

Research on Information Avoidance Behavior of College Students — Take WeChat Public Account As an Example

Zihang Wu and Liping Shao

Abstract—In order to research the information evasion behavior of college students in WeChat public account, inquiry the characteristics of college students, and provide some theoretical guidance for college students' information services. The semi-structured interview method was used to collect the data evasion behavior data of 20 college students. Combined with relevant report data and literature analysis, the user's information evasion behavior was described. The influence factors were summarized by referring to the Wilson information behavior model. Personal factors directly affect the information evasion behavior of college students, and information factors have an indirect influence.

Index Terms—Information avoidance, information behavior, user research.

I. INTRODUCTION

In recent years, the Internet has developed rapidly, and the information in the Internet has also exploded. The openness and rapid development of the network, on the one hand, makes the users more abundant and diverse for obtain the information, on the other hand, users also face the interference of useless, invalid and redundant information that often appears in the network. There is a huge amount of information in the network environment. Although computers will help people to carry out preliminary information screening, people will still be exposed to a large amount of information. Therefore, users must establish their own information selection mechanism to deal with irrelevant information or influence information. In order to achieve the purpose of improving the efficiency of information activities, it is important for users to adopt information avoidance behavior.

Information evasion is a kind of information behavior in which users consciously ignore and avoid certain information due to different reasons such as time, energy, knowledge background, and personal hobbies, so as to improve the efficiency of information utilization[1].

Foreign research on user information avoidance began in the 1940s. The objects include patients, adolescents and pregnant women. The content focuses on health information avoidance, information avoidance factors, information avoidance and decision-making, and selective avoidance in the media, emphasizing health information Avoidance,

avoidance of social media information and other specific avoidance behaviors [2]. Domestic research on this field started relatively late. The research mainly focuses on four themes of information avoidance and influencing factors in different contexts, specific group information avoidance driving factors, information avoidance and information encounters, and selective contact and selective attention[2]. A systematic explanation of information evasion is the case study of hospitals, libraries, scientific research and decision-making scenarios in Jinshu Wen [3] in the master's thesis. However, for the network environment, there are relevant information shielding research, systematic interpretation of the research is still less.

As a common phenomenon in user information behavior, information avoidance is widely permeated in user behavior. This article studies the information evasion behavior of users on WeChat official accounts. As a new type of information dissemination method, the WeChat official account has obvious influence.

Investigating whether there is information avoidance phenomenon in it, and analyzing the factors that affect information avoidance is of very important value for understanding users, improving official accounts, promoting profits, and even understanding the development of human beings.

II. RESEARCH DESIGN

A. Selection of Sample Objects

In order to gain an in-depth understanding of the information avoidance behavior of college students, this research adopts a semi-structured interview method based on Wilson's information behavior model, sorts and codes data, analyzes the data, and summarizes the influencing factors. Qualitative research pays more attention on the variety of the information that the research object can provide rather than the number of samples [4]. The research object of this article is college students. Recruit students from Hebei University to participate voluntarily, and on the basis of preliminary surveys, observe whether the respondent can provide the required information as a standard. Pay attention to the average distribution of the sample, and select college students of different grades and different majors who have information avoidance behaviors on the official account as the interview subjects. Its majors are distributed in information management and information systems, e-commerce, accounting, software engineering, optoelectronic information engineering, etc. The sample size is 20 (4 of which are analyzed for reliability and validity).

Manuscript received March 28, 2022; revised May 28, 2022.

Zihang Wu is with Beijing Jiaotong University, Beijing, China. She is now with the Department of Information Management, China (e-mail: 19120622@bjtu.edu.cn).

Liping Shao is with the Information Management Department, University of Beijing Jiaotong, Beijing, China (e-mail: lpsao@bjtu.edu.cn).

TABLE I: BASIC INFORMATION OF INTERVIEWEES

Classification	Index value	Number
Gender	Male	8
	Female	12
Grade	Freshman	3
	Sophomore	4
	Junior	6
	Senior year	7

B. Interview Design and Data Collection

Interview method is a common method in qualitative research. In this research, interview method was adopted, with participants face-to-face or voice-over-phone conversations. Communicate with the interviewee according to the question outline, and the interviewee can answer the question freely without limiting the answer. The interview structure can be flexibly handled according to the interviewee's answer, which is more helpful to understand the deep content of the interviewee's thoughts, psychology, etc.. To capture the interviewee's inner thoughts, which can help the analyst discover a wide range of behavioral characteristics and influencing factors from multiple perspectives.

