Collective impression management and collective privacy concerns in co-owned information disclosure: the mediating role of relationship support and relationship risk

Yafei Feng South China Normal University, Guangzhou, China Yan Zhang Lanzhou University, Lanzhou, China, and Lifu Li University of Technology Sydney, Sydney, Australia disclosure

Co-owned information

Received 19 May 2023 Revised 16 July 2023 3 October 2023 7 November 2023 Accepted 17 November 2023

Abstract

Purpose – The privacy calculus based on a single stakeholder failed to explain users' co-owned information disclosure owing to the uniqueness of co-owned information. Drawing on collective privacy calculus theory and impression management theory, this study attempts to explore the co-owned information disclosure of social network platform users from a collective perspective rather than an individual perspective.

Design/methodology/approach – Drawing on collective privacy calculus theory and impression management theory, this study explores the co-owned information disclosure of social network platform users from a collective perspective rather than an individual perspective based on a survey of 740 respondents. **Findings** – This study finds that self-presentation and others presentation directly positively affect users' co-owned information disclosure via relationship presentation indirectly positively affect users' co-owned information disclosure via relationship support. Furthermore, personal privacy concern, others' privacy concern and relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship resentationship privacy concern indirectly negatively affect users' co-owned information disclosure via relationship privacy concern indirectly negatively affect users' co-owned in

Originality/value – The findings develop the theory of collective privacy calculus and impression management, which offer insights into the design of the collective privacy protection function of social network platform service providers.

Keywords Co-owned information disclosure, Collective privacy calculus, Collective impression management, Relationship support, Relationship risk

Paper type Research paper

1. Introduction

With the development and application of social network technology, people's lives and work have become closely intertwined with social network platforms (Schlosser, 2020; Marengo *et al.*, 2022; Wang and Xie, 2022; Li and Hu, 2022), such as WeChat, Weibo and Facebook. In order to increase social interaction and maintain social relationships, people often share various types of information, including their location, photos and social activity records on these platforms (Choi and Sung, 2018; Mouakket and Sun, 2020; Javed *et al.*, 2023). Sharing daily life on social network platforms has become a common practice for many individuals (Yin *et al.*, 2021). Due to individuals' daily lives often being interconnected with those around them, including their



The work described in this paper was partially supported by the grants from the South China Normal University Youth Teacher Training Fund (22SK28) and the Fundamental Research Funds for the Central University (Project No. 2023lzujbkybh002).

Library Hi Tech © Emerald Publishing Limited 0737-8831 DOI 10.1108/LHT-05-2023-0196 friends, colleagues and family members (Rui and Stefanone, 2018; Choi *et al.*, 2015), their posts on social network platforms often include other people's information (Li *et al.*, 2019a, b; Such *et al.*, 2017), such as group photos and chat screenshots. In this study, the information that multiple people create or generate together is called co-owned information.

If an individual is an integral part of co-owned information, they can be considered as coowners or stakeholders of the information. Here is a simple but representative example: Bob, Alice and their friends had dinner together at the weekend. They had a pleasant time and took a selfie together. Later, Bob posted this photo on the social network platform. In this scene, the group photo is the information co-owned by Bob, Alice and other friends. Sharing co-owned information on the social network platform has become a widespread, natural and inevitable phenomenon (Li *et al.*, 2019a, b; Such and Criado, 2018). However, existing literature on information disclosure primarily focuses on information owned by themselves, overlooking the significance of co-owned information and relevant stakeholders. This gap indicates that the potential underlying mechanisms behind users' disclosure of their own information cannot directly explain co-owned information disclosure. As a result, understanding the driving factors and inhibitors related to the disclosure of co-owned information holds great theoretical and practical significance.

Privacy calculus theory is the most commonly used framework to explain the information disclosure of social network platform users (Rui and Stefanone, 2018; Hong *et al.*, 2020). Based on this framework, prior studies identify impression management (i.e. self-presentation) as the main driving factor for users to share information on social network platforms (Hong *et al.*, 2020; Sun *et al.*, 2021), while the concern about personal privacy is identified as the main obstacle for users to share information on social network platforms (Krasnova *et al.*, 2010; Jozani *et al.*, 2020). However, when the information is co-owned by multiple stakeholders with social relations, existing literature based on the privacy calculus and impression management falls short in explaining the motivations and obstacles for users' information disclosure.

