

## A Study on Master's Students' Mental Health Information Seeking Behavior under Academic Stress: Postprint

**Authors:** Ding Xiao, Li Jian

**Date:** 2023-04-01T00:00:00+00:00

### Abstract

[Purpose/Significance] Through empirical research, this study reveals the process and influencing factors of mental health information seeking behavior among master's students in academic stress contexts, providing support for investigating the mental health status of master's students and graduate education management. [Method/Process] Data were collected using semi-structured interviews, and grounded theory methodology was employed to conduct an exploratory study on mental health information seeking behavior in academic stress contexts. [Results/Conclusion] The findings indicate that in academic stress contexts, the mental health information seeking behavior process of master's students primarily comprises four stages: initiation, execution, acquisition, and evaluation. Motivations for mental health information seeking mainly include external drive and internal drive. Problem-solving information constitutes the primary content of mental health information seeking among master's students. Factors influencing master's students' mental health information seeking behavior encompass personal factors, objective condition factors, information factors, and confidentiality factors, among which information factors serve as the main determinant.

### Full Text

## A Study on Mental Health Information Seeking Behavior of Postgraduate Students Under Academic Stress

**Ding Xiao, Li Jian**

College of Computer and Information Science, Southwest University, Chongqing 400715

### Abstract:

[Purpose/Significance] Through empirical research, this study reveals the behav-

ioral process and influencing factors of mental health information seeking among postgraduate students under academic stress, providing support for exploring the mental health status of postgraduate students and informing postgraduate training and management. [Method/Process] Semi-structured interviews were used to collect data, and grounded theory was employed to conduct exploratory research on mental health information seeking behavior under academic stress. [Result/Conclusion] The study finds that under academic stress, the mental health information seeking process of postgraduate students mainly includes four stages: initiation, execution, acquisition, and evaluation. Mental health information seeking motivations primarily consist of external drive and internal drive. Problem-solving information constitutes the main content of postgraduate students' mental health information seeking. Factors influencing postgraduate students' mental health information seeking behavior include personal factors, objective condition factors, information factors, and confidentiality factors, among which information factors represent the primary influence.

**Keywords:** academic stress; mental health information; information seeking behavior; postgraduate students

---

## 1. Concept Definitions

### 1.1 Academic Stress

Scholars have defined academic stress from different perspectives. Lin Chongde et al. [8] defined it in the *Psychology Dictionary* as “psychological burden and tension responses caused by learning, which originate from both external environmental influences and students' self-expectations.” Chen Xu defined academic stress as “a psychological response and subjective feeling that occurs when the internal and external environmental demands of learning exceed students' coping abilities or are perceived as threatening” [9]. Based on these definitions, this study defines academic stress as the psychological tension response generated by postgraduate students when facing academic demands, resulting from the interaction between internal and external environmental influences and individual factors. In this study, academic stress specifically includes research pressure, course learning pressure, competitive pressure, and self-external expectation pressure.

### 1.2 Mental Health Information

Mental health encompasses two aspects: the absence of mental illness and the presence of a positive, upward-developing psychological state [10]. Health information broadly refers to information related to physical and mental health, diseases, nutrition, and wellness [11]. Based on these definitions, mental health information in this study refers to information related to mental health diseases, conditioning, and healthcare.

### 1.3 Information Seeking Behavior

T.D. Wilson defined information behavior as a general term for human behaviors related to information resources and channels, including active or passive information seeking behavior and information use behavior. Information seeking behavior specifically refers to the process by which individuals, after recognizing a need, activate knowledge stored in memory or purposefully search for information in their surrounding environment to satisfy that need [12]. Under academic stress, postgraduate students' mental health information seeking behavior is typically problem-oriented, with problem-solving as its main goal, thus constituting an active information behavior. Therefore, information seeking behavior in this study refers to postgraduate students' purposeful, active search for needed information through various channels.

---

## 2. Related Research

Overall, domestic and international research on college students' health information seeking behavior is relatively rich, covering influencing factors, patterns, and characteristics, with a primary focus on online environments. Among these, Lin Ting [13] explored influencing factors of Chinese college students' online health information seeking behavior, including gender, personal health awareness, online environment satisfaction, online health information resource satisfaction, social network support satisfaction, and real-world medical support satisfaction. Li Xin et al. proposed that college students' online health information seeking behavior has three main patterns: incidental acquisition, problem-solving, and long-term attention [14]. C.H. Basch [15] evaluated the resources used for college students' health information seeking behavior and investigated their perceptions of online tools, finding that college students frequently use the internet to obtain health information, with women more inclined to use the internet for health information, consult health professionals, and verify information with professionals. Women also spend significantly more time on social media (average 4.96 hours/day) than men. F. Khademian et al. [16] surveyed 386 Iranian college students about their online health information seeking and e-health literacy through questionnaires, finding that 205 participants (54.4%) had low levels of e-health knowledge, and that participants tended to search for disease, symptom, and treatment information when ill, paying less attention to other health-related information.

