

Does Cyberchondria Influence Subjective Well-Being in Online Healthcare platforms?—An Empirical Study

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Background: Users may develop cyberchondria if they seek information about health issues excessively in online healthcare platforms. This can lead to a decline in their subjective well-being, which is essential for overall health. From the perspective of cyberchondria, we aim to investigate the factors influencing subjective well-being within the online healthcare context. Therefore, this study focuses on users' subjective well-being, exploring the internal mechanism linking cyberchondria and subjective well-being.

Methods: This study uses Partial Least Squares Structural Equation Modelling (PLS-SEM) to explore the internal mechanism of subjective well-being. A cross-sectional survey was conducted in China. The constructs in this study were measured based on previous mature scales. Data were collected from 299 users of online healthcare platforms for analysis.

Results: The findings indicate that cyberchondria can lead to information anxiety and intermittent discontinuance. Information anxiety can affect subjective well-being. Furthermore, the study reveals that information avoidance plays a significant moderating role in these relationships.

Conclusion: This study is innovative in its exploration of subjective well-being, offering valuable insights for users of online health platforms. Additionally, it highlights the moderating effect of information avoidance on cyberchondria, information anxiety, and intermittent discontinuance, which could enrich research into subjective well-being in the context of healthcare. The findings of this study could be used to improve the subjective well-being among users of online health platforms.

Keywords: cyberchondria, information anxiety, intermittent discontinuance, online healthcare platform, subjective well-being

Introduction

Decreased subjective well-being has emerged as a salient concern within the context of social platforms.¹ This issue gains further complexity in the healthcare domain, where a proliferation of health-related content presents potential influences on users' psychological states. Subjective well-being, a critical indicator reflecting an individual's overall psychological condition, is intrinsically linked not only to general health outcomes but also to sustained user engagement with digital environments. While online healthcare offers many advantages to its users, it is important to recognize that excessive information consumption can lead to negative behaviors,² thereby undermining subjective well-being. Individuals with elevated cyberchondria report significantly lower life satisfaction, higher negative affect, and diminished subjective well-being. In online healthcare platforms, problematic use of health-related information by users is referred to as cyberchondria. This can result in information anxiety and ultimately impact an individual's subjective well-being.³

Cyberchondria, characterized by the repetitive online search for health information, is a prevalent phenomenon among users of online healthcare platforms.⁴ This behavior is often linked to diminished subjective well-being. Previous studies have established a relationship between cyberchondria and anxiety.⁵ Additionally, research has demonstrated a correlation between health and subjective well-being,⁶ underscoring the potential negative impact of cyberchondria.^{7,8} Consequently, the information anxiety inherent in cyberchondria likely contributes to poorer subjective well-being, particularly within the context of online health platforms where information is readily accessible yet potentially overwhelming.

Meanwhile, cyberchondria may also result in intermittent discontinuance, which is defined as users who regularly leave and return to the platform.⁹ This behavior may ultimately lead to permanent discontinuance from the platform.¹⁰ Research suggests that individuals experiencing negative consequences from platform use, such as those potentially stemming from cyberchondria, may adopt coping strategies.¹¹ Specifically, users who encounter unpleasant issues can abandon the platform and look for another, resulting in intermittent discontinuance. This pattern can be interpreted as a behavioral adaptation aimed at managing aversive experiences encountered online. In order to enhance users' subjective well-being and create a more comfortable environment, it is crucial to address intermittent discontinuance in online healthcare platforms.

Above all, subjective well-being is a critical determinant of overall health, and previous research has indeed explored related phenomena such as cyberchondria, information anxiety, and intermittent discontinuance to some extent. It is shown that cyberchondria could lead to anxiety, and subjective well-being could be influenced by users' feeling. However, existing research has not analyzed the internal relationships between cyberchondria and subjective well-being comprehensively. Understanding subjective well-being from the perspective of cyberchondria is vitally important for users' health. Therefore, this study examines the relationship between cyberchondria and subjective well-being, explicitly accounting for the mediating or moderating roles of information anxiety, intermittent discontinuance, and information avoidance. This study could provide valuable insights into the relationship between cyberchondria and subjective well-being, thereby enriching existing research on subjective well-being among users of online healthcare platforms. The remainder of this study is organized as follows: Section 2 provides a literature review on cyberchondria, information anxiety, intermittent discontinuance, information avoidance, and subjective well-being. Section 3 outlines the methodology employed in this study. Section 4 presents the key findings. Section 5 discusses the results and Section 6 addresses the theoretical implications, practical applications, limitations, and suggestions for future research.

Theoretical Background and Hypotheses

SOR Model

S-O-R (Stimulus-Organism-Response) model, developed by Mehrabian and Russell,¹² provides a framework for understanding how external stimuli influence individuals' responses through internal psychological and emotional states. The S-O-R model emphasizes the importance of both external stimuli and internal states in shaping user responses. According to the S-O-R model, external stimuli affect individuals via their internal state. Consequently, the model serves as a valuable framework for understanding individual responses.

