ChinaRxiv

AI translation · View original & related papers at
chinarxiv.org/items/chinaxiv-202308.00525

Factors Influencing User Information Seeking in Social Q&A Platforms: A Mixed-Methods Perspective (Postprint)

Authors: Chen Xiaoyu, FU Shaoxiong, Deng Shengli

Date: 2023-08-27T00:00:00+00:00

Abstract

[Purpose/Significance] Although existing scholars have empirically analyzed the influencing factors of information seeking behavior among social Q&A users, current research has not yet explored how the combination and configuration of these influencing factors affect information seeking. To address this research limitation, from a mixed-methods perspective and building upon regression analysis, this study employs Qualitative Comparative Analysis (QCA) to deepen the understanding of how user characteristic factors and motivational factors combine and configure to produce effects. [Method/Process] By reviewing prior research on the influencing factors of online users' information seeking behavior, this paper identifies that QCA can be employed to address existing research limitations. Using information seeking in social Q&A as an empirical case, this study applies both regression analysis and QCA to analyze the influencing factors of users' information seeking behavior in social Q&A communities, and compares and summarizes the results obtained from these two methods. [Result/Conclusion] The study demonstrates that regression analysis helps researchers identify which factors significantly affect online users' information seeking behavior, while the QCA method helps researchers discover how these influencing factors combine and configure to produce effects.

Full Text

Preamble

Volume 62, Issue 20, October 2018
ChinaXiv Cooperative Journal

ChinaRxiv 中X

Research on Influencing Factors of Social Q&A Users' Information Seeking Behavior: A Mixed-Methods Perspective

Chen Xiaoyu[1], **Fu Shaoxiong**[2], **Deng Shengli**[2]
[1] Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore 637718
[2] School of Information Management, Wuhan University, Wuhan 430072

Abstract

[**Purpose/Significance**] Although previous studies have empirically examined the influencing factors of social Q&A users' information seeking behavior, current research has not yet explored how combinations of these factors affect information seeking. To address this limitation, this study adopts a mixed-methods perspective, employing qualitative comparative analysis (QCA) based on regression analysis to deepen understanding of how user characteristic factors and motivational factors combine to influence information seeking. [**Method/Process**] By reviewing prior research on influencing factors of online users' information seeking behavior, this study demonstrates how QCA can address existing limitations. Using social Q&A users' information seeking as an empirical case, the study applies both regression analysis and QCA to analyze influencing factors, comparing and summarizing results from both methods. [**Result/Conclusion**] Findings indicate that regression analysis helps identify which factors significantly affect users' information seeking behavior, while QCA reveals how these factors combine and interact to produce effects.

Classification Number: G254
Keywords: Social Q&A; User Information Behavior; Information Seeking Behavior; Mixed Methods; Qualitative Comparative Analysis; Regression Analysis

DOI: 10.13266/j.issn.0252-3116.2018.20.012

Research on social Q&A users' information seeking behavior constitutes an important component of online user information seeking studies, with influencing factors representing a key research focus [1]. While prior empirical research has identified user characteristics, motivational factors, and contextual factors as significant influences on information seeking [2-7], current studies have not examined how conditional combinations of these factors impact information seeking behavior [8]. Clarifying how different factors combine to influence users' information seeking would deepen understanding of the underlying mechanisms. Mixed methods research, which combines quantitative and qualitative approaches to address research questions [11], has been advocated in library and information science [11-12], yet empirical applications remain limited in domestic information science research on information seeking behavior [10], despite growing international attention [13-14].

QCA, as a qualitative method grounded in configurational theory, is particularly suited for analyzing combinations of factors leading to specific behavioral

outcomes [15]. When combined with regression-based quantitative research, QCA can enrich and deepen research conclusions [13]. Given the complexity of motivations underlying social Q&A users' information seeking, where different combinations of antecedent conditions may produce the same behavior, QCA offers an appropriate analytical framework. This study addresses the question: Which user characteristic factors (age, gender, Q&A service usage experience) combine with which motivational factors (information need, affinity, satisfaction) to positively promote information seeking (information seeking intention)?

