

Exploring the Relationship Between Pornography Addiction and Religiosity

Dito Aryo Prabowo

Faculty of Psychology, UIN Syarif Hidayatullah Jakarta, Indonesia

dito.aryo17@mhs.uinjkt.ac.id

Abstract

Indonesia has recorded reports of complaints in 2020 regarding pornography and cybercrimes that continued to increase from 2011 to 2018. Despite the prevalence, objective approaches to construct, assess, and treat problematic pornography consumption are still unclear due to highly different concepts. This study aims to explore the relationship between pornography addiction and religiosity. Religiosity might be used as a buffer to pornography addiction. However, individuals who engage in pornography consumption with high religious beliefs and religious experiences may perceive their behavior as addictive, hence facilitating them to be more vulnerable to pornography addiction. 1500 online responses from Indonesian citizens to the newly developed Pornography Addiction Scale Indonesia (PASI) and the Centrality of Religiosity Scale (CRS) were obtained using the non-probability sampling technique. There is no significant correlation found between both variables, albeit significant correlations were found in their aspects, namely salience and religious experience; mood modification and religious experience; internal conflict and intellectual; and internal conflict and ideology. Significant mean differences also found between religiosity score and pornography consumption demographic data. The results were discussed using comparison with other findings in other studies.

Keywords: pornography addiction, pornography consumption, religiosity

Abstrak

Indonesia mencatat laporan pengaduan pada tahun 2020 terkait pornografi dan kejahatan dunia maya yang terus meningkat dari tahun 2011 sampai 2018. Terlepas dari prevalensinya, pendekatan objektif untuk membangun, menilai, dan menangani konsumsi pornografi yang bermasalah masih belum jelas karena konsep yang sangat berbeda. Penelitian ini bertujuan untuk mengeksplorasi hubungan antara adiksi pornografi dan religiusitas. Religiusitas dapat digunakan menjadi penghambat menuju adiksi pornografi, namun individu dengan kepercayaan dan pengalaman keagamaan yang tinggi dapat mempersepsikan perilaku konsumsi pornografi sebagai sesuatu hal yang adiktif, sehingga membuat mereka lebih rentan terhadap adiksi pornografi. 1500 respon dari warga negara Indonesia untuk alat ukur yang baru dikembangkan yaitu Pornography Addiction Scale Indonesia (PASI) dan Centrality of Religiosity Scale (CRS) diperoleh dengan teknik pengambilan sampel non-probabilitas. Ditemukan tidak terdapat korelasi yang signifikan antara kedua variabel. Meskipun diperoleh korelasi yang signifikan pada aspek-aspek keduanya; seperti salience dan internal conflict; mood modification dan religious experience; internal conflict dan intellectual; serta internal conflict dan ideology. Diperoleh rata-rata perbedaan secara signifikan antara skor religiusitas dan data demografis terkait konsumsi pornografi. Hasil penelitian kemudian didiskusikan lebih lanjut dengan melakukan perbandingan antara hasil studi lain.

Kata kunci: adiksi pornografi, konsumsi pornografi, religiusitas

Introduction

Sudden website traffic was observed in 2020 statistics from Pornhub, one of the largest pornography websites. There was a 24.5% change compared to the average day during March or the beginning of the Covid-19 outbreak (Pornhub Insights, 2020). A similar increase also can be observed in Indonesia, wherein KPAI (*Komisi Perlindungan Anak Indonesia*) 2020 annual report, pornography and cybercrime complaints were steadily rising from 2011 to 2018 and ranked fourth among all complaint clusters in 2020 (Komisi Perlindungan Anak Indonesia, 2021). Week Relative Search Volume (WRSV) comparison in Google Trends also shows the increased interest in pornography after the outbreak of Covid-19, when many governments encourage the citizens to stay at home (Zattoni et al., 2020). The increase may be associated with how individuals cope with confinement, stress, and free pornography access, leading to problematic pornography consumption (Mestre-Bach et al., 2020). This is also associated with the higher prevalence of internet addiction, including pornography, due to financial hardships, isolation, problematic substance use, and mental health issues (Awan et al., 2021).