The SOR model has been applied in the research of user psychology and behavior research to help understand how individuals interact with their external environment.¹³ The model is based on the premise that external stimuli (S) influence users (the organism, O), which leads to a response (R).

For users of online healthcare services, social interactions are essential for seeking and sharing information. However, they may experience negative effects from cyberchondria if they become overwhelmed with information. In online healthcare platforms, cyberchondria serves as a stimulus, and it could induce information anxiety and intermittent discontinuance. According to the Stimulus-Organism-Response (SOR) theory, internal states play a crucial role in influencing users' behavior.¹⁴ Cyberchondria, characterized by excessive health-related online searching leading to heightened anxiety, can itself function as a significant stimulus (S), and may have a significant impact on users' subjective well-being through the organism of anxiety and intermittent discontinuance. This study aims to explore the mechanisms underlying subjective well-being. According to the S-O-R framework, cyberchondria may significantly impact users' subjective well-being, potentially mediated through these anxiety states and usage discontinuance. Therefore, this study employs the S-O-R model as an appropriate theoretical lens to investigate the underlying mechanisms linking cyberchondria (S) to users' subjective well-being (R) in online healthcare.

The Relationship Between Cyberchondria, Information Anxiety, and Intermittent Discontinuance

Cyberchondria, which is characterized by searching for health-related information, is becoming increasingly prevalent among users. These days, online healthcare platforms offer a blend of authentic and fabricated health-related information. The complexity of health knowledge makes it challenging for users to distinguish between reliable and false information. Thus, users are more susceptible to developing cyberchondria in online healthcare platforms, where mixed information is accessible.

Scholars have found an association between cyberchondria and information anxiety.¹⁵ Social media use is positively associated with information anxiety.¹⁶ Information anxiety refers to the frustration experienced by users when they are unable to find the information they need from available resources.¹⁷ This anxiety is often caused by the overwhelming amount of information available. Furthermore, research suggests that seeking health information online can lead to misconceptions about COVID-19¹⁸ and can also lead to heightened anxiety.¹⁹ Previous studies have strongly linked cyberchondria and problematic internet use,⁴ which is significantly related to information anxiety.

Furthermore, cyberchondria can have a negative impact on intermittent discontinuance.²⁰ In addition, cyberchondria may be the cause of intermittent use, whereby users log out for a period of time. Research has also been found that cyberchondria is associated with functional impairment.²¹ Cyberchondria is a problematic tendency that may exacerbate information anxiety and intermittent discontinuance. Therefore, this study aims to explore the effect of cyberchondria, considering the influence of cyberchondria on information anxiety and intermittent discontinuance in online healthcare platforms.

H1. Cyberchondria influences information anxiety positively.

H2. Cyberchondria influences intermittent discontinuance positively.

The Effect of Information Anxiety on Subjective Well-Being

Information anxiety is characterized by discomfort with excessive information and demonstrates the psychological strain.²² It can manifest as a reluctance to read information leaflets about prescription medicine^{23,24} and may contribute to negative behavioral patterns.²⁵

Information anxiety can diminish users' perceived well-being. It influences both the relationship between involvement and knowledge purchase intention,²⁶ as well as the relationship between information processing style and information-seeking behavior.²⁷ It has been confirmed that people's perceptions of information can be affected by information anxiety. Information anxiety has been linked to stress and difficulty in problem-solving,²⁵ and to influencing the way people solve problems.²⁸ Information anxiety also has the potential to reduce users' subjective well-being. Reduced subjective well-being is particularly common among users. Therefore, this study assumes that users' subjective well-being is influenced by information anxiety. In essence, higher levels of information anxiety are likely to lead to decreased subjective well-being.

H3. Information anxiety influences subjective well-being negatively.

The Effect of Intermittent Discontinuance on Subjective Well-Being

The propensity to stop, throw away or reuse, known as intermittent discontinuance, may be detrimental to one's subjective well-being. Users who stop using online healthcare platforms may feel disconnected from the latest information,²⁴ which can lead to lower subjective well-being. Research has shown that intermittent discontinuance can harm well-being.¹ Subjective well-being may decrease as the tendency to discontinue the use of the platform increases. In the context of online healthcare platforms, higher levels of intermittent discontinuance may lead to a decrease in subjective well-being. Therefore, it is assumed that subjective well-being is negatively impacted by intermittent discontinuance.

H4. Intermittent discontinuance influences subjective well-being negatively.

The Effect of Information Avoidance in the Relationship Between Cyberchondria, Information Anxiety, and Intermittent Discontinuance

Information avoidance means that people avoid information. Due to the vast quantity of information available, people are more likely to feel fatigued and overwhelmed. Cyberchondria is believed to contribute to information anxiety and intermittent discontinuance. Interestingly, people with information avoidance would like to limit their exposure to information.²⁹ However, as they dislike excessive information, some users tend to ignore it to a certain extent. In other words, people who avoid information may have different attitudes towards and behave differently with regard to different types of information.