This preliminary interview with 20 college students, about 25-35 minutes per time; in the later period, a total of 4 people were interviewed to test the theoretical saturation. The outline of the interview is shown in Table II.

TABLE II: INTERVIEW OUTLINE

Interview topic	Main content
Personal Information	Grade, major, gender, personality, whether to work directly after graduation, whether to prepare or experience postgraduate entrance examination
Information avoidance behavior and influencing factors	1.The number and type of official accounts, and which type of official account has the largest number? 2.The length/number of times to watch the news of the official account per day , and which official accounts should be paid attention to frequently? 3.What kind of news (or official account) would not read? The reason? Please list two messages that you won't read. 4.What kind of the official account messages you pay attention to every day? 5.What do you think of the negative news published by the official account? Or Repeat message? 6.Will the reminder function of unknown messages affect your attention to the content of the message itself? 7.The source of the official account? And will the source influence the trust of official account? 8.How does the title, pictures, layout, and the trust of the official account of the publish message affect the view of information? (Scoring) 9.Will the use of the information service function of the WeChat official account increase the reading of published information of the official account?

C. Reliability and Validity Guarantee

In qualitative research, reliability refers to the degree of agreement between the data recorded by the researcher and the actual occurrence in the natural environment, and validity refers to the degree to which the knowledge claimed by the

researcher is consistent with the facts (external validity) or the researcher's degree of construction of reality (internal validity)[5]. This article uses the following methods to ensure the reliability and validity of the research process and results.

TABLE III: RELIABILITY AND VALIDITY ANALYSIS

Evaluation index	Guarantee method
Reliability	Use triangular mutual evidence (research objects of different backgrounds) to ensure the diversity of data
	Collect research data under circumstances that are not controlled or interfered by external forces
Validity	Repeatedly confirm the contents of the record to accurately interpret the intention expressed by the research object.
	Grasp the main points. Perform frequency statistics based on keywords answered by users to capture clues
	Brainstorming. Share and discuss research questions and preliminary conclusions with partners to facilitate the discovery of research deficiencies and capture new key points
	Theory test. Compare research findings with relevant data reports
	Purposeful sampling. When sampling, proceed from the research questions and goals, and select the most matching sample to ensure the external validity of the research conclusions.

III. DESCRIPTION AND ANALYSIS

A. Report Data

According to the report of QUESTMOBILE[6], 73% of WeChat users follow less than 20 official accounts, and more than half of the users spend 10-30 minutes on the official account every day. The vast majority of users will follow a certain official account because of recommendations from others, 45% of users will actively look for official accounts of interest on their own, and 18.7% of users will follow the official account by scanning the code offline. After users read the official account tweets, more than half of the users have shared the official account articles. In terms of usage habits, the most frequent time period for browsing information is 22:00-24:00, accounting for 46.8%; in terms of active reading, people who only choose to browse when they see interesting content, accounting for 60.4%; In terms of the reading time of a single push, the total reading within 3 minutes, accounting for 72.4%.

B. Interview Data

The user group in this interview is some college students from Baoding City. The interview found that the number of official accounts that users pay the least attention to is 35, 11 users have more than 70 followers, and 7 users have more than 100 official accounts. The average number of followers is 85.4, the average number of female followers is 101, and the average number of male followers is 63.8.

In the types of official accounts, it is found that the vast majority of users will pay attention to official accounts such as school officials and school clubs. Users who are preparing for postgraduate entrance examinations or undergoing postgraduate entrance examinations will pay attention to a considerable number of public accounts for postgraduate

entrance examinations. Girls are obviously concerned about consumption. There are too many official accounts, and boys pay more attention to science and technology official accounts. The interview found that most users have a preference on official accounts, which is also an important factor in users' information evasion behavior. In terms of reading time, the average reading time on the official account is 25 minutes each day, half of the people have an average reading time of less than 20 minutes, the average reading time of boys is 22 minutes, and the reading time of girls is 28 minutes. There is no significant difference between the two.

In this interview, the three factors of importance were scored on a five-point scale. The average value found that the importance of the title was 4.13, the importance of the image was 3.44, and the importance of the official account was 3.81.

C. Interview Analysis

Through the comparison and analysis of the data in the public account analysis report and the data of the interview, the following conclusions are drawn:

The number of official accounts followed by college students is obviously more than the data in the official account report, and the reading time is not much different. The research object-college students have obvious characteristics and representativeness. The influence and penetration of the official account on college students is obvious. WeChat is a more important part of private mobile socialization. The WeChat official account based on the social function can not only meet their basic demands for interpersonal relations, but also on the official account. Meanwhile, the information obtained in this can also become the link between them and other groups' social circles[7]. The number of official accounts followed by college students is large, and there are obvious differences in the proportion of attention between different genders. There are many types of public accounts, but the commonalities of college students are more obvious, mostly concentrated in school clubs, majors, news and current affairs, shopping and consumption.

