# Meta-Analysis of Factors Influencing User Online Information Seeking Intention (Postprint)

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## Abstract

[Purpose/Significance] Online information seeking behavior has long been a focal concern in user information behavior research. Existing literature exhibits inconsistencies in identifying factors that influence online information seeking intention. Clarifying the overall effect sizes of these influencing factors can provide systematic reference for deepening the understanding of users' online information seeking intention. [Method/Process] This study selected eight antecedent variables and five moderating variables affecting users' online information seeking intention, conducting a meta-analysis of 178 independent effect sizes from 104 research studies. [Results/Conclusion] Perceived risk (r=0.166), self-efficacy (r=0.309), perceived usefulness (r=0.509), perceived ease of use (r=0.384), source credibility (r=0.441), information quality (r=0.466), information literacy (r=0.389), and anxiety (r=0.244) exert significant positive effects on users' online information seeking intention. Search channels, search contexts, education level, identity categories, and social culture moderate the relationships between the aforementioned eight variables and online information seeking intention.

## Full Text

## A Meta-Analysis of Factors Influencing Users' Online Information Seeking Intention

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### Abstract

[**Purpose/Significance**] Online information seeking behavior has consistently been a focal point of research in user information behavior studies. Existing

literature shows discrepancies in identifying the factors influencing online information seeking intention. Clarifying the overall effect sizes of these influencing factors can provide systematic reference for deepening our understanding of users' online information seeking intention.

[**Method/Process**] This study selected eight antecedent variables and five moderating variables affecting users' online information seeking intention, incorporating 178 independent effect sizes from 104 research studies for meta-analysis.

[**Result/Conclusion**] Perceived risk (r = 0.166), self-efficacy (r = 0.309), perceived usefulness (r = 0.509), perceived ease of use (r = 0.384), source credibility (r = 0.441), information quality (r = 0.466), information literacy (r = 0.389), and anxiety (r = 0.244) all exert significant positive effects on users' online information seeking intention. Search channel, search context, education level, identity category, and social culture moderate the relationships between these eight variables and online information seeking intention.

**Keywords:** information seeking, perceived usefulness, self-efficacy, perceived risk

## 1. Introduction

In the mobile Internet era, platforms such as WeChat, Weibo, TikTok, CSDN, and Zhihu have become important sources for people to obtain information on health, entertainment, academia, and other domains. As of December 2020, China's internet user population reached 989 million, with search engine users alone totaling 770 million. Online information seeking behavior research has become a core theme in user information behavior theory, holding significant importance for the optimization and improvement of search engines and related platforms. Individuals engage in information seeking activities to achieve certain goals (work, study, life, leisure, etc.), and this process is influenced by multiple factors that may vary across different environments, industries, and research designs.

Scholars in library and information science, information systems, and organizational behavior have conducted extensive empirical research on factors influencing online information seeking based on theories such as the Information Systems Success Model, Technology Acceptance Theory, and T.D. Wilson's information seeking model, laying a foundation for further in-depth investigation. However, the large volume of empirical studies with inconsistent conclusions (e.g., substantial differences in the strength of relationships between the same antecedent and outcome variables across different studies) may cause cognitive confusion among scholars regarding related issues. Therefore, to thoroughly understand these issues, quantitative meta-analysis is necessary. Currently, a few scholars have used meta-analysis to explore the effects of individual variables such as field-independent/field-dependent cognitive style and perceived risk on users' online information seeking intention. Others have conducted meta-analyses on

factors influencing health information seeking intention: C.C. Chang et al. incorporated 71 studies and found self-efficacy, health literacy, usability, credibility, emotional response, and subjective norms to be important factors, while also examining moderating effects of sample roles, gender, mean age, topics, information channels, publication types, data collection methods, and sampling methods. X. Wang et al. included 44 studies to explore psychological factors (anxiety, risk), instrumental factors (information quality, credibility), environmental factors (Internet usage), and demographic factors (age, gender) on online health information seeking intention, analyzing moderating effects of communication technology development, information type, and participant types. R.D. McMullan et al. included 20 studies, while A. Hallyburton et al. included 177 studies, examining health anxiety and gender effects on online health information seeking intention, respectively.

