

Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

CYBERCHONDRIA AND HEALTH ANXIETY IN THE DIGITAL AGE: A SCOPING REVIEW

¹Rubab Shahid, ²Saira Javed, ³Iqra Gohar

¹Student of M.Phil Psychology, Department of Psychology, National University of Medical Sciences, Rawalpindi

²Lecturer Clinical Psychology/PhD Scholar Psychology, NDP, National University of Medical Sciences, Pakistan

³Student of M.Phil Psychology, Department of Psychology, National University of Medical Sciences, Pakistan

rubabshahid5009@gamil.com, Saira.javedbhati@gmail.com, iqragohar01@gmail.com

Article Details

Received on 10 May, 2026

Accepted on 11 June, 2026

Published on 12 June, 2026

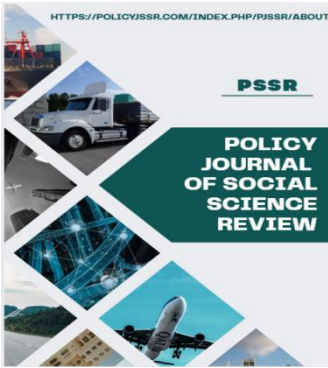
Copyright @Author

Corresponding Author: *

ABSTRACT

With the rapid expansion of digital information, individuals increasingly rely on the internet to search for medical symptoms and health-related concerns. However, this behaviour has led to the emergence of cyberchondria, characterized by excessive or repeated online health searches that amplify distress and anxiety. This scopus review aims to explore the relationship between cyberchondria and health anxiety, along with the associated psychological behavioural and cognitive factors in the digital age. A total of 28 studies were selected following systematic screening across databases such as Google Scholar, PubMed and ScienceDirect. The included studies comprised Cross-sectional, correlational. Mediation, experimental, and review designs. Findings Consistently indicate a strong association between Cyberchondria and health anxiety with the mediating and moderating role of variables, such as health literacy emotional regulation, cognitive bias, social media use, and personality traits. Overall, the findings suggest that cyberchondria is a multifactorial phenomenon influenced by both individual psychological vulnerabilities and digital environmental factors, ultimately contributing to increase health anxiety.

Keywords: Cyberchondria, Health Anxiety, Digital Health, E-health Literacy, Anxiety, Internet Use



Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

Introduction:

In the digital era, the internet has become a primary source of health-related information. While it offers accessibility and awareness, excessive reliance on online medical information has given rise to a psychological phenomenon known as cyberchondria. Cyberchondria refers to repeated and excessive online health searches that escalate anxiety rather than alleviating it.

Health anxiety, often conceptualized as excessive worry about having or acquiring a serious illness, plays a central role in this phenomenon. Individuals with health anxiety tend to misinterpret benign bodily sensations as signs of serious illness, which drives them to seek reassurance online. However, instead of relief, exposure to alarming or ambiguous medical information often intensifies anxiety.

The reviewed literature highlights multiple contributing factors. Psychosocial variables such as social media usage, pandemic-related stress, and personality traits significantly influence cyberchondria. For instance, studies like Koleilat et al. (2025) demonstrate that increased social media exposure during COVID-19 is associated with higher cyberchondria levels. Similarly, Manzoor et al. (2025) found that poor emotional regulation increases vulnerability to health anxiety.

Cognitive and behavioural mechanisms also play a critical role. Research by Nicolai

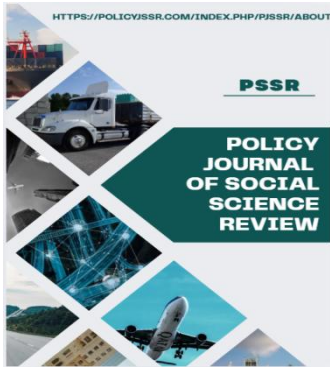
et al. (2022) indicate that cognitive biases, such as base rate neglect, contribute to maladaptive interpretation of health information. Moreover, Afrin et al. (2022) highlight that perceived severity mediates the relationship between online health information seeking and cyberchondria.

Additionally, health literacy emerges as a protective factor. Studies such as Fang & Mushtaque (2024) and Sansakron et al. (2024) suggest that higher health literacy reduced the intensity of cyberchondria by enabling individuals to critically evaluate online information.