From the above data, we can see that the gender difference between male and female is different in the attention of the official account. There are a lot of official accounts that girls follow, but the browsing time differs little from that of boys. Most interviewees have preferred official accounts. More attention will be paid to the push messages of specific official accounts, and the information evasion behavior of non-preferred official accounts will be more obvious. It can be seen that the preference of official accounts has an impact on information evasion behavior. Based on the preference of the official account, the information evasion behavior of interviewed users found that the user's evasion behavior will focus on the title and image of the push message, and make their own judgments based on the content of the title. According to interviews and users' scoring on the five-point scale, it can be seen that the biggest influencing factor for users to pay attention to the official account news is the title, followed by their preference for official accounts, followed by pictures, and partly typesetting, but there are two in the interview. One interviewee said that they would pay special attention to pictures and typography, even more important than the title.

User needs and sharing. There is little difference in the

sharing behavior between reports and interviews, and about half of the people have shared articles. Most of the interviewees said that they rarely pay attention to the public push messages shared by their friends in WeChat groups and Moments. Most of the interviewees said that before opening, they did not have clear needs, and would screen and read them according to their own preferences. One interviewer regarded the official account message reading as an "auxiliary news medium." Some interviewers indicated that there will be a clear demand. If there is no relevant news in the instant message, they will search through historical news or use the service content of the official account. Users with high demand intensity have fewer information avoidance behaviors, and users with low demand intensity have more avoidance behaviors.

IV. EVASION BEHAVIOR CHARACTERISTICS

A. Non-preferred Official Account

The interview found that even though college students often follow dozens or even hundreds of official accounts, there are preferred official accounts in the user's following behavior. Not only is the user's deep reliance on and trust in certain official accounts, that is, the "frequently read subscription account" on the WeChat subscription account interface, which makes it easy for users to find content quickly. Those who prefer official accounts are mostly related to interests or majors. For example, respondent No. 2 prefers a certain story-type official account, respondent No. 3 prefers a certain beauty and a school club official account, and respondent No. 5 prefers two digital accounts. The source of the official account comes from the drainage of the WeChat platform by other platforms, the recommendation of friends, etc. Users have a high degree of loyalty to their preferred official accounts. Researching on the characteristics of preferred official accounts can reflect the characteristics of non-preferred official accounts from the side, and has a promoting effect on research information evasion.

Compared with preferred official accounts, non-preferred official accounts account for a large proportion, and information evasion behavior for non-preferred official accounts will be more common. At this time, users will pay more attention to the initial impression of the push message, such as the title and image.

B. Specific Needs

Users who browse the official account information based on certain information needs will naturally cause information evasion behaviors due to information duplication and irrelevance of information. Information demand is an important factor that affects users' evasive behavior.

According to Herzberg's theory of motivational health care factors, the demand analysis of college students found that the needs of college students come from motivational factors to the greatest extent, such as the improvement of professional skills, understanding of news and current affairs, or consumer and shopping needs. Users are positive and satisfied with the above-mentioned content. This kind of content will generate motivating factors and affect the learning and planning of college students. On the basis of strong demand, users will consciously strengthen the browsing of information. For

example, on the basis of motivational factors, students who take the postgraduate entrance examination will pay attention to many public accounts related to the postgraduate entrance examination, draw extensive information from them, and even use the historical news search function to check news.

The demand intensity of health care factors is lower than motivational factors. For example, in the Youth Official Account of Hebei University, messages related to dormitory culture, campus food, etc. are pushed, and most users hold a neutral and biased attitude toward them. Although the contents of health factors in the official account are diverse, they cannot produce more positive effects. Therefore, college students will have more information evasive behaviors on the news of "health factors".

C. Information Characteristics

The user's information avoidance behavior actually combines their own existing needs, knowledge, emotions and other factors to consciously avoid information. Therefore, a particularly important factor in information avoidance behavior is the information itself. Before the user receives the information, the information in the official account is judged by users from the previous impression and the presentation methods such as the title and picture of the push message, as well as whether the message is hot or not, and the influence of the location of the message. The official account impression has been discussed in "Non-preferred Official Account", so the characteristics of the push message itself are described here.