Scholarly research on college students' mental health information seeking behavior has also primarily focused on online environments and quantitative methods. Key studies include: Xie Deguang et al. [17] surveyed 238 randomly selected college students in Chongqing using questionnaires, finding that 98.32% used the internet and 77.31% had used it to obtain mental health information, primarily through Baidu or Google searches; over 92% held positive attitudes toward obtaining mental health information online; and students most wanted to ac-

cess information on interpersonal communication, emotion regulation, stress coping, self-understanding, career, and learning psychology. R.D. Debate [18] used the Information-Motivation-Behavioral Skills (IMB) model to explore determinants of mental health help-seeking behavior among 1,242 male college students, finding correlations between information and motivation, information and behavioral skills, and motivation and behavioral skills. A. Horgan et al. [19] used questionnaires to examine college students' perceptions of using the internet for mental health information and support, finding that 30.8% had searched for mental health information online, primarily about depression; 68% would use the internet for mental health support if needed, but 79.4% still preferred face-to-face support. Additionally, a survey on influencing factors of college students' mental health information seeking behavior on online platforms found that external platform quality and internal e-health literacy quality significantly influenced online mental health information seeking behavior; e-health literacy and online mental health information seeking behavior had significant direct positive effects on college students' mental health; and online mental health information seeking behavior played a significant mediating role between platform quality, e-health literacy, and college students' mental health [20]. Furthermore, foreign scholar T. Grace et al. [21] studied information behavior of college students under academic stress, using questionnaires to explore academic stress and information seeking coping strategies among undergraduates at Bello University, finding that academic stress influenced undergraduates' information seeking at the university library. Under stress, college students sought information by reading textbooks in the university library, with relaxation being their coping strategy.

In summary, domestic and international scholars have primarily studied college students' health information seeking behavior in online environments using quantitative methods. Compared with domestic research, foreign scholars have conducted relatively more studies on college students' mental health information seeking behavior with richer content, but they tend to focus on online channels. Research on college students' information behavior under academic stress has not delved into specific information behavior processes. Currently, academic stress is a common problem faced by postgraduate students, and finding reasonable coping methods is crucial. Therefore, this study focuses on the academic stress scenario of postgraduate students, deeply exploring their behavioral processes and influencing factors, which has certain theoretical and practical significance.

---

### 3. Research Design

#### 3.1 Research Methods

Since mental health issues involve many personal factors, and differences in individuals' environments and complexity of thinking make many problems im-

possible to measure clearly through quantitative methods, qualitative research, which emphasizes human factors and focuses on specific contexts, is more conducive to 挖掘 deeper perspectives [22]. Therefore, this study adopts grounded theory qualitative research methods, conducting data analysis from the bottom up to conduct exploratory research on the process and influencing factors of postgraduate students' mental health information seeking behavior under academic stress, and obtains research results through three-level coding.

### 3.2 Data Collection Methods

Semi-structured interviews were used to collect data. Through literature review and research questions, an interview outline was formulated. Purposeful sampling was then employed, and based on preliminary interviews, 18 postgraduate student samples with mental health information seeking experiences under academic stress were selected according to whether they could provide necessary information. Given that qualitative research emphasizes richness rather than quantity of sample data, this study focused on diversity of sample sources, selecting postgraduates from different grades and majors as much as possible. The interview sample distribution is shown in . During interviews, appropriate guidance was provided to allow respondents to fully express their experiences and views. Interview content was first collected in audio form and then transcribed into text, with consent obtained from all respondents.

Based on previous theoretical research, this study used a semi-structured interview outline as interview prompts, conducting interviews via telephone (including QQ and WeChat calls). The interview sequence was adjusted according to actual circumstances, with each interview lasting approximately 15-20 minutes. The interview outline is shown in .

### 3.3 Data Analysis

This study used grounded theory methods, conducting three-level coding on the data: open coding, axial coding, and selective coding, to extract the mental health information seeking behavior processes and influencing factors of postgraduate students under academic stress. During data analysis, new problems and perspectives were continuously identified, and new samples were selected accordingly until theoretical saturation was reached.

**3.3.1 Open Coding** Open coding is the first-level coding process of raw data, which involves completely decomposing collected data and coding word by word, line by line, and event by event [23]. This study conducted multiple analyses and comparisons of transcribed text data to ensure accuracy and scientificity of coding results. Ultimately, 65 basic concepts and 24 categories were obtained. To save space, only representative original statements and their corresponding categories are selected for each category, as shown in .

**3.3.2 Axial Coding** In the axial coding stage, the above categories were classified and integrated, ultimately forming 9 categories and 5 main categories. The axial coding results are shown in .