Despite the prevalence, objective approaches to construct, assess, and treat problematic pornography consumption are still unclear due to highly different concepts. For example, the debate to include the term "addiction" to attribute the phenomenon may be considered to question the normativity of sexual behaviors and try to control it under the pathological names (Ley, et.al 2014; Voros, 2009). One of the discussions related to pornography addiction is how beliefs regarding pornography may induce the phenomenon. Grubbs et al. (2015) found that religiosity can predict individuals' perceived pornography addiction, which may indicate their perception of pornography. The perception might come from guilt when watching pornography, due to different morals and values (Duffy et al., 2016). Religious belief also becomes a source of adhered values and morals, where pornography consumption may be viewed as an act of lust and against certain religions, therefore creating conflicts when an individual engages in both religious practices and pornography consumption (Short et al., 2015).

Grubbs & Perry (2019) underlined this conflict as moral incongruence between sexual values and sexual behavior. It is likely to promote distress as in religion, it promotes values that condemn and disapprove of pornography. However, contrasting results were found in a study of pornography consumption and religiosity among Christian University students where no statistically significant correlation was found between both variables (Baltazar et al., 2010). The authors argue that religiosity can have protective and risk factors, while they may encourage one to avoid pornography, it could also be a permissible sexual outlet than sexual intercourse with someone other than one's spouse. In Indonesia, studies observing the relationship between religiosity and pornography consumption were different and statistically significant negative (Puspitasari & Sakti, 2019; Theophilus, 2018). Furthermore, other studies found positive results relationship between religiosity and pornography (Subekti, 2019). Since previous studies incline to study pornography consumption or impact in Indonesia haven't been studied beyond the exposure extent, this study aims to observe the nature of the relationship for both variables.

This study also aims to explore the relationship of both variables at the level of the aspects. Fernandez and Griffiths (2019) based on the literature review of pornography addiction measurements, the frequently assessed components of addiction includes impaired control, salience, mood modification, interpersonal conflict, and general life conflict. Huber & Huber (2012) took their source to measure religiosity from Stark and Glock where they develop ritual dimensions into public and private practice, coming from Glock's approach to the sociology of religion, which defined the dimensions as intellectual, ideological, private practice, public practice, and religious experience. Salience refers to the perceived importance of pornography for an individual where it dominates his thoughts, feelings, and actions (Bóthe et al., 2018). This may correspond to the religious experience dimension, representing an emotionally affective feeling and transcendence to ultimate reality (Huber & Huber, 2012). The emotional intensity of religious experience may also be associated with how individuals perceive the emotional impact of pornography as described in the mood modification component or alleviate negative feelings (Fernandez & Griffiths, 2019). One major component assessed in pornography problematic

consumption measurement is the conflict which ranged from various problems experienced with oneself to social functioning. Internal conflict refers to personal disputes resulting from the behavior, including psychological distress problems (Fernandez & Griffiths, 2019). This conflict may be associated with an individual's knowledge of religion (intellectual) which may invoke discrepancies.

Aside of the relationships between both variables, this study also intends to explore the mean differences in pornography addiction and religiosity levels between levels of pornography consumption demographic data. Perry (2017) found there was a curvilinear effect between earlier pornography consumption on later religious service attendance, where after declining religious service attendance and prayer, individuals with higher levels of pornography tend to have increasing religious attendance. The study yields two possible explanations, that they no longer have moral conflicts between both practices, or they were pursued to higher religious attendance to seek help from their high pornography consumption. However, Short et al. (2015) note that religiosity interfered with pornography consumption at a rate of 74 minutes per week. The contrasting evidence may be confirmed in this study by seeking the mean differences of both variables' levels and pornography consumption demographic data.

Methods

Study design

Kumar (2011) types of study design, this study can be categorized as non-experimental, cross-sectional, and retrospective type. This type refers to the study that aims to observe the variables without any modification to seek information from participants based on their current or past experience in a single time frame to obtain the prevalence of the studied phenomenon. To answer the hypotheses, this study employs the correlational research strategy and differential research design by demonstrating a relationship between two variables and comparing preexisting groups to establish differences between them (Gravetter & Forzano, 2012).

Participants

1500 respondents from Indonesian citizens with the age range 18-60 (36.5% female, $M=24.8$, $SD=4.51$) were obtained through the online questionnaire service Google Form. They responded to study information and the survey link shared to social media or networking services such as Twitter, WhatsApp, and LINE.