Researchers have investigated the mechanisms of information avoidance. For example, it is known that information avoidance is preceded by information anxiety.³⁰ It is shown that individuals experiencing distress are more likely to disregard information.³¹ The consequences of information avoidance are also associated with more negative attitudes towards seeking information.³² In this study, cyberchondria was found to have less of an effect on information anxiety and intermittent discontinuance when information avoidance was higher than when it was lower, as users tried to lessen the negative effects caused by their problematic use of health information. Information avoidance is therefore thought to impact the way in which cyberchondria influences information anxiety and intermittent discontinuance. Users with cyberchondria may be less prone to information anxiety and intermittent discontinuance, making a greater effort to avoid negative consequences than individuals with lower levels of information avoidance. Users with different levels of information avoidance may display varying degrees of information anxiety and intermittent discontinuance when confronted with cyberchondria.²² Thus, in this study, it is believed that for users who have higher information avoidance, the relationships between cyberchondria and information anxiety and cyberchondria and intermittent discontinuance are less important.

H5. Information avoidance could lessen the influences of cyberchondria and information anxiety.

H6. Information avoidance could lessen the influences of cyberchondria and intermittent discontinuance.

Based on the discussion, this study builds a theoretical model shown in [Figure 1](#).

Methodology

Measurement Items

This study develops five latent variables and measured items are developed based on previous research. Subjective well-being is measured based on previous research.³³ Cyberchondria is measured in reference to the work of Farooq, Laato and Islam.³⁴ Information anxiety is measured using six items.³⁰ Intermittent discontinuance is measured using a scale adapted from Cao, Long, Hu, Li and Qin,³⁵ and information avoidance is based on a previous study.³⁰ Each construct is measured on a single item using a 7-point scale, in which one demonstrates strongly disagree and seven demonstrates strongly agree. Scores on these constructs are treated as a continuous measure; no clinical cut-offs are applied in this study.

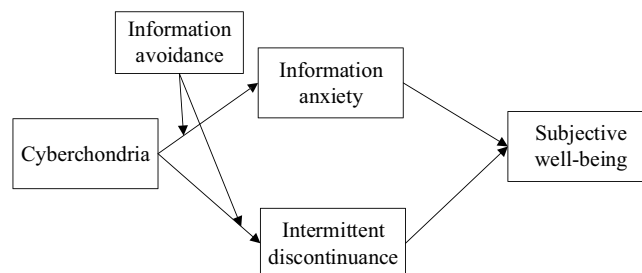


Figure 1 Theoretical Model.

Data Collection Tools

All methods were carried out in accordance with the relevant guidelines. The study collects data on users' cognition, emotions and behavioral intention. Informed consent was obtained from all participants. This study analyzes the mechanism of subjective well-being in online healthcare platforms. Previous measurement items were referred to in order to demonstrate the constructs in this study. To ensure that the constructs in English are suitable for our research context, we used a back-translation method is used to convert the measurement items into Chinese. Besides, we ensure their reliability by converting them back into English. The meaning is consistent in both languages. Furthermore, we discussed the questionnaire with the research team and experts outside the research team to guarantee its readability and design quality. Our study involves analyzing anonymized data with fully anonymized survey responses. According to the ethical guidelines for research involving human subjects: World Medical Association Declaration of Helsinki states that research using anonymized data or non-identifiable materials may be exempt from formal ethical review.³⁶ We created a final version of the questionnaire to distribute and selected 32 undergraduate students to conduct a pilot test. These students are from a health information literacy class at our university and are willing to participate in the research. Informed consent is obtained from them. Before the test, they had to select the online healthcare platforms they had used. Those who do not use any platforms are excluded from the survey. Thus, the 32 undergraduate students provided informed consent and had experience of using online health platforms such as Haodaifu and ChunyuDoctor in China. The results of the test showed that the measurement items were adequate for further analysis.

Finally, we distributed the questionnaires via Wenjuanxing, an online questionnaire platform specialized in collecting questionnaire collection. Wenjuanxing is a professional platform for collecting questionnaires. It offers users a wealth of features and a convenient operation experience. Many literature have used this platform for collecting user data. We distributed questionnaires and obtained responses from the target group. Informed consent was obtained from all subjects by including it in the questionnaire. Only participants who agreed to the information consent could continue to participate in the survey and answer the questionnaire. Respondents who were not satisfied would be excluded from this study. After eliminating incomplete responses (e.g. those who answered the same for all measurement items and did not pass the reverse discrimination question), 299 valid survey responses remained for the final data analysis (The sample size is suitable for analyzing data using Smart PLS).