The reading index, reposting index and influence index of hot topic articles are significantly higher than other articles[8]. According to the theory of agenda setting theory, it is emphasized that audiences will change their understanding of the importance of things due to the issues provided by the media, and take action first on events deemed important by the media[9]. Both hot issues are easy to attract users' attention, and can promote the reading of push messages in related aspects. Non-hot news users will produce more information evasion than hot news users.

Report data and interview results will show that the location of the article will affect users' reading behavior. Compared with the headline news, the information evasion behavior of the next message will be more obvious. Of course, this is also understandable. There are two types of WeChat official accounts, subscription accounts and service accounts. Subscription accounts are suitable for individuals and organizations and have more prominent media functions; service accounts are suitable for organizations and have outstanding business service functions. The information evasion behavior of service accounts is not discussed here.

The title and image of the article will allow users to intuitively understand a push message. The title is generally a summary of the content of the article, and the title will directly affect the user's information evasion behavior. One-half of the respondents believe that the title directly determines whether they will read a message. Respondents said that "the headline is too long or the news with complex headlines will not be read." The interviewed boy clearly stated that he would not read the news of the "headline party". Respondent No. 5 said, "Don't be marketed, and keep your head clear. The headlines in these messages are just attractive gimmicks, and the content has nothing to do with the headlines, which is a waste of time and energy." Studies have shown that titles that adopt contemporary language

vocabulary, quote multiple narrative methods, apply punctuation to emphasize emotional color, and meet the psychological needs of readers will have a higher click-through rate[10]. The flat and straightforward narration is often tasteless and painless. This kind of headline is mostly submerged in the information wave. In the headline of the WeChat official account, suspense headlines account for a large proportion; WeChat news headlines should be as oral as possible to narrow the psychological distance, and create an intimate relationship between the media and the audience; ordinary declarative sentences may not pay much attention to, while imperative sentences may be offensive due to emotions and positions, but interrogative sentences can moisturize things silently get close to the audience and make them actively participate, which greatly increases the possibility of clicking on a tweet[11]. Most people think that the picture of the official account is not as important as the title, and the results of the Likert five-level scale in the interview are also the same. There are also users who say that a bad picture will also cause information evasion behavior.

V. SUMMARY AND OUTLOOK

A. Influencing Factor Model

Based on the research and analysis of the literature on the influencing factors of relevant user information avoidance behaviors, combined with the interview data, the influencing factors of information avoidance behaviors are divided into user perspective and information perspective to analyze, and the influence of information avoidance behavior of college students' official accounts is constructed. The factor theory model, as shown below.

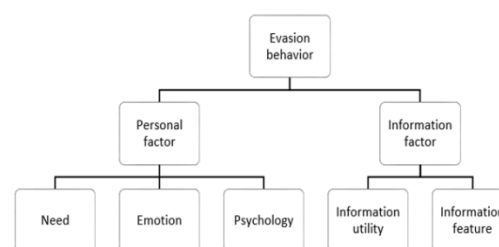


Fig. 1. Information evasion behavior model in the official account.

B. Personal Factor

Personal factors are internal factors that directly determine users' information avoidance behavior patterns. It mainly includes information needs and emotions. Based on the Wilson information behavior model, it is believed that the starting point of user information behavior lies in information demand, and the end of information behavior lies in information utilization, forming a cycle of information behavior. The intensity of user demand directly affects the user's information avoidance behavior. Emotion is mainly reflected in the user's trust and sense of dependence on the official account. The factors that affect the user's emotion are the user's impression of the official account: the quality of the previous article content, the push frequency, the information service of the official account, etc. Regarding the research on user emotions, the interviewees stated that "we always look at the official account when the mood is calm or in a good mood, and will not look at the official account when the mood is bad". Negative emotions will increase the frequency of

information avoidance behaviors. Studies have shown that people adopt various strategies to avoid or reduce bad emotions and unpleasant experiences, and to increase or prolong positive emotions. There is also evidence that when people make decisions and take actions, they avoid information that they regret[12].

C. Information Factor

Information factors are external conditions that indirectly affect users' information evasion behavior, which is mainly reflected in information utility and information characteristics. Information utility refers to the gains and losses obtained by college students by browsing the official account news, such as the improvement of professional skills, the supplement of knowledge gaps, and the improvement of mood. This article studies the influence of information characteristics, including influencing factors such as the source characteristics of the official account, the degree of content and hot spots, the location of the article, and the image of the title. In addition, the diversity, practicability, and reliability of information will also have an impact on information evasion.

