

Effects of pornographic content consumption on anxiety and depression: A systematic review and meta-analysis

Jia Yang Tan, Chen Ee Low, Hon Jen Wong, Isaac Yongjie Sim, Charmaine Yong Ching Lee, Hong Ruey Ding, Sean Loke, Ainsley Ryan Yan Bin Lee, Cyrus Su Hui Ho

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Abstract

Background: The consumption of pornographic content has become increasingly prevalent in today's digital age. Although pornography use is often viewed as recreational or harmless, emerging evidence suggests that frequent, compulsive or problematic use may worsen mental health. Hence, this study aims to review the existing literature to investigate the effects of pornographic consumption on anxiety and depression, while examining factors affecting consumption.

Objective: This study aims to investigate the effects of pornographic consumption on anxiety and depression.

Methods: We systematically searched PubMed, Embase, Cochrane, and PsycINFO for all studies that examined anxiety and depression in pornographic content consumers (PCC). PRISMA reporting guidelines were followed. Random effects meta-analyses were conducted for the primary analysis using correlation coefficients (COR) and standardised mean differences (SMD). A synthesis without meta-analysis approach was further performed to examine factors affecting pornography consumption.

Results: A total of 19 studies were included. Overall meta-analysis indicated significant positive correlations between pornographic consumption and both anxiety (COR=0.16, 95%CI: 0.08; 0.25) and depression (COR=0.24, 95%CI: 0.15; 0.32). Subgroup analyses found that PCC who were less than 25 years old showed a stronger correlation with anxiety compared to older users (COR=0.22 vs COR=0.16, $p=0.0321$). Systematically reviewing the studies found that male gender and younger age significantly increased pornographic content consumption.

Conclusions: The study found significant positive correlations between pornographic consumption and both anxiety and depression, with an increased effect on younger users. This highlights the need for targeted interventions and public education about these associations and suggests that pornographic use assessments may be relevant in mental health evaluations.

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Original Manuscript

Effects of pornographic content consumption on anxiety and depression: A systematic review and meta-analysis

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Abstract

Background

The consumption of pornographic content has become increasingly prevalent in today's digital age. Although pornography use is often viewed as recreational or harmless, emerging evidence suggests that frequent, compulsive or problematic use may worsen mental health. Hence, this study aims to review the existing literature to investigate the effects of pornographic consumption on anxiety and depression, while examining factors affecting consumption.

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Results

A total of 19 studies were included. Overall meta-analysis indicated significant positive correlations between pornographic consumption and both anxiety (COR=0.16, 95%CI: 0.08; 0.25) and depression (COR=0.24, 95%CI: 0.15; 0.32). Subgroup analyses found that PCC who were less than 25 years old showed a stronger correlation with anxiety compared to older users (COR=0.22 vs COR=0.16, $p=0.0321$). Systematically reviewing the studies found that male gender and younger age significantly increased pornographic content consumption.

Conclusion

The study found significant positive correlations between pornographic consumption and both anxiety and depression, with an increased effect on younger users. This highlights the need for

targeted interventions and public education about these associations and suggests that pornographic use assessments may be relevant in mental health evaluations.

Keywords

Pornography; Pornography Addiction; Depression; Anxiety; Mental Health



Introduction

The consumption of pornographic content has become increasingly prevalent in today's digital age, with a growing number of pornographic content consumers (PCC) accessing such material via smart devices and the Internet. A 2016 national population-based probability survey(1) conducted on American adults found that 94% of men and 87% of women reported lifetime pornography use, beginning on average in their teenage years. Other studies in developed countries estimated pornography use to be prevalent in 46-74% of men and 16-41% of women(2). This has been further amplified by recent factors, including increased Internet usage and the COVID-19 pandemic(3). Although pornography use is often viewed as recreational or harmless, emerging evidence suggests that frequent, compulsive, or problematic use may worsen mental health(4). Biologically, repeated exposure to hyperstimulating sexual content can disrupt the brain's reward circuitry, particularly the dopaminergic pathways, leading to depressive features of anhedonia or a blunted affect(5). Psychologically, the distorted depiction of sex, relationships and body images in pornography can generate unrealistic expectations and feelings of inadequacy(6).

Simultaneously, mental health conditions such as anxiety and depression have become pressing public health issues in the 21st century. They affect more than 580 million people globally, according to the World Health Organisation in 2015(7), with young adults and adolescents, the largest group of PCC(8), being disproportionately impacted. Loneliness(9), excessive digital exposure(10), and evolving social norms around sex and relationships(11) have all contributed to the growing global mental health burden. Problematic pornography consumption may not only manifest from these stressors but also further reinforce them(12). While individual studies have found pornography consumption to distort perceptions of oneself(13) and one's relationships(14), the broader psychological consequences, especially their magnitude and consistency across populations, remain understudied in scientific literature.

To the best of the authors' knowledge, this study is the first systematic review and meta-analysis to investigate the effects of pornographic consumption on anxiety and depression. By compiling data from multiple studies and performing subgroup analyses, the study also examined relevant prognostic factors that affect pornography consumption. Such an understanding would be critical for reforming public education and guiding interventional methods for those at risk of the psychological complications of pornography usage.