Smart PLS 3.0 and SPSS 22.0 are the softwares we used for data analysis. SmartPLS is particularly suited for analyzing complex path models with many latent constructs, especially when the primary research objective is prediction. This aligns with our study's aim to explore intricate relationships between cyberchondria, information anxiety, intermittent discontinuance, information avoidance and subjective well-being. SPSS was used extensively for the critical initial stages of data management and diagnostics. This included: Checking data integrity (missing values analysis). Data transformation/cleaning where necessary. Descriptive Statistics & Reliability: descriptive statistics (frequencies, means, standard deviations) for all observed variables. It was also used to calculate internal consistency reliability (Cronbach's Alpha) for reflective constructs.

The demographic characteristics are shown in Table 1. The sample's demographic concentration among young, educated, middle-income users aligns with typical digital health early adopters. It demonstrates the main users of online healthcare platform.

Results

Measurement Model

In this study, reliability is measured using Cronbach's α , composite reliability (CR), and average variance extracted (AVE), while validity is analyzed using factor loadings, composite reliability (CR), and average variance extracted (AVE). According to the standard criteria, factor loadings, CR, and Cronbach's α should be above 0.7, and the AVE should be above 0.5.³⁷ The data analysis shows that the model is reliable and valid (Table 2).

Table 1 Demographic Characteristics

Item	Property	Number	Percentage
Gender	Male	164	54.8
	Female	135	45.2
Age	≤20	34	11.4
	21-30	85	28.4
	31-40	76	25.4
	40-50	50	16.7
	≥50	54	18.1
Income	≤3000	79	26.4
	3001-5000	75	25.1
	5001-10,000	92	30.8
	≥10,000	53	17.7
Education	Senior high school or lower	129	43.1
	Undergraduate	139	46.5
	Master	25	8.4
	Bachelor or higher	6	2.0

Table 2 Model Reliability and Validity

Measurement		Factor Loading	Cronbach's α	CR	AVE
Cyberchondria	Cyber1	0.865	0.875	0.914	0.727
	Cyber2	0.849			
	Cyber3	0.849			
	Cyber4	0.848			
Information anxiety	IA1	0.852	0.920	0.937	0.713
	IA2	0.823			
	IA3	0.861			
	IA4	0.830			
	IA5	0.869			
	IA6	0.832			
Intermittent discontinuance	Inter1	0.874	0.880	0.918	0.736
	Inter2	0.855			
	Inter3	0.842			
	Inter4	0.860			

(Continued)

Table 2 (Continued).

Measurement		Factor Loading	Cronbach's α	CR	AVE
Subjective well-being	Well1	0.858	0.922	0.939	0.721
	Well2	0.857			
	Well3	0.844			
	Well4	0.818			
	Well5	0.845			
	Well6	0.870			
Information avoidance	InfoAvoid1	0.856	0.922	0.939	0.720
	InfoAvoid2	0.847			
	InfoAvoid3	0.844			
	InfoAvoid4	0.857			
	InfoAvoid5	0.834			
	InfoAvoid6	0.852			

Structural Model

This study analyses the structural model. Figure 2 ab shows the path coefficients. The results indicate that cyberchondria has a positive influence on both information anxiety ($\beta=0.717$, $t=20.847$, $p<0.001$) and intermittent discontinuance ($\beta=0.743$, $t=24.337$, $p<0.001$), thus supporting H1 and H2. Furthermore, information anxiety negatively affects subjective well-being ($\beta=-0.307$, $t=3.569$, $p<0.001$). However, the analysis reveals that intermittent discontinuance does not impact subjective well-being ($\beta=-0.156$, $t=1.712$, $p>0.05$), thus supporting H3 and rejecting H4.

Moderating Effect

To analyze the internal mechanism of subjective well-being comprehensively, this study examines the moderating role of information avoidance in the relationships between cyberchondria and information anxiety, as well as in the relationship between cyberchondria and intermittent discontinuance. The results of these moderating effects are presented in Table 3. Model 1 demonstrates the effect of cyberchondria on information anxiety. Model 2 shows the influence of cyberchondria and information avoidance on information anxiety, while Model 3 shows the effects of cyberchondria, information avoidance, and their interaction effect on information anxiety. The most important finding is the interaction effect between cyberchondria and

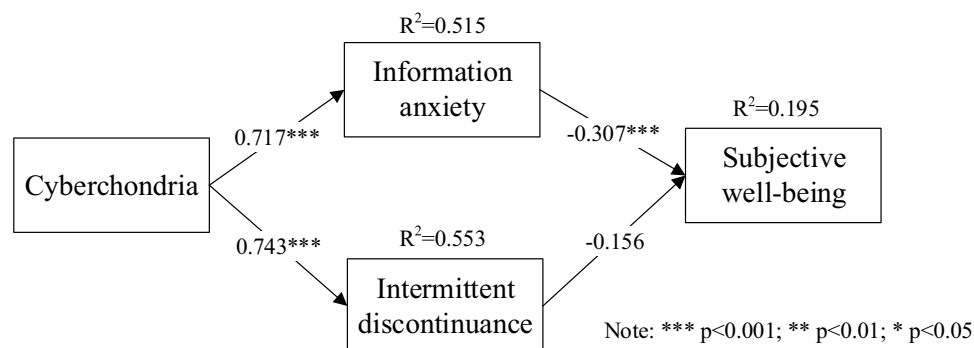
**Figure 2** Analysis Results for the Structural Model.