**3.3.3 Selective Coding** Selective coding involves excavating core categories through main categories and sub-categories. Based on open coding and axial coding, this study ultimately identified “postgraduate students’ mental health information seeking behavior” as the core category. Among them, initiation, execution, acquisition, and evaluation constitute the specific behavioral process of postgraduate students’ mental health information seeking, while influencing factors are the factors that affect postgraduate students’ mental health information seeking behavior. The relationship structure between main categories and core categories is shown in .

**3.3.4 Theoretical Saturation Test** To ensure theoretical saturation, this study interviewed 4 additional postgraduate students after forming the preliminary theory. Coding according to previous rules revealed no new concepts or categories, indicating that theoretical saturation had been achieved.

---

## 4. Research Results

### 4.1 Mental Health Information Seeking Behavior Process of Postgraduate Students Under Academic Stress

Through layered coding, four main categories of postgraduate students’ mental health information seeking behavior under academic stress were obtained: “initiation,” “execution,” “acquisition,” and “evaluation.” Each stage exhibits different characteristics, based on which a model of postgraduate students’ mental health information seeking behavior under academic stress was constructed, as shown in [Figure 1: see original paper].

**4.1.1 Initiation Stage** The initiation stage is the first phase of postgraduate students’ mental health information seeking under academic stress, triggered by two forms of seeking motivation—internal drive and external drive—which generate psychological tension responses and subsequently produce mental health information seeking behavior. Sometimes the motivation causing postgraduate students’ mental health information seeking behavior is not singular but results from the interaction of both internal and external information seeking motivations.

**(1) Internal Drive.** Internal drive is the main form of mental health information seeking motivation generated by postgraduate students under academic stress. Academic stress triggers mental health information needs, which, when reaching a certain level, transform into information seeking motivations that

initiate mental health information seeking behavior. Internal drive mainly includes three forms: solving personal psychological problems, personal interest, and curiosity, with solving personal psychological problems being the primary form. As one participant stated: “J-01: When I’m under a lot of pressure, if I don’t find information to solve it, problems will occur.” Generally, during periods of high academic stress, postgraduate students’ mental health information seeking behavior is mostly driven by the motivation to solve personal psychological problems. Additionally, personal interest and curiosity are also common forms. For example: “L-02: I quite like psychology, so I’ve read many mental health-related books and attended many related lectures; I’m very interested.” “K-02: Friends around me with depressive tendencies told me there are some tests online; out of curiosity, I searched to see what tests were available.”

**(2) External Drive.** External drive forms of information seeking motivation mainly include helping others solve psychological problems, being influenced by others, and research needs. Helping others solve psychological problems is a targeted form of motivation where students search for relevant mental health information when people around them experience mental health issues. As one participant noted: “J-05: When people around me experience such situations, I also search for relevant content. I might search online specifically for how to communicate with them or how to alleviate their emotions.” Interviews revealed that some postgraduate students, influenced by others, become concerned about their own mental health status and search for relevant information, though such searches are usually not highly targeted. For example: “G-05: When research pressure is high, seeing online that someone has certain conditions, such as someone ending their life due to academic pressure, makes me worried and suspicious about whether I have similar problems, so I search.” Some postgraduate students’ information seeking motivation also arises from research needs, such as: “M-08: When writing my thesis, the pressure is quite high. Besides the need to relieve stress, I also read mental health-related books and monographs for research reasons.”

**4.1.2 Execution Stage** The execution stage is the phase where information seeking behavior is triggered after motivation is generated. After developing information seeking motivation, postgraduate students search for mental health information through various channels, including various types of mental health-related information content. Information seeking channels and content mutually influence each other, forming a constraining relationship.

**(1) Seeking Channels.** Seeking channels are the information access pathways chosen by postgraduate students. Under academic stress, due to relatively high cognitive levels and diverse resource access pathways, postgraduate students tend to select various information seeking channels until their information needs are met. These mainly include online channels, interpersonal channels, book channels, and psychologist channels. Among them, online channels have become the main channel for postgraduate students to search for mental health

information, with almost every interviewee mentioning online searches. This is because the internet offers anonymity, privacy, and convenience [24]. As one participant stated: “I-06: I search online because it’s convenient and saves time and effort.” Interviews found that postgraduate students tend to use comprehensive online information seeking channels such as Baidu and Zhihu, rarely using professional health websites and seldom maintaining continuous attention to such information. Jin Yan et al. [25] also noted in their research that college students rarely track specific health apps, health websites, or health information sources long-term, with weak willingness for continuous searching and use. Some postgraduate students also expressed concerns about this channel, stating that information obtained this way is unreliable. I. Montagni et al. [26] similarly found that despite daily internet use, college students have strong distrust of online mental health information.