It should be noted that besides perceived risk and cognitive style, literature includes many other important variables affecting online information seeking intention, such as perceived usefulness and information literacy. How do these factors work? Beyond the "health information seeking" contexts analyzed by previous scholars, other online information seeking contexts include academic, leisure, and consumption scenarios. How do relationships between antecedent and outcome variables differ across these contexts? Do different online information seeking contexts affect these relationships? To address these unresolved issues, systematic review and statistical analysis of relevant literature should reveal previously undiscovered findings. Therefore, based on systematic review of domestic and international literature, this study incorporates as many research samples as possible (104 studies) and research variables (eight independent variables including perceived usefulness, perceived ease of use, and source credibility), using rigorous meta-analysis procedures to comprehensively evaluate the nature and strength of factors influencing online information seeking, reconcile inconsistent findings, and explore which external characteristics (five variables including identity category, search context, and social culture) moderate relationships between antecedent and outcome variables, aiming to provide precise, generalizable conclusions and insights for future research.

## 2. Theoretical Foundations

User-centered online information seeking research primarily adopts a cognitive psychology perspective, building upon classic user information behavior models such as the Information Systems Success Model and Technology Acceptance Model.

**2.1 Information Systems Success Model** In 1992, W.H. DeLone and E.R. McLean proposed the Information Systems Success Model (ISSM). Recent years have seen numerous empirical studies based on this model. For instance, C.T.B. Ho et al. found that most tourists believe information quality and system quality affect their tourism information seeking behavior, with more reliable infor-

mation sources leading to more frequent information seeking. Cha Xianjin et al. discovered that information quality and source credibility positively and directly influence perceived information usefulness, subsequently affecting users' information seeking behaviors. Zhang Tairui et al. analyzed academic search engines as a seeking context and found that academic self-efficacy positively influences academic information seeking. Based on this model, this study extracts information quality and source credibility as two important factors affecting online information seeking intention. Information quality refers to the quality of information content output by information systems, including completeness, accuracy, consistency, and timeliness of information output. Source credibility refers to information recipients' perception of information source reliability.

**2.2 Technology Acceptance Model** In 1989, F.D. Davis et al. proposed the classic Technology Acceptance Model (TAM). Scholars have used this model to explore adoption of new systems and technologies such as WeChat, digital libraries, academic databases, new teaching technologies, e-commerce, and mobile applications. Given the model's wide application, this study extracts perceived usefulness and perceived ease of use as important antecedents of online information seeking behavior. Perceived usefulness refers to individuals' belief that using a particular system or technology will enhance their work performance, while perceived ease of use refers to individuals' belief that a particular system or technology is easy to use and operate.

**2.3 Self-Efficacy Theory** In 1982, A. Bandura proposed Self-Efficacy Theory from a social learning perspective. Recent research has applied self-efficacy to explore user information seeking behavior across health, academic, and leisure contexts. For example, Cao Fenfang et al. found that academic self-efficacy positively influences academic information seeking. Ding Shuiping et al. discovered that stronger consumer self-efficacy increases information seeking likelihood. L. Zhang et al. found that users with high self-efficacy are more inclined to use the Internet for information seeking. Additionally, S. Livingstone et al. proposed a model of self-efficacy and online interaction, noting that gender, age, and income significantly affect individual self-efficacy, which in turn influences online interaction with other users. Therefore, this study includes self-efficacy as an antecedent of online information seeking, measuring the correlation between individuals' subjective assessment of their work capabilities and their online information seeking intention.