Measurements

Pornography addiction

Pornography addiction risk level was measured using the newly developed Pornography Addiction Scale Indonesia (PASI) which is composed of 27 items to assess five aspects of pornography addiction: salience, emotional regulation (mood modification), impaired control, internal conflict, and craving. All aspects were taken from systematic reviews of pornography addiction or problematic pornography consumption (cf. (Binnie & Reavey, 2020; Fernandez & Griffiths, 2019)). The instrument uses 4-point Likert scale ranging from 1 (very unsuitable) to 4 (very suitable). Taber (2018) internal consistency measured with Cronbach's Alpha for the aspects and total score were satisfactory $\alpha > .6$, ranged from .756, .809, .868, .605, .820, and .936 respectively. Construct validation using second order confirmatory factor analysis found the model were acceptable to the data ($\chi^2=2796.13$, $df=289$, $p<.001$, $RMSEA=.076$, $SRMR=.057$).

Religiosity

Religiosity was measured using The Centrality of Religiosity Scale (CRS) and adapted into *Bahasa Indonesia* by Hasbiya (2019). The scale consists of 15 items, with every three items belonging to five dimensions: intellectual, ideology, public practice, private practice, and religious experience. The instrument uses a 4-point Likert scale ranging from 1 (very unsuitable) to 4 (very suitable). Taber (2018)

Cronbach's Alpha for the dimensions and total score were satisfactory $\alpha > .6$, ranged from .747, .687, .784, .746, .834, and .907 respectively. Construct validation using confirmatory factor analysis found the model were acceptable to the data ($\chi^2=3438.13$, $df=314$, $p<.001$, $RMSEA=.0697$, $SRMR=.0377$).

Demographic data

Demographic data used in this study were sex (male or female), age, last time-consuming pornography (within 24 hours, 48 hours, a week, a month, 6 months, a year, or never within this year), pornography consumption frequency in the last 6 month (more than 5 times a week, 3-5 times a week, 1-2 times a week, 1-2 times a month, less than once a month, or never in the last 6 month), and an average of pornography consumption duration in 6 months (more than 10 hours, 7-10 hours, 4-6 hours, 1-3 hours, less than 1 hour, never in the last 6 month).

Data analysis

The obtained data were analyzed using correlation analysis and one-way ANOVA analysis. One-way ANOVA analysis used Welch's test and Games-Howell Post-Hoc test that did not use equal variance assumption. All analyses, including internal consistency and confirmatory factor analysis, were conducted with Jamovi version 2.0.0.0. Jamovi is an open statistical platform using the community to develop software aligned with R.

Results and Discussion

Based on the correlation analysis **Table 1.**, this study found no statistically significant correlation between pornography addiction and religiosity level, pornography addiction, and all aspects of religiosity. However, religiosity correlated with all aspects of pornography addiction except impaired control and craving, where a negative correlation was found except for internal conflict. We also found a significant correlation between pornography addiction and religiosity aspects, salience was correlated negatively to private practice and religious experience. Emotional regulation was associated negatively with public practice, private practice, and religious experience. Impaired control was positively correlated to ideology and public practice. All correlations between internal conflict and aspects of religiosity were positively correlated, and in contrast, there is no significant correlation between craving and all aspects of religiosity.

Both pornography addiction and religiosity scores were significantly correlated with age. To examine the correlation, we use mean comparison to see which age groups have the highest scores from both variables. Franssen et al. (2020) age groups categorization; young (19-34 years), early middle-aged (35-49 years), and late middle-aged adults (50-65 years) groups. Papalia & Martorell (2013) young groups are separated into three groups; late adolescents (18-19 years), emerging adulthood (20-24 years), and young adult (25-34 years). There is no significant mean differences found, however, in pornography addiction scores were decreasing after each age group and religiosity scores showing little differences from each age groups except early middle-aged groups see **Table 2.**