First, previous studies on information disclosure only focused on the interests and risks of disclosers, ignoring the interests and risks of other stakeholders within the context of coowned information disclosure. Since there are multiple stakeholders of co-owned information, the disclosure of co-owned information will affect not only the information discloser but also related stakeholders (Rui and Stefanone, 2018). For example, sharing a group photo at a party on a social network platform may reveal not only the focal person's privacy but also the privacy of others in the photo. Therefore, on the one hand, users will weigh their interests and risks when disclosing co-owned information. On the other hand, users are also expected to weigh the interests and risks of other stakeholders, which previous studies have ignored.

Second, previous studies neglected the crucial role of social relationships in the process of privacy calculus within the context of co-owned information disclosure. In reality, the co-owned information that people want to share on social network platforms usually involves people who are relatively close to them. Moreover, there is often a particular social relationship between the information discloser and other stakeholders, such as classmate relationships and friend relationships. Compared with strangers, individuals pay more attention to the views and feelings of acquaintances. Therefore, the gains and losses of social relations with other stakeholders are expected to be an essential factor affecting people to share co-owned information on social network platforms, which has rarely been mentioned in previous studies.

Based on the research gaps, this study attempts to understand the motivations and obstacles for users to share co-owned information on social network platforms from a collective rather than an individual perspective. First, considering that there are multiple stakeholders in co-owned information, users are expected to consider not only their personal interests and risks but also the interests and risks of other stakeholders when disclosing information. Therefore, based on collective privacy calculus theory and impression management theory, this study explores the impact of users' perceptions of collective benefits (i.e. self-presentation, others presentation and relationship presentation) and risks (i.e. personal privacy concern, others' privacy concern and relationship privacy concern) on co-owned information disclosure. Second, due to the importance of social relationships among stakeholders, users are expected to value the maintenance and development of social relationships and avoid social risks. Therefore, in this study, the gains and losses of social relationships (i.e. relationship support and relationship risk) are considered as the key factors affecting users' co-owned information disclosure.

This study has several contributions. First, this study is the first to theorize and empirically analyze the phenomenon of co-owned information disclosure on social network platforms, which expands the research scenario and theoretical boundary of information disclosure. Second, this study develops a collective privacy calculus model to understand the co-owned information disclosure of social network platform users from the collective level rather than the individual level, extending the theoretical connotation of impression management theory and privacy calculus theory. Third, this study confirms the crucial role of relationship support and relationship risk in the collective privacy calculus process, which is conducive to the research of social relationships and privacy calculus. Finally, the findings of this study offer insights into the design of the collective privacy protection function of social network platform service providers.

2. Theoretical background

2.1 Co-owned information disclosure on social network platforms

In the digital age, social network platforms represented by Facebook and WeChat have become popular avenues for users to share their events, thoughts, feelings, emotions and hobbies in daily life in the form of text, pictures and videos (Wang *et al.*, 2022; Zhao *et al.*, 2021; Osatuyi, 2013). Compared with traditional social interaction limited by time and place, the digital contact with friends, colleagues and even strangers provided by the social network platform is continuous and borderless, so it has become the primary way of communication in modern society (James *et al.*, 2015; Marengo *et al.*, 2022; Javed *et al.*, 2023; Nabi *et al.*, 2023). An inevitable result of social interaction is self-disclosure, which is one of the main activities of users on social network platforms and has become a part of many people's daily life. Self-disclosure is defined as an individual's voluntary sharing of information with others (Cozby, 1973). Before the popularization of the Internet, the audience of self-disclosure was limited to friends, family members and people with similar geographical locations. With the possibility of open communication on the Internet, users' self-disclosure has reached a new level, and their audience is also far beyond their social field (Satici and Uysal, 2015).