**2.4 Perceived Risk Theory** In 1960, R.A. Bauer proposed the concept of perceived risk, suggesting that individuals may be unable to accurately obtain expected results due to various uncertainties, with some outcomes being unpleasant. This concept emphasizes users' subjectively perceived risk rather than actual risk resulting from user behavior. In online information seeking, the virtual nature of the network environment has made perceived risk a major concern for scholars. For instance, Wang Xinyue et al. found that perceived risk positively

influences public information seeking behavior in major public health emergencies. However, Z. Deng and S. Liu indicated that perceived risk primarily refers to uncertainty when seeking health information, with lower perceived risk associated with higher online information seeking frequency, suggesting a negative correlation. Jin Shuaiqi et al. treated perceived risk as an objective environmental variable and found that user health information seeking behavior was not affected by perceived risk levels. Given the widespread application of perceived risk theory in information seeking research, this study includes perceived risk as an antecedent variable in meta-analysis to explore how users' subjective risk perception or loss acceptance affects their online information seeking intention.

**2.5 Anxiety Theory** Mainstream psychological anxiety theory is based on anxiety acquisition response theory and factor analysis. Although scholars have defined anxiety from different perspectives, no unified consensus has been formed. S.H. Soroya et al. view anxiety as a sense of compulsion and tension when people cannot find needed information quickly or encounter overwhelming information. C. Lagoé et al. consider anxiety as fear or discomfort when users encounter situations detrimental to themselves. As an internal cause triggering complex psychological responses and emotional states that may differentially affect individual information seeking behavior, anxiety has been studied in library and information science through lenses such as technology anxiety, health anxiety, and information anxiety. Most research suggests that negative anxiety emotions positively affect online information seeking behavior, though inconsistent findings exist. For instance, some scholars found that online information seeking behavior decreases as individual anxiety increases. Addressing these contradictory conclusions and the widespread social context of anxiety, this study includes anxiety as an independent variable to further examine its effect on online information seeking intention.

**2.6 Information Literacy** In 1974, P.G. Zurkowski proposed the concept of information literacy. A search using "Information Literacy" as a keyword yields 10,399 relevant documents in the SSCI database alone (search date: March 20, 2021), primarily concentrated in Information Science & Library Science and Health Care Sciences & Services. In user information behavior research, W. Chen et al. found that college students' information literacy significantly and positively affects their online mental health information seeking. Y. Liu and X. Lei noted that individual differences in information literacy lead to different knowledge acquisition from the Internet, with higher information literacy yielding more precise search results and more accurate predictions. In online healthcare environments, health literacy as a specific manifestation of personal information literacy also affects online information seeking behavior. Deng Shengli et al. found that higher health literacy correlates with more frequent health information seeking behavior. Given the widespread use of the information literacy concept, this study analyzes it as an important factor influencing users' online information seeking intention.

Based on the above theories, this study constructs a theoretical model of factors influencing users' online information seeking intention, as shown in Figure 1 [Figure 1: see original paper].

## 3. Research Methods and Process

**3.1 Research Methods** In 1976, psychologist G.V. Glass proposed meta-analysis, a method for quantitatively analyzing numerous studies with the same purpose and independent results. Meta-analysis involves steps including topic determination, literature search, literature selection, data extraction, publication bias testing, heterogeneity testing, model selection, effect size calculation, and moderation testing. By determining study weights based on sample size and comprehensively analyzing individual studies with different methods, measurements, and samples, meta-analysis can increase both the precision and generalizability of research conclusions. Although critics argue that meta-analysis suffers from an "apples and oranges" problem, combining diverse studies reduces result meaningfulness, this criticism only applies to narrow-group meta-analyses (e.g., apples) where studies from different groups (e.g., oranges) should not be included. For broad-group meta-analyses (fruit), combining multiple related groups (apples, oranges, and other fruits) is more appropriate, reminding researchers to sample studies at appropriate analytical levels. For multi-level, heterogeneous research questions, meta-analysis can employ random-effects models that incorporate both sampling error and between-group error (potentially arising from differences in research design, populations, or methods), systematically comparing differences in conclusions across groups (apples, oranges, and other fruits) through moderation analysis to explain heterogeneity causes. Therefore, this study uses Comprehensive Meta-Analysis V3.0 software to analyze eight factors affecting online information seeking intention, exploring differences in research conclusions across five external characteristics (search channel, search context, education level, etc.) through moderation analysis.