This study reviews major findings from research on online users' information seeking influencing factors, identifies methodological limitations stemming from insufficient mixed-methods application, and introduces a specific mixed-methods approach—combining regression analysis with QCA. Using social Q&A users' information seeking as an empirical case, the study employs regression analysis and QCA to analyze influencing factors, with QCA enriching conclusions from regression analysis by exploring factor configurations.

2. Influencing Factors of Online Users' Information Seeking Behavior

Given limited research specifically on influencing factors in social Q&A contexts, this study expands its literature review to broader online user information seeking behavior. The review analyzes major influencing factors and research methods, categorizing them by factor level and methodological characteristics, with emphasis on recent publications.

In terms of influencing factors, research on online user information seeking behavior is extensive but lacks systematic synthesis [16]. Scholars have identified key factors from various theoretical perspectives. Professor R. Savolainen from Tampere University, Finland, a long-time researcher in this area, summarizes that influencing factors can be categorized into three levels [17-18]: user characteristic factors (personality, education, occupation, ethnicity, knowledge background) [19-23]; intrinsic or extrinsic motivational factors (information need, information source quality, information satisfaction) [5, 24-28]; and contextual factors (search environment, task type, task difficulty) [29-33].

Methodologically, information seeking research in library and information science employs diverse quantitative and qualitative methods. Common quantitative approaches include surveys, secondary data analysis, laboratory experiments, and field experiments; qualitative methods include interviews, case studies, and action research [10-11]. Most existing studies identify which factors positively or negatively affect information seeking, relying primarily on linear regression to examine average effects of various factors on cumulative behaviors or outcomes [34]. Table 1 summarizes relevant research on information seeking influencing factors.

Table 1 Relevant Research on Information Seeking Influencing Factors

Factor Category	Research Method	Representative Literature	Key Findings
User Characteristics	Survey	Y. Zhang, Y. Sun, Y. Kim (2017) [21]	User information seeking affected by education, income, personality traits, and resource usage experience
	Interview + Survey	K.S. Kim, S.C.J. Sin, T.L. Tsai (2014) [22]	Gender, grade, major, and task personality affect social media information seeking
	Experiment + Survey	N. Al-Muomen, A. Morris (2011) [23]	Information seeking behavior influenced by gender, nationality, and information literacy
		Sun Li, Cao Jindan (2016) [35]	Education level significantly affects information seeking behavior
Motivational Factors	Survey	L. Lu, Y.C. Yuan (2011) [24]	Information need positively affects information seeking

Factor Category	Research Method	Representative Literature	Key Findings
		Cha Xianjin, Zhang Jinchao, Yan Yalan (2015) [36]	Microblog users' information seeking affected by source credibility and information quality
		Fu Shaoxiong, Chen Xiaoyu, Deng Shengli (2017) [25]	Information adoption directly and indirectly (via satisfaction) affects continued information seeking; critical thinking efficacy negatively moderates this relationship
	Secondary Data Analysis	Liu Man (2013) [37]	Information need, participation, epistemic belief, and self-efficacy affect information seeking

Factor Category	Research Method	Representative Literature	Key Findings
Contextual Factors	Meta-analysis	Ke Qing, Sun Jianjun, Cheng Ying (2015) [33]	Field-independent users show higher time performance; field-dependent users show higher achievement performance
		Deng Shengli, Fu Shaoxiong, Chen Xiaoyu (2017) [38]	Context affects health information media selection; convenience, satisfaction, and quality influence media choice
		Wang Fang, Zhang Xin, Zhai Yujia (2017) [39]	Environment and task factors affect information seeking
		M. Sanchez, A. Chevalier, F. Amadieu (2017) [40]	Task type and complexity affect information seeking

3. Introducing Mixed Methods: Regression Analysis and QCA

In information systems research, Venkatesh, Brown, and Bala [41] established guidelines for mixed-methods research covering basic principles and validity testing. Zhu and Zhao [11] argue that introducing mixed methods to information science requires concrete cases to demonstrate theoretical rationale, design patterns, and purposes, thereby highlighting advantages. Drawing on these guidelines, this study designs a mixed-methods approach for the research question,

as shown in Table 2 .