Thus, this systematic review aims to integrate findings across the studies to understand how digital behaviour, cognitive processes, and psychological vulnerabilities interact to influence cyberchondria and health anxiety.

Material and Methods:

The systematic review followed a structured and systematic approach to identify, screen, and analyze relevant studies related to cyberchondria and health anxiety. A comprehensive literature search was conducted using electronic databases including Google Scholar, PubMed, and Science Direct. To ensure a broad and relevant search, specific keywords such as “Cyberchondria”, “Health Anxiety”, “e-Health Literacy”, “online health information seeking”, and “Digital health anxiety” were used.



Policy Journal of Social Science Review

ISSN Online:3006-4635

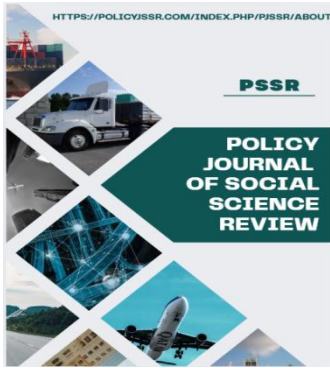
ISSN Print: 3006-4627

The selection of studies was guided by predefined inclusion and exclusion criteria. Studies were included if they were published between 2021 and 2026. Employed quantitative experimental, mediation or review designs and specifically focus on cyberchondria and/or health anxiety. Additionally, only full text articles were considered and the population of interest were included adolesc adults, students and clinical samples. On the other hand, studies were excluded if they were published in languages other than English, lacked full text availability, or were not directly relevant to the variables of interest.

Initially, several articles were identified through databases searches. Theses studies were then screened based on their titles and abstracts, followed by a detailed full text review to assess eligibility. After applying all inclusion and exclusion criteria, a total of 28 studies were selected and included in the final review.

Results:

The overview is presented in the PRISMA flow chart in figure 1. Total 28 studies were included and rest of the articles were excluded due to lack of full detail about our inclusion criteria. Table 1 shows the summary of the studies included.



Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

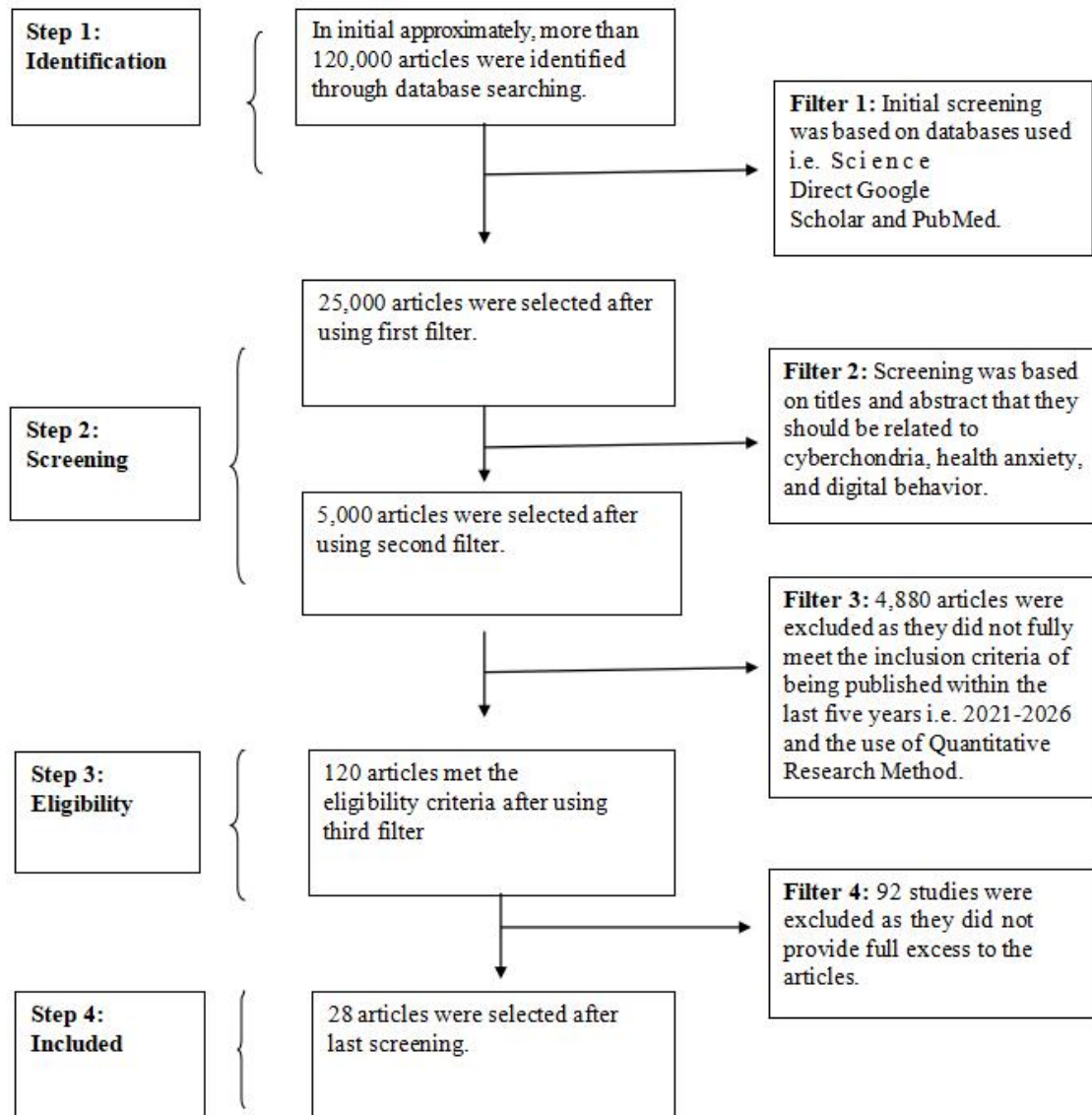
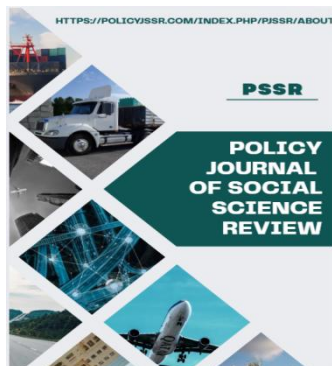


Fig 1: PRISMA Flow Chart

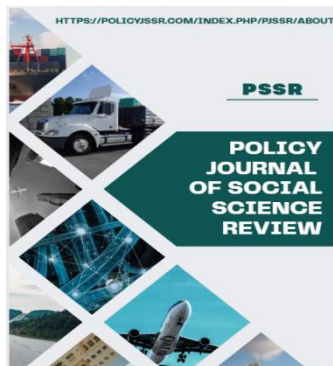


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

Author (Year)	Study Focus	Population	Study Design	Key Variables / Notes	Key Findings
1 Fang & Mushtaque (2024)	Role of health literacy in cyberchondria & health anxiety	General population (China/Pakistan)	Cross-sectional	Health literacy, Emotional regulation	Health literacy moderated the relationship between cyberchondria and health anxiety
2 Yalçın (2025)	Mediation of health anxiety between e-health literacy & cyberchondria	385 participants (Turkey)	SEM	e-Health literacy, Health anxiety	Health anxiety fully mediated the relationship
3 Sarpdağı & Çapık (2024)	Cyberchondria & health anxiety in obese individuals	389 patients	Correlational	BMI, Health anxiety	Positive correlation; cyberchondria predicted 14% variance
4 Manzoor et al. (2025)	Personality, emotional regulation & cyberchondria	100 university students (Pakistan)	Correlational	Personality (TIPI), ERQ	Positive link with health anxiety; negative with emotional regulation