In fact, individuals do not exist in isolation, and their daily lives are usually closely related to others, such as family members, friends and colleagues. Information content people share on social network platforms often involves other stakeholders (Li *et al.*, 2019a, b; Rui and Stefanone, 2018; Zhang *et al.*, 2022). When people share or present interesting events in their life, they often involve other people's participation in these activities (Li *et al.*, 2019a, b; Yu *et al.*, 2018). For example, When Bob talked about a wonderful weekend, he had to mention his friends' participation. When Bob wants to share photos with his friends at the weekend on the social network platform, he has to consider the interests of other stakeholders. Because the group photo contains more than one person, Bob and his friends in the photo are the co-owners of the photo.

Given that the co-owned information is owned by multiple stakeholders, there is a specific social relationship between these stakeholders, which makes the two-sided consequences of information disclosure more significant. On the one hand, sharing co-owned information can bring benefits not only to the discloser but also to other stakeholders. On the other hand, the negative impact of co-owned information sharing may also be enhanced, as it can negatively impact the discloser and other stakeholders.

2.2 Collective privacy calculus

Privacy calculus theory is the most commonly used framework in the study of individual information disclosure, which describes the process of the trade-off between costs and benefits when individuals disclose information (Laufer and Wolfe, 1977; Nabity-Grover *et al.*, 2020). Privacy calculus theory holds that users disclose personal information only when the benefit is greater than the risk (Smith *et al.*, 2011; Nguyen *et al.*, 2023). Furthermore, individual information disclosure behavior is also influenced by personality and background factors (Gutierrez *et al.*, 2019). Although most previous works have reported the negative impact of privacy issues on information disclosure, users still disclose information because they tend to overestimate benefits and underestimate privacy risks (Dinev and Hart, 2006; Jiang *et al.*, 2013).

However, the previous literature on users' information disclosure based on privacy calculus theory only focused on their own information, ignoring the information co-owned by information disclosers and related stakeholders. In fact, given that people's lives are not isolated, individuals often relate to the people around them when sharing their daily lives on social network platforms (Yu *et al.*, 2018; Cao *et al.*, 2018; Zhang *et al.*, 2022). Moreover, people understand privacy boundaries differently (Yuan and Bi, 2022). Therefore, the privacy calculus of individuals in co-owned information disclosure differs from that in self-disclosure. Within the research context of co-owned information disclosure, on the one hand, individuals will consider their benefits and risks when disclosing the information, which may be the primary consideration for individuals. On the other hand, because individual information disclosure will affect other stakeholders, individuals are expected to consider the benefits and risks of other stakeholders when disclosing the information.

2.3 Collective impression management

Impression management theory holds that individuals try to influence what others think of themselves by adjusting the information in social interaction (Goffman, 1959). In order to achieve a certain goal, people will try to manage or change the impression that others have formed about themselves. Goffman (1959) compares people in the real world with actors on the stage to explain impression management. Individuals are expected to enter role-playing in different interactive modes, whether face-to-face or online, and strive to impress others with their own edited versions (Goffman, 1959; Leary and Kowalski, 1990; Paliszkiewicz and Madra-Sawicka, 2016).

The development of Internet technology provides more choices for individual impression management. Social network platforms allow users to present themselves by sharing their daily life through text, pictures, videos and other ways (Pounders *et al.*, 2016). Users of social network platforms are considered to have more control over impression management because they have enough time to use the functions provided by the platform to present themselves (Krämer and Winter, 2008; Rui and Stefanone, 2013). Self-presentation plays a pivotal role in impression management, which encompasses any behavior in which individuals convey his or her self-image to others (Leary and Kowalski, 1990). Self-presentation is considered as one of the main motivations for users to share information on social network platforms (Paliszkiewicz and Madra-Sawicka, 2016; Hong *et al.*, 2020; Sun *et al.*, 2021).

However, in the scenario of co-owned information disclosure, because the information that individuals want to share is related to multiple stakeholders, individuals have to consider the interests of other stakeholders when sharing information. In order to maintain and develop social relationships, individuals will attach great importance to the benefits of other stakeholders. Therefore, individuals are expected to conduct collective impression management rather than just personal impression management. They will try to manage the impression that others have formed about the collective rather than just themselves. As a result, collective impression management is expected to be an essential driving factor for users to share co-owned information on social network platforms.

