International Journal of Multidisciplinary Research and Publications
ISSN (Online): 2581-6187

The Key Influencing Factors of Chinese Users' Continued Use of Platform AI Tools Despite Perceiving Risks

Sun Qianxi[1], Wang Hu[2]
[1]School of Journalism and Communication, Shanghai University, Shanghai, People's Republic of China
[2](Corresponding author) School of Journalism and Communication, Shanghai University, Shanghai, People's Republic of China
Email address: sunqianxi9@163.com

Abstract*—As AI becomes more popular and widely used, people often encounter conflicts between privacy and profit. Internet platforms have launched AI models and require users to provide data to train them. Despite people's concerns about privacy and security, numerous studies have shown that they still have to disclose personal information in order to obtain services. Furthermore, even when people perceive privacy risks, they will sacrifice privacy protection if the benefits they receive are significant enough. This article examines whether a chain mediating effect exists when users avoid using AI platforms, considering the factors of perceived benefits, perceived risks and privacy protection. The research found that there is no chain mediating effect, but there may be a mediating or masking effect between perceived risks, privacy protection, and users avoiding using AI platforms. Perceived risk has a negative impact on users' avoidance of the platform's AI tools rather than the positive impact that has always been believed. Even if people perceive significant risks, they may not necessarily choose to avoid using AI platforms.*

Keywords*—Perceived benefits; perceived risks; privacy protection; artificial intelligence.*

I. INTRODUCTION

Many internet platforms have launched, or are planning to launch, their own large AI models, using user data and other information for training purposes. In 2023, Kingsoft Office Software WPS changed its privacy policy, allowing it to use users' content for AI training by default, without permission. This sparked widespread dissatisfaction. The original creators of Bytedance's AI tool Doubao have also criticised it. It is suspected that the original creators' works have been directly used for the AI training of Doubao. Some users are concerned about potential privacy violations and are reluctant to disclose information on the platform. Original creators who use platforms like WPS are also at risk. They are concerned that their unpublished original content may be learnt by AI and enter the database, which could lead to copyright disputes and other issues in the future.

Many studies have shown that, despite concerns about privacy and security, people still have to disclose personal information to obtain products and services. Moreover, even if people perceive risks, they may lack sufficient awareness of how to protect themselves and may not take preventive measures. Sometimes, they may feel powerless and abandon privacy protection measures. In general, people will give up privacy protection if they feel that they are gaining something of value from using a platform. If the risk level is relatively high, users' willingness to protect their privacy will also decline. Currently, many platforms have introduced AI models. It is unclear whether people avoid using the AI tools on related platforms because of how they perceive the benefits and risks. Based on this, this paper raises the following research question:

What impact do the perceived benefits and risks of using the platform's AI tools have on users' decision to avoid them? Does privacy protection play a mediating role, and is there a mediating effect chain?

II. LITERATURE REVIEW AND RESEARCH HYPOTHESES

A. Rational fatalism in media avoidance research

The concept of rational fatalism was first proposed by behavioural economist Kerwin, who described people's sense of helplessness towards ultimate events as 'fatalism', or the notion that 'fate cannot be changed'. Some scholars have found that, when privacy threats are perceived as high and users do not believe that their privacy rights are being violated, they will not be concerned about disclosing information. According to rational fatalism, a sense of destiny can result in inefficient or ineffective analysis. They gradually shift from a well-considered reasoning system to a rapid, intuitive one, leading to less rational behaviour. This phenomenon is manifested in privacy issues as follows: People overestimate the benefits of information leakage and underestimate the risks of transferring personal data.

When people overestimate the benefits of an information leak, they are more likely to give out their data. Scholars have proven through research that perceived benefits have a positive impact on information disclosure. In other words, the greater the perceived benefits, the less protection there is for privacy and the more likely users are to give up some of their privacy rights. Similarly, when it comes to using AI platforms, if users anticipate high returns, they may be more willing to disclose their information and less likely to avoid platforms involving the leakage of private information. Currently, many studies on media avoidance focus on avoiding media platforms containing advertising information. However, with the rapid development of AIGC technology, a new phenomenon has emerged: the avoidance of AI platforms. Therefore, research into the avoidance of related platforms is necessary.

Sun Qianxi and Wang Hu, "The Key Influencing Factors of Chinese Users' Continued Use of Platform AI Tools Despite Perceiving Risks," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 8, Issue 3, pp. 116-119, 2025.

Based on this, this paper proposes the following hypothesis:
H1: Perceived revenue negatively affects the protection of user privacy.
H2: Perceived benefits negatively affect users' avoidance of platforms with AI-related functions.

