

# Analysis of User Behavior in Searching for Health Information on Social Networking Services

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## Abstract:

This paper delves into the characteristics of user behavior in searching for health information on Social Networking Services (SNS) platforms, the mechanisms of health information dissemination and its impact, and the strategies and challenges in enhancing the credibility of health information. The analysis indicates that users' search for health information is primarily driven by preventive awareness, solution-seeking, and curiosity about new trends, with a preference for professional or certified sources of information. The dissemination of health information is influenced by the content's appeal, platform algorithms, and user interaction, but there is also the issue of the rapid spread of misleading information. Hence, enhancing the credibility of information requires a multifaceted approach, including content verification, user education, and algorithm optimization.

## Keywords:

SNS health information  
User behavior  
Information dissemination  
Credibility enhancement  
Content verification

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## 1. Introduction

In today's era of information overload, Social Networking Services (SNS) have become an important channel for people to access health information. However, this convenient means of accessing information also brings a series of challenges. Given the varying quality of information on SNS platforms, users often face the challenge of distinguishing between true and false information. Moreover, personalized information feeds may lead to users being trapped in "information

cocoons", thereby limiting their exposure to diverse health information. Therefore, a thorough analysis of user behavior in searching for health information on SNS is crucial for enhancing public health awareness and optimizing the dissemination of health information <sup>[1]</sup>. By conducting more precise analyses of user behavior, providing users with higher quality, personalized health information services, and taking effective measures to reduce the spread of misleading information, a healthier and more trustworthy online information environment

can be built <sup>[2]</sup>.

## **2. Characteristics of health information search behavior on SNS platforms**

### **2.1. Motivations and needs for user search behavior**

On SNS platforms, the behavior of users searching for health information is typically driven by several key motivations. Firstly, an enhanced awareness of prevention prompts users to proactively search for information related to healthy lifestyles and disease prevention. For example, according to a recent survey, over 60% of users stated that their search for health information on SNS was to improve personal or family lifestyle habits. Secondly, when users or their close ones encounter health issues, seeking solutions and treatment advice becomes another significant motivation. In such cases, about 40% of users turn to SNS platforms to seek the experiences of other users or the opinions of professionals. Lastly, curiosity about emerging health trends and products also stimulates user search behavior, with approximately 30% of users turning to SNS to learn about the latest health and wellness information <sup>[3]</sup>.

### **2.2. Information search and filtering strategies**

Faced with the vast health information repository on SNS platforms, users exhibit clear strategic behavior in searching and filtering information. One strategy is the choice of keywords, as users tend to use specific disease names, symptoms, or treatment methods as search keywords, which helps narrow the search scope and quickly locate relevant information. Another strategy is the consideration of information sources, as about 70% of users indicate they tend to trust health information posted by medical professionals or that is certified <sup>[4]</sup>.

### **2.3. Understanding and application of information**

The level of understanding and application of health information by users is also an important dimension in analyzing their search behavior. Although the vast majority of users (about 85%) state they can understand the health information they find, only half of them consider the applicability of the information to their actual

situation and personal differences. Furthermore, about 30% of users feel confused by information overload in practical applications, unsure of which advice is suitable for them <sup>[5]</sup>. This indicates that, although SNS platforms provide a wealth of health information resources, how to improve users' abilities to filter, understand, and apply information remains a pressing issue <sup>[6]</sup>.

## **3. The mechanisms and impact of health information dissemination on SNS platforms**

### **3.1. The intrinsic logic of dissemination mechanisms**

The mechanism of health information dissemination on SNS platforms is primarily constituted by three major elements: the appeal of the content, platform algorithms, and user interactions. Firstly, the novelty, practicality, and emotional resonance of the content itself are key factors in attracting user attention. For instance, research shows that over 75% of respondents prefer to follow content that provides practical health advice or solutions. Secondly, the algorithms of SNS platforms promote similar health information content based on users' past interactive behaviors, allowing certain information to spread rapidly through personalized recommendations. Statistics reveal that health information readings via personalized recommendations are three times higher than those through general recommendations. Lastly, interactions among users, such as comments, shares, and likes, further accelerate the spread of information. Data indicates that the dissemination speed of health information content with high interactivity is over five times faster than that with low interactivity <sup>[7]</sup>.