Table 1. Pearson's Correlation Between Included Measurements

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	24.8	4.51	—															
2. Sex	—	—	.188***	—														
3. Pornography addiction	63.6	15.8	-.068**	.306***	—													
4. Religiosity	49.2	8.2	.053*	.004	-.008	—												
5. Salience	11.8	3.49	-.009	.295***	.876***	.087***	—											
6. Emotional regulation	15	4.26	-.071**	.211***	.819***	-.077**	.64***	—										
7. Impaired control	16.9	4.63	.106***	.33***	.888***	.041	.701***	.623***	—									
8. Internal conflict	8.37	2.31	.135***	.193***	.753***	.17***	.54***	.501***	.76***	—								
9. Craving	11.5	3.97	.014	.231***	.848***	-.018	.781***	.6***	.634***	.511***	—							
10. Intellectual	8.73	2.25	.108***	.056*	.008	.758***	-.036	-.048	.036	.128***	-.001	—						
11. Ideology	11.1	1.57	-.019	-.013	.039	.745***	-.038	-.011	.101***	.169***	-.015	.387***	—					
12. Public practice	8.71	2.39	.045	.116***	.015	.83***	-.048	-.067**	.055*	.16***	.017	.602***	.479***	—				
13. Private practice	1.2	1.99	.029	-.091***	-.048	.85***	.129***	-.08**	-.008	.106***	-.045	.496***	.62***	.603***	—			
14. Religious experience	1.5	1.97	.028	-.084**	-.042	.839***	.103***	.095***	-.008	.124***	-.036	.471***	.658***	.564***	.74***	—		
15. Last time ^a	5.56	1.49	-.001	.349***	.558***	.121***	.533***	.455***	.54***	.399***	.395***	-.082**	-.035	.093***	.148***	.123***	—	
16. Frequency ^a	4.11	1.34	.028	.399***	.622***	.167***	.611***	.499***	.576***	.399***	.495***	.109***	-.074**	.118***	.194***	-.17***	.759***	—
17. Average of duration ^a	2.5	.88	-.016	.186***	.398***	-.072**	.398***	.318***	.346***	.237***	.346***	-.032	-.036	-.04	.103***	-.081**	.375***	.412***

Note. ^a of pornography consumption, * p < .05, ** p < .01, *** p < .001

Table 2. Pornography Addiction and Religiosity Scores' Mean Based on Age Groups

Age groups	N	Pornography addiction		Religiosity	
		Mean	SD	Mean	SD
19-20	94	64.6	14.87	49	8.21
20-24	753	64	15.15	49.1	7.84
25-34	575	63.5	16.36	49.1	8.59
35-49	78	59	17.6	50.7	8.75

Mean comparison results of religiosity score with pornography consumption demographic data (last used, frequency, and the average of duration) found all data were statistically different. The differences between seven subgroups of last pornography consumption and religiosity was $F(6.206) = 8.15, p < .001$ based on one-way ANOVA, with significant religiosity level differences, were found between respondents that last consumed pornography more than one year and more active (within last 24 hours, 48 hours, and a week). The difference between six subgroups of pornography consumption frequency determined by one-way ANOVA was also significant with $F(5.419) = 11.7, p < .001$ with subgroup who most often used pornography more than 5 times a week had a statistically significant difference of religiosity level with other four subgroups (1-2 times a week, 1-2 times a month, less than once a month, and never in the last 6 month). As for the average of pornography consumption duration groups, there was also a significant difference in terms of religiosity level determined by one-way ANOVA $F(5.953)=4.76, p < .001$. There are no significant religiosity level differences between the most engaged group (more than 10 hours) and other levels. However, significant differences were found between the least involved group (never in 6 months) with four different groups (less than 1 hour, 1-3 hours, and 4-6 hours).

Based on the findings, there is no correlation found between religiosity and pornography addiction. Similar results were found in the study of relationship among religiosity and self-perceived problematic pornography consumption in 6-month longitudinal study (Maddock et al., 2019). They attribute the result to the nature of the used religiosity measurement was focused more on religious behaviors than religious identity or affiliation. They also suggest the respondents' religious incongruence. According to Perry (2018) explains why Americans with conservative beliefs on religious commitment and affiliation oppose pornography in principle than in actual practice.