Methods

This systematic review was conducted based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and registered with PROSPERO (CRD420251086306).

Literature search was performed across four major databases: PubMed, Embase, Cochrane, and PsycINFO. The search strategy integrated terms related to 'Pornography', 'Depression' and 'Anxiety'. Relevant subject headings with appropriate truncations were utilised using specific database-controlled vocabulary, and synonyms with the appropriate truncations were used. Examples of search strategies for PubMed and Embase are provided in Supplementary Table 1.

Three reviewers independently screened the titles and abstracts of the studies to determine eligibility. Discrepancies between reviewers were resolved by a fourth independent reviewer. All studies examining anxiety and depression using validated psychometric instruments in PCC were included if published in peer-reviewed English-language journals from inception to 02 July 2025. Studies were excluded if they were non-empirical, conference abstracts or grey literature. The study selection process is shown in Figure 1.

Extracted data included participant demographics, correlation, anxiety and depression scores, religiosity and self-esteem. Statistical analyses were performed using R (version 4.1.0) with the *meta* and *metafor* packages. Two-sided p-value of less than 0.05 was considered statistically significant. The primary outcomes were correlation, anxiety and depression scores. Correlation scores were pooled using the *metacor* function and interpreted using Cohen's guidelines(15). Anxiety and depression scores were pooled as standardised mean difference (SMD) using the *metacont* function to compare the severity of these scores between male gender as the exposed group and female gender as the control group.

Subgroup analyses were conducted if there were sufficient studies. The subgroup analyses conducted were stratified by mean patient age (<50 vs ≥50 years), (≤25 vs >25 years), proportion of male participants (<50% vs ≥50%), national income classification (low, lower-middle, upper-middle, or high income)(16), and World Health Organisation (WHO) region(17). If there were insufficient studies for subgroup analyses, a synthesis without a meta-analysis approach was performed.

Between-study heterogeneity was quantified using I^2 and τ^2 statistics(18). I^2 value below 30% was

treated as low heterogeneity, 30% to 60% as moderate, and above 60% as substantial.

Sensitivity analyses were conducted by leave-one-out analyses to assess the influence of individual studies on the overall result. The risk of bias for each included study was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Tool(19).