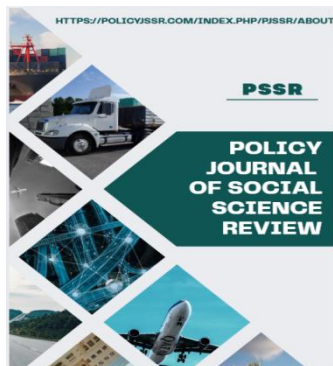


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

5	Abu Khait et al. (2022)	Internet addiction & cyberchondria	143 students	Survey	Anxiety sensitivity, Internet addiction	Moderate to high correlation with cyberchondria
6	Acar et al. (2025)	Cyberchondria & pregnancy anxiety	376 pregnant women	Descriptive	Pregnancy anxiety	Strong association; increased internet use raises anxiety
7	Santoro et al. (2022)	Mediation of health anxiety	563 adults (Italy)	Mediation analysis	Somatic symptoms	Health anxiety fully mediated cyberchondria relationship
8	Błachnio et al. (2022)	Emotional functioning & cyberchondria	615 participants	Cross-sectional	Pessimism, Emotion regulation	Strong association with health anxiety
9	Kefeli Col et al. (2023)	E-health literacy & cyberchondria	568 students (Turkey)	Cross-sectional	Health anxiety, Death anxiety	Health anxiety increases cyberchondria; literacy reduces it
10	Aslan & Koca (2025)	Serial mediation in students	352 students	Mediation analysis	Health perception, Literacy	Health anxiety influences cyberchondria levels
11	Sönmez et al. (2025)	Cyberchondria in high-risk pregnancy	Pregnant women	Correlational	Depression, Anxiety	Positive association with depression & anxiety

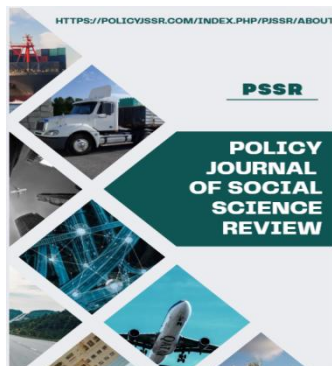


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

12	Demirtepe-Saygılı et al. (2021)	COVID-19 & health anxiety	392 students	Cross-sectional	Health literacy	Health anxiety influenced behavior change
13	Alanka et al. (2022)	COVID & cyberchondria	662 individuals	Cross-sectional	Pandemic stress	Increased cyberchondria due to pandemic
14	Garbóczy et al. (2021)	Stress & health anxiety in students	1289 students	Cross-sectional	Coping styles	Maladaptive coping increased anxiety
15	Mhalla et al. (2025)	Illness anxiety in medical residents	404 residents	Clinical study	Thought patterns	33.7% showed illness anxiety disorder
16	Boussaid et al. (2025)	Thought suppression & cyberchondria	213 medical students	Correlational	Thought suppression	Positive relationship with cyberchondria
17	Han et al. (2021)	COVID severity & cyberchondria	486 participants	Mediation	Psychological distress	Cyberchondria anxiety/stress mediated
18	Sezer et al. (2022)	Anxiety & cyberchondria in women	422 women	Cross-sectional	Trait anxiety	Positive association; lower well-being

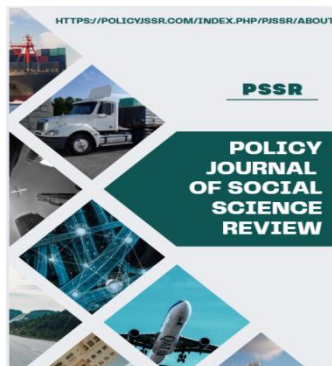


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

19	Sansakorn et al. (2024)	Moderation by health literacy	1295 participants	Cross-sectional	Health literacy	Strong association; moderated by literacy
20	Xu & Starcevic (2025)	Cyberchondria in older adults	638 older adults	Mediation	Cognitive fusion	Negative impact on quality of life
21	Jungmann & Dessauer (2025)	Adolescents & cyberchondria	159 adolescents	Cross-sectional	Intolerance of uncertainty	Strong link with health anxiety
22	Kurcer et al. (2021)	COVID fear & cyberchondria	794 students	Cross-sectional	COVID fear	Increased health anxiety
23	Nicolai et al. (2022)	Base-rate neglect cognitive bias in cyberchondria	368 participants (Germany)	Experimental	Reasoning bias	Bias increases health anxiety; reasoning style involved