Interpersonal channels are also a common choice for postgraduate students to obtain mental health information under academic stress, mainly through classmates, teachers, friends, and relatives, sometimes for psychological comfort. As one participant noted: “E-03: I ask teachers for help because they have experience. They handle problems more objectively, have a more long-term perspective, and can analyze problems more thoroughly.” P. Gorczynski et al. [27] found that individuals are most likely to seek support from intimate partners or family members rather than from medical professionals. Therefore, interpersonal channels are a common choice for postgraduate students seeking mental health information.

Book channels are another mental health information seeking channel for postgraduate students under academic stress. Information in books is more systematic than other sources. As one participant stated: “J-03: I think books are more systematic. I mainly want to systematically learn and find out why I have such problems.” However, due to professional and cognitive level limitations, book channels sometimes create obstacles for postgraduate students’ information acquisition.

Psychologist channels refer to obtaining mental health information through specialized psychological counseling institutions, a choice mainly influenced by disease severity, information professionalism, personal experience, and other factors. According to one postgraduate student: “L-06: I feel the information I found online was very helpful. I haven’t seen a psychologist because I feel my psychological problems don’t reach that level.” Postgraduate students generally choose this channel only when mental health information obtained through other channels cannot meet their needs. Psychologist channels can provide high-quality information, which is the main reason some postgraduate students choose this channel. I. Montagni et al. [28] also found in their research that mental health information obtained through online channels cannot replace professional medical advice. Therefore, psychologist channels can provide more scientific, authoritative, and targeted information, representing a more professional information acquisition option for postgraduate students.

**(2) Seeking Content.** Under academic stress, postgraduate students generate various mental health information needs and search for different types of information based on these needs, mainly including problem-solving information, disease diagnosis information, and psychological health information. Problem-solving information is content searched to solve certain psychological problems or emotional fluctuations. Interviews found that postgraduate students under academic stress usually have clear purposes, with solving facing problems being their main goal. Therefore, problem-solving information is the main content of postgraduate students' mental health information seeking. As one participant stated: "C-03: When facing thesis proposal and external review, my pressure is high. Then I search for questions like 'what to do when I have no ideas for a short-term proposal' or 'how to cope when external review fails.' Mainly seeking solutions." Disease diagnosis information is a type of mental health information searched when postgraduate students judge whether they have mental diseases, approached with caution, especially information found online, with emphasis on information quality. As one participant noted: "L-01: When I first started, I wasn't familiar with my supervisor and worried about not doing well, so I was under great pressure, even suspecting mild depression, so I searched online for depressive symptoms." Psychological health information is usually preventive information taken when no mental disease exists or when conditions are mild, including health medications and measures. Postgraduate students with strong mental health awareness typically search for this type of information.

**4.1.3 Acquisition Stage** The acquisition stage is the phase where mental health information is obtained after information seeking behavior occurs. Under academic stress, postgraduate students' mental health information acquisition patterns mainly include purposeful acquisition and incidental acquisition.

**(1) Purposeful Acquisition.** Purposeful acquisition is a form where information seekers obtain mental health information that matches their seeking purpose. Before information seeking behavior occurs, seekers already have clear information seeking purposes. As one participant stated: "B-01: Before my thesis proposal, academic stress was particularly high. When I felt psychological problems, I searched for relevant solutions, and basically found answers." Generally, during periods of high academic stress, postgraduate students tend toward purposeful acquisition with relatively clear information seeking purposes.

**(2) Incidental Acquisition.** Incidental acquisition refers to mental health information that postgraduate students accidentally discover while searching for or browsing other information and then utilize. For example: "Q-03: When course pressure is high, I search for things like 'bad mood, high pressure.' I often click on similar articles, then Zhihu recommends depression-related content, and I look at it." Additionally, when academic stress is low, postgraduate students have weaker seeking purposes, and information acquisition patterns are mainly incidental. According to one postgraduate student with low academic stress: "O-05: Actually, I more often encounter mental health information ac-

cidental, click to view it, and then get recommended similar content later. This happens quite often.” Although information seeking behavior is an active, purposeful information acquisition behavior [29], incidental information acquisition is its opposite, but purposeful information acquisition often encounters relevant useful information. Therefore, while this study mainly explores postgraduate students’ active information acquisition—mental health information seeking behavior—using incidental information acquisition as a reference can provide a more complete understanding of postgraduate students’ mental health information seeking behavior process.

**4.1.4 Evaluation Stage** The evaluation stage is the final stage of postgraduate students’ mental health information seeking behavior and the stage to test their seeking results. Under academic stress, postgraduate students often evaluate the utilization effect of searched mental health information to decide whether to continue seeking information or adopt other solutions. Evaluation results mainly include stress relief and minimal effect.