Results

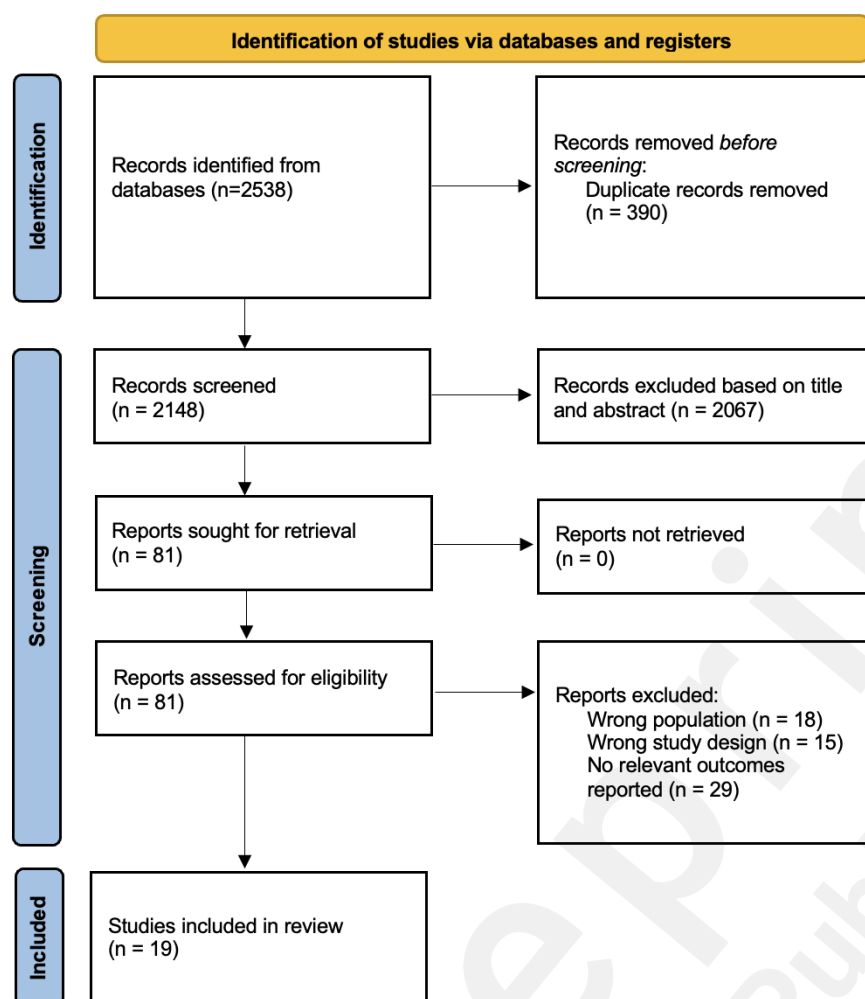


Figure 1: PRISMA Flowchart

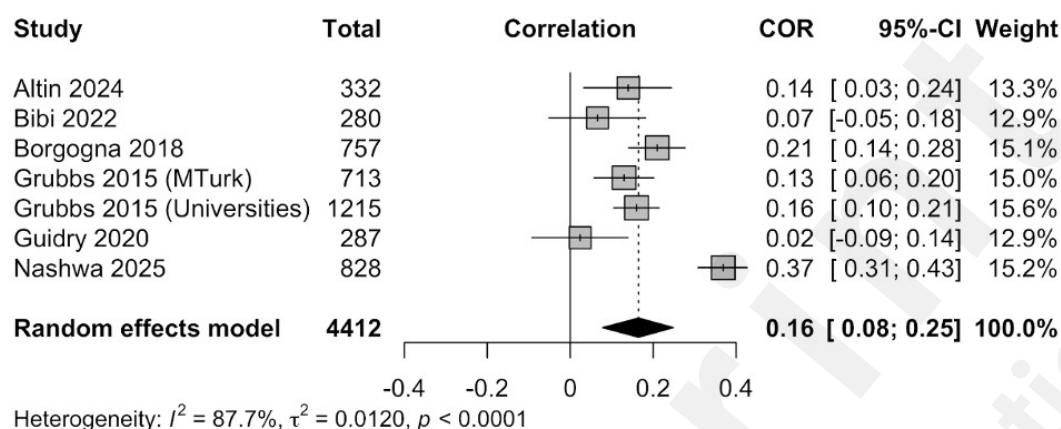
Out of the 2538 reports identified from the databases (Figure 1), we included a total of 19 studies(4, 20-37) evaluating depression and anxiety in PCC. The remaining 2519 studies were excluded after removing duplicates and irrelevant studies with no relevant outcomes, wrong study design and wrong population.

The main characteristics of the studies are reported in Table 1. The studies' sizes ranged from 280 to 1639 participants, including a total of 17,529 PCC in the final analysis. Seven of the studies were from the United States of America(21, 22, 24, 30, 33-35), two studies were from Croatia(26, 36), two studies recruited online participants(25, 28), one study each was from Italy(4), Netherlands(23), Pakistan(20), China(27), Sweden(29), United Kingdom(31), Israel(32) and Egypt(37). The mean age of PCC at the time of the study ranged from 15.2 to 41.1 years old. Six studies(4, 20, 21, 24, 25, 37) investigated the correlation between pornography use and anxiety. 10 studies(4, 20, 21, 23-25, 27-29,

37) investigated the correlation between pornography use and depression. Three studies(20-22) evaluated the anxiety scores between males and females. Five studies(20, 21, 27-29) evaluated the depression scores between males and females.

Meta-analysis of the correlation of pornographic consumption on anxiety and depression