B. The communication privacy management theory

The communication privacy management theory was first proposed by the American scholar Sandra Petronio. This theory can be used to help understand how people make judgements about privacy issues. People create privacy borders to safeguard their personal privacy when they reveal their personal information to others. Users are concerned about the risks to their privacy, yet they still give up their private information for the sake of convenience. However, once this boundary is crossed, users will develop a conditioned reflex to protect their privacy, which in turn causes privacy turmoil and leads to avoidance behaviour. Conversely, users are willing to disclose their privacy.

When they perceive risks and pay attention to their own information security, they engage in privacy protection, such as controlling access to their private information and hiding its quantity, breadth and depth. Some scholars have verified through research that perceiving risks can affect users' decision to avoid using the medium and that perceiving risks positively affects privacy protection. As a result, the following research hypotheses are presented in the context of using AI platforms:
H3: Perceived risk positively affects the protection of user privacy.
H4: Perceived risk positively affects situations where users avoid platforms with AI-related functions.

As users become less willing to disclose personal information, they will avoid using the medium. Therefore, it is assumed that:
H5: Privacy protection is positively correlated with avoiding the use of AI functional platforms.

III. Research Design

A. Theoretical model

The research framework is based on the Communication Privacy Management (CPM) theory. This theory is divided into three parts: privacy ownership, privacy control and privacy turbulence. In this study, perceived benefits and risks are classified as privacy ownership. People measure the perceived benefits and risks, and then exercise privacy control, which in this study takes the form of privacy protection. Individuals adjust their privacy boundaries by regulating ownership of their privacy, deciding whether to disclose private information or avoid using media, and so on, ultimately leading to privacy turmoil. Privacy turmoil was defined as avoiding the use of AI platforms.

Situations involving the avoidance of AI platforms include not using them, as well as selectively disclosing private information on them. Additionally, any platform that uses or delivers AI features is generally referred to as an AI platform. At the same time, personal privacy information includes not only sensitive personal information, but also personal content information such as original written works, papers and paintings.

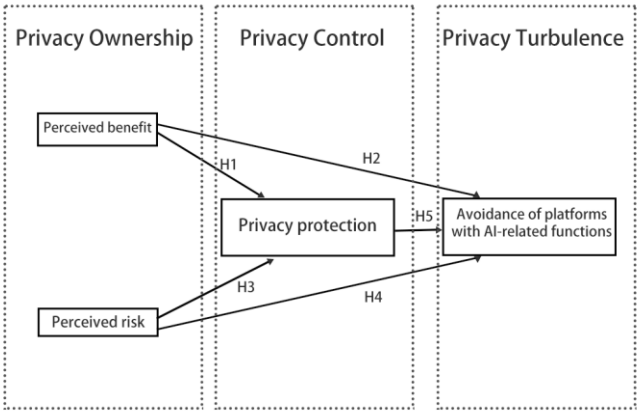

Fig. 1. The research framework.

As shown in Figure 1, the research hypothesises the existence of a chain mediating effect among the four variables.
H1: Perceived benefit negatively affects protection of user privacy.
H2: Perceived benefit negatively affects avoidance of platforms with AI-related functions.
H3: Perceived risk positively affects protection of user privacy.
H4: Perceived risk positively affects avoidance of platforms with AI-related functions.
H5: Privacy protection is positively correlated with avoidance of AI functional platforms.

IV. Data Analysis and Model Validation

This research takes a quantitative approach, examining issues through questionnaires, data analysis and model construction. The questionnaire was distributed in 2024 and is mainly targeted at users in Shanghai, China. A total of 109 questionnaires were retrieved, of which 104 were valid and 5 were invalid. SPSS and AMOS were used to analyze the data and correct the model on the samples.

A. Reliability and validity test

The research framework is based on the Communication Privacy Management theory. This theory is divided into three parts: privacy ownership, privacy control and privacy turbulence. In this study, perceived benefits and risks are classified as privacy ownership. In this study, privacy protection is the form taken by the exercise of control over personal information by people who measure the perceived benefits and risks. Individuals adjust their privacy boundaries by regulating ownership of their privacy, deciding whether to disclose private information or avoid using media, and so on, ultimately leading to privacy turmoil. In this study, privacy turmoil was defined as avoiding the use of AI platforms.

Cronbach's alpha coefficient was used to measure the scale's reliability. The higher the alpha coefficient, the more reliable and credible the scale is, and the more stable it is.

Sun Qianxi and Wang Hu, "The Key Influencing Factors of Chinese Users' Continued Use of Platform AI Tools Despite Perceiving Risks," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 8, Issue 3, pp. 116-119, 2025.