Co-owned information disclosure

2.4 Relationship support and relationship risk

Social network platforms have changed the way people establish and maintain relationships (Li *et al.*, 2020). More and more people interact with others on social network platforms, such as Facebook and WeChat. People often update their statuses and comment and share their daily life on social networks (Liu and Wang, 2018). Although people know that such information disclosure will reveal their privacy, such as hobbies and addresses, they still choose to disclose in order to make new friends and maintain old social relationships (Taddei and Contena, 2013). Relationship support refers to the extent to which individuals believe that specific behaviors can establish, maintain and enhance interpersonal relationships (Kim *et al.*, 2011). It is considered as an important motivation for individuals to disclose information on the social network platform (Taddei and Contena, 2013; Chen *et al.*, 2019). In the scenario of co-owned information disclosure, relationship support is the extent that the discloser believes that their information disclosure can improve the interpersonal relationship between the discloser and other stakeholders.

However, attempts to establish and maintain social relationships by sharing information on social networking platforms may also backfire. The ubiquitous network connection in the Internet era makes information shared online on an unprecedented scale (Li *et al.*, 2020). The popularity of social networks and their immediacy in content sharing have further expanded this. There is a special situation in information disclosure: users publish posts containing coowned privacy information on social network platforms, such as group photos, party information, collective activity information and location information. This kind of information disclosure may reveal not only the privacy of the information publisher but also the privacy of other stakeholders (Rui and Stefanone, 2018; Cao *et al.*, 2018). However, due to the blurring of the current privacy boundary, the mainstream social network platforms only provide the corresponding privacy setting functions for information publishers, and other stakeholders are in a passive position in this process (Li *et al.*, 2019a, b; Such and Criado, 2018; Cao *et al.*, 2018). The current laws and regulations also make it difficult to restrict users' disclosure of co-owned privacy. Embarrassing or inappropriate sharing of co-owned information can lead to the breakdown of social relationships (Such and Criado, 2018).

Relationship risk refers to the extent to which individuals believe that specific behaviors can destroy their interpersonal relationships (Xu *et al.*, 2009). Under the co-owned information disclosure scenario, relationship risk mainly reflects the potential loss that sharing co-owned information may bring to the social relationship between the discloser and other stakeholders. In general, the impact of co-owned information sharing on the social relationship between the discloser and related stakeholders is two-sided, with both opportunities and risks. Appropriate information disclosure can establish and maintain social relationships, while inappropriate information disclosure may be counterproductive.

3. Research model and hypotheses

In view of the uniqueness of co-owned information, this study attempts to explore the antecedents of co-owned information disclosure by taking collective privacy calculus theory and impression management theory as lens. This study proposes that collective impression management and collective privacy concerns will not only directly affect the co-owned information disclosure, but also indirectly affect the co-owned information disclosure through the benefit and risk of social relationships. The specific research model is shown in Figure 1.





3.1 Collective impression management and co-owned information disclosure

Impression management theory describes the process in which people try to manage and control others' impressions and views of themselves (Goffman, 1959). Individuals tend to present themselves in an image that matches their current social situation and interpersonal background to ensure that others make a positive evaluation of themselves (Bitterly and Schweitzer, 2019). Social network platforms allow users to manage their impressions through text, pictures and videos, providing multiple functions for users to show themselves (Sun et al., 2021). Sharing daily life on social network platforms has become a part of many people's lives, and self-presentation is also considered one of the main motivations for sharing information on social network platforms (Reed and Saunders, 2020; Yang and Ying, 2021).