A



B

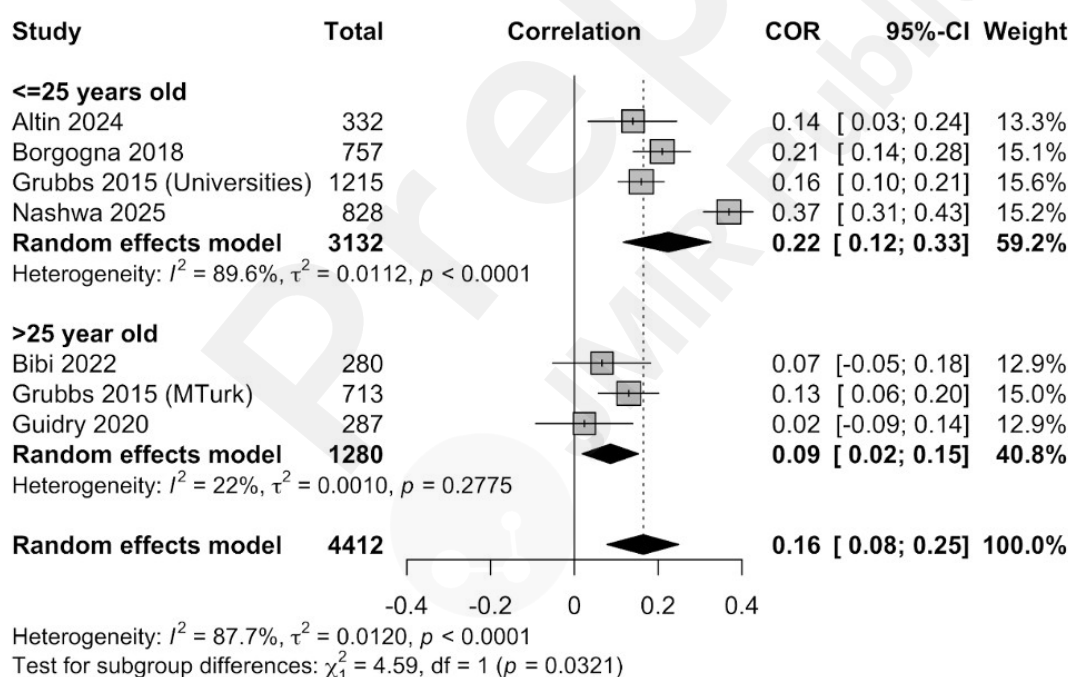
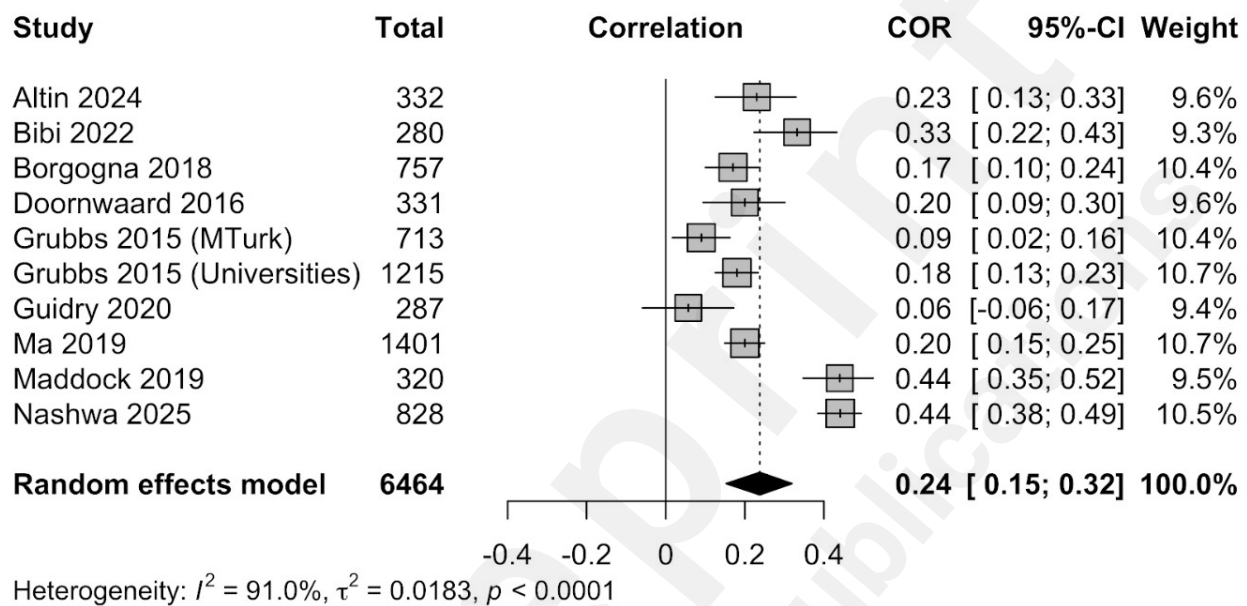


Figure 2: Pooled correlation scores between pornography consumption and anxiety (A) stratified by age (B)

The meta-analysis of six studies (Figure 2A)(4, 20, 21, 24, 25, 37) indicated a positive correlation between pornography consumption and anxiety, with a correlation of 0.16 (95%CI: 0.08; 0.25).

Subgroup meta-analyses showed that pornographic content consumers whose age ≤ 25 years old had a statistically significant stronger correlation between pornographic consumption and anxiety with a correlation of 0.22 (95%CI: 0.12; 0.33) compared to those age > 25 years old with a correlation of 0.16 (95%CI: 0.08; 0.25) (test for subgroup differences, $p = 0.0321$) (Figure 2B). Subgroup meta-analyses (Supplementary Table 3) showed no significant differences (test for subgroup differences, $p > 0.05$) in WHO region, income levels, percentage of males and scale used to assess for anxiety.

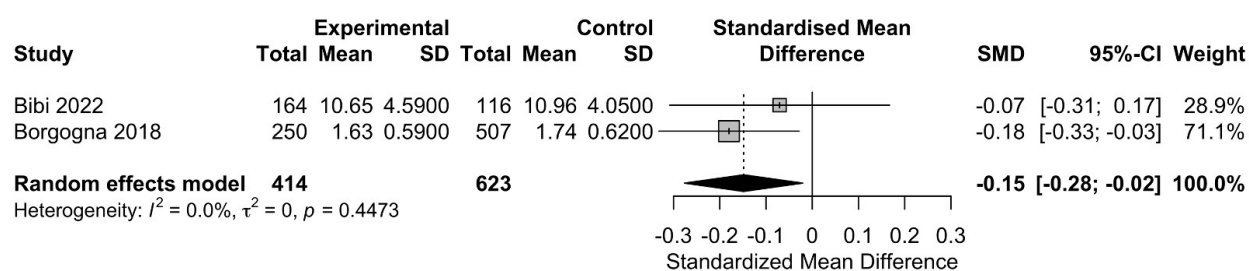


Fig

Figure 3: Pooled correlation scores between pornography consumption and depression

The meta-analysis of nine studies (Figure 3)(4, 20, 21, 23-25, 27, 28, 37) indicated a positive correlation between pornography consumption and depression, with a correlation of 0.24 (95%CI: 0.15; 0.32). Subgroup meta-analyses showed no significant differences in age, percentage of males and WHO region. However, subgroup analysis revealed significant differences (test for subgroup differences, $p < 0.0001$) in the types of depression scale used and income levels (Supplementary Table 2).