### 3.2 Research Process

**3.2.1 Literature Search and Screening** This study used search terms including "information seeking," "information search," "information retrieval," "Information See*," "Information Search*," and "Information Retrieval" to search authoritative databases including CNKI, PQDT, and Web of Science on January 20, 2021, with Google Scholar as a supplementary tool for unpublished literature. Full-text documents were carefully read and screened according to the following criteria: (1) must be empirical research; (2) must clearly report sample size and correlation coefficients between antecedent variables and information seeking intention, or T-values convertible to correlation coefficients. During screening, variables with similar names but different meanings, or different names but same meanings, were determined for inclusion based on their measurement scales. Following search → screen → include procedures, 104 studies were selected for analysis, including 65 foreign-language documents (2

dissertations, 63 journal articles) and 39 Chinese documents (13 dissertations, 26 journal articles).

**3.2.2 Literature Coding** To ensure coding accuracy and meta-analysis data objectivity, the authors developed corresponding literature coding standards based on research objectives. The first two authors independently coded the 104 studies and compared results one by one, discussing and resolving inconsistent codes. Literature coding detailed recorded author, publication year, effect size (correlation coefficient or T-value), sample size, search context, search channel, participant education level, identity category, and social culture information. Due to space limitations, partial literature coding information is shown in Table 1 .

## 4. Research Results

Based on 104 studies, this study identified eight antecedents of online information seeking intention (perceived risk, self-efficacy, perceived usefulness, perceived ease of use, source credibility, information quality, information literacy, and anxiety), 178 independent effect sizes, and 64,746 samples for meta-analysis.

**4.1 Publication Bias Testing** Systematic factors may prevent some relevant literature from being collected, potentially biasing meta-analysis results. For instance, journals tend to accept articles showing significant relationships between variables, while studies with non-significant results may remain unpublished. Such situations are unavoidable and require proper reporting of publication bias to minimize its impact. Therefore, this study first used funnel plots for visual observation (Figure 2 [Figure 2: see original paper]), showing that effect sizes from included studies were basically symmetrically distributed on both sides of the overall effect, indicating no substantial publication bias.

To overcome the subjectivity of visual funnel plot inspection, this study employed Fail-Safe N, Rank Correlation, and Trim & Fill methods for quantitative publication bias testing. The criteria for no publication bias across three methods are: Fail-Safe N test requires $Z > 1.96$, $p < 0.05$; Rank Correlation test requires $p > 0.05$ with or without continuity correction; Trim & Fill requires examining corrected point estimates—if point estimates change substantially but do not affect final results, publication bias is acceptable. As shown in Table 2 , comprehensive testing indicates that publication bias for variables in included studies is moderate and acceptable.

**4.2 Heterogeneity Testing** Given differences in research contexts, quality, methods, and samples across included studies, effect size variation may not result solely from sampling error but from genuine differences in true effect sizes across studies. Therefore, heterogeneity testing is required. Results confirmed expectations (Table 3 ), with Q-test results for all factors being significant ($p < 0.001$), indicating heterogeneity among effect sizes. Additionally, I-squared

values all exceeded 75%, further indicating high heterogeneity. Consequently, this study selected random-effects models determined by both within-group and between-group errors and conducted moderation analysis.

**4.3 Overall Effect Testing** Using random-effects models to analyze each influencing factor, forest plots are shown in Figure 3 [Figure 3: see original paper]; descriptive statistics including factor effect sizes and 95% confidence intervals are presented in Table 4 . Figure 3 and Table 4 show that all eight influencing factors exert significant positive effects on users' online information seeking intention.