**(1) Stress Relief.** Stress relief refers to postgraduate students’ belief that searching for mental health information can alleviate academic stress. Interviews found that most postgraduate students indicated that searched mental health information was helpful and could solve their problems to some extent. As one participant stated: “A-06: I think it’s helpful. When I’m under pressure and avoiding academic tasks, I search for relevant mental health information, and then I can start studying.”

**(2) Minimal Effect.** Minimal effect refers to the situation where searching for mental health information basically does not solve academic stress problems. Only a few postgraduate students expressed that this method could not effectively solve academic stress problems. As one participant noted: “K-03: I think this method may only play a very basic role and doesn’t seem to fundamentally help solve problems for others.”

After evaluating the utilization effect of mental health information, postgraduate students’ information seeking behavior does not necessarily end directly. Some postgraduate students return to the execution stage when their information needs are unmet, readjusting information seeking channels and content for another round of information seeking. Sometimes new information seeking motivations are generated, returning to the initiation stage to restart information seeking. After one or several cycles, the seeking behavior ends. Therefore, postgraduate students’ mental health information seeking behavior is not a single linear process but involves cycling between different stages.

## 4.2 Influencing Factors of Mental Health Information Seeking Behavior Under Academic Stress

Through the above data coding analysis, influencing factors of postgraduate students’ mental health information seeking behavior under academic stress were

extracted: “personal factors,” “objective condition factors,” “information factors,” and “confidentiality factors.” For more detailed analysis and understanding, a framework of influencing factors of mental health information seeking behavior was constructed, as shown in [Figure 2: see original paper].

**4.2.1 Personal Factors** Personal factors are related to individual characteristics, mainly including personality traits, mental health awareness, personal experience, health literacy, and disease severity. Personality traits refer to an individual’s psychological characteristics. Under academic stress, extroverted postgraduate students tend to use various channels to search for mental health information, especially interpersonal channels, actively seeking help from friends and teachers. Introverted individuals prefer more covert information acquisition channels, with relatively conservative information seeking behavior. As one participant stated: “N-01: Maybe it’s my personality. I like to put on a facade and don’t want teachers and classmates to see my embarrassing side. I feel I can’t open up to teachers about my problems.” Zheng Ce et al. [30] also found in their research that individual personality trait elements influence health information seeking behavior across different platforms.

Mental health awareness refers to postgraduate students’ attitudes and concepts toward mental health. Under academic stress, the stronger the mental health awareness, the more active the information seeking behavior. Relatively speaking, postgraduate students with weak mental health awareness exhibit lagging information seeking behavior. As one participant noted: “B-03: At first, I just thought it was stress and didn’t consider it a mental health problem. Later, I gradually began paying attention to my mental health.”

Personal experience refers to postgraduate students’ past information seeking experiences and practices. Due to research and learning needs, postgraduate students generally have rich information seeking experience. When new information needs arise, they tend to use trusted information acquisition channels. As one participant stated: “E-02: I usually search on Zhihu because I have experience and familiarity with searching for many things there.”

Additionally, under academic stress, health literacy also influences postgraduate students’ mental health information seeking behavior. Health literacy refers to the ability to obtain and understand health information, specifically mental health information in this study. Differences in postgraduate students’ ability to understand mental health information often affect their information seeking behavior. As one participant noted: “I-05: Some mental health-related knowledge is really difficult to understand. Some professional terms are hard to comprehend. I couldn’t understand them even after reading for a long time.” B. Hanik et al. [31] also found in a study on college students that e-health literacy significantly influences online mental health information seeking behavior.

Disease severity refers to the severity of psychological problems or diseases caused by academic stress. Under academic stress, disease severity directly

influences the intensity of postgraduate students' mental health information seeking behavior. Generally, the smaller the psychological problem, the weaker the information seeking motivation and the less time spent on mental health information seeking. As one participant stated: "L-06: I feel the information I found online was very helpful. I haven't seen a psychologist because I feel my psychological problems don't reach that level."

**4.2.2 Objective Condition Factors** Objective condition factors in this study mainly include time factors, economic factors, and platform retrieval effectiveness. Time factors refer to postgraduate students' considerations regarding time costs. As one participant noted: "R-08: When research tasks are heavy and I feel stressed, these emotions come suddenly. There are no books at hand, and by the time I find books, the moment when I most need this information has passed, so I search online for quickly accessible information." Relatively speaking, under high academic stress, postgraduate students' mental health information needs are more urgent, and they are unwilling to spend too much time searching for information. Additionally, some postgraduate students indicated that psychological counseling services provided by universities require advance appointments and long waiting periods. Therefore, time factors are an important factor influencing postgraduate students' mental health information seeking behavior.

Similarly, under academic stress, economic factors are a consideration for postgraduate students when searching for information, taking into account that they lack independent financial means. Therefore, they generally do not want significant financial expenses when searching for mental health information, which also hinders their acquisition of mental health information. As one participant stated: "M-09: Some materials I want to read are quite expensive. Some monographs are not available in the library, and buying them is very expensive."