Table 3 Analysis of Moderating Role of Information Avoidance in the Relationship Between Cyberchondria and Information Anxiety

Effect	Variable	Model 1		Model 2		Model 3	
		β	T value	β	T value	β	T value
Main effect	Cyberchondria	0.716	17.680	0.657	14.736	0.597	11.923
	Information avoidance			-0.134	-3.014	-0.174	-3.713
Moderating effect	Cyberchondria \times Information avoidance					-0.115	-2.550
Adjusted R squared		0.511		0.524		0.533	
R squared change		0.513		0.015		0.010	
F change		312.580***		9.084***		6.502**	

Note: *** $p < 0.001$; ** $p < 0.01$.

Table 4 Analysis of Moderating Role of Information Avoidance in the Relationship Between Cyberchondria and Intermittent Discontinuance

Effect	Variable	Model 1		Model 2		Model 3	
		β	T value	β	T value	β	T value
Main effect	Cyberchondria	0.743	19.136	0.694	16.182	0.645	13.345
	Information avoidance			-0.111	-2.579	-0.143	-3.168
Moderating effect	Cyberchondria \times Information avoidance					-0.095	-2.174
Adjusted R squared		0.551		0.559		0.565	
R squared change		0.552		0.010		0.007	
F change		366.180***		6.652***		4.727**	

Note: *** $p < 0.001$; ** $p < 0.01$.

information avoidance. The results confirm that information avoidance moderates the relationship between cyberchondria and information anxiety negatively, thus supporting H5 (see Table 3).

Furthermore, the moderating effect of information avoidance on the relationship between cyberchondria and intermittent discontinuance is analyzed. Table 4 shows that information avoidance negatively moderated the relationship between cyberchondria and intermittent discontinuance. Therefore, H6 is supported.

Discussion

In this study, we investigate the impact of cyberchondria on subjective well-being in online healthcare platforms. We thoroughly examine the effects of information anxiety, intermittent discontinuance, and information avoidance on subjective well-being, which intensify previous literature of subjective well-being and cyberchondria.

The study has some insightful findings. First, it reveals that information anxiety and intermittent discontinuance are positively influenced by cyberchondria. Compared to prior research which investigated factors such as information overload,³⁸ this research explores information anxiety²⁵ and intermittent discontinuance through a more holistic perspective of cyberchondria.³⁵ It uncovers the internal relationship between cyberchondria and subjective well-being. The findings indicated people with cyberchondria have cognitive difficulties processing large amounts of information, which intensifies their information anxiety and leads to discontinue their use of the platform.

Second, information anxiety negatively impacts subjective well-being. Intermittent discontinuance, however, does not affect subjective well-being. This study enriches the researches of antecedents of subjective well-being.³⁹ Information

anxiety arises from cyberchondria and has been shown to adversely affect behavior.²⁵ As information anxiety increases, a user's enthusiasm may wane, potentially leading to a decline in subjective well-being. Therefore, there is a heightened likelihood that a user's subjective well-being will diminish as information anxiety escalates. However, intermittent discontinuance, characterized by a tendency to stop using the platform,⁴⁰ has little to no effect on subjective well-being. Users may start acting negatively and cease using an online healthcare platform; the platform is unlikely to influence their subjective well-being, as it becomes increasingly distant from their experience.

Third, there may be a negative correlation between cyberchondria and intermittent discontinuance, with information avoidance moderating the relationship between cyberchondria and information anxiety. The relationship between cyberchondria and information anxiety is complex due to users' tendency of information avoidance, which could be influenced by the level of information avoidance.²² Information avoidance, characterized by a desire to evade excessive information, significantly impacts users emotionally.³² Users with higher levels of information avoidance are less motivated to engage with information, especially when faced with an overwhelming amount of it. Furthermore, these individuals are less likely to alter their usage patterns or switch to another platform, which in turn reduces intermittent discontinuance. In other words, compared to users with lower levels of information avoidance, those with higher levels are less prone to experiencing information anxiety and intermittent discontinuance at the same level of cyberchondria. This study contributes to the exploration of information avoidance in the relationship between cyberchondria, information anxiety, and intermittent discontinuance.