Reliability analyses were conducted on four dimensions: perceived benefits, perceived risks, privacy protection and avoidance of using AI platforms. The reliability of perceived benefits and perceived risks was greater than 0.8 and that of avoiding AI platforms was greater than 0.7, both of which demonstrate high reliability. The privacy protection dimension was found to be slightly less reliable, with a value between 0.6 and 0.7. However, it still has value, so it is retained. Overall, the reliability is greater than 0.7, which is within an acceptable range.

This study used exploratory factor analysis to evaluate the questionnaire's structural validity, identify its potential structure, test it through factor analysis and extract common factors effectively. The KOM metric value is 0.760, which is greater than 0.7. The significance of the Bartlett sphericity test is less than 0.05, indicating that exploratory factor analysis can be conducted. For the principal component analysis of the 16 questions, four factors were extracted and the cumulative variance explained was 63.217%. According to the above table, four factors can be extracted, indicating that the variable has four dimensions. Furthermore, most of the values on the scale are greater than 0.7. The rotation component matrix shows that the factor attribution of each item largely aligns with the scale design factors, indicating relatively good structural validity of the questionnaire.

B. Structural equation modelling and hypothesis testing.

The study also used confirmatory factors to analyze the validity of the questionnaire and model. Furthermore, confirmatory factor analysis (CFA) forms part of structural equation modelling. The study therefore first conducted a CFA analysis on four variables: perceived benefit, perceived risk, privacy protection and avoiding the use of AI tools on the platform.

The model's X^2/df metric is 2.797, which is less than 3. The RMSEA is 0.069, which is also less than 0.08. The CFI is 0.905, which is greater than 0.9. The IFI is 0.909, which is also greater than 0.9. The PGFI is 0.617, which is greater than 0.5. The PNFI is 0.631, which is also greater than 0.5. Therefore, all of the models in this study fit well and meet the model adaptation criteria. Overall, the model adaptation is therefore ideal.

C. Model correction and results analysis.

According to the results obtained from the data analysis, neither perceived risk nor privacy protection significantly affect the avoidance of using AI platforms. The P-value for perceived risk affecting privacy protection is less than 0.001, while the P-value for privacy protection affecting avoidance of AI platforms is less than 0.01. There may be a mediating effect among these three factors, with perceived benefit having a negative impact on perceived risk ($\beta = -0.049$). However, the results of this study show that perceived benefits are not connected to privacy protection or avoiding the use of AI platforms.

Therefore, research hypotheses H1 and H2 are not supported.

Based on these results, the model was modified. Afterwards, the significance of each path in the adjusted model met the required standards. The P-value of perceived risk for privacy protection was less than 0.001, the P-value of privacy protection for avoiding the use of AI platforms was less than 0.01 and the P-value of perceived risk for avoiding the use of AI platforms was less than 0.05. Perceived risk positively affects privacy protection, and privacy protection positively affects avoiding the use of AI platforms. However, perceived risk has a negative effect on the avoidance of using AI platforms.

Therefore, the mediating effect requires further investigation, and other variables may affect the results. Furthermore, the negative impact of perceived risk on the avoidance of using AI platforms may be influenced by certain unknown variables.

Accordingly, the research hypothesis that H3 'perceived risk positively affects user privacy protection' and H5 'privacy protection is positively correlated with the avoidance of using AI functional platforms' are both true. However, H4, which states that perceived risk positively affects users' avoidance of platforms with AI related functions, does not hold true. The research results contradict these hypotheses and are corrected as follows: Perceived risk negatively affects situations in which users avoid using platforms with AI related functions.

V. CONCLUSION AND DISCUSSION

Through path coefficient analysis of the samples and models, the study found that the variable of perceived benefit may have little influence or correlation. Whether the variable is related to perceived risk, privacy protection, or avoiding the use of AI platforms, the corresponding perceived benefit paths are not significant. The study also found that perceived risk positively affects privacy protection, and that privacy protection positively affects avoiding the use of AI platforms. However, the hypothesis that perceived risk negatively impacts the avoidance of AI platform use was not supported by the research, which is also inconsistent with what has traditionally been regarded as common sense.

Conventionally, the higher the perceived risk, the more one should avoid high risk behaviours. However, research shows the opposite. When the perceived risk is too high, avoidance behaviours actually decrease. This point has also been discussed by some scholars. According to rational fatalism theory, if people feel helpless in certain situations, they may give up because they cannot change the circumstances. Some scholars have also found that when privacy is threatened to an extreme degree, people believe that enough of their private information has been compromised and no longer worry about protecting their privacy. However, this can also have drawbacks. People may underestimate the risks of giving up their privacy as a result, thus getting into a difficult situation.