A



B

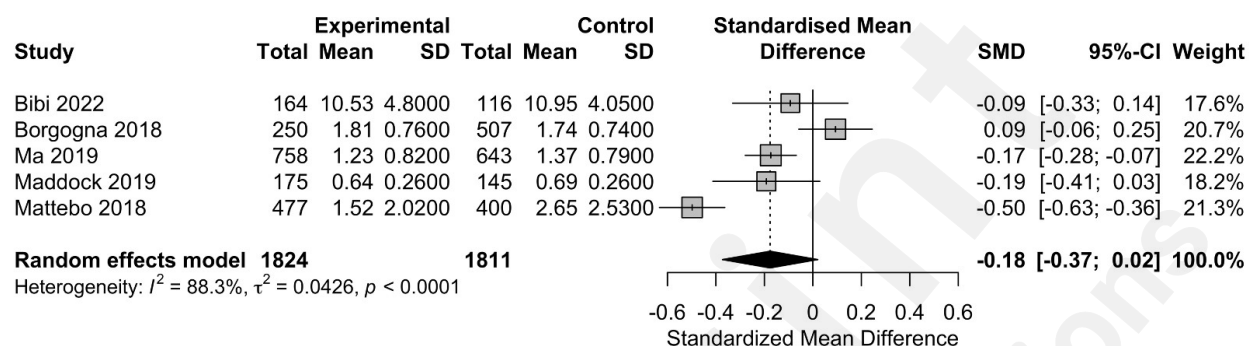


Figure 4: Pooled standardised mean differences in anxiety (A) and depression (B) scores between male and female pornography content consumers

Meta-analyses of two studies(20, 21) found that male PCC have lower anxiety scores compared to females, with a statistically significant pooled SMD of -0.15 (95%CI: -0.28; -0.02). Meta-analyses of five studies(20, 21, 27-29) found that male PCC have a statistically insignificant lower depression scores compared to females, with a pooled SMD of -0.18 (95%CI: -0.37; 0.02). The SMD for Mattebo et al.(29) was notably much lower than the rest, likely because they hypothesised that pornography consumption was more socially acceptable for male users, posing minimal threat to their mental health.

Systematic review of the prognostic factors affecting pornographic consumption

The study examined the prognostic factors affecting pornographic consumption. These factors include demographic variables such as gender, age, religiosity and self-esteem.

Age

Five studies(22, 30-33) evaluated the association between age and pornographic consumption (Supplementary Table 5). Three studies(31-33) found that a younger age is significantly associated with higher pornographic consumption. Noel and Camilleri et al.(22, 30) found a significant increase

in pornography usage in consumers of older ages.

Gender

Eight studies(27-33, 36) explored the link between gender and pornographic consumption (Supplementary Table 6). All eight studies(27-33, 36) found that males are significantly associated with higher pornographic consumption.

Religiosity

Two studies(27, 28) investigated the association between religiosity and pornographic consumption (Supplementary Table 7). Both studies(27, 28) found no significant difference in pornographic consumption between consumers who are either religious or non-religious.

Self-esteem

Two studies(23, 26) explored the association between self-esteem and pornographic consumption (Supplementary Table 8). Doornward et al.(23) found significantly increased pornographic use in those with low global self-esteem while Kohut et al.(26) found no significant association between self-esteem and pornographic consumption.

Risk-of-bias and Publication Bias

The quality of the 19 studies(4, 20-37) was assessed using Joanna Briggs Institute Critical Appraisal tool and presented in Supplementary Table 9. Overall, there was no significant risk of bias identified. The evaluation of publication bias using outlier and leave-one-out analyses indicated significant bias for depression correlation from Maddock et al. (Supplementary Figure 1-2)(28), possibly due to a larger proportion of religious participants in which pornography use may cause guilt and moral conflict(12). Significant bias for anxiety correlation from Nashwa et al., (Supplementary Figure 3-4) (37) was also identified, possibly because Egypt has strong religious taboos surrounding pornography, amplifying psychological distress after its consumption(38).

Discussion

This study is the first systematic review and meta-analysis that sought to investigate the effects of pornographic consumption on anxiety and depression. The results demonstrated significant positive correlations between pornographic consumption on both anxiety and depression. Subgroup analyses found that PCC whose age was less than 25 years old showed a stronger correlation with anxiety compared to older users. Male PCC have significantly lower anxiety scores compared to females, but there was no significant gender difference observed for depression scores. The systematic review highlighted that male gender and younger age significantly increased pornographic content consumption.

