M, Manshaei GR. The Study of mediating role of attitude toward pornography and self-control in the relationship between religious commitment and tendency to internet pornography. Soc Psychol Res. 2020;9(36):55-72.
- 12. Nelson LJ, Padilla-Walker LM, Carroll JS. "I believe it is wrong but I still do it": A comparison of religious young men who do versus do not use Psycholog pornography. Relig Spiritual. 2010;2(3):136. doi:10.1037/a0019127
- 13. Baltazar A, Helm Jr HW, McBride D, Hopkins G, Stevens Jr JV. Internet pornography use in the context of external and internal religiosity. J Psychol Theol. 2010;38(1):32-40.
- 14. Abell JW, Steenbergh TA, Boivin MJ. Cyberporn use in the context of 2006;34(2):165-71 religiosity. T Psychol Theol. doi:10.1177/009164710603400206
- 15. Banazadeh N, Sabahi A, Ziaadini H, Jalali-Khalilabadi A, Banazadeh M. The relationship between extrinsic and intrinsic religious orientation with perceived stress and cigarette addiction among university students. Addict Health. 2019;11(2):73-80. doi: 10.22122/ahj.v11i2.226 PMID: 31321004
- 16. Allport GW, Ross JM. Personal religious orientation and prejudice. J Personal Soc Psychol. 1967;5(4):432. doi:10.1037/0022-3514.5.4.432 PMid:6051769
- 17. Hotchkiss JT. The relationship between sexual compulsivity, emotional and spiritual distress of religious and non-religious internet pornography users. J Religion Health. 2021;60(3):1630-51. doi:10.1007/s10943-020-01152-y PMid:33586057
- 18. Bőthe B, Tóth-Király I, Zsila Á, Griffiths MD, Demetrovics Z, Orosz G. The development of the problematic pornography consumption scale (PPCS).

- J Sex Res 2018;55(3):395-406. doi:10.1080/00224499.2017.1291798 PMid:28276929
- 19. Hosseinnezhad S, Hosseinabadi M. Validity and reliability of the Persian version of problematic pornography consumption scale among social networking sites users. J Psychologicalsci. 2019;18(75): 363-72.
- 20. Janbozorgi M. Religious orientation and mental health. Res Med. 2007;31(4):345-50.
- 21. Abell JW, Steenbergh TA, Boivin MJ. Cyberporn use in the context of religiosity. T Psychol Theol. 2006;34(2):165-71 doi:10.1177/009164710603400206
- 22. Baltazar A, Helm HW, Mcbride D, Hopkins G, Stevens J V. Internet pornography use in the context of external and internal religiosity. J Psychol Theol. 2010;38(1):32-40. doi:10.1177/009164711003800103
- 23. Short MB, Kasper TE, Wetterneck CT. The relationship between religiosity and internet pornography use. J Relig Health. 2015;54:571-83. doi:10.1007/s10943-014-9849-8 PMid:24609752
- 24. Perry SL. Does viewing pornography diminish religiosity over time? Evidence from two-wave panel data. J Sex Res. 2017;54(2):214-26. doi:10.1080/00224499.2016.1146203 PMid:27049348
- 25. Cooper A, Delmonico DL, Burg R. Cybersex users, abusers, and compulsives: New findings and implications. Sex Addict Compul: J Treatment Prevent. 2000;7(1-2):5-29doi:10.1080/10720160008400205
- 26. Dwulit AD, Rzymski P. Prevalence, patterns and self-perceived effects of pornography consumption in polish university students: A cross-sectional study. Int J Environ Res Public Health. 2019;16(10):1861. doi:10.3390/ijerph16101861 PMid:31137778
- 27. Peter J, Valkenburg PM. Adolescents and pornography: A review of 20 2016;53(4-5):509-31 of research. I Sex Res doi:10.1080/00224499.2016.1143441 PMid:27105446
- 28. Cooper A, Griffin-Shelley E, Delmonico DL, Mathy RM. Online sexual problems: Assessment and predictive variables. Sexual Addiction Compulsivity: Treatment Prevent 2001;8(3-4):267-85 doi:10.1080/107201601753459964
- 29. Mohr CJ. Identity and the life cycle. Selected papers. By Erik H. Erikson. With a historical introduction by David Rapaport. New York: international universities press, Inc., 1959. 171 pp.
- 30. Kumar P, Patel VK, Bhatt RB, Vasavada DA, Sangma RD, Tiwari DS. Prevalence of problematic pornography use and attitude toward pornography among the undergraduate medical students. J Psychosexual Health. 2021;3(1):29-36 doi:10.1177/2631831821989677
- 31. Chowdhury MR, Chowdhury MR, Kabir R, Perera NK, Kader M. Does the addiction in online pornography affect the behavioral pattern of undergrad private university students in Bangladesh?. Int J Health Sci. 2018;12(3):67.
- 32. Willoughby BJ, Carroll JS, Nelson LJ, Padilla-Walker LM. Associations between relational sexual behaviour, pornography use, and pornography acceptance among US college students. Cult Health Sex. 2014;16(9):1052-69. doi: 10.1080/13691058.2014.927075.
- 33. Emmers-Sommer T, Hertlein K, Kennedy A. Pornography use and attitudes: An examination of relational and sexual openness variables between and within gender. Marr Family Rev. 2013;49(4):349-65. doi:10.1080/01494929.2012.762449

How to Cite this Article:

Hasanzadeh M, Zanjani Z, Omidi A. The relationship between religious orientation and pornography use among students at Kashan University of Medical Sciences in 2023. Int Arch Health Sci. 2024;11(3):201-206. doi: 10.48307/iahsj.2023.420796.1079