A similar religiosity measure was also used in the current study, where three of five aspects were focused on religious practice and experience. Another explanation may attributed to the indifferent religiosity level across age groups may also contributed to the result. Studies related to religiosity and pornography addiction mainly incorporate respondents with narrow age range as respondents. For example, studies in Indonesia to current study mostly report significant correlations (Agustina & Hafiza, 2013; Puspitasari & Sakti, 2019), and mostly involve adolescent and high school respondents (cf. Gayatri, et.al 2020; Hardani, et al 2017; Mardiyantari, et.al 2018; Nurhidayah & Pramintari, 2017)).

Following the main result, examining both variables' aspects' relationship may explain further nature of pornography addiction with religiosity. Salience was correlated negatively with private practice and religious experience, which may represent as a more private and personal internalization of their religious belief and opposed to salience, which defined in this study as feelings, thoughts, and behaviors pertained to individual's view on pornography's importance. This finding can be related to a US study where frequent internet pornography consumption diminishes religious service attendance and perceived closeness to God (Perry & Hayward, 2017). The study also confirmed our result that pornography consumption correlated negatively with religiosity and its aspects, and on how impaired control on pornography addiction level correlated negatively with public practice. Moral incongruence may explained why internal conflict on individuals with pornography consumption was positively correlated to all religiosity aspects. The increasing level of religiosity enhance their moral to accept religious belief, thus with pornography consumption, moral distress become parts on how they think they are addicted to pornography (Grubbs et al., 2020).

In mean comparison of religiosity level and pornography consumption include: last consumption, frequency, and duration. The research found that there are significant differences of religiosity between the last used within hours (1-10 hours ago) and days (more than 10 hours, a week ago, more than 6 month). Short et al. (2015) showing how religious individuals were less likely to currently view pornography may posit individuals' importance on religious values and make religiosity as protective factors of pornography consumption. In the light of the relationship of pornography addiction and religiosity found in this study, it seems that pornography consumption and addiction have different association with religiosity. Pornography consumption might be negatively correlated to religiosity due to individuals with high religiosity adhere more to their beliefs, however all religiosity aspects are more associated to individuals' score in internal conflict aspect of pornography addiction. This may imply internal conflict in pornography addiction as a main factor for religious individuals, rather than other aspects, which can be used as potential treatment for individuals with pornography addiction.

Conclusion

This study aimed to explore the nature of the relationship between pornography addiction and religiosity. While both variables did not significantly correlated, both variables' aspects' yield significant correlation, such as salience and private service and religious experiences. The result underlines the importance of internalization of religious belief, as shown in the analysis where certain aspects of religiosity that involves personal involvement to religious belief are associated with lower pornography addiction level. Broad age range in this study also may contributed to the result, which suggest future studies to inspect how age may elaborate the relationship of both variables.

References

- Agustina, I., & Hafiza, F. (2013). Religiositas dan perilaku cybersex pada kalangan mahasiswa. *Psikologika: Jurnal Pemikiran dan Penelitian Psikologi*, 18(1), 15–23. <http://journal.uii.ac.id/Psikologika/article/view/4161/3707>
- Awan, H. A., Aamir, A., Diwan, M. N., Ullah, I., Pereira-Sanchez, V., Ramalho, R., Orsolini, L., de Filippis, R., Ojeahere, M. I., Ransing, R., Vadsaria, A. K., & Virani, S. (2021). Internet and pornography consumption during the COVID-19 pandemic: Presumed impact and what can be done. *Frontiers in Psychiatry*, 12, 1-8. <https://doi.org/10.3389/fpsy.2021.623508>
- Baltazar, A., Helm, H. W., McBride, D., Hopkins, G., & Stevens, J. V. (2010). Internet pornography consumption in the context of external and internal religiosity. *Journal of Psychology and Theology*, 38(1). <https://doi.org/10.1177/009164711003800103>
- Binnie, J., & Reavey, P. (2020). Problematic pornography consumption: Narrative review and a preliminary model. *Sexual and Relationship Therapy*, 35(2), 137–161. <https://doi.org/10.1080/14681994.2019.1694142>
- Bóthe, B., Tóth-Király, I., Zsila, Á., Griffiths, M. D., Demetrovics, Z., & Orosz, G. (2018). The development of the problematic pornography consumption scale (PPCS). *Journal of Sex Research*, 55(3). <https://doi.org/10.1080/00224499.2017.1291798>
- Duffy, A., Dawson, D. L., & das Nair, R. (2016). Pornography addiction in adults: A systematic review of definitions and reported impact. *Journal of Sexual Medicine*, 13(5). <https://doi.org/10.1016/j.jsxm.2016.03.002>
- Fernandez, D. P., & Griffiths, M. D. (2019). Psychometric instruments for problematic pornography consumption: A systematic review. *Evaluation & the Health Professions*, 44(2), 111–141. <https://doi.org/10.1177/0163278719861688>