Table 2 Criteria for Implementing Mixed-Methods Research

Criterion	Implementation in This Study
Mixed-Methods Rationale	Regression analysis examines cumulative quantitative effects; QCA treats cases as complete sets of condition combinations, with different combinations as subsets, grounded in configurational theory
Mixed-Methods Design	Sequential design: quantitative research first, followed by qualitative research
Mixed-Methods Purpose	Use QCA results to enrich and support regression analysis conclusions
Meta-Inference	QCA (qualitative) deepens regression (quantitative) findings by providing more contextualized conclusions
Research Design Validity	Current understanding of factor combinations' effects is limited; QCA explores configurations based on regression-validated factors
Quantitative Validity	Cronbach's α, composite reliability, average variance extracted, factor loadings and cross-loadings
Qualitative Validity	Coverage and consistency metrics
Mixed-Methods Process	First, regression analysis validates significant factors; then QCA identifies factor combinations leading to information seeking

This study combines regression analysis (quantitative) with QCA (qualitative). Methodologically, regression examines cumulative quantitative effects of factors [15], while QCA analyzes cases as sets of condition combinations based on configurational theory [34]. The sequential design (quantitative first, qualitative second) aims to deepen quantitative findings with contextualized explanations [11]. QCA uses Boolean algebra principles for data coding, representing condition presence as 1 and absence as 0.

QCA has been applied in knowledge management, consumer behavior, and IS research [42, 44, 46, 49]. In library and information science, few studies have used QCA to analyze health information seeking in online communities [8]. Sun and Shi [45] used QCA to analyze causes of irrational clustering behavior in Chinese social networks, finding it resulted from multiple factor combinations.

4. Empirical Analysis Based on Regression and QCA

This study examines influencing factors of social Q&A users' information seeking, exploring how two factor levels (user characteristics and motivational factors) combine to positively affect information seeking behavior. Based on prior

research, six key variables were selected and categorized into these two levels. Variable names, definitions, and sources appear in Table 3 . These variables were identified as important influencing factors in previous studies [3, 5, 25]. Measurement details and sources are available in the authors' prior research [3, 5], with specific measurement items shown in Table 4 .

Table 3 Research Variables and Definitions

Variable	Definition	Source
Information Need	User's strong desire to obtain information	S.C.J. Sin (2015) [52]
Affinity	User's liking and integration with social Q&A platform	T.D. Wilson (1997) [53]
Information Satisfaction	User's satisfaction with platform information	X. Zha et al. (2015) [26]
Information Seeking	User's willingness to seek information on Q&A platforms	A. Bhattacherjee (2001) [54] Y. Yan, R.M. Davison [28]

Table 4 Measurement Scales

Construct	Measurement Items	Source
Information Need	On Zhihu, I feel my knowledge 储备 is insufficient in some areas On Zhihu, I have strong desires to understand certain domains On Zhihu, I have problems or troubles to solve On Zhihu, I need others' opinions for decision-making	T.D. Wilson (1997) [53] A. Zha et al. (2015) [26] Y. Yan, R.M. Davison [28] A. Bhattacherjee (2001) [54]
Information Satisfaction	Overall experience using Zhihu: very dissatisfied—very satisfied	
Affinity	Using Zhihu has become part of my daily life Zhihu is very important to me I cannot bear not using Zhihu for several consecutive days	
Information Seeking	I frequently use Zhihu to seek information I spend much time seeking information on Zhihu	

Construct	Measurement Items	Source
	I regularly use Zhihu to seek information I frequently use Zhihu to seek information	

4.1 Data Collection

Data were collected through a self-reported online questionnaire targeting Zhihu users (both information seekers and contributors) from January to March 2016. Sampling employed a snowball approach: inviting friends, classmates, and relatives to participate, who then invited their contacts. Research indicates this relationship-based sampling yields more credible responses than random sampling [25]. Additionally, using Zhihu's private messaging function, questionnaires were sent to followers and followees of a specific user with library/information science backgrounds or interests. This approach targeted core Zhihu users, yielding high-credibility responses.