Platform retrieval effectiveness refers to the usability and retrieval relevance of information retrieval platforms. As one participant noted: "C-04: Some platforms' retrieval results are not ideal. The titles match well, but the content is different from what's wanted when clicked, which discourages enthusiasm. Not finding information is frustrating." Under academic stress, platform retrieval effectiveness often affects the enthusiasm of postgraduate students' information seeking behavior. Additionally, Jin Yan et al. [24] found in their research that college students' health information seeking behavior includes four types: searching, browsing, encountering, and tracking. Platform retrieval effectiveness corresponds to searching behavior, while influencing factors related to browsing, encountering, and tracking behaviors were not found in interviews.

**4.2.3 Information Factors** Information factors mainly include information quality and information value. Postgraduate students usually select information seeking channels based on the quality and value of provided information. Interviews found that almost every postgraduate student mentioned consider-

ing information quality, indicating they evaluate information quality and value when searching for mental health information. Therefore, under academic stress, information factors are the main factors influencing postgraduate students' mental health information seeking behavior.

Information quality mainly refers to information's authority, reliability, professionalism, scientificity, etc. Interviews found that postgraduate students generally consider information quality issues under academic stress, often having high requirements for information quality. As one participant stated: "L-05: I think information authority is very important, so I mainly read mental health books, worrying that information found online is unscientific."

Information value refers to whether information provided by information sources has direct utilization value. The purpose of seeking information is to use it to solve practical problems. Therefore, information value is an important factor influencing postgraduate students' choice of information acquisition channels. As one participant noted: "J-05: When friends around me have problems, I also search for relevant content. I might search online specifically for how to alleviate their emotions. In this case, I won't read books because online platforms have others' shared experiences that can be directly utilized."

**4.2.4 Confidentiality Factors** Under academic stress, confidentiality factors are commonly considered by postgraduate students, who often worry about personal information leakage when searching for mental health information. Especially for cautious postgraduate students, privacy protection is more important. As one participant stated: "N-05: I'm quite cautious. During the search process, I'm very afraid of leaking my privacy." Therefore, whether personal privacy can be protected is an important factor that postgraduate students consider during the information seeking execution stage.

---

## 5. Research Conclusions and Implications

### 5.1 Research Conclusions

This study starts from the real problem faced by postgraduate students—academic stress—and uses qualitative research methods to conduct exploratory research on postgraduate students' mental health information seeking behavior, analyzing their behavioral processes and influencing factors in detail.

Interviews found that postgraduate students' academic stress mainly includes specific forms such as course learning pressure, research pressure, self-external expectation pressure, and competitive pressure. Postgraduate students' academic stress exhibits phased characteristics, with course learning pressure and research pressure showing more obvious phased characteristics compared to self-external expectation pressure and competitive pressure, mainly manifested in different academic task volumes and urgency across stages, with mental health

information seeking behavior also changing accordingly. Generally, during periods with heavy or urgent course and research tasks, academic stress is greater, and mental health information seeking behavior occurs more frequently. At these times, internal drive mainly triggers mental health information seeking behavior, and the behavior is more active, manifested as urgent acquisition of mental health information to relieve stress. Therefore, in terms of seeking channels, they tend to choose types that can quickly solve problems and are unwilling to spend too much time searching for relevant information, with purposeful acquisition being the main information acquisition pattern. Relatively speaking, during periods of low academic stress, postgraduate students' mental health information seeking behavior is less purposeful, with incidental acquisition being more common.

Under academic stress, postgraduate students' mental health information seeking behavior mainly includes four stages: initiation, execution, acquisition, and evaluation. In the initiation stage, due to academic stress, postgraduate students usually generate information needs, which, when reaching a certain level, transform into two forms of information seeking motivation: internal and external drive. In the execution stage, considering time and convenience, postgraduate students usually first choose online channels and interpersonal channels. Book channels and psychologist channels often become subsequent choices due to various factor considerations. Problem-solving information is the main mental health content searched by postgraduate students, mainly generated by internal drive. Additionally, disease diagnosis information and psychological health information are also mental health content searched by postgraduate students. In the acquisition stage, purposeful acquisition is the main pattern of postgraduate students' information acquisition. However, incidental acquisition is also common; when purposefully searching for mental health content, they may also incidentally discover relevant useful information and utilize it. In the evaluation stage, postgraduate students often evaluate information utilization effects to make subsequent behavioral choices due to problem-solving needs.