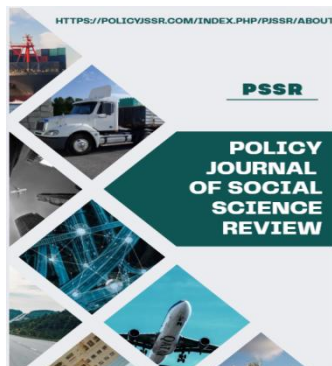


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

24	Koleilat et al. (2025)	Social media use & cyberchondria during COVID-19	406 Lebanese participants	Cross-sectional	Social media use, COVID fear, age	Social media use and fear significantly associated with cyberchondria
25	Afrin et al. (2022)	OHIS cyberchondria via moderated mediation	Survey participants	Moderated mediation	Perceived severity, Neuroticism	Perceived severity mediates OHIS-cyberchondria link; moderators significant
26	Ambrosini et al. (2022)	OCD & addiction	572 Participants	Mediation	OCD symptoms, Internet addiction	OCD & internet addiction mediate cyberchondria-anxiety/depression
27	Martino et al. (2026)	Cyberchondria as a complex system involving anxiety and informational instability in the digital age.	General population (Review of existing literature including adolescents, students, and clinical patients).	Narrative Review / of Synthesis	Intolerance of uncertainty (IU), health anxiety, metacognitive beliefs, algorithmic bias, and cognitive	Cyberchondria is a maladaptive cycle where online searching increases anxiety rather than relieving it. It is driven by cognitive biases (like confirmation bias) and digital "filter bubbles".



Policy Journal of Social Science Review

ISSN Online:3006-4635

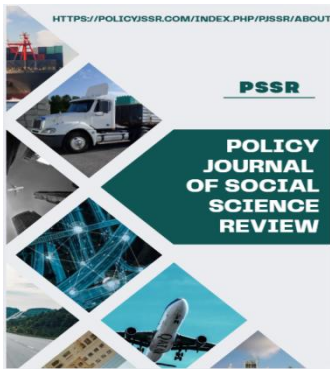
ISSN Print: 3006-4627

28	Santi & Sahoo (2022)	Prevalence and severity of cyberchondria among medical students during the pandemic.	763	Cross-sectional observational study.	Cyberchondria Severity Scale (CSS-15) covering 5 domains: Excessiveness, Distress, Compulsion, Reassurance, and Mistrust.	Most students showed moderate levels of cyberchondria. Significant positive correlation found between age/year of study and cyberchondria severity.
----	----------------------	--------------------------------------------------------------------------------------	-----	--------------------------------------	---------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

Discussion:

This systematic review provide comprehensive evidence that cyberchondria is strongly linked with health anxiety and is influenced by multiple interrelated factors. Firstly, the findings confirm that health anxiety is a central mechanism underlying cyberchondria. Individuals with heightened health anxiety are more likely to engage in excessive online health searches, which in turn reinforce their fears. Secondly digital behaviour plays a crucial role. The widespread availability of online health information, combined with social media exposure, increases the likelihood of encountering alarming or misleading content, thereby intensify anxiety. Thirdly,

cognitive factors, such as intolerance of uncertainty and reasoning biases contribute to the persistence of cyberchondria individuals tend to interpret ambiguous information negatively leading to increased worry and compulsive searching behaviours. Moreover, emotional and personality factors, including poor emotional regulation and neuroticism further exacerbate the condition. These findings align with previous research indicating that psychological vulnerabilities significantly influence online health behaviours. Importantly health literacy emerges as a key protective factor, suggesting that individuals ability to critically evaluate online information may reduce cyberchondria.



Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

Implications:

The findings of this systematic review highlight that cyberchondria and health anxiety are significantly influenced by digital behaviour, cognitive vulnerabilities, and psychosocial factors. Based on the reviewed literature, several practical implications can be drawn for policymakers, clinicians, educational institutions, and future research directions to reduce the burden of cyberchondria in the digital age.

1. Early Identification and Screening

There is a need for early detection of individuals at risk of developing cyberchondria and elevated health anxiety. Educational institutions such as schools and universities should implement regular psychological screening programs focusing on online health information seeking behavior, anxiety levels, and digital usage patterns. Early identification can help in preventing the escalation of excessive health-related internet searching into clinically significant anxiety.