A total of 278 valid questionnaires were collected. Demographic information appears in Table 5 . The questionnaire had two parts: (1) measurement scales for research variables, and (2) demographic information (including user characteristics). A 7-point Likert scale measured perceived levels (1-7).

To ensure samples from both channels represented the same population, chi-square tests compared demographic characteristics (gender, age, education, Q&A service experience). Results showed no significant differences in age (^{2}=2.791, p=0.257), education (^{2}=1.601, p=0.449), or experience (^{2}=2.021, p=0.568), though gender differed significantly (^{2}=6.240, p=0.012). Overall similarity indicated both samples came from the same target population [55].

Table 5 Sample Demographics

Characteristic	Category	Percentage (%)
Gender	Male	48.20
	Female	51.80
Age	18-22	21.58
	23-28	76.98
Education	High school or below	1.44
	Undergraduate	50.36
	Graduate or above	48.20
Q&A Platform Experience	<1 year	30.94
	1-3 years	39.57
	>3 years	29.49

4.2 Regression Analysis

4.2.1 Reliability and Validity Testing Measurement reliability was assessed using three criteria: Cronbach's α, composite reliability (CR), and average variance extracted (AVE), with critical values of 0.70, 0.70, and 0.50 respectively [56]. All variables met these thresholds (Table 6), indicating satisfactory reliability.

Table 6 Reliability Test Results

Variable	Items	Mean	SD	Cronbach's α	CR	AVE
Information Need	4	5.310	0.964	0.893	0.879	0.532
Affinity	3	3.394	1.400	0.913	0.818	0.825
Information Satisfaction	3	4.906	0.848	0.934	0.917	0.733
Information Seeking	4	3.739	1.446	0.940	0.940	0.798

Validity was assessed through factor loadings and cross-loadings. When an item's loading on its intended construct substantially exceeds loadings on other constructs, discriminant validity is supported. Table 7 shows good discriminant validity between most constructs and good convergent validity within constructs [57].

Table 7 Factor Loading Matrix

Item	Information Need	Affinity	Satisfaction	Information Seeking
IN1	0.941	0.248	0.229	0.180
IN2	0.839	0.393	0.300	0.631
IN3	0.393	0.464	0.282	0.642
AFF1	0.446	0.400	0.286	0.391
AFF2	0.400	0.642	0.205	0.784
AFF3	0.418	0.395	0.201	0.322
SAC1	0.395	0.244	0.793	0.428
SAC2	0.333	0.405	0.867	0.285
SAC3	0.405	0.314	0.847	0.401
IS1	0.314	0.306	0.928	0.462
IS2	0.286	0.205	0.883	0.401
IS3	0.205	0.201	0.855	0.847

Note: IN=Information Need; AFF=Affinity; SAC=Satisfaction; IS=Information Seeking

4.2.2 Regression Analysis Results SPSS Statistics 21.0 conducted linear regression analysis (Table 8). Motivational factors showed significant positive

effects: affinity and satisfaction significantly affected information seeking. Information need also positively affected information seeking when considered alone, but became non-significant when affinity was included. Following Baron and Kenny's mediation criteria [58], affinity fully mediated the relationship between information need and information seeking [5].

Among user characteristics, gender and experience significantly affected information seeking. Male users showed stronger information seeking intention than females. Experienced users demonstrated stronger seeking intention than inexperienced users. Age had no significant effect.

Table 8 Linear Regression Results

Variable	Model 1	Model 2	Model 3
Information Need	0.271**	0.055 n.s.	0.034 n.s.
Affinity		0.709***	0.203**
Information Satisfaction			0.684***
User Characteristics			
Gender			-0.006 n.s.
Age			-0.168**
Experience			0.120**
Total R^2 (%)			

Note: ***p<0.01;*** p<0.001; n.s. not significant*

4.3 Qualitative Comparative Analysis (QCA)

4.3.1 Data Calibration This study employs fuzzy-set QCA (fsQCA) to identify factor combinations leading to information seeking, following similar information behavior studies [8, 15, 40, 42]. fsQCA selects combinations with maximum coverage and consistency. Since the 7-point Likert data cannot be simply dichotomized, values were transformed to 0-1 probabilities based on configuration theory: higher original values correspond to higher fsQCA values, reflecting greater occurrence probability [15].