Contributions and Implications

Theoretical Contributions

This study offers several theoretical contributions. First, by investigating cyberchondria within an online healthcare platform, this research broadens the application of SOR theory.³⁵ Previous studies have investigated cyberchondria and anxiety.⁴¹ It is shown that cyberchondria could influence users' quality of life.⁵ Subjective well-being could be decreased when users faced with cyberchondria. However, the relationship between cyberchondria and subjective well-being has not got much attention. This study found that cyberchondria positively influences information anxiety and intermittent discontinuance. Furthermore, the experience of information anxiety and intermittent discontinuance can induce negative effects on users' subjective well-being. This study confirms that cyberchondria is related to subjective well-being. Therefore, the present research utilizes SOR theory and extends its application to the study of subjective well-being in online healthcare platforms.

Secondly, this study investigates information avoidance as a boundary in the relationship between cyberchondria and information anxiety, as well as between cyberchondria and intermittent discontinuance. This study contributes to the existing research on these topics. While previous studies have examined the factors influencing the intermittent discontinuance^{9,35} and information anxiety,⁴² but have overlooked the critical aspect of information avoidance. Information avoidance is important for users' feelings and behavior. The pathway from cyberchondria to intermittent discontinuance and information anxiety could be influenced by information avoidance. By analyzing information avoidance within the context of cyberchondria, this study enhances our understanding of how information avoidance affects intermittent discontinuance and information anxiety, thereby encouraging further research in this area.

Third, this study validates the relationships that explore the mechanism of subjective well-being. From the perspective of cyberchondria, it leads to some negative effects such as information anxiety and intermittent discontinuance, which could further negatively influence subjective well-being. Currently, there is a lack of research investigating subjective well-being from cyberchondria. By comprehensively illustrating the roles of cyberchondria, information anxiety, and the internal mechanism of subjective well-being, this study enhances the understanding of subjective well-being among users in online healthcare platforms.

Practical Contributions

This study makes practical contributions to understanding the mechanism of subjective well-being in online healthcare platforms. Firstly, concerning social media health information, social providers should enhance the quality of health information scientifically. Excessive seeking of health information could lead to cyberchondria, thereby affecting subjective well-being. Therefore, providers of online healthcare platforms should focus more on the adverse effects

caused by excessive seeking of health-related information. By offering high-quality health information and reducing the quantity of harmful information, subjective well-being could be enhanced.

Second, social media users who are confronted with cyberchondria need much attention. It should be clear that providing a positive environment on social platforms is important for users seeking health-related information. The effects of cyberchondria on information anxiety and intermittent discontinuance deserve much attention. It is crucial to mitigate the possible negative effects of cyberchondria. Users who frequently seek health information require special attention, and targeted services are excellent for reducing information anxiety and intermittent discontinuance caused by cyberchondria.

Third, paying much attention to users' information avoidance is prominent for online healthcare platform providers. Usually, the maximum volume of information is not best for all users. Although rich information is necessary, the potential drawbacks of information avoidance are always present. Information avoidance should not be neglected in the relationships between cyberchondria and information anxiety, intermittent discontinuance. For online healthcare platform users, higher information avoidance is important in lessening the negative effects induced by cyberchondria. Thus, in order to enhance the health-related information experience, high-quality health information should be provided for online healthcare platform users. Additionally, information avoidance is worth attention because it plays a buffering effect in cyberchondria.

Conclusion

This study is based on SOR theory and investigates the internal mechanism of subjective well-being among users of online healthcare platforms. Cyberchondria, information anxiety, intermittent discontinuance, information avoidance and intermittent discontinuance are the main constructs we analyzed in this study. Cyberchondria is not rare with much health-related information online, and subjective well-being could be influenced by this kind of stimuli. In addition, subjective well-being is of vital importance for users seeking information. This study explores the internal mechanism of subjective well-being. Specifically, it reveals how cyberchondria affects information anxiety and intermittent discontinuance. The findings confirm that cyberchondria significantly influences both information anxiety and intermittent discontinuance. Additionally, the study establishes the moderating role of information avoidance. Furthermore, it expands the research context and the boundaries of SOR theory, offering effective recommendations for enhancing users' subjective well-being. However, this study also has some limitations. First, information avoidance varies significantly and requires further investigation to understand its various effects. Second, information anxiety may be influenced by individual differences. Future research should explore the psychological mechanisms underlying subjective well-being, and integrate various factors in order to develop optimal strategies for effectively enhancing subjective well-being on social media.

Data Sharing Statement

The datasets used and/or analysed during the current study available from the corresponding author on reasonable request.

Ethical Approval

We thank the reviewer for raising this important requirement under the Declaration of Helsinki (Article 22). This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. The study has been reviewed by the Ethics Review Committee of Shandong Normal University. All participants provided informed consent before participation. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee. Participants' privacy and confidentiality were safeguarded throughout the research process, and all data were collected and analyzed in compliance with ethical standards.

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Disclosure

We declare that we have no known competing financial interests or personal relationships, no relevant financial or nonfinancial interests to disclose.