In the context of co-owned information disclosure, the information is co-owned by the information disclosers and relevant stakeholders. This ownership implies the stakeholders' reasonable and legal right to obtain benefits from the information. Therefore, information disclosers are expected to consider not only their personal interests but also other stakeholders' interests. In this case, people's impression management on the social network platform will also change from personal impression management to collective impression management. Collective impression management focuses on self-presentation, others presentation and relationship presentation. The discloser achieves the shaping of selfimage through self-presentation, which reflects the personal interests of the discloser. Furthermore, in order to safeguard the interests of other stakeholders, the discloser is expected to strive to improve the image of other stakeholders. Moreover, relationship presentation can shape the ideal relationship image of the discloser and other stakeholders,

reflecting the friendly interpersonal relationship between the discloser and stakeholders, which is conducive to the improvement of the collective image of the discloser and stakeholders. Therefore, this study proposes the following hypotheses:

- *H1a.* Self-presentation is positively associated with co-owned information disclosure intention.
- *H1b.* Others presentation is positively associated with co-owned information disclosure intention.
- *H1c.* Relationship presentation is positively associated with co-owned information disclosure intention.

Relationship support reflects an individual's belief that specific behaviors can improve interpersonal relationships (Kim *et al.*, 2011). In the scenario of co-owned information disclosure, relationship support mainly refers to the extent that the discloser believes that their information disclosure can improve the interpersonal relationship between the discloser and other stakeholders. When individuals want to show their daily life involving other people, they are not only managing their own image, but also managing the image of other stakeholders. The way of such presentation, as a signal, shows goodwill to other stakeholders, indicating that the discloser cherishes and values their social relationships. Through collective presentation (i.e. self-presentation, others presentation and relationship presentation) on the social network platform, the discloser can form connections and interaction with other stakeholders, which is conducive to establishing, maintaining and developing their social relationships. Moreover, the higher the relationship support they perceived, the greater the benefit they felt from sharing co-owned information, and thus, they are more motivated to share it on social network platforms. Therefore, this study proposes the following hypotheses:

- H2a. Self-presentation is positively associated with relationship support.
- H2b. Others presentation is positively associated with relationship support.
- H2c. Relationship presentation is positively associated with relationship support.
- *H3.* Relationship support is positively associated with co-owned information disclosure intention.

3.2 Collective privacy concerns and co-owned information disclosure

As countless users share their photos, identities, locations and stories on social network platforms, privacy risks in the social network platforms are widespread, unpredictable and to some extent inevitable (Nabity-Grover *et al.*, 2020; Yang and Zhang, 2022). More importantly, when users share their daily activities on the social network platform, they often involve private information about other people's participation in these activities (Ilia *et al.*, 2015; Such *et al.*, 2017), such as daily schedules with colleagues, group photos with friends and family anecdotes. Similarly, individuals may also face the risk of their privacy being disclosed by others due to sharing information with colleagues, friends or family members on social network platforms (Chen *et al.*, 2015; Ilia *et al.*, 2015). Therefore, the social aspects of privacy are vital for understanding individuals' privacy perceptions and decisions on social network platforms, as social and communication needs are the basis and driving force for users to share information on social network platforms (Ellison *et al.*, 2011).

Users' privacy concerns are multifaceted when publishing and sharing co-owned information on social network platforms. On the one hand, the disclosers are concerned about their personal privacy risks, which is the primary concern of existing research. On the other

hand, the disclosers are expected to worry about the privacy of other stakeholders. The disclosers will worry that the privacy of other stakeholders will be accidentally exposed or violated due to their sharing behavior (Yu *et al.*, 2018). Also, they are worried about disclosing sensitive topics to other stakeholders and losing control of relevant information of stakeholders (Choi and Jiang, 2013). Furthermore, in addition to the private information about each stakeholder, the information about the existence of the collective, the social relationships that constitute the collective, and the interaction within the collective are also part of collective privacy. The social relationship dimension of privacy includes the characteristics, membership, purpose, cohesion, structure and dynamics of the collective itself (Jia and Xu, 2016), which far exceed the private information of each stakeholder. Therefore, under the coowned information disclosure scenario of the social network platform, individuals are not only worried about the possible invasion of their privacy but also about the invasion of the privacy of other stakeholders and their collective social relationships. These collective privacy concerns are expected to be the main obstacles for users to share co-owned information on social network platforms. Therefore, this study proposes the following hypotheses:

- *H4a.* Personal privacy concern is negatively associated with co-owned information disclosure intention.
- *H4b.* Others' privacy concern is negatively associated with co-owned information disclosure intention.
- *H4c.* Relationship privacy concern is negatively associated with co-owned information disclosure intention.