Transformation followed these rules: original $1\$ \rightarrow 0, 7 \rightarrow 1; intermediate values transformed as 2 \rightarrow 0.2, 3 \rightarrow 0.3, 4 \rightarrow$ based on Liu et al.'s [15] calibration method.

User characteristic factors required different transformation: gender (male=0, female=1); age and experience frequencies were transformed according to Table 9 rules, also following Liu et al. [15].

Table 9 Data Transformation Rules

Original Value	Age	Experience
18-22	1	

Original Value	Age	Experience
23-28	0.6	
29-35	0.3	
>35	0	
<1 year	0	
1-3 years	0.6	
>3 years	1	

4.3.2 Results Analysis Analysis used the "QCAGUI" R package developed by Dusa. Based on regression results showing age's negative effect (β=-0.006), the youngest age group was coded as 1 and oldest as 0. Condition combinations were analyzed to identify those leading to information seeking. Following established standards, combinations with consistency >0.90 and frequency >3 were accepted as valid [15].

Table 10 presents five such combinations. Combination 1 shows that users with strong information needs engage in information seeking. Combination 2 indicates that users with strong affinity and high satisfaction seek information. Combination 3 reveals that older female users with strong affinity seek information. Combination 4 demonstrates that experienced users with strong affinity seek information. Combination 5 shows that male users with high satisfaction seek information.

Additionally, one sufficient condition combination was identified: (IN • AFF • AGE • GEN • EXP)→information_ This means younger, experienced female users with strong information needs and affinity will invariably seek information.

Table 10 fsQCA Analysis Results

Combination	Raw Coverage	Unique Coverage	Consistency	Solution Coverage	Solution Consistency
IN	0.142	0.008	0.642		
AFF • SAC	0.451	0.042	0.938		
AGE • GEN • AFF	0.338	0.027	0.957		
EXP • AFF	0.332	0.021	0.933		
GEN • SAC	0.274	0.033	0.929		
Overall Solution				0.915	0.936

Note: IN=Information Need; AFF=Affinity; SAC=Satisfaction; AGE=Age; GEN=Gender; EXP=Experience; • indicates condition must be present; blank indicates condition may be present or absent

5. Results Analysis and Discussion

This mixed-methods study employed linear regression and QCA to examine social Q&A users' information seeking. Regression validated whether six factors significantly affected seeking, while QCA identified factor combinations producing information seeking (Table 11).

Table 11 Mixed-Methods Results Analysis

Research Stage	Method	Key Findings
Quantitative	Regression Analysis	• Information need positively affects information seeking • Affinity affects information seeking • Satisfaction affects information seeking • Affinity fully mediates information need's effect • Male users show stronger seeking intention • Experienced users show stronger seeking intention
Qualitative	QCA Analysis	• Some users seek information due to strong information needs • Some users seek due to strong affinity + high satisfaction • Older female users seek due to strong affinity • Experienced users seek due to strong affinity • Some male users seek due to high satisfaction • Young, experienced females with strong needs and affinity will invariably seek information

Regression results show that motivational factors significantly affect social Q&A users' information seeking. Information need has a positive direct effect, but affinity fully mediates this relationship—information need must operate through affinity to influence seeking. Among user characteristics, gender and experience significantly affect seeking: males and experienced users show stronger intentions.

QCA emphasizes case-specific factor combinations. The five core combinations reveal distinct user profiles: (1) high-need users, (2) high-affinity + high-satisfaction users, (3) older high-affinity females, (4) experienced high-affinity users, and (5) high-satisfaction males. The sufficient condition combination identifies young, experienced females with strong needs and affinity as invariably engaging in information seeking.

This study demonstrates that regression identifies general trends—information need, affinity, and satisfaction generally affect seeking—while QCA reveals "robust" condition combinations among high-intention users. Rather than analyzing effect magnitudes, QCA examines post-hoc case characteristics to identify necessary and sufficient factor combinations.