References

- Marttila E, Koivula A, Räsänen P. Does excessive social media use decrease subjective well-being? A longitudinal analysis of the relationship between problematic use, loneliness and life satisfaction. *Telematic Informatic*. 2021;59:101556. doi:10.1016/j.tele.2020.101556
- Della Vedova AM, Covolo L, Muscatelli M, Loscalzo Y, Giannini M, Gelatti U. Psychological distress and problematic smartphone use: two faces of the same coin? Findings from a survey on young Italian adults. *Computers Human Behav*. 2022;132:107243. doi:10.1016/j.chb.2022.107243
- Agrawal V, Khulbe Y, Singh A, Kar SK. The digital health dilemma: exploring cyberchondria, well-being, and smartphone addiction in medical and non-medical undergraduates. *Article Indian J Psychiatry*. 2024;66(3):256–262. doi:10.4103/indianjpsychiatry.indianjpsychiatry_570_23
- Fergu TA, Spada MM. Cyberchondria: examining relations with problematic Internet use and metacognitive beliefs. *Clin Psychol Psychother*. 2017;24(6):1322–1330. doi:10.1002/cpp.2102
- Ambrosini F, Truzoli R, Vismara M, Vitella D, Biolcati R. 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*. 2022;8(5):e09437. doi:10.1016/j.heliyon.2022.e09437
- Elbarazi I, Saddik B, Grivna M, et al. The Impact of the COVID-19 “Infodemic” on well-being: a cross-sectional study. *J Multidisciplinary Healthcare*. 2022;15:289–307. doi:10.2147/jmdh.S346930
- Cheng G, He S, He Q, et al. Gender and residence differences in the association between social support and subjective well-being among Chinese oldest-old: a national longitudinal study. *Arch Gerontol Geriatrics*. 2022;98:104545. doi:10.1016/j.archger.2021.104545
- Liu YX, Peng WY, Cao M, Zhang SJ, Peng J, Zhou ZK. Cyberchondria and chinese adolescent mental health in the age of COVID-19 pandemic. *article. Cyberpsychol Behav Soc Networking*. 2023;26(8):631–639. doi:10.1089/cyber.2022.0319
- Shen XL, Li YJ, Sun YQ. Wearable health information systems intermittent discontinuance: a revised expectation-disconfirmation model. *Article. Ind Manage Data Syst*. 2018;118(3):506–523. doi:10.1108/imds-05-2017-0222
- Zhou T, Zhang CL. Examining generative ai user intermittent discontinuance from a C-A-C perspective. *article; early access. Int J Hum-Comput Interact*. 2024;41(10):6377–6387. doi:10.1080/10447318.2024.2376370
- Margaret NYM. Re-examining the innovation post-adoption process: the case of Twitter discontinuance. *Computers Human Behav*. 2020;103:48–56. doi:10.1016/j.chb.2019.09.019
- Mehrabian A, Russell JA. *An approach to environmental psychology*. An approach to environmental psychology. 1974;xii,266–xii,266.
- Luqman A, Cao X, Ali A, Masood A, Yu L. Empirical investigation of Facebook discontinues usage intentions based on SOR paradigm. *Computers Human Behav*. 2017;70:544–555. doi:10.1016/j.chb.2017.01.020
- Wang SF, Chen CC. Explore the driving factors of designers’ AIGC usage behavior based on SOR framework. *Article Front Comput Sci-Switz*. 2024;6:18. doi:10.3389/fcomp.2024.1417016
- Arsenakis S, Chatton A, Penzenstader L, Billieux J, Khazaal Y. Unveiling the relationships between cyberchondria and psychopathological symptoms. *J Psychiatr Res*. 2021;143(8):254–261. doi:10.1016/j.jpsychires.2021.09.014
- Soroya SH, Faiola A. Why did people avoid information during the COVID-19 pandemic? Understanding information sources’ dynamics among Pakistani Z generation. *Library Hi Tech*. 2023;41(1):229–247. doi:10.1108/lht-02-2022-0113
- Yan P. ‘Fed with the wrong stuff’: information overload and the everyday use of the Internet in rural and urban China. *Article. Int Comm Gazette*. 2021;83(5):404–427. doi:10.1177/17480485211029019
- Su Y, Lee DKL, Xiao X. “I enjoy thinking critically, and I’m in control”: examining the influences of media literacy factors on misperceptions amidst the COVID-19 infodemic. *Computers Human Behavior*. 2022;128:107111. doi:10.1016/j.chb.2021.107111
- Xu J, Liu CJF PH. Infodemic vs. pandemic factors associated to public anxiety in the early stage of the COVID-19 outbreak: a cross-sectional study in China. *Front Public Health*. 2021;9:723648. doi:10.3389/fpubh.2021.723648
- Khan AW, Pandey J. Dark side consequences of cyberchondria: an empirical investigation. *Aslib JInformation Manag*. 2022;74(5):801–817. doi:10.1108/ajim-08-2021-0222
- Mathes BM, Norr AM, Allan NP, Albanese BJ, Schmidt NB. Cyberchondria: overlap with health anxiety and unique relations with impairment, quality of life, and service utilization. *Psychiatry Res*. 2018;261:204–211. doi:10.1016/j.psychres.2018.01.002
- Liu JY, Li H, Shen W, He YM, Zhu LL. How to cope with the negative health information avoidance behavior in a pandemic: the role of resilience. *Article Early Access Behav Info Technol*. 2024;17. doi:10.1080/0144929x.2024.2314746
- Bapat SS, Patel HK, Sangsiry SS. Role of information anxiety and information load on processing of prescription drug information leaflets. *article. Pharmacy*. 2017;5(4):1–18. doi:10.3390/pharmacy5040057
- Her YC, Timmermans E. Tinder blue, mental flu? Exploring the associations between Tinder use and well-being. *Inform Comm Soc*. 2021;24(9):1303–1319. doi:10.1080/1369118x.2020.1764606
- Xiang KH, Qiao GH, Gao F, Cao Y. Information anxiety, intergroup emotion, and rational coping in hotel employees under normalized pandemic prevention measures. *Article J Hosp Tour Manag*. 2021;48:344–356. doi:10.1016/j.jhtm.2021.07.005
- Lin SY, Cheng KH, Chuang SH. Three needs and information anxiety on knowledge purchase intentions across online knowledge platforms. *article. Behav Sci*. 2021;11(10):127. doi:10.3390/bs11100127
- Hadavi S, Farhadpoor MR. Relationship between information processing styles and information seeking behavior, with information anxiety as a moderator variable. *Libres-Library Info Sci Res Electronic J*. 2021;31(2):119–129. doi:10.32655/libres.2021.2.3
- Tsai MJ, Wu AH. Visual search patterns, information selection strategies, and information anxiety for online information problem solving. *Article Comput Educ*. 2021;172(11):104236. doi:10.1016/j.compedu.2021.104236
- Zhou T, Xie YY. Understanding social media users’ information avoidance intention: a C-A-C perspective. *Aslib JInformation Manag*. 2023. doi:10.1108/ajim-10-2022-0471
- Soroya SH, Farooq A, Mahmood K, Isoaho J, S-e Z. From information seeking to information avoidance: understanding the health information behavior during a global health crisis. *Information Processing Manag*. 2021;58(2):102440. doi:10.1016/j.ipm.2020.102440