- Franssen, T., Stijnen, M., Hamers, F., & Schneider, F. (2020). Age differences in demographic, social and health-related factors associated with loneliness across the adult life span (19–65 years): A cross-sectional study in the Netherlands. *BMC Public Health*, 20(1), 11–18. <https://doi.org/10.1186/s12889-020-09208-0>
- Gayatri, S., Shaluhiah, Z., & Indraswari, R. (2020). Faktor-faktor yang berhubungan dengan frekuensi akses pornografi dan dampaknya terhadap perilaku seksual pada remaja di Kota Bogor (Studi di SMA Kota Bogor). *Jurnal Kesehatan Masyarakat*, 8(3), 410–419. <https://ejournal3.undip.ac.id/index.php/jkm/article/view/26456/23985>
- Gola, M., Wordecha, M., Sescousse, G., Lew-Starowicz, M., Kossowski, B., Wypych, M., Makeig, S., Potenza, M. N., & Marchewka, A. (2017). Can pornography be addictive? An fMRI study of men seeking treatment for problematic pornography consumption. *Neuropsychopharmacology*, 42(10), 21–31. <https://doi.org/10.1038/npp.2017.78>
- Gravetter, F. J., & Forzano, L.-A. B. (2012). *Research methods for the behavioral sciences*. Wadsworth Cengage Learning.
- Grubbs, J. B., Exline, J. J., Pargament, K. I., Hook, J. N., & Carlisle, R. D. (2015). Transgression as addiction: Religiosity and moral disapproval as predictors of perceived addiction to pornography. *Archives of Sexual Behavior*, 44(1). <https://doi.org/10.1007/s10508-013-0257-z>
- Grubbs, J. B., Kraus, S. W., Perry, S. L., Lewczuk, K., & Gola, M. (2020). Moral incongruence and compulsive sexual behavior: Results from cross-sectional interactions and parallel growth curve analyses. *Journal of Abnormal Psychology*, 129(3), 266–278. <https://doi.org/10.1037/abn0000501>
- Grubbs, J. B., & Perry, S. L. (2019). Moral incongruence and pornography consumption: A critical review and integration. *Journal of Sex Research*, 56(1), 29–37. <https://doi.org/10.1080/00224499.2018.1427204>
- Hardani, R., Hastuti, D., & Yuliati, L. N. (2017). Kelekatan anak dengan ibu dan ayah serta perilaku pornografi pada anak usia SMP. *Jurnal Ilmu Keluarga & Konsumen*, 10(2), 120–131. <http://journal.ipb.ac.id/index.php/jikk/article/view/14627/13046>
- Hasbiya, A. (2019). Pengaruh impulsivitas, self-esteem, dan religiusitas terhadap perilaku sexting, State Islamic University Syarif Hidayatullah Jakarta.
- Huber, S., & Huber, O. W. (2012). The centrality of religiosity scale (CRS). In *Religions*, 3(3). <https://doi.org/10.3390/rel303071>
- Komisi Perlindungan Anak Indonesia. (2021). *Siaran pers laporan kinerja tahun 2020 komisi perlindungan anak Indonesia "Perlindungan anak di era pandemi COVID-19."* <https://www.kpai.go.id/files/2021/02/media-release-laporan-akhir-tahun-2020-1.pdf>
- Kumar, R. (2011). *Research methodology : A step-by-step guide for beginners / Ranjit Kumar* (3rd ed.). SAGE.
- Ley, D., Prause, N., & Finn, P. (2014). The emperor has no clothes: A review of the ‘pornography addiction’ model. *Current Sexual Health Reports*, 6(2). <https://doi.org/10.1007/s11930-014-0016-8>
- Maddock, M. E., Steele, K., Esplin, C. R., Hatch, S. G., & Braithwaite, S. R. (2019). What is the relationship among religiosity, self-perceived problematic pornography consumption, and depression over time?. *Sexual Addiction & Compulsivity*, 26(3–4), 211–238. <https://doi.org/10.1080/10720162.2019.1645061>
- Mardiyantari, E., Firdauz, M. A., Pujiningtyas, L. R., Yutifa, H., Susanto, S., & Sunarsi, S. (2018). Hubungan media pornografi dengan perilaku seksual pranikah pada remaja. *Strada Jurnal Ilmiah Kesehatan*, 7(1), 36–39. <http://jurnal.strada.ac.id/sjik/index.php/sjik/article/view/145>
- Masaeli, N., & Farhadi, H. (2021). Prevalence of internet-based addictive behaviors during COVID-19 pandemic: A systematic review. *Journal of Addictive Diseases*, 1–27. <https://doi.org/10.1080/10550887.2021.1895962>
- Mestre-Bach, G., Blycker, G. R., & Potenza, M. N. (2020). Pornography consumption in the setting of the COVID-19 pandemic. *Journal of Behavioral Addictions J Behav Addict*, 9(2), 181–183. Nurhidayah,