Relationship risk reflects an individual's belief that specific behaviors can damage their interpersonal relationships (Xu et al., 2009). In the scenario of co-owned information disclosure, relationship risk mainly refers to the extent that the discloser believes that their information disclosure can destroy the interpersonal relationship between the discloser and other stakeholders. Due to the differences in privacy awareness and privacy boundaries among individuals, there may be inconsistencies in the collection, processing, utilization and sharing of co-owned information among stakeholders, which may lead to privacy conflicts (Yu et al., 2018). For example, when Bob shares a group photo containing Alice, he thinks Alice in the photo is beautiful, but Alice thinks she is ugly in the photo, and she does not want others to know about her relationship with Bob. In this case, even if individuals fully consider the interests and risks of other stakeholders, their sharing of coowned information may still be frowned upon by other stakeholders, which will negatively affect the interpersonal relationship between the discloser and other stakeholders. Therefore, individuals' collective privacy concerns (i.e. personal privacy concern, others' privacy concern and relationship privacy concern) will enhance their perception of relationship risk. Moreover, the greater the relationship risk perceived by users, the greater the losses they perceive when weighing the risks and benefits of coowned information sharing, which will reduce their willingness to share. Therefore, this study proposes the following hypotheses:

- H5a. Personal privacy concern is positively associated with relationship risk.
- H5b. Others' privacy concern is positively associated with relationship risk.
- *H5c.* Relationship privacy concern is positively associated with relationship risk.
- *H6.* Relationship risk is negatively associated with co-owned information disclosure intention.

4. Research methodology

4.1 Measurements and questionnaire design

In order to ensure the reliability and validity of the measurement, all the measurement items in this study come from the existing literature and are adjusted according to the current research context. Among them, the items of self-presentation, others presentation and relationship presentation are from Krasnova *et al.* (2010), and the items of personal privacy concern, others' privacy concern and relationship privacy concern are from Dinev and Hart (2006) and James *et al.* (2017). Besides, the items of relationship support and relationship risk are from Kim *et al.* (2011) and Xu *et al.* (2009), respectively. The items of disclosure intention are from Malhotra *et al.* (2004). The results of the items were expressed by the 7-point Likert scale, with a scale from 1 to 7 representing the increasing degree of agreement of the participants. Specific measurement items and references are shown in Table 1.

4.2 Participants and procedures

This study randomly selected WeChat users to fill in the online questionnaire, and the research model and hypothesis were verified based on their data. WeChat, China's largest social network platform, has 1.309 billion monthly active users in 2022. It allows users to share their daily life in the form of text, pictures, audio and video, and is widely welcomed by users. Therefore, we choose WeChat users as participants, which is widely representative.

This study chooses the sample service function of the wenjuanxing to collect data. Wenjuanxing is a professional online questionnaire survey, examination, evaluation and voting platform. Moreover, its sample service function can accurately locate the target population. It can also set various screening rules, screening pages, quota control and other conditions to automatically filter out invalid answers. At the same time, it supports manual screening to ensure the validity of the final data. Therefore, it is widely used by a large number of enterprises and individuals.

A total of 788 questionnaires were received, and 740 valid data were finally obtained after screening out invalid data. Among them, 55.1% were women and 44.9% were men; 86.1% of the respondents were between the ages of 20 and 35; and 89% of respondents received college and undergraduate education. Furthermore, 99.3% of respondents had used WeChat for more than half an hour every day, and 90.7% of respondents had more than 100 WeChat friends.

5. Data analysis and results

This study takes partial least squares (PLS) to test the measurement model and structural model. The measurement model is mainly used to verify the relationship between each latent variable and its observation items, while the structural model is used to test the relationship between latent variables.