Future research should extract samples matching these combinations for deeper analysis through interviews or focus groups to understand why specific combinations lead to the same behavior.

Acknowledgments: The authors thank Dr. Liu Yong, Assistant Professor at Aalto University School of Business, for methodological guidance and literature support on qualitative comparative analysis.

References

[1] SHAH C. Online question-answering (Q&A) [M] // Social information seeking. Berlin: Springer, Cham, 2017: 45-74.
[2] CHOI E, SHAH C. Asking for more than an answer: what do askers expect in online Q&A services? [J]. Journal of information science, 2017, 43(3): 424-435.
[3] CHEN X, CHUA AYK, DENG S. Comparing the web and mobile platforms of a social Q&A service from the user's perspective [J]. Aslib journal of information management, 2018, 70(2): 176-190.
[4] CHOI E, SHAH C. User motivations for asking questions in online Q&A services [J]. Journal of the Association for Information Science and Technology, 2016, 67(5): 1182-1197.
[5] DENG S, CHEN X, FU S. Research on the influence of user information needs on information seeking in social Q&A communities: mediating effect of community involvement [J]. Information Science, 2017, 35(7): 3-8.
[6] JIANG T, YANG Y, QIN J, et al. Information needs in status message questions [J]. Library and Information Service, 2017, 61(22): 98-106.
[7] CHEN J, DENG S. Empirical analysis of user experience influencing factors in social Q&A platforms [J]. Information Resource Management Journal, 2017, 7(4): 80-88.
[8] DENG S, FU S. Application of qualitative comparative analysis (QCA) in library and information science: using online community health information seeking as example [J]. Information Science, 2017, 35(9): 24-29.
[9] ZHANG C, ZHENG X, WANG F. QCA in management configurational research: review and prospects [J]. Foreign Economics and Management, 2017,

39(4): 68-83.
[10] WANG F, ZHU N, ZHAI Y. Mixed methods application in Chinese information science: analysis and domain distribution [J]. Journal of the China Society for Scientific and Technical Information, 2017, 36(11): 1119-1129.
[11] ZHU Q, ZHAO Y. Theoretical exploration and application of mixed methods in information science [J]. Journal of the China Society for Scientific and Technical Information, 2013, 32(12): 1236-1247.
[12] YE Y. Scientific philosophical foundations and dual integration principles of qualitative and quantitative methods in library and information science [J]. Journal of Library Science in China, 2017, 43(2): 4-15.
[13] SUN Y, LU C. Information systems behavior research in the big data era [J]. Journal of Information Resource Management, 2018, 8(1): 39-54.
[14] ZHAO Y, XU X, PENG X, et al. Understanding user exodus in social networking sites: evidence from Kaixin001 [J]. Journal of the Association for Information Science and Technology, 2018, 69(4): 553-565.
[15] LIU Y, MEZEI J, KOSTAKOS V, et al. Applying configurational analysis to IS behavioral research: a methodological alternative for modeling combinatorial complexities [J]. Information Systems Journal, 2017, 27(1): 59-89.
[16] SAVOLAINEN R. Self-determination and expectancy-value: comparison of cognitive psychological approaches to motivators for information seeking about job opportunities [J]. Aslib Journal of Information Management, 2018(2): 123-140.
[17] SAVOLAINEN R. Approaching the motivators for information seeking: the viewpoint of attribution theories [J]. Library & Information Science Research, 2013, 35(1): 63-68.
[18] SAVOLAINEN R. Everyday life information seeking: approaching information seeking in the context of "way of life" [J]. Library & Information Science Research, 1995, 17(3): 259-294.
[19] DENG S, FU S. Research on group characteristic differences affecting health information seeking [J]. Information Resource Management Journal, 2016(4): 5-11.
[20] DENG S, FU S, LIU J. Group differences in online health information resource selection under task contexts [J]. Library and Information Service, 2017, 61(22): 98-106.
[21] ZHANG Y, SUN Y, KIM Y. The influence of individual differences on consumer's selection of online sources for health information [J]. Computers in Human Behavior, 2017, 67: 303-312.
[22] KIM KS, SIN SCJ, TSAI TI. Individual differences in social media use for information seeking [J]. Journal of academic librarianship, 2014, 40(2): 171-178.
[23] AL-MUOMEN N, MORRIS A, MAYNARD S. Modelling information-seeking behavior of graduate students at Kuwait University [J]. Journal of documentation, 2012, 68(4): 430-459.
[24] LU L, YUAN YC. Shall I Google it or ask the competent villain down the hall? The moderating role of information need in information source selection [J]. Journal of the American Society for Information Science and Technology,