### **3.2. The dual effects of dissemination outcomes**

The dissemination of health information on SNS platforms has a significant impact on public health awareness and behavior. On one hand, effective dissemination of health information can significantly improve the public's level of health knowledge and awareness of prevention. Surveys indicate that among users who obtain health information through SNS, more than 60% report improvements in their health behaviors as a result. However, on the other hand, incorrect or misleading health information also spreads

rapidly on SNS, causing adverse effects. For example, a recent study showed that the spread of misinformation about certain unverified health treatments even surpasses that of accurate, science-based information, with about 30% of users admitting to engaging in inappropriate health behaviors due to misleading health information on SNS <sup>[8]</sup>.

### 3.3. User attitudes and response mechanisms

User attitudes towards health information on SNS platforms and their response mechanisms are equally critical <sup>[9]</sup>. The majority of users (about 80%) tend to trust health information that comes from professional institutions or medical experts and are cautious about information from non-professional or anonymous sources. Furthermore, when faced with an abundance of health information, users adopt a series of filtering and verification measures, such as checking the reliability of information sources and comparing the consistency of information from multiple sources. About 70% of users report that they verify health information on SNS by visiting official medical websites or consulting medical professionals <sup>[10]</sup>.

## 4. Strategies and challenges in enhancing the credibility of health information on SNS

### 4.1. Content verification and professional certification

To enhance the credibility of health information on SNS, the verification of content and certification by professional organizations are crucial. A study targeting the publication of health information on SNS platforms shows that introducing third-party professional organizations for content review significantly improves the accuracy of the information. For example, compared to uncertified health information, the trustworthiness of information certified by professional health organizations increased by 50%. Additionally, implementing content verification mechanisms, such as fact-checking and source review, is also effective in reducing the spread of misleading information. However, challenges to this strategy include how to balance the timeliness and accuracy of information review, as well as ensuring the transparency and fairness of the review process <sup>[11]</sup>.

### 4.2. User education and literacy enhancement

Improving users' health information literacy is another key strategy for enhancing the credibility of health information on SNS. Educating users on how to identify high-quality health information can effectively reduce the impact of misleading information <sup>[12]</sup>. A survey on users' health information literacy revealed that users who had received training in identifying information were about 40% better at recognizing incorrect or misleading health information than those who had not been trained. However, enhancing the public's information literacy involves the investment of extensive social educational resources and takes time to be effective, posing a major challenge to implementing this strategy <sup>[13]</sup>.

### 4.3. Algorithm optimization and personalized user experience

SNS platforms can enhance the credibility of health information through algorithm optimization. By adjusting recommendation algorithms to prioritize health information from reliable sources, the spread of misleading content can be reduced. Statistics show that on SNS platforms using optimized recommendation algorithms, the proportion of high-quality health information that users encounter increases by 30%. Providing users with personalized information filtering tools that allow them to select information based on their own needs and preferences is also an effective method. However, optimizing algorithms requires constant adaptation to changes in user behavior and the evolution of the information environment, posing a significant challenge to technical teams. Additionally, ensuring the transparency of algorithms and avoiding potential biases are issues that need special attention <sup>[14]</sup>.

## 5. Conclusion

This study conducted an in-depth analysis of health information search behavior on SNS platforms and their dissemination mechanisms and explored strategies for enhancing the credibility of information. The results indicate that users prefer to search for professionally certified health information but are faced with the challenge of misleading information. Effective dissemination strategies include the appeal of the

content, algorithm recommendations, and active user interaction. To enhance the credibility of information, a combination of content verification, user education, and algorithm optimization is necessary<sup>[15]</sup>. In the future, with the advancement of technology and the increase

in user awareness, it is expected that more accurate and personalized health information services will be realized while ensuring a healthy and reliable information environment.

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The authors declare no conflict of interest.

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