The authors found a positive correlation between pornographic consumption and anxiety, which is consistent with the findings of existing studies(12, 39). Pornographic content consumption is often shrouded in secrecy due to notions of stigma and shame that come with its usage(40). Hence, its use can perpetuate cycles of shame and guilt that can be difficult to break due to fears of being discovered and judged by others, manifesting as anxiety symptoms. This is particularly so for individuals when their sexual behaviours clash with their personal values and beliefs(12) that pornography is morally objectionable and harmful(41). For example, religiously-affiliated individuals are more likely to have stronger negative attitudes towards pornography use and express a moral disapproval of it, a view rooted in conservative religious beliefs(42). Additionally, the unrealistic portrayals in pornographic scenes can create pressure for consumers to perform in specific ways, creating performance anxiety in real-world sexual encounters as they compare themselves to what they observe in pornography(43).

Subgroup analysis revealed that younger PCC aged less than 25 years old showed a stronger correlation with anxiety compared to older users. This finding is consistent with the current understanding of developmental psychology, as adolescence and young adulthood are key periods in personal identity development and exploration in areas such as love(44), including establishing intimate connections with other(45). Hence, pornographic consumption during this period, when they are more impressionable, can lead to larger effects on their beliefs and behaviours. Neurodevelopmentally, as their pre-frontal cortex, which is critical for decision making and emotional control(46), has yet to be fully matured(47), they might be more vulnerable to the ill effects of compulsive pornographic consumption and its associated anxiety. Furthermore, they lack the maturity to critically evaluate these unrealistic depictions of sex and relationships shown in

pornographic content(48). The systematic review also identified younger age to be significantly associated with more pornographic content consumption(49), likely due to greater digital fluency(50) and sexual curiosity(51), which can contribute to the higher anxiety correlation observed as they are more susceptible to the ill effects of pornography consumption with greater exposure. Collectively, these factors can explain why younger consumers are more affected and highlight the need for targeted age-specific interventions and education aimed at promoting healthy relationships and sexual intimacy, as well as the potential psychological risks of pornography consumption during their important formative years of personal development and exploration.

The authors also found a positive correlation between pornographic consumption and depression, which aligns with much evidence from existing literature. For example, Koob et al.(52) found that the overstimulation of the body's reward system from watching pornographic content can cause withdrawal symptoms when such behaviour is stopped for a period, which includes depression and cognitive impairment. A study conducted in California that involved 1864 young adults also found an association of depressive symptoms with frequent pornographic viewing(53). This can be explained through several mechanisms. From a neurobiological point of view, chronic pornographic use can disrupt the dopaminergic pathways in the brain's reward system(54). Over time, this prolonged exposure can build tolerance, where PCC will require increasingly novel or extreme stimuli to experience the same level of pleasure. When increasingly more pleasurable activities start to become less satisfying, this can lead to anhedonia(55) and emotional numbness(56), which are all hallmark features of depression(57). Psychologically, pornographic consumption can create unrealistic expectations about sexual behaviour and body image. Unrealistic and idealised sexual scenarios portrayed in pornographic content can distort one's view of real-life sexual relationships and intimacy(58). Pornographic actors also typically have the "perfect" body types, which can potentially evoke feelings of inadequacy and low self-esteem amongst PCC when they start comparing their own bodies to theirs(59). A study conducted in Israel involving 726 heterosexual and sexual minority men found that problematic pornography use was associated with greater social body comparison and, as a result, more negative perceptions of their own body image(60).

The analyses revealed that male PCC show significantly lower anxiety scores compared to females, while showing no significant gender difference in depression scores. This can be due to current societal norms and cultural attitudes towards pornography, where consuming pornography is more socially acceptable for men than for women(61). Conversely, in many cultures, female sexual desire

and pornography usage are often viewed as socially deviant, disgraceful and indecorous(62). Hence, males can consume pornography with fewer internal conflicts previously discussed and are protected from experiencing the same levels of anxiety compared to females. Secondly, multiple studies also reported that men often engage in pornography as a form of coping mechanism to manage their negative emotions and alleviate stress(63). The functional use of pornographic content to alleviate anxiety symptoms can explain the lower anxiety scores compared to females. A study by Rosann et al. that explored gender differences in coping strategies found that women tend to use more emotion-focused coping strategies compared to men when dealing with external stressors in their lives, and were also reported to have a higher risk of anxiety-related symptoms(64). On the other hand, no significant gender differences in depression scores can be explained by the shared impact of long-term pornography usage on relationship quality, personal body image and self-esteem as previously discussed. These outcomes are not inherently gender-specific and can impact both males and females to the same extent.

The systematic review identified males to be significantly associated with more pornographic content consumption(65). Collectively, the findings of higher consumption patterns together with statistically significantly lower anxiety scores compared to females need to be carefully interpreted, particularly in the context of public health. The results should not be misconstrued as evidence that pornography consumption is psychologically beneficial to male users, but rather they highlight the complex interplay between gender roles, individuals' coping strategies, societal norms and expectations and psychological outcomes, which requires a nuanced, individualised approach. It is possible that male PCC experience anxiety relief through pornographic use as an emotional regulation tool(66). While speculative discussions about its potential controlled therapeutic use may arise, such application would require extensive research involving well-defined population groups, standardised dosing, clear therapeutic objectives and comprehensive psychological evaluation and monitoring of participants. These areas remain largely unexplored in the current literature, and there is no evidence supporting such an approach thus far due to its ethical complexity.