2011, 62(1): 133-145.
[25] FU S, CHEN X, DENG S. Transformation of user information behavior in social Q&A communities: theoretical model from information adoption to continued seeking [J]. Library and Information Knowledge, 2017(4): 80-88.
[26] ZHA X, ZHANG J, YAN Y, et al. Does affinity matter? Slow effects of e-quality on information seeking in virtual communities [J]. Library & Information Science Research, 2015, 37(1): 68-75.
[27] SAVOLAINEN R. Information need as trigger and driver of information seeking: a conceptual analysis [J]. Aslib Journal of Information Management, 2017, 69(1): 2-21.
[28] YAN Y, DAVISON RM. Exploring behavioral transfer from knowledge seeking to knowledge contributing: the mediating role of intrinsic motivation [J]. Journal of the Association for Information Science and Technology, 2013, 64(6): 1144-1157.
[29] LIU P, YE F. Review of information seeking behavior research from cognitive perspective [J]. Information Science, 2017, 35(1): 161-168.
[30] LIU C, ZHAO Y, YANG F. Effects of time constraints and task order in user experiment design [J]. Library and Information Service, 2015, 59(1): 99-105.
[31] LI Y. Exploring relationships between work task and search task in information search [J]. Journal of the American Society for Information Science and Technology, 2009, 60(2): 275-291.
[32] JIANG T, CHI Y, GAO H. Clickstream data analysis of Chinese academic library OPAC users' information behavior [J]. Library & Information Science Research, 2017, 39(3): 213-223.
[33] KE Q, SUN J, CHENG Y. Effects of field-independent/field-dependent cognitive style on information seeking performance: meta-analysis [J]. Journal of the China Society for Scientific and Technical Information, 2015(6): 646-661.
[34] TANG R, TANG S. Historical heritage and democratic transition in former Soviet bloc countries: dual testing with fsQCA and mvQCA across 26 countries [J]. World Economics and Politics, 2013(2): 39-57.
[35] SUN L, CAO J. Effects of task performer characteristics on online information seeking [J]. Library and Information Service, 2016, 60(9): 83-90.
[36] CHA X, ZHANG J, YAN Y. Factors affecting users' academic information seeking in microblogging: dual-path perspective of information quality and source credibility [J]. Journal of Library Science in China, 2015, 41(3): 71-86.
[37] LIU M. Quantitative analysis of information seeking behavior research in China (2003-2013) [J]. Library Theory and Practice, 2013(6): 22-25.
[38] DENG S, FU S, CHEN X. Effects of information media on user health information seeking: dual perspective of health literacy and retrieval ability [J]. Information Science, 2017(4): 126-132.
[39] WANG F, ZHANG X, ZHAI Y. Review of information source selection research [J]. Information Science, 2017, 35(4): 126-132.
[40] SANCHEZ M, CHEVALIER A, AMADIEU F. How do older and young adults start searching for information? Impact of age, domain knowledge and problem complexity [J]. Computers in human behavior, 2017, 72: 67-77.