**4.4 Moderation Testing** Heterogeneity testing revealed high heterogeneity among study samples, suggesting significant moderating variables may exist. To scientifically explain heterogeneity causes, moderation testing is necessary. This study conducted moderation analysis on five variables: search channel (Internet, social media, search engine), search context (health information seeking, academic information seeking, leisure/consumption information seeking, other information seeking), education level (high vs. low, with high defined as >40% graduate education or >60% undergraduate education), identity category (general public, college students/researchers, other specific groups), and social culture (mainland China, Taiwan, Hong Kong, foreign countries) to test whether external characteristics moderate effect sizes. Note that "Internet" in search channel represents online information seeking channels not specifically identified as social media or professional search engines. "General public" in identity category refers to populations without specific identity designation. Analysis results are shown in Tables 5 and 6 , where $p < 0.05$ indicates significant effect size differences under that moderating variable.

## 5. Discussion

### 5.1 Analysis of Information Seeking Antecedents

**5.1.1 Perceived Risk and Anxiety** Results show that users' online information seeking intention positively correlates with perceived risk and anxiety ($r = 0.166$, $p < 0.001$; $r = 0.244$, $p < 0.01$). Specifically, in health, leisure, academic, and work contexts, user decisions involve uncertainty about behavioral processes or outcomes. Higher uncertainty leads to greater risk perception and more frequent information seeking behavior, potentially generating different search strategies. For example, when patients are uncertain which medication best matches their condition, perceived risk arises, triggering online information seeking behavior around information needs. Similarly, anxiety significantly affects users' online information seeking intention—stronger anxiety increases likelihood of online information seeking to eliminate doubts. This study comprehensively analyzes multiple search contexts while considering channel and user characteristics, reaffirming through meta-analysis the effects of perceived

risk and anxiety on online information seeking intention across various contexts, demonstrating the generalizability of their mechanisms.

**5.1.2 Self-Efficacy and Information Literacy** Meta-analysis results show that users' online information seeking intention positively correlates with self-efficacy and information literacy ($r = 0.309$, $p < 0.001$; $r = 0.389$, $p < 0.001$). Specifically, users with higher confidence are more likely to satisfy information needs through online seeking. Self-efficacy increases with users' desire for health, research, entertainment, and other information. Individuals who actively engage in healthcare and academic research contexts believe relevant channel information can influence outcomes of their concerns and have greater confidence in their ability to obtain relevant information online. Users with high self-efficacy can better clarify information seeking tasks, set goals and expected outcomes, and adopt more active information seeking strategies. Users with high information literacy have stronger intentions and more active behaviors in online information seeking. Combined with these findings, we can be more confident that self-efficacy and information literacy inherit mechanisms from traditional offline environments, significantly affecting users' online information seeking intention and playing important roles between user information needs, Internet usage, and information seeking processes and outcomes.

**5.1.3 Perceived Usefulness and Perceived Ease of Use** Results show that perceived usefulness and perceived ease of use positively correlate with online information seeking intention ($r = 0.509$, $p < 0.001$; $r = 0.384$, $p < 0.001$). Specifically, based on past online information seeking experience, stronger perceptions of information usefulness and platform ease of use lead to higher satisfaction, which in turn increases information seeking frequency. As classic TAM constructs, perceived usefulness and perceived ease of use unsurprisingly significantly affect users' online information seeking intention across multiple contexts. These results provide meta-analytic empirical support for the generalizability of these constructs' effects on information system usage intention.

**5.1.4 Source Credibility and Information Quality** Meta-analysis results show that online information seeking intention positively correlates with source credibility and information quality ($r = 0.441$, $p < 0.001$; $r = 0.466$, $p < 0.001$). Specifically, source credibility directly affects user information satisfaction and perceived information usefulness, thereby influencing users' intention to use that source for information seeking. Information quality dimensions such as accuracy, completeness, and consistency significantly and directly affect users' online information seeking intention, and as perceived information quality increases, so does the probability of information adoption. Whether users focus on health, explore academia, or enjoy entertainment, source credibility and information quality serve as screening mechanisms for users to evaluate information usefulness and represent important manifestations of information value, significantly enhancing perceived usefulness and strengthening online information

seeking intention.