Limitations

Several limitations may reduce the applicability of the findings. Firstly, the correlational nature of the findings prevents us from determining whether pornography use led to anxiety and depression outcomes, or whether consumers with pre-existing anxiety and depression are more likely to consume pornographic content. Secondly, the lack of previous psychological assessments prior to the

consumption of pornographic content is also a significant limitation. As the findings only reflect their psychological state after pornography usage, we are unable to exclude the possibility that participants may already have anxiety and depression before watching pornography. There is also a possibility that male consumers already have lower anxiety scores independent of pornography usage. Thirdly, the limited number of studies available for subgroup analysis limited the robustness of the results. For example, we initially planned to investigate how consumption of different types of pornographic content can have differential psychological effects but could not proceed due to limited studies. Therefore, future longitudinal studies should look for any causative associations between pornographic content consumption and psychological outcomes and how the different types of pornographic content can cause differing psychological outcomes. Fourthly, there was high heterogeneity among the results, with variability in terms of assessment tools used to assess psychological outcomes, countries, income levels and other sociocultural and economic factors. Therefore, the subgroup analyses were constrained by the limited number of studies in each category. Lastly, most studies assessed pornography consumption on a graded scale and correlated this to their anxiety and depression scores, rather than a binary classification of pornographic users and non-pornographic users. Hence, individuals with little to no pornographic consumption are still included in the analysis and we are unable to determine psychological outcomes solely based on individuals with high pornographic consumption patterns.

Conclusion

The study found significant positive correlations between pornographic consumption and both anxiety and depression. PCC whose age was less than 25 years old showed a stronger correlation with anxiety compared to older users. Male PCC have significantly lower anxiety scores compared to females, but there was no significant gender difference observed for depression scores. Systematic review highlighted that male gender and younger age significantly increased pornographic content consumption. Overall, a comprehensive pornographic use assessment may be relevant as part of mental health evaluations in selected individuals facing psychological problems, and a focus on public education about these associations can be beneficial to the general population. Public health professionals can aim to promote more open and stigma-free conversations about healthy sexual behaviour and its association with the emotional well-being and digital use of individuals.

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None.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Funding Sources

The authors have no funding sources to declare.

Author Contributions

CEL and JYT contributed to the conception and design of the study with guidance from CSHH. JYT, IYS and CYCL performed the data extraction. HJW performed the data analysis. JYT and CEL wrote the manuscript. SL, ARYBL and CSHH reviewed and revised the manuscript. ARYBL and CSHH provided supervision. All authors read and approved the submitted version.

Data Availability Statement

All data generated or analysed during this study are included in this article. Further enquiries can be directed at the corresponding author.

Abbreviations

PCC, Pornographic Content Consumers

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Table 1: Main characteristics of the included studies

Author	Publication year	Region of study	Population studied	Gender Male (Proportion 0-1)	Age at study (Mean $\pm$ SD)	Total number of participants	How was pornography consumption/addiction assessed	Anxiety scale	Correlation scores between anxiety and pornographic use	Anxiety scores for males (Mean $\pm$ SD)	Anxiety scores for females (Mean $\pm$ SD)	Depression scale	Correlation scores between depression and pornographic use	Depression scores for males (Mean $\pm$ SD)	Depression scores for females (Mean $\pm$ SD)
Altin	2024	Italy	Adults >18	0.36	23.41 $\pm$ 2.84	332	CYPAT	DASS	0.14	NR	NR	DASS	0.23	NR	NR
Bibi	2022	Pakistan	Adults >18	0.587	25.4 $\pm$ 5.271	280	PCQ and BPS	DASS	0.066	10.65 $\pm$ 4.59	10.96 $\pm$ 4.05	DASS	0.332	10.53 $\pm$ 4.8	10.95 $\pm$ 4.05
Borgogna	2018	USA	University students	0.33	24.13	757	PPUS	DASS	0.21	1.63 $\pm$ 0.59	1.74 $\pm$ 0.62	DASS	0.17	1.81 $\pm$ 0.76	1.74 $\pm$ 0.74
Camilleri	2020	USA	Adults > 18	0.34	20.76	1031	mCIUS	DASS	NR	8	10	DASS	NR	NR	14
Doornwaard	2016	Netherlands	Adolescents boys	1	15.16 $\pm$ 1.31	331	Compulsive Internet Use Scale	NR	NR	NR	NR	Depressive Mood Scale	0.2	NR	NR
Grubbs (MTurk)	2015	USA	Adults > 18	0.519	30.2 $\pm$ 9.9	713	Study specific 0-12 scale to quantify consumption, CPUI-9 for pornography addiction	GAD-7	0.13	NR	NR	CES-D-10	0.09	NR	NR