2. Digital and Health Literacy Interventions

Health literacy has been consistently identified as a protective factor against cyberchondria. Therefore, structured programs should be introduced to improve e-health literacy among students and the general population. These interventions should focus on enhancing individuals' ability to critically evaluate online health information, differentiate between credible

and non-credible sources, and reduce reliance on misleading digital content.

3. Psychological and Clinical Interventions

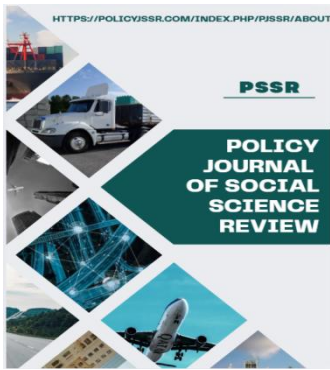
Clinical practices should incorporate cyberchondria assessment within routine psychological evaluations, especially among individuals presenting with health anxiety. Evidence-based interventions such as Cognitive Behavioral Therapy (CBT), metacognitive therapy, and mindfulness-based interventions can be effective in reducing maladaptive online health searching behaviors and associated anxiety symptoms. Additionally, emotional regulation training may help individuals manage distress triggered by online health information.

4. Educational and Institutional Implications

Educational institutions play a key role in shaping digital behavior. Schools, colleges, and universities should organize mental health awareness programs and workshops focusing on safe internet use, stress management, and coping strategies for anxiety. Such programs can help students develop healthier online habits and reduce vulnerability to cyberchondria triggered by academic stress and excessive screen exposure.

5. Policy and Public Health Implications

Policymakers should focus on regulating the quality of online health information to minimize misinformation and anxiety-



Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

inducing content. Public health campaigns should be introduced to promote awareness regarding cyberchondria and encourage responsible use of digital health platforms. Collaboration with social media platforms and search engines is also necessary to ensure that reliable medical information is prioritized and misleading content is minimized.

6. Research Implications

Future research should focus on longitudinal studies to better understand the causal relationship between cyberchondria and health anxiety. There is also a need to explore neuropsychological mechanisms, such as cognitive bias and emotional processing, in greater depth. Additionally, more research is required to examine cultural differences, digital behavior patterns, and the effectiveness of intervention programs aimed at reducing cyberchondria.

Conclusion

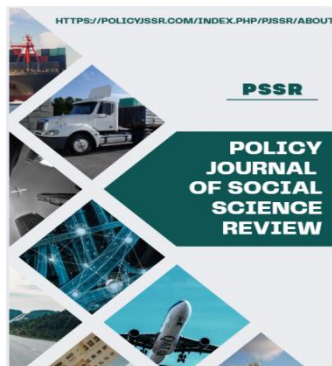
Review concludes that cyberchondria is a significant psychological issue in the digital age, closely associated with health anxiety. The findings highlight that excessive online health information seeking, combined with cognitive biases and emotional vulnerabilities, contributes to increased anxiety.

The interaction between digital exposure and psychological factors underscores the need for integrated interventions, including improving health literacy,

regulating online content, and providing psychological support.

References

- Abu Khait, A., Mrayyan, M. T., Al-Rjoub, S., Rababa, M., & Al-Rawashdeh, S. (2022). Cyberchondria, anxiety sensitivity, hypochondria, and internet addiction: Implications for mental health professionals. *Current Psychology*, *31*(1), 1-10. <https://doi.org/10.1007/s12144-022-03815-3>
- Acar, Z., Özkan, A., & Malçok, F. G. (2025). Being pregnant in the digital age: Cyberchondria and pregnancy anxiety. *BANU Journal of Health Science and Research*, *7*(3). <https://doi.org/10.46413/boneyusbad.1628422>
- Afrin, R., Prybutok, G., & Prybutok, V. R. (2022). The pathways from online health information seeking to cyberchondria: A perspective from moderated mediation. *Psychiatry Research Communications*, *2*(4), 100069. <https://doi.org/10.1016/j.psycom.2022.100069>
- Alanka, Ö., Çimen, Ü., & Değirmenci, F. (2022). Cyberchondria as digital psychopathology: COVID-19 pandemic example. *Van Yüzüncü Yıl University Journal of Social Sciences Institute*, *56*(1), 185-202.