In-depth interviews were conducted with twelve respondents to gain a better understanding of the issue of "perceiving the negative impact of risks and avoiding the use of AI platforms." According to the results of these interviews, the majority of interviewees believe that the advantages of AI platforms outweigh the disadvantages and are aware of the issue of privacy infringement. However, they have a rather

Sun Qianxi and Wang Hu, "The Key Influencing Factors of Chinese Users' Continued Use of Platform AI Tools Despite Perceiving Risks," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 8, Issue 3, pp. 116-119, 2025.

negative attitude, thinking that, when faced with such huge platforms, individuals have little power. The interviewees mentioned that they do not pay much attention to privacy terms related to the platform because they consider them to be meaningless and unfair. If they want to use the functions, they have no choice but to compromise.

Some interviewees indicated that, even if information is leaked, they would not necessarily give up using AI tools. 'When using them, they might choose to hide or avoid the operation that leads to personal information leakage rather than giving them up just because they leak my privacy.' This is consistent with the survey results and the fatalism. When users sense a very high risk, they tend to 'give up all hope', believing that protective measures will be ineffective and that the platform will still 'spy' on their lives and work. Users may adjust their behaviour, but they will not stop using the relevant platforms.

VI. FUNDING

Key Project of the National Social Science Fund of China: 'Research on intelligent information dissemination and digital social governance for the elderly in megacities' (22AXW008).

REFERENCES

[1] Boritz, J. E., & No, W. G. "E-Commerce and Privacy: Exploring What We Know and Opportunities for Future Discovery," *Journal of Information Systems*, 25(2), 11-45, 2011.

[2] Kokolakis, S. "Privacy Attitudes and Privacy Behaviour: A Review of Current Research on the Privacy Paradox Phenomenon," *Computers & Security*, 64(1), 122-134, 2017.

[3] Aivazpour, Z., Valecha, R., & Rao, R. H. "Unpacking Privacy Paradox: A Dual Process Theory Approach," 2017, Retrieved July 18, 2021.

[4] Xuan, C., & Chen, S. "The impact of privacy violation experiences on individuals' willingness to protect personal information: A theoretical perspective based on risk-benefit and regulatory focus," *Chinese Journal of Journalism & Communication*, 45(04), 138–156, 2023.

[5] Kerwin, J. T. "Rational Fatalism: Non-monotonic Choices in Response to Risks," Working Group in African Political Economy Meeting. University of California, Berkeley, CA. 3-16. 2012, Retrieved September 23, 2020.

[6] Keith, M. J., Babb, J. S., & Lowry, P. B. "A Longitudinal Study of Information Privacy on Mobile Devices," In Proceedings of the 47th Hawaii International Conference on System Sciences, 3149-3158, 2014.

[7] Aivazpour, Z., Valecha, R., & Rao, R. H. "Unpacking Privacy Paradox: A Dual Process Theory Approach," 2017, Retrieved July 18, 2021.

[8] Motiwalla, L. F., Li, X. B. "Unveiling Consumers' Privacy Paradox Behaviour in an Economic Exchange," *International Journal of business Information Systems*, 23(3), 307-329, 2016.

[9] Xiao, D. "The privacy paradox and its cognitive decision-making: An empirical analysis based on privacy calculus and rational fatalism," *Journalism Research*, (03), 45–60+121, 2023.

[10] Petronio, S. "Road to Developing Communication Privacy Management Theory: Narrative in Progress, Please Stand By," *Family Communication*, 4(3), 193-207, 2004.

[11] Yang Man, Wen Xiuyan. "The mediating effect of privacy protection intentions: privacy concerns, privacy protection self-efficacy, and precision advertising avoidance," *Journalism & Media Studies*, (7): 41-52, 2020.

[12] Lin Shengliang, Feng Xueru. "The Impact of Privacy Concerns on Computational Advertising Avoidance: An Examination of the Chain Mediation Effect Based on Perceived Risk and Privacy Protection," *University of Journalism*, (05): 29-43+119, 2023.

[13] Kehr, F. "Feeling and Thinking: On The Role of Intuitive Processes in Shaping Decisions about Privacy," Switzerland, University of St. Gallen, 2015.

[14] Youn, S. "Determinants of Online Privacy Concern and Its Influence on Privacy Protection Behaviors among Young Adolescents," *Journal of Consumer Affairs*, 43(3), 389-418, 2009.

[15] Dienlin, T., & Trepte, S. "Is the Privacy Paradox a Relic of the Past? An In-Depth Analysis of Privacy Attitudes and Privacy Behaviors," *European Journal of Social Psychology*, 45(3), 285-297, 2015.

[16] Cho, C. H., & Cheon, H. "Why do People Avoid Advertising on the Internet," *Journal of Advertising*, 33(4), 89-97, 2004.