**5.2 Moderation Analysis** Meta-analysis results show that effects of relevant antecedents on users' online information seeking intention are moderated by search channel, search context, education level, social culture, and participant age.

**5.2.1 Search Channel** Search channel moderates the effects of perceived risk, self-efficacy, and information literacy on online information seeking intention ($Q = 4.226$, $p = 0.040$; $Q = 13.283$, $p = 0.001$; $Q = 26.275$, $p = 0.000$). Specifically, compared to the Internet, social media environments show stronger positive effects of perceived risk on online information seeking intention. Compared to other channel types, search engine environments show stronger positive effects of self-efficacy and information literacy. Channel trust or familiarity affects users' information seeking behavior and is a key explanatory variable for risk information seeking behavior. The moderating mechanism of search channel on perceived risk may be that when individuals perceive health or consumption risks, they may use multiple channels to verify information. When obtaining authoritative, reliable information from professional websites, uncertainty-induced risk perception significantly decreases. When obtaining large amounts of false, erroneous, exaggerated, or contradictory information through social media, uncertainty increases, making risk perception regarding time and result credibility important considerations. The moderating mechanism on self-efficacy and information literacy may be that strong self-efficacy not only provides confidence for adapting to search channels but also affects search motivation. Different search channels present different information technology environments that affect users' information collection, evaluation, and utilization through psychological stress mechanisms. Compared to familiar social media, self-efficacy and information literacy effects may be more pronounced when using professional, functionally complex search engines.

**5.2.2 Search Context** Search context moderates the effects of source credibility, information literacy, and anxiety on online information seeking intention ($Q = 11.704$, $p = 0.008$; $Q = 4.650$, $p = 0.031$; $Q = 348.333$, $p = 0.000$). Specifically, compared to other contexts, source credibility shows stronger positive effects in leisure/consumption, health, and academic seeking contexts. Information literacy shows stronger positive effects in academic than health contexts, while anxiety negatively affects online information seeking intention in academic contexts but positively in health and consumption contexts. The moderating mechanism on source credibility may be that while source credibility is an important screening variable for information usefulness, different contexts have significantly different requirements for information accuracy, completeness, and usefulness. In leisure/consumption, health, and academic contexts, information quality and usefulness directly affect decision-making that may have serious financial, health, or work consequences, making source credibility, information

quality, and usefulness crucial dimensions. The moderating mechanism on information literacy may be that information literacy is a prerequisite for academic research, more important than in health contexts. Academic research requires analyzing problems based on existing knowledge and theories, where high information literacy enables rapid, accurate information acquisition and critical evaluation to facilitate research. Differences in anxiety effects across contexts may result more from anxiety type and degree than context differences. When anxiety and worry about health, academics, or leisure/consumption spread, this emotion positively promotes online information seeking intention. However, if excessive complex information exceeds processing capacity in a short time, information anxiety may arise, affecting intention and potentially leading to task abandonment.

**5.2.3 Education Level** Users' education level moderates the effects of self-efficacy, source credibility, and information quality on online information seeking intention ($Q = 7.031$, $p = 0.030$; $Q = 14.926$, $p = 0.001$; $Q = 74.224$, $p = 0.000$). However, after removing interfering literature without reported education levels, education level only moderates self-efficacy effects ($Q = 6.790$, $p = 0.009$). Among highly educated users, self-efficacy shows stronger positive effects on online information seeking intention. Generally, highly educated individuals have higher comprehensive qualities, which correlate with more past successful experiences that enhance confidence in completing tasks. Self-efficacy and education are highly correlated. High self-efficacy groups have higher expectations and willingness to accept challenges. Among highly educated individuals, rich knowledge and experience from past learning help them quickly acquire and accurately evaluate relevant information, while less educated individuals may lack relevant knowledge and face obstacles in information acquisition and evaluation, needing to focus on channel ease of use and information discrimination. Therefore, self-efficacy effects on online information seeking intention are more pronounced among highly educated users.