S., & Pramintari, R. D. (2017). Perilaku cyber romance ditinjau dari status identitas ego dan sikap terhadap pornografi pada remaja. *SOUL: Jurnal Pemikiran Dan Penelitian Psikologi*, 9(1), 45–54. <http://jurnal.unismabekasi.ac.id/index.php/soul/article/view/465>

<https://doi.org/10.1556/2006.2020.00015>

Papalia, D., & Martorell, G. (2013). Experience human development. *Journal of Chemical Information and Modeling*, 53(9).

Perry, S. L. (2017). Does viewing pornography diminish religiosity over time? evidence from two-wave panel data. *Journal of Sex Research*, 54(2), 214–226. <https://doi.org/10.1080/00224499.2016.1146203>

Perry, S. L. (2018). Not practicing what you preach: Religion and incongruence between pornography beliefs and usage. *Journal of Sex Research*, 55(3), 369–380. <https://doi.org/10.1080/00224499.2017.1333569>

Perry, S. L., & Hayward, G. M. (2017). Seeing is (Not) believing: How viewing pornography shapes the religious lives of young Americans. *Social Forces; a Scientific Medium of Social Study and Interpretation*, 95(4), 1757–1788. <https://doi.org/10.1093/sf/sow106>

Pornhub Insights. (2020). *Coronavirus Update – June 18*. <https://www.pornhub.com/insights/coronavirus-update-june-18>

Puspitasari, A., & Sakti, H. (2019). Hubungan religiusitas dengan intensitas mengakses situs pornografi pada siswa kelas XI SMA Hasyim Asy'ari Pekalongan. *Jurnal EMPATI*, 7(4), 1262–1268. <https://ejournal3.undip.ac.id/index.php/empati/article/view/23431>

Short, M. B., Kasper, T. E., & Wetterneck, C. T. (2015). The relationship between religiosity and internet pornography consumption. *Journal of Religion and Health*, 54(2). <https://doi.org/10.1007/s10943-014-9849-8>

Subekti, Z. A. (2019). Hubungan antara Tingkat Religiusitas dengan Sikap Terhadap Pornografi pada Remaja di Pondok Pesantren “Z” Surabaya [Skripsi], Universitas Airlangga.

Taber, K. S. (2018). The use of cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>

Theophilus, S. (2018). Hubungan antara orientasi religiusitas dengan penggunaan pornografi internet pada remaja [Skripsi], Universitas Tarumanagara.

Voros, F. (2009). The invention of addiction to pornography. *Sexologies*, 18(4). <https://doi.org/10.1016/j.sexol.2009.09.007>

Zattoni, F., Gül, M., Soligo, M., Morlacco, A., Motterle, G., Collavino, J., Barneschi, A. C., Moschini, M., & Moro, F. D. (2020). The impact of COVID-19 pandemic on pornography habits: A global analysis of Google Trends. *International Journal of Impotence Research*. <https://doi.org/10.1038/s41443-020-00380-w>