

A Review of Research on Factors Influencing Chinese College Students' Surrogate Online Health Information Seeking

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Abstract: Despite the rapid growth of online medical care, the middle-aged and elderly face a significant “digital divide” due to low media literacy. They require assistance from the younger generation to navigate online medical information. College students are a unique group in this process. They possess strong media abilities and enough time for digital feedback, making surrogate online health information seeking normal. Chinese researchers have conducted in-depth studies on the factors influencing college students' alternative searches for health information. This paper will provide an overview of these studies. The paper summarizes the factors influencing surrogate searches by analyzing what Chinese researchers have adopted. According to the study, three dimensions have been identified. These dimensions include health worries, intrinsic drive value, and the relationship between patients and health providers. It is vital to consider these dimensions when evaluating healthcare experiences and outcomes. However, existing research in China mainly focuses on rural college students, and few studies have examined urban college students. This paper conjectures that media competence does not play the primary role in the surrogate online health information seeking of urban college students and proposes a model for further study.

Keywords: college students, online health information, surrogate search

1. Introduction

In 2017, China launched the “Healthy China” strategy, calling on its citizens to take responsibility for their health, learn health information and maintain a healthy lifestyle. At the same time, China is vigorously developing its online healthcare industry and integrating it with technologies such as 5G to provide medical services to its citizens, so online healthcare is gradually becoming more popular, and more people are seeking health information via the internet. However, the current aging situation in China is becoming increasingly severe: on 1 November 2020, China's population aged 60 and above reached 264 million, accounting for about 18.70% of the total population [1]. As older people find it difficult to use online health tools such as health apps to obtain information when faced with health problems, it has become common practice for young people in China to help middle-aged and older people search for health information.

Students are a specific group of the young generation, born in the era of new media and very accustomed to using the internet for information seeking, making them a target group for research on alternative health information-seeking behavior. Chinese researchers are interested in the support that rural students provide to their families, and many studies have been conducted on influencing factors, which are the subject of the analysis presented in this paper. This paper summarizes the influence factor models established by Chinese researchers and the influence factors that have been successfully verified, as well as providing some clarity on research methods.

There are many benefits to studying the factors influencing surrogate online health information seeking among college students in China. For society, the government can take more targeted measures to help college students in their alternative search, which will not only help the parents of these college students obtain accurate health information but also improve their health awareness. For the field of health communication, this is a review and summary of existing research, which can help researchers find the further research goals and directions. For the field of health communication, this is a review and summary of existing research, which can help researchers find further research goals and directions. For the students, this study is an analysis of their behavior and psychology, which can make more people in society pay attention to their needs and then help them to make a more professional surrogate online health information seeker.

2. Research Models and Methodology

The Comprehensive Model of Information Seeking (CMIS) is a common choice for Chinese researchers using models to study surrogate online health information seeking [2]. It comprises six theoretical concepts divided into two main dimensions, suggesting that health-related factors (demographics, direct experience, salience, and beliefs) and information carrier factors (information carrier characteristics and utility) can influence individuals' health information-seeking behavior. Specifically, health-related factors and information carrier characteristics indirectly affect information seeking through utility, while information carrier factors directly affect information seeking. Developments of this theory integrated a range of new variables, such as children's anxiety about their parents' health status and media skills anxiety, into the existing framework, replacing the original concepts in the health-related factors [3]. Alternatively, some researchers have added a new "social support" variable under the "health relevance" dimension, allowing them to construct a new model of search intent formation [4]. Chinese researchers have also focused on "anxiety" and analyzed the formation of college students' alternative search intentions using the SSO (Stressor-Strain-Outcome, SSO) model [5,6]. Some researchers have also used the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) as a theoretical basis to explore the factors influencing college students' online health information-seeking behavior during the New Crown pneumonia epidemic [7,8]. Although the study was conducted in the context of a crucial infectious disease, the model used is still a significant demonstration for research into the factors influencing surrogate online health information seeking among students. In addition to using existing models, Chinese scholars have also attempted to quantitatively collect data on various characteristics of college students using a combination of multiple scales, such as the EQ-5D, SHAI, GSES, and IRI [9,10].