**5.2.4 Identity Category** User identity category moderates the effects of self-efficacy, perceived usefulness, perceived ease of use, and information literacy on online information seeking intention ($Q = 12.155$, $p = 0.002$; $Q = 6.893$, $p = 0.032$; $Q = 14.433$, $p = 0.001$; $Q = 7.539$, $p = 0.023$). Specifically, college students/researchers show the weakest positive effects of self-efficacy and perceived ease of use, but the strongest positive effect of perceived usefulness compared to other specific groups. In most cases, college students/researchers frequently use various channels to search for academic information due to required learning or research tasks, mastering various search engines or professional databases, thus naturally weakening self-efficacy and perceived ease of use effects. For learning or research purposes, perceived knowledge usefulness is the most important outcome measure. Additionally, through reading, screening, thinking about, and researching obtained materials, they gain inspiration and new knowledge to explore unknown scientific fields and complete specific tasks.

Faced with massive database literature, their information awareness and abilities to acquire, evaluate, and effectively utilize information become particularly important. Therefore, compared to other groups, information literacy shows the strongest positive effect on online information seeking intention among college students/researchers, highly related to their learning or work nature.

**5.2.5 Social Culture** Social culture exerts interfering moderation on the effects of self-efficacy, perceived ease of use, and source credibility on online information seeking intention ($Q = 14.510$, $p = 0.001$; $Q = 9.944$, $p = 0.019$; $Q = 25.459$, $p = 0.000$). Specifically, under mainland China's social culture, self-efficacy shows stronger positive effects. Compared to Taiwan and foreign cultures, mainland China and Hong Kong show stronger positive effects of perceived ease of use. Under mainland Chinese and foreign cultures, source credibility shows significantly stronger positive effects than in Taiwan. Individuals from different regions are influenced by various social cultural factors including social environment, education, publicity, and value orientation, leading to ideological differences. Users with different ideologies show significant differences in customs, lifestyles, perspectives, and behavioral norms, resulting in different understandings and cognitions of the same things, making these differences understandable.

## 6. Conclusion

This study employed meta-analysis, selecting eight antecedents and five moderators from 104 empirical studies to conduct combined analysis of relationships between major influencing factors and online information seeking intention. Through meta-analysis procedures, detailed correlations between antecedents and outcomes were elaborated, with further analysis of five moderators' effects. Results show that perceived risk is weakly positively correlated with online information seeking intention, moderated by search channel; self-efficacy is positively correlated with online information seeking intention, with relationships varying by search channel, education level, identity category, and social culture; perceived usefulness is strongly correlated with online information seeking intention, moderated by identity category; perceived ease of use is positively correlated with online information seeking intention, with relationships varying by identity category and social culture; source credibility is significantly positively correlated with online information seeking intention, moderated by search context, education level, and social culture; information quality is significantly positively correlated with online information seeking intention, moderated by education level; information literacy is positively correlated with online information seeking intention, with relationships varying by identity category, search channel, and search context; anxiety is positively correlated with online information seeking intention, moderated by search context.

This meta-analysis effectively integrates previous research, forming new understandings of past inconsistent results and providing new perspectives for future

research. However, limitations remain: (1) To enhance conclusion persuasiveness, meta-analysis requires strict literature data standards and large samples. Although this study included 104 studies meeting minimum requirements for each variable, some variables had relatively few effect sizes. (2) Limited by literature quantity, like most meta-analyses, this study included variables with similar definitions or measurement dimensions. While this may not necessarily cause statistical bias, more reliable overall estimates would result from analyzing literature with identical variable meanings and measurement methods. Future meta-analyses should not only ensure adequate literature quantity but also emphasize original literature data quality and clarity of variable conceptual definitions and measurement tool selection to increase conclusion accuracy.

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### Author Contributions

Li Huafeng: Conceptualized the research, wrote and revised the manuscript;
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*Note: Figure translations are in progress. See original paper for figures.*