5.1 Measurement model

The reliability is usually evaluated by the values of Cronbach's alpha (CA), composite reliability (CR) and average variance extracted (AVE) of constructs, reflecting the stability and consistency of the measurement results (Fornell and Larcker, 1981). Generally speaking, if CR exceeds 0.5, CA and CR exceed 0.7, the measurement of variables is considered to have good reliability (Hsu and Lin, 2008; Fornell and Larcker, 1981). As shown in Table 2, the CA values of all variables are between 0.785 and 0.896, the CR values of all variables are between 0.875 and 0.927 and the AVE values of all variables are between 0.686 and 0.800, meeting the corresponding threshold requirements.

LHT	Variables	Me	References	
	Self-presentation (SP)	(1)	Sharing co-owned information on WeChat Moments helps me to make a good impression on others	Krasnova et al. (2010)
	(01)	(2)	Sharing co-owned information on WeChat Moments helps me to	<i>ci ui</i> . (2010)
		(3)	Sharing co-owned information on WeChat Moments helps me to	
	Others	(1)	Sharing co-owned information on WeChat Moments helps other information owners to make a good impression on others	Krasnova
	presentation (or)	(2)	Sharing co-owned information on WeChat Moments helps other information owners to present themselves in a favorable way	<i>ci ui</i> . (2010)
		(3)	Sharing co-owned information on WeChat Moments helps other information owners to present their best sides to others	
	Relationship presentation (RP)	(1)	Sharing co-owned information on WeChat Moments can make others have a good impression on the relationship between other information current and me	Krasnova <i>et al</i> . (2010)
		(2)	Sharing co-owned information on WeChat Moments can present the relationship between me and other information owners in a favorable way	
		(3)	Sharing co-owned information on WeChat Moments can present best sides of the relationship between me and other information owners to others	
	Personal privacy concern (PPC)	(1)	I am concerned that my personal information in co-owned information I submit on WeChat Moments could be misused	Dinev and Hart (2006).
		(2)	I am concerned because my personal information in co-owned information I transmit on WeChat Moments can be intercepted by third parties	James <i>et al.</i> (2017)
		(3)	I am concerned about my personal information in co-owned information I transmit on WeChat Moments because of what others might do with it	
		(4)	I am concerned about my personal information in co-owned information I transmit on WeChat Moments because it could be used in a way I did not foresee	
	Others' privacy concern (OPC)	(1)	I am concerned that other information owners' information in co- owned information I submit on WeChat Moments could be misused	Dinev and Hart (2006),
		(2)	I am concerned because other information owners' information in co-owned information I transmit on WeChat Moments can be intercepted by third parties	James <i>et al.</i> (2017)
		(3)	I am concerned about other information owners' information in co- owned information I transmit on WeChat Moments because of what others might do with it	
		(4)	I am concerned about other information owners' information in co- owned information I transmit on WeChat Moments because it could be used in a way I did not foresee	
	Relationship	(1)	I am concerned that our relationship information in co-owned	Dinev and
	privacy concern (RPC)	(2)	Information I submit on WeChat Moments could be misused I am concerned that our relationship information in co-owned information I transmit on WeChat Moments can be intercepted by third parties	Hart (2006), James <i>et al.</i> (2017)
		(3)	I am concerned about our relationship information in co-owned information I transmit on WeChat Moments because of what others might do with it	
		(4)	I am concerned about our relationship information in co-owned information I transmit on WeChat Moments because it could be used in a way I did not foresee	
Table 1.Measures				(continued)

Variables	Mea	asures	References	Co-owned information	
Relationship support (RS)	(1)	Sharing co-owned information on WeChat Moments helps build interpersonal relationships between me and other information owners	Kim <i>et al.</i> (2011)	disclosure	
	(2)	Sharing co-owned information on WeChat Moments helps maintain social relationships between me and other information owners			
	(3)	Sharing co-owned information on WeChat Moments helps enhance social relationships between me and other information owners			
Relationship risk (RR)	(1)	Sharing co-owned information on WeChat Moments may bring many unpredicted problems to the relationship between me and other information owners	Xu <i>et al.</i> (2009)		
	(2)	Sharing co-owned information on WeChat Moments is risky to the relationship between me and other information owners			
	(3)	Sharing co-owned information on WeChat Moments may bring potential losses to the relationship between me and other information owners			
Disclosure	(1)	I am willing to share co-owned information on WeChat Moments	Malhotra		
intention (DI)	(2)	I am likely to share co-owned information on WeChat Moments	et al. (2004)		
	(3)	I am probable to share co-owned information on WeChat Moments			
Source(s): Author	rs' owr	n creation		Table 1.	