The influencing factors of postgraduate students' mental health information seeking behavior mainly include four types: personal factors, information factors, objective condition factors, and confidentiality factors. Among them, personal factors directly affect postgraduate students' mental health information seeking behavior, with personality traits, mental health awareness, and personal experience directly influencing their choices of information seeking channels and mental health information. Since information quality and information value were mentioned multiple times in interviews, information factors are key considerations for postgraduate students when choosing information acquisition channels and are also the main factors influencing their mental health information seeking. Meanwhile, objective condition factors and confidentiality factors affect the enthusiasm of postgraduate students' mental health information seeking behavior; generally, the smaller the time and economic costs of obtaining information, the more active the information seeking behavior. Additionally, various factors not only act independently on postgraduate students' informa-

tion seeking behavior but also interact to influence it.

Moreover, postgraduate students' academic stress has certain continuity, so under this scenario, their mental health information seeking behavior is not a single linear process but usually involves cycling between different stages. After acquiring mental health information, postgraduate students generally evaluate information utilization effects, producing two results—stress relief and minimal effect. Due to the continuity of academic stress, existing problems usually cannot be solved at once and require continuous adjustment of information seeking channels and strategies to meet information needs. Some postgraduate students also generate new information seeking motivations during this process, restarting mental health information seeking. Previous research on college students' health information seeking behavior has focused on quantitative research methods. Compared with quantitative research, qualitative research is more humanistic and more conducive to discovering unknown variables and conducting in-depth exploration and research [32]. Therefore, this study's use of qualitative research methods compensates to some extent for Xie Deguang et al.'s [17] quantitative research on college students' mental health information seeking channels and content, enriching research scenarios on college students' health information seeking behavior and providing deeper excavation and analysis of information seeking channels beyond online environments.

## 5.2 Research Implications

Academic stress is currently a common problem faced by postgraduate students. If not properly addressed, this pressure can often lead to psychological barriers or even psychological problems, affecting their physical and mental health. Finding appropriate solutions is crucial. During interviews, almost every interviewee indicated that searching for relevant mental health information is helpful for their own or others' mental health and is an effective stress coping method. It can be seen that postgraduate students currently hold positive attitudes toward mental health information seeking behavior, and mental health information obtained through various channels can prevent and solve psychological problems to a certain extent, consistent with W. Chen et al.'s [19] research on college students' online mental health information seeking behavior. Therefore, how to timely and effectively provide mental health information and services for postgraduate students is an issue that universities and relevant information service providers should focus on.

This includes actively developing diversified mental health counseling services. Universities should provide free mental health information consulting services combining online and offline methods, improve the timeliness of psychological counseling services, and reduce postgraduate students' time and economic concerns when searching for mental health information. Privacy protection should be emphasized in psychological counseling to avoid personal information leakage. Additionally, mental health education should be strengthened to improve postgraduate students' mental health awareness. Furthermore, information su-

pervision of relevant online channels should be enhanced to ensure the authenticity and reliability of mental health information.

This study has certain limitations. First, in terms of sample selection, the sample is not rich enough; more discipline categories should be added for analysis to further improve sample diversity and coverage. Second, this study examines postgraduate students' mental health information seeking behavior under academic stress scenarios. Postgraduate students may face pressures not limited to academic stress but also including various other forms, and information seeking types may not be limited to mental health information but also include recreational information, which could be explored more deeply in future research.

---

## References

- [1] Song Zhijie, Zhang Jie. Research on the correlation between moderate to high academic stress and academic achievement—taking postgraduate students as an example[J]. *Research on Higher Financial Education*, 2012, 15(3): 8-14.
- [2] Han Hongmin. Current situation, mechanism and improvement of postgraduate students' academic stress coping[D]. Kaifeng: Henan University, 2017.
- [3] Liu Lei, Duan Xinghua. Current situation of postgraduate students' psychological stress and its impact on mental health[J]. *Journal of Sichuan College of Education*, 2011, 27(11): 24-27, 31.
- [4] Yu Shuhua, Wang Xuepeng. Analysis of current situation and countermeasures of postgraduate students' psychological stress[J]. *Journal of Inner Mongolia Agricultural University (Social Science Edition)*, 2017, 19(5): 111-114.
- [5] Chen Li. Analysis of current situation and countermeasures of contemporary college students' mental health[J]. *Journal of Southwest Jiaotong University (Social Science Edition)*, 2007(5): 98-101.
- [6] Zhang Shujuan. Mental health status and countermeasures of college students[J]. *Journal of Traditional Chinese Medicine Management*, 2016, 24(3): 30-31.
- [7] Zhang Ning. Research on the influence of coping styles and social support on subjective well-being of postgraduate students in Xi'an[D]. Xi'an: Shaanxi Normal University, 2004.
- [8] Lin Chongde, Yang Zhiliang, Huang Xiting. *Psychology Dictionary*[M]. Shanghai: Shanghai Education Press, 2003.
- [9] Chen Xu. Research on middle school students' academic stress, coping strategies and psychological mechanisms[D]. Chongqing: Southwest China Normal University, 2004.