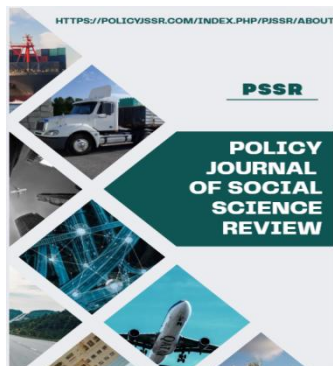


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

- Ambrosini, F., Truzoli, R., Vismara, M., Vitella, D., & Biolcati, R. (2022). The effect of cyberchondria on anxiety, depression and quality of life during COVID-19: The mediational role of obsessive-compulsive symptoms and internet addiction. *Heliyon*, 8(6), e09437. <https://doi.org/10.1016/j.heliyon.2022.e09437>
- Aslan, H., & Koca, G. Ş. (2025). Examining the relationships between e-health literacy, cyberchondria, health anxiety, and health perception among foreign university students. *BMC Public Health*, 25, 4368. <https://doi.org/10.1186/s12889-025-25636-2>
- Błachnio, A., Przepiórka, A., Kot, P., Cudo, A., & Steuden, S. (2022). The role of emotional functioning in the relationship between health anxiety and cyberchondria. *Current Psychology*. <https://doi.org/10.1007/s12144-022-04126-3>
- Boussaid, N., Feki, R., Ben Ayed, I., Smaoui, N., Gassara, I., Charfi, N., Ben Thabet, J., Maalej, M., Omri, S., & Zouari, L. (2025). Health anxiety in medical students: A hidden challenge in medical education. *European Psychiatry*, 71(S1), S488. <https://doi.org/10.1192/j.eurpsy.2025.1016>
- Demirtepe-Saygılı, D., Eşiyok, E., & Turanci, E. (2021). Media usage, health literacy, health anxiety, and health behaviors of university students during the COVID-19 pandemic. *Turkish Review of Communication Studies*, (38), 19-34. <https://doi.org/10.17829/turcom.862102>
- Fang, S., & Mushtaque, I. (2024). The moderating role of health literacy and health promoting behavior in the relationship among health anxiety, emotional regulation, and cyberchondria. *Psychology Research and Behavior Management*, 17, 51-62. <https://doi.org/10.2147/PRBM.S446448>
- Garbóczy, S., Szemán-Nagy, A., Ahmad, M. S., Harsányi, S., Ocsenás, D., Rekenyi, V., Al-Tammemi, A. B., & Kolozsvári, L. R. (2021). Health anxiety, perceived stress, and coping styles in the shadow of the COVID-19. *BMC Psychology*, 9, 53. <https://doi.org/10.1186/s40359-021-00560-3>
- Han, L., Zhan, Y., Li, W., Xu, Y., Xu, Y., & Zhao, J. (2021). Associations between the perceived severity of the COVID-19 pandemic,