According to the literature, the most commonly used methods for obtaining data on alternative searches among Chinese studies investigating factors that college students search for health information are survey methods (including questionnaires and telephone surveys), interviews, observations, and mixed methods. Chinese researchers commonly use regression analysis, the chi-square test, and sensitivity analysis to test associations between indicators in data analysis. In addition, the use of different research methods had an impact on the collection of research data. In general, studies using the survey method code and analyze the data to verify the accuracy of the model.

Whereas researchers using the interview method would semantically analyze the words of the interviewees to draw conclusions such as influencing factors. Comparing the two, the data from the survey method is more accurate, while the interview method may give the researcher unexpected information.

3. Factors Influencing Chinese College Students' Surrogate Online Health Information Seeking

Existing research on Chinese college students primarily investigates the impact of three dimensions, namely health worry, intrinsic drive value, and the relationship between patients and health providers, on their willingness and ability to search for alternative health information. As the content and demand for health-related information have increased dramatically in China in recent years, the benefits of health information as an alternative to searching behavior are significant. Family members and friends who “seek information on behalf of or because of others” often trigger behavior changes or influence patients' health-related decisions [11].

3.1. The Effect of Health Worries on Chinese College Students' Surrogate Online Health Information Seeking

The perceived need for health information is mainly a function of the health concerns of the Chinese students' parents, suggesting that the health status of senior citizens has attracted the children's attention and generated the emotion of worry, thus increasing the perceived health information needs. This is an important reason why the concerns about the health status of the fathers and mothers of Chinese students become a key variable influencing the perceived health information needs. This type of concern can be divided into three types, named medical worry, medical difficulty, and limited knowledge, based on the two-way evidence of the dimensionality and content of the searches. Medical worry refers to the searcher's concern about the searched person's long-term physical problems and short-term sudden physical discomfort, as well as the physical and mental vulnerability of the searched person due to his physical tension, leading to excessive concern about his physical condition, and so on. Medical difficulty refers to a situation where the searched person can't seek timely medical treatment for various reasons, including personal matters, time, and distance. Limited knowledge refers to the fact that both the surrogate and the surrogate have some degree of lack of authoritative health information. When the above three situations occur, the surrogate usually trusts friends and relatives to talk about his condition to allay their fears. As college students lack general knowledge of health care, it is difficult to digest the anxiety brought about by the health risks of friends and relatives. When receiving the relevant reflections of the replaced person, it will be because of the initiative to use the Internet to search for related information and then provide feedback to the help-seeker.

3.2. The Effect of Intrinsic Drive Value on Chinese College Students' Surrogate Online Health Information Seeking

The research shows that university students' endogenous values significantly influence alternative search behavior for health information on the Internet, which coincides with the findings of Abrahamson J A et al. [12]. In addition, students are a more educated and information-savvy group and will be more likely to use the Internet and to understand and use different information channels more quickly. A large proportion of students use online media platforms to find and disseminate health information [13]. Meanwhile, students think surrogate online health information seeking is extremely significant to patients and that such behavior can help patients understand their diseases more comprehensively. Simultaneously, college students are concerned that patients may overlook

certain aspects in their online searches. They propose aiding patients in conducting supplementary online searches for relevant health information. These university students perceive online health information as a mutually beneficial alternative to conventional searching, which is not only beneficial to the health of their patients but also enriches the university students' health knowledge and improves their search skills. The behavior of alternative searchers has been defined as "warm expert" by some scholars. Alternative searchers are starting to assist those who are so uneducated that they need the help of a "warm expert". College students act as "warm experts," developing a quicker, more reliable search method that enhances the provision of health information and fosters personal worth.