Grubbs (Universities)	2015	USA	Adults > 18	0.672	19.3	1215	Study specific 0-12 scale to quantify consumption, CPUI-9 for addiction	GAD-7	0.16	NR	NR	CES-D-10	0.18	NR	NR
Guidry	2020	Online	Adults age 18-73	0.491	36.75	287	Study specific 5-point Likert scale to quantify consumption	DASS	0.024	NR	NR	DASS	0.057	NR	NR
Kohut (Zagreb)	2018	Croatia	Adolescents age 15-19	0.311	16.1 ± 0.46	643	Study specific 1-7 scale to quantify consumption	PHQ-4	NR	NR	NR	PHQ-4	NR	NR	NR
Kohut (Rijeka)	2018	Croatia	Adolescents age 15-19	0.397	15.9 ± 0.52	1179	Study specific 1-7 scale to quantify consumption	PHQ-4	NR	NR	NR	PHQ-4	NR	NR	NR
Ma	2019	China	Grade 7 students	0.541	12.43 ± 0.54	1401	Study specific 5-point Likert scale to quantify consumption	NR	NR	NR	NR	PHQ-9	0.2	1.23 ± 0.82	1.37 ± 0.79
Maddock	2019	Online	Adults age 19-75	0.548	36.26 ± 10.18	320	Excessive Use Subscale of the Problematic Pornography	NR	NR	NR	NR	CESD-R-10	0.44	0.64 ± 0.26	0.69 ± 0.26

							phy Use Scale and study specific questions									
Mattebo	2018	Sweden	Adolescents age 7-15	0.544	16.25 0.537	± 877	Study specific 0-6 scale to quantify consumpt ion	NR	NR	NR	NR	DSRS	M - 0.019; F - 0.153	1.52 ± 2.02	2.65 ± 2.53	
Noel	2023	USA	Adults age 18-25	0.55	21.3 ± 2.1	1022	PPCS-6	GAD-7	NR	NR	NR	CES-D-10	NR	NR	NR	
Sallie	2021	United Kingdom	Adults > 18	0.747	28.93 12.46	± 1344	CYPAT	HADS	NR	NR	NR	HADS	NR	NR	NR	
Varod	2024	Israel	Adults > 18 who can read Hebrew	0.17	25.41 6.54	± 463	PPCS— Short Version	BSI-A	NR	NR	NR	BSI-18	NR	NR	NR	
Weaver	2011	USA	Internet- using adults	0.481	NA	559	SEMB	NR	NR	NR	NR	CES-D-10	NR	NR	NR	
Whitfield	2018	USA	Adults > 18, cisgender male, self- identified as gay or bisexual, and reported having sex with a man in the past year	1	41.14 12.82	± 1021	Study specific questionn aire to quantify consumpt ion	BSI-A	NR	NR	NR	CES-D-10	NR	NR	NR	
Willoughby	2019	USA	Online	0.565	33.56 10.62	± 1639	Study specific questionn aire to quantify consumpt ion	NR	NR	NR	NR	CES-D-10	NR	NR	NR	
Stulhofer	2019	Croatia	High school students	0.398	15.9 ± 0.52	1287	Study specific questionn	PHQ-4	NR	NR	NR	PHQ-4	NR	NR	NR	

							aire to quantify consumption								
Nashwa	2025	Egypt	Nursing students	0.37	20.74 ± 1.7	828	PAST	DASS	0.369	NR	NR	DASS	0.441	NR	NR

Abbreviations: NR, not reported; SD, standard deviation; United States of America, USA; DASS, Depression Anxiety Stress Scale; GAD-7, General Anxiety Disorder-7; PHQ-4, Patient Health Questionnaire-4; HADS, Hospital Anxiety and Depression Scale; BSI-A, Brief Symptom Inventory-Anxiety; CES-D-10, Center for Epidemiological Studies Depression Scale-10 item; PHQ-9, Patient Health Questionnaire-9; CESD-R-10, Center for Epidemiologic Studies Depression Scale Revised-10 item; DSRS, Depression Self-Rating Scale; BSI-18, Brief Symptom Inventory-18; CYPAT, Cyber Pornography Addiction Test; PCQ, Pornographic Craving Questionnaire; BPS, Brief Pornography Screening; PPUS, Problematic Pornography Use Scale; mCIUS, Modified Compulsive Internet Use Scale; CPUI-9, Cyber Pornography Use Inventory-9; PPCS-6, Problematic Pornography Consumption Scale-6; PPCS- Short Version, Problematic Pornography Consumption Scale-Short Version; SEMB, Sexually Explicit Media Use Behavior; PAST, Pornography Addiction Screen Tool

Supplementary Files

CONSORT (or other) checklists

PRISMA Checklist.

URL: <http://asset.jmir.pub/assets/25366c5f9d052105000f47ae92ac5475.pdf>

PRISMA Checklist for Abstract.

URL: <http://asset.jmir.pub/assets/1e384637e110aa7f0451fc4579fe0ffd.pdf>