D. Outlook

Although there have been researches on information evasion a long time ago, most of them are relatively scattered. Many studies have focused on explaining information evasion from psychological factors, and few studies have studied the possible influencing factors from a social perspective [12]. This article combines the literature review method and the interview method to conduct a qualitative research on the group of college students. Taking WeChat official account push information as an example, using a semi-structured interview method combined with Wilson's information behavior model, the characteristics of college students' WeChat official account evasion behavior are summarized, combined with relevant literature, and the influencing factors are summarized. Analyze from the user's personal and information perspectives. On the one hand, they are affected by user emotional preferences and user emotions. On the other hand, it is also affected by information characteristics and information utility. However, due to various reasons, there are still many shortcomings in this article: the number of interviewees in this article is limited, and sufficient numbers of undergraduate public account attention data have not been collected; the influencing factors listed in this article are just a summary of the interview results, and the mechanism of occurrence has not been studied. In future research, we will pay more attention to the role of data and use more sufficient data to do research. As well, to understand more about the mechanism of information evasion, and to pay attention to the selection of the basis of information evasion in psychology, economics, communication and other disciplines, make the research of information evasion more universal.

CONFLICT OF INTEREST

The authors declare no conflict of interest".

AUTHOR CONTRIBUTIONS

Zihang Wu 's main work is to design investigation

experiments, conduct detailed interview investigations, data collection and analysis, and article writing.

Liping Shao's main work includes the determination and guidance of research ideas

REFERENCES

- [1] H. Gaiping, "Research on information avoidance behavior," *Modern Economic Information*, no. 15, pp. 372–373, 2018.
- [2] M. H. Chen, Y. Wu, and J. Li, "Research progress and theoretical framework of information avoidance behavior," *Information and Documentation Services*, vol. 42, no. 3, pp. 82–93, 2021.
- [3] J. S. Wen, Information evasion research. Master, Southwest University, [Online]. Available: <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CMFD&dbname=CMFD2012&filename=1012280259.nh&uniplatform=NZKPT&v=SbTFZHtCXycpXgSj0dGD4gSuArZz%25mmd2BQ6FdVaDHLou6LJMaZkSVOPwAzymgP3iLSZr>
- [4] D. Ellis, "Qualitative evaluation and research methods," *Int. J. Inf. Manag.*, vol. 10, no. 4, p. 323, 1990.
- [5] Z. Dan and H. Yi, "Research on the influencing factors of pregnant women's information avoidance behavior," *Library and Information Service*, vol. 61, no. 17, pp. 91–98, 2017.
- [6] Quest Mobile. Quest Mobile WeChat Official Account Insight-Industry Research Report-Quest Mobile. [Online]. Available: <https://www.questmobile.com.cn/research/report-new/35>
- [7] J. W. Chen, S. Lin, and X. J. Guo, "Research on the audience Preferences of University WeChat official accounts in the "internet+" era," *New Media Research*, vol. 4, no. 13, pp. 7–11, 2018.
- [8] M. N. Wang et al., "Analysis of the influence of WeChat official account articles and its influencing factors," *China Health Education*, vol. 34, no. 5, pp. 428–431, 2018.
- [9] X. C. Gao, "Analysis of new approaches to agenda setting theoretical research in the new media environment," *Journalism and Communication Research*, vol. 18, no. 1, pp. 12–20+109, 2011.
- [10] Y. W. Ji, "Analysis of the language skills of news media editing news headlines on WeChat official accounts," *New Media Research*, vol. 5, no. 5, pp. 123–124, 2019.
- [11] M. Chen, "How to make a WeChat official account title-taking Hefei evening news WeChat official account as an example," *News World*, pp. 35–38, 2019.
- [12] X. Q. Li, F. Q. Zhang, X. M. Yan, and G. R. Chen, "Overview and enlightenment of the development of typical foreign user information behavior models," *Information Magazine*, vol. 37, no. 2, pp. 194–200, 2018.

Copyright © 2022 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (CC BY 4.0).



Shao Liping,

Wu Zihang was born in Handan City, Hebei Province in China. Undergraduate study in Hebei University, majoring in information management and information systems. Postgraduate at Beijing Jiaotong University majoring in information management.

She has won school-level scholarships twice. The research direction is information avoidance and enterprise information. Under the guidance of teacher the experimental ideas were put forward and this investigation was made.



Shao Liping is the with deputy director of the Department of Information Management, School of Economics and Management, Beijing Jiaotong University, is an excellent lecturer of Beijing Jiaotong University. Published various monographs, teaching materials, reference books and other more than 30 books. Her research fields are Information management,

ERP application, security management.

She led the discussion on the idea of the essay and offered suggestions for revision and writing guidance. Instruct Zihang Wu to complete the writing and submission of this paper