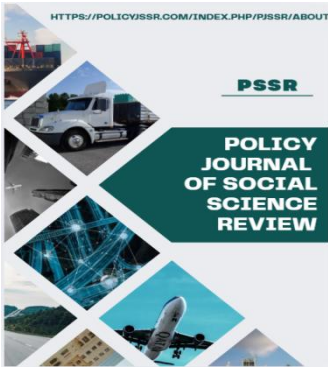


Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

- cyberchondria, depression, anxiety, stress, and lockdown experience: Cross-sectional survey study. *JMIR Public Health and Surveillance*, 7(9), e31052. <https://doi.org/10.2196/31052>
- Jungmann, S. M., & Dessauer, E. (2025). Health-related internet use and cyberchondria in adolescents: Population-based cross-sectional survey. *Journal of Medical Internet Research*, 27, e65792. <https://doi.org/10.2196/65792>
- Kefeli Col, B., Gumusler Basaran, A., & Genc Kose, B. (2022). The relationship between e-health literacy, health anxiety, cyberchondria, and death anxiety in university students that study in health related department. *Journal of Multidisciplinary Healthcare*, 15, 2479–2493. <https://doi.org/10.2147/JMDH.S384451>
- Koleilat, N., Ghosson, A., Ghandour, A., Soufan, F., Kaddoura, H., Jounblat, M., Abdallah, S., & Shaarani, I. (2025). Association between social media use and cyberchondria during the COVID-19 pandemic: A cross-sectional study. *Clinical eHealth*, 8, 230–239. <https://doi.org/10.1016/j.ceh.2025.10.003>
- Kurcer, M. A., Erdogan, Z., & Kardes, V. C. (2022). The effect of the COVID-19 pandemic on health anxiety and cyberchondria levels of university students. *Perspectives in Psychiatric Care*, 58(4), 1321–1329. <https://doi.org/10.1111/ppe.12850>
- Manzoor, I., Ahmad, S., & Arshad, H. (2025). Health anxiety, personality traits, emotional regulation and cyberchondria among university students. *Journal of Behavioural Sciences*, 35(1).
- Martino, G., Giacobello, M. L., Silvestro, O., Meduri, A., Sparacino, G., Gangemi, S., & Vicario, C. M. (2026). Cyberchondria and complexity: A systems-level exploration of anxiety and informational instability in the digital age. *Frontiers in Psychology*, 17, 1794803. <https://doi.org/10.3389/fpsyg.2026.1794803>
- Mhallai, A., Ben Haouala, A., Betbout, I., Haj Salah, A., Amamou, B., & Zaafrane, F. (2025). Excessive preoccupation of having a serious illness in medicine residents. *European Psychiatry*, 71(S1), S486. <https://doi.org/10.1192/j.eurpsy.2025.1011>
- Nicolai, J., Moshagen, M., Schillings, K., & Erdfelder, E. (2022). The role of base-rate neglect in cyberchondria



Policy Journal of Social Science Review

ISSN Online:3006-4635

ISSN Print: 3006-4627

- and health anxiety. *Journal of Anxiety Disorders*, 91, 102609. <https://doi.org/10.1016/j.janxdis.2022.102609>
- Santoro, G., Starcevic, V., Scalone, A., Cavallo, J., Musetti, A., & Schimmenti, A. (2022). The doctor is in(ternet): The mediating role of health anxiety in the relationship between somatic symptoms and cyberchondria. *Journal of Personalized Medicine*, 12(9), 1490. <https://doi.org/10.3390/jpm12091490>
- Sansakorn, P., Mushtaque, I., Awais-E-Yazdan, M., & Dost, M. K. B. (2024). The relationship between cyberchondria and health anxiety and the moderating role of health literacy among the Pakistani public. *International Journal of Environmental Research and Public Health*, 21(9), 1168. <https://doi.org/10.3390/ijerph21091168>
- Santi, N. S., & Sahoo, J. P. (2023). Cyberchondria in medical students: An observational study. *National Journal of Physiology, Pharmacy and Pharmacology*, 13(1). <https://doi.org/10.5455/njppp.2023.13.05224202202062022>
- Sarpdağı, Y., & Çapık, C. (2024). Investigation of the relationship between health anxiety and cyberchondria in obese cases. *Turkish Journal of Diabetes and Obesity*, 2, 144–153.
- Sezer, Ö., Başoğlu, M. A., & Dağdeviren, H. N. (2022). An examination of cyberchondria's relationship with trait anxiety and psychological well-being in women of reproductive age: A cross-sectional study. *Medicine*, 101(46), e31644. <https://doi.org/10.1097/MD.00000000000031644>
- Sönmez, T., Türk Delibalta, R., & Yurt, E. (2025). Cyberchondria in high-risk pregnant women: Its relationship with depression and anxiety. *Salud Mental*, 48(4), 223–230. <https://doi.org/10.17711/SM.0185-3325.2025.025>
- Xu, R. H., & Starcevic, V. (2025). Cyberchondria in older adults and its relationship with cognitive fusion, health-related quality of life, and mental well-being: Mediation analysis. *JMIR Aging*, 8, e70302. <https://doi.org/10.2196/70302>
- Yalçın, B. (2025). The role of health anxiety in the relationship between e-health literacy and cyberchondria. *TOGÜ Erbaa Sağlık ve Yönetim Dergisi*, 2(1), 1–21.