[41] VENKATESH V, BROWN S, BALA H. Bridging the qualitative-quantitative divide: guidelines for conducting mixed methods research in information systems [J]. MIS quarterly, 2013, 37(1): 21-54.
[42] FANG J, SHAO Y, WEN C. Transactional quality, relational quality, and e-loyalty: evidence from SEM and fsQCA [J]. International journal of information management, 2016, 36(6): 1205-1217.
[43] SCHNEIDER CQ, ROHLFING I. Case studies nested in fuzzy-set QCA on sufficiency: formalizing case selection and causal inference [J]. Sociological methods & research, 2016, 45(3): 526-568.
[44] TAN CW, BENBASAT I, CENFETELLI RT. An exploratory study of the formation and impact of electronic service failures [J]. MIS quarterly, 2016, 40(1): 1-29.
[45] SUN G, SHI W. Generation paths of irrational clustering behavior among university WeChat users: crisp-set QCA [J]. Information Science, 2017, 35(5): 150-156.
[46] BACKHANS MC, SARAH M, DANIEL B, et al. What is the impact of flexicurity on employment chances for people with low education and health-related activity limitations? QCA comparison of 21 European countries [J]. BMC public health, 2016, 16(1): 842-856.
[47] BAKKER RM, CAMBRE B, KORLAAR L, et al. Managing the project learning paradox: a set-theoretic approach toward project knowledge transfer [J]. International journal of project management, 2011, 29(5): 494-503.
[48] VIS B. The comparative advantages of fsQCA and regression analysis for moderately large-N analyses [J]. Sociological methods & research, 2012, 41(1): 168-198.
[49] CAMPBELL JT, SIRMON DG, SCHIJVEN M. Fuzzy logic and the market: a configurational approach to investor perceptions of acquisition announcements [J]. Academy of management journal, 2016, 59(1): 163-187.
[50] TAO Q, LI R, WANG Y. Innovation network configuration, environmental turbulence and innovation performance: QCA empirical analysis [J]. Science & Technology Progress and Policy, 2016, 33(18): 19-27.
[51] HE J. Fuzzy-set methods in comparative political analysis [J]. Social Sciences, 2013(5): 30-38.
[52] SIN SCJ. Demographic differences in international students' information source uses and everyday information seeking challenges [J]. The journal of academic librarianship, 2015, 41(4): 466-475.
[53] WILSON TD. Human information behavior [J]. Informing science, 2000, 3(2): 49-56.
[54] BHATTACHERJEE A. Understanding information systems continuance: an expectation-confirmation model [J]. MIS quarterly, 2001, 25(3): 351-370.
[55] SUN Y, FANG Y, LIM KH. Understanding knowledge contributors' satisfaction in transactional virtual communities: a cost-benefit trade-off perspective [J]. Information & management, 2014, 51(4): 441-450.
[56] FORNELL C, LARCKER DF. Evaluating structural equation models with unobservable variables and measurement error [J]. Journal of marketing research, 1981, 18(1): 39-50.

[57] CHIN WW. The partial least squares approach to structural equation modeling [J]. Modern methods for business research, 1998, 295(2): 295-336.
[58] BARON RM, KENNY DA. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations [J]. Journal of personality and social psychology, 1986, 51(6): 1173-1182.

Author Contributions:
Chen Xiaoyu: Conceptualization, literature review, questionnaire design, data collection, drafting and revision.
Fu Shaoxiong: Research framework design, literature review, data collection and analysis, revision.
Deng Shengli: Research framework guidance, paper revision.

Analyzing the Influencing Factors of Internet Users' Information-Seeking Behavior: A Mixed-Method Perspective

Chen Xiaoyu[1], Fu Shaoxiong[2], Deng Shengli[2]
[1] Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore 637718
[2] School of Information Management, Wuhan University, Wuhan 430072

Abstract: [Purpose/significance] Although previous studies have examined influencing factors of users' information seeking in social Q&A communities, current knowledge about how configurations of these factors impact information seeking is limited. [Method/process] To address this gap, this study uses a mixed-methods approach combining regression analysis and qualitative comparative analysis (QCA) to explore factor configurations that exert profound effects on users' information seeking. [Result/conclusion] Regression analysis findings contribute to exploring what factors may affect users' information seeking, while QCA findings contribute to understanding how these influencing factors are configured.

Keywords: Social Q&A; User Information Behavior; Information-Seeking Behavior; Mixed-Method; Qualitative Comparative Analysis (QCA)

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.