3.3. The Effect of the Relationship Between Patients and Health Providers on Chinese College Students' Surrogate Online Health Information Seeking

The development of network communication technology has permeated all aspects of macro- and micro-society, causing society and individuals within it to move towards mediatization. Through this process, the media has the potential to not only transmit information but also change interpersonal relationships and behaviors through a symbiotic relationship with people in society. In professionalism, doctors and healthcare providers possess more comprehensive medical knowledge and can provide relatively objective and rational medical guidance to their substitutes. However, despite this expertise, when facing a health issue, individuals searching for replacements still rely on health information given by university students. This observation further highlights the significant impact of close relationships on active searches for substitutes. College students often have a close relationship with their substitute teachers and communicate with them regularly in person. Consequently, due to their drive, they are often selected as mediators between their substitutes and other parties. Through online communication, the student-substitute relationship shifts from personal interaction to a deeper level of mediation. The surrogate search methods mean that college students and replacement staff can obtain more access to information and resources. These lead to more diverse and profound connections and interactions, which promote the development of a closer relationship between the two parties. From another perspective, in Chinese culture, caring for family and friends is considered an important moral obligation. A common way of demonstrating care and social support is by proactively using internet information to assist family members and friends suffering from illnesses. College students may feel a sense of caring and potential altruism when they come across the requests for help made by the searched person, which, in turn, initiates alternative searches.

4. Discussion

Chinese researchers were interested in studying how students from remote, rural, and ethnic areas serve as a 'bridge' in the 'Digital Divide'. Furthermore, they aimed to investigate how these students are the source of health information for parents who search online. However, urban students spend more time with older people and have a more comprehensive understanding of the media, making it difficult to realize the problems that arise when searching for health information. Faced with the reality of the media skills of their elders, especially their fathers, they gradually blurred their role in taking the initiative and providing numerical nutrition to their elders. In addition, another area that requires particular attention in follow-up research is the lack of discussion about the spaces of social interaction in which students primarily live. Urban college students mainly live on campus and have more face-to-face interaction with classmates than with their parents. The media competence of the youth groups did not differ significantly, while most of these students possessed a high level of interactive health literacy. These may result in a non-significant effect of media competence on the willingness of urban college students to surrogate online health information seeking.

On the other hand, Xie Xingzheng et al.'s analysis of active health information-seeking intention in ethnic villages in southwestern China showed that in ethnic villages, people mainly shared information within the area, and rural students gained more trust from their fathers and mothers by leaving home to study at the university [3]. Therefore, it becomes the intermediary between the direct experience of rural areas and the utility of online information. In the urban college student population, however, the sense of trust that others have in themselves is likely to be a prerequisite for the occurrence of active alternative searching behavior for health information, especially if there is not much difference in media literacy with the searched-for person, and the role of socially endowed agency for the individual will be more pronounced. As a result, as one direction for further research, the author proposes the hypothesis that media competence is not a principal factor influencing surrogate online health information seeking among urban university students.

5. Conclusion

The Chinese researcher's study of college students' alternative search for health information was based on adopting some existing theories to explain the phenomenon, modifying the model according to the actual situation, and using appropriate health-related scales from around the world to measure and quantify the data using Lister's scales before data testing, to obtain more accurate research data. After data analysis, the Chinese researchers concluded that the three dimensions of health anxiety, endogenous value and patient relationship are most likely to influence college students' alternative health information-seeking behaviour. However, the Chinese study was primarily carried out in rural areas, and there are still fewer studies on similar behaviours among urban students. Further study can investigate the behaviour of urban college students, summarize different behaviour patterns, and provide new guidance for the development of online health care in China. This study provides an overview of Chinese scholars' impressive factors influencing college students' surrogate online health information seeking. Due to the author's limited ability to sort out all the relevant literature, the excavation of the model use and the impact of research methods on the data is not deep enough, and more in-depth analysis is needed in this area in the future. In addition, the author's hypothesis that media literacy is not a crucial factor influencing urban college students' surrogate online health information seeking will be validated using the CMIS as a basis for drawing new conclusions.

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