- [10] Lin Chongde. Standards for mental health[J]. Teaching of Ideological and Political Course, 2000(3): 36-37, 57.
- [11] Li Yuelin, Cai Wenjuan. Review of foreign research on health information seeking behavior[J]. Library and Information Service, 2012, 56(19): 128-132.
- [12] Wilson TD. Models in information behavior research[J]. Journal of Documentation, 1999, 55(3): 249-270.
- [13] Lin Ting. Research on influencing factors of college students' online health information seeking behavior[J]. Information Research, 2018(10): 95-100.
- [14] Li Xin, Li Xuhui. Investigation and suggestions on college students' online health information seeking behavior for e-health literacy[J]. Library Theory and Practice, 2017(4): 44-50.
- [15] Bascch CH, MacLean SA, Romero RA, et al. Health information seeking behavior among college students[J]. Journal of Community Health, 2018, 43(6): 1094-1099.
- [16] Khademian F, Montazer MR, Aslan A, et al. Web-based health information seeking and eHealth literacy among college students: a self-report study[J]. Investigación y Educación en Enfermería, 2020, 38(1): 128-137.
- [17] Xie Deguang, Song Xueqin, Wang Jinliang. Research on college students' use of the internet to obtain mental health information[J]. Journal of Sichuan College of Education, 2011, 27(11): 24-27, 31.
- [18] Debate RD, Gatto A, Rafal G. The effects of stigma on determinants of mental health help-seeking behaviors among male college students: an application of the information-motivation-behavioral skills model[J]. American Journal of Men's Health, 2018, 12(5): 1286-1296.
- [19] Horgan A, Sweeney J. Young students' use of the internet for mental health information and support[J]. Journal of Psychiatric and Mental Health Nursing, 2010, 17(2): 117-123.
- [20] Chen W, Zheng Q, Liang C, et al. Factors influencing college students' mental health promotion: the mediating effect of online mental health information seeking[J]. International Journal of Environmental Research and Public Health, 2020, 17(13): 4783.
- [21] Takaig G, Bubea AA. Academic stress and coping strategies for information seeking among undergraduates in faculty libraries of Ahmadu Bello University Zaria[J]. Samaru Journal of Information Studies, 2016, 16(2): 74-87.
- [22] Xu Jiejie, Li Jian. Research on health information seeking behavior of chronic disease patients based on grounded theory—taking WeChat platform as an example[J]. Information Research, 2019(11): 63-68.
- [23] Corbin JM, Strauss AL. Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory[M]. Translated by Zhu Guangming.

Chongqing: Chongqing University Press, 2015: 145.

[24] McKinley CJ, Ruppel EK. Exploring how perceived threat and self-efficacy contribute to college students' use and perceptions of online mental health resources[J]. *Computers in Human Behavior*, 2014(34): 101-109.

[25] Jin Yan, Han Yongli, Deng Shengli. Research on college students' health information seeking behavior based on mobile terminals[J]. *Library Theory and Practice*, 2018(6): 72-76.

[26] Montagni I, Parizo I, Horgan A, et al. Spanish students' use of the internet for mental health information and support seeking: the e-MentH project[J]. *Digital Health*, 2016(2): 1-16.

[27] Gorczynski P, Sims-Schouten W, Hill D, et al. Examining mental health literacy, help-seeking behaviours, and mental health outcomes in UK university students[J]. *The Journal of Mental Health Training, Education and Practice*, 2017, 12(2): 111-120.

[28] Montagni I, Donisi V, Tedeschi F, et al. Internet use for mental health information and support among European university students[J]. *Health Informatics Journal*, 2016, 22(2): 333-354.

[29] Zhao Dongxiang, Ma Feicheng, Zhang Qiping. Phenomenological study on health information seeking behavior of the elderly[J]. *Journal of the China Society for Scientific and Technical Information*, 2019, 38(12): 1320-1328.

[30] Zheng Ce, Kong Jun, Fu Shaoxiang. Research on personality trait differences in young people's health information seeking behavior from a platform perspective[J]. *Library and Information Service*, 2017, 61(12): 77-85.

[31] Hanik B, Stellefson M. E-health literacy competencies among undergraduate health education students: a preliminary study[J]. *International Electronic Journal of Health Education*, 2011(14): 46-58.

[32] Zhu Shubei, Deng Xiaozhao. Research on influencing factors of elderly people's online health information seeking behavior[J]. *Library and Information Service*, 2015, 59(5): 60-67, 93.

---

#### **Author Contributions:**

Ding Xiao: Topic selection and determination, research design, data collection and analysis, writing.

Li Jian: Guidance on the paper, revision of the paper, and final draft revision.

*Note: Figure translations are in progress. See original paper for figures.*

*Source: ChinaXiv — Machine translation. Verify with original.*