31. Siebenhaar KU, Köther AK, Alpers GW. Dealing with the COVID-19 infodemic: distress by information, information avoidance, and compliance with preventive measures. *Frontiers in Psychol.* 2020;11:567905. doi:10.3389/fpsyg.2020.567905
32. Link E. Information avoidance during health crises: predictors of avoiding information about the COVID-19 pandemic among German news consumers. *Info Processing Manag.* 2021;58(6):102714. doi:10.1016/j.ipm.2021.102714
33. Zheng XM, Zhu WC, Zhao HX, Zhang C. Employee well-being in organizations: theoretical model, scale development, and cross-cultural validation. *J Organizational Behav.* 2015;36(5):621–644. doi:10.1002/job.1990
34. Farooq A, Laato S, Akmn I. Impact of online information on self-isolation intention during the COVID-19 pandemic: cross-sectional study. *Original Paper J Med Internet Res.* 2020;22(5):e19128. doi:10.2196/19128
35. Cao YY, Long QQ, Hu BL, Li JJ, Qin XH. Exploring elderly users' MSNS intermittent discontinuance: a dual-mechanism model. *Telematic Informatic.* 2021;62:101629. doi:10.1016/j.tele.2021.101629
36. *WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants.* World Medical Association.
37. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. *Eur Bus Rev.* 2019;31(1):2–24. doi:10.1108/EBR-11-2018-0203
38. Xu C, Yan W. The relationship between information overload and state of anxiety in the period of regular epidemic prevention and control in China: a moderated multiple mediation model. *Curr Psychol.* 2023;42(25):21842–21859. doi:10.1007/s12144-022-03289-3
39. Zhu YQ, Yao J. Social media use and subjective well-being among young adults in Mainland China: mediated by social media fatigue and social capital. Article; Early Access. *Curr Psychol.* 2025;13. doi:10.1007/s12144-025-07478-8
40. Bhatia S, Singh N, Liébana-Cabanillas F. Intermittent continued adoption of digital payment services during the COVID-19 induced pandemic. *Int J Hum Comput Interact.* 2022;39(14):2905–2919. doi:10.1080/10447318.2022.2087671
41. Song Y, Min D. The logic behind cyberchondria: longitudinal relations among risk perception, health anxiety, and online health information seeking. *J Association Info Sci Technol.* 2025;76(3):545–562. doi:10.1002/asi.24946
42. Lu Q, Tao L, Peng XY, Chen J. Pathways of front-line healthcare professionals' information anxiety during the COVID-19 pandemic: a qualitative study in China. Article; Early Access. *Inf Dev.* 2024;21. doi:10.1177/02666669241261632

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