Constructs	СА	CR	AVE				
DI	0.821	0.893	0.735				
OP	0.842	0.905	0.76				
OPC	0.886	0.921	0.745				
PPC	0.874	0.914	0.726				
RP	0.785	0.875	0.699				
RPC	0.896	0.927	0.762				
RR	0.875	0.923	0.800				
RS	0.848	0.897	0.686				
SP	0.830	0.898	0.746				
Note(s): DI = disclosure intention, OP = others' presentation, OPC = others' privacy concern, PPC = personal privacy concern, RP = relationship presentation, RPC = relationship privacy concern, RR = relationship risk, RS = relationship support, SP = self-presentation Source(s): Authors' own creation							

Table 2. Reliability

Validity includes convergent validity and discriminant validity. The convergent validity reflects the correlation between the latent variables and their corresponding observation items, while the discrimination validity reflects the degree of differentiation between the measurement items of different latent variables (Anderson and Gerbing, 1988; Jiang *et al.*, 2002). Convergent validity can be evaluated by observing factor loading values and AVE values of variables. If each latent variable has a higher AVE value (>0.5), and each measurement item has a higher factor loading value (>0.7) on its corresponding potential variable, it indicates that the measurement model has good convergent validity (Fornell and Larcker, 1981). As shown in Tables 2 and 3, the AVE values of all variables are greater than 0.5, and the factor loading value of each measurement item on its corresponding latent variables is greater than 0.7, meeting the threshold requirements.

ТНТ										
1/111		DI	OP	OPC	PPC	RP	RPC	RR	RS	SP
	DI1	0.864	0.455	-0.167	-0.197	0.360	-0.145	-0.224	0.416	0.411
	DI2	0.844	0.349	-0.156	-0.144	0.319	-0.108	-0.168	0.365	0.363
	DI3	0.864	0.348	-0.107	-0.105	0.320	-0.122	-0.177	0.362	0.343
	OP1	0.391	0.858	-0.101	-0.119	0.572	-0.110	-0.137	0.622	0.655
	OP2	0.409	0.875	-0.130	-0.138	0.578	-0.098	-0.115	0.615	0.639
	OP3	0.385	0.882	-0.078	-0.090	0.554	-0.052	-0.083	0.600	0.609
	OPC1	-0.145	-0.084	0.870	0.673	-0.086	0.634	0.531	-0.078	-0.097
	OPC2	-0.123	-0.078	0.846	0.686	-0.058	0.633	0.540	-0.056	-0.087
	OPC3	-0.153	-0.101	0.870	0.669	-0.054	0.610	0.561	-0.069	-0.104
	OPC4	-0.163	-0.144	0.866	0.707	-0.097	0.625	0.563	-0.114	-0.140
	PPC1	-0.157	-0.130	0.639	0.849	-0.093	0.612	0.482	-0.091	-0.103
	PPC2	-0.128	-0.090	0.689	0.837	-0.040	0.642	0.512	-0.042	-0.107
	PPC3	-0.147	-0.112	0.686	0.860	-0.099	0.633	0.536	-0.124	-0.111
	PPC4	-0.172	-0.122	0.685	0.862	-0.034	0.667	0.551	-0.076	-0.104
	RP1	0.321	0.516	-0.053	-0.041	0.827	-0.070	-0.100	0.601	0.559
	RP2	0.347	0.528	-0.054	-0.055	0.827	-0.058	-0.072	0.584	0.573
	RP3	0.311	0.590	-0.106	-0.097	0.855	-0.077	-0.129	0.630	0.544
	RPC1	-0.147	-0.094	0.614	0.641	-0.083	0.871	0.505	-0.108	-0.080
	RPC2	-0.099	-0.068	0.625	0.632	-0.049	0.865	0.503	-0.062	-0.043
	RPC3	-0.134	-0.088	0.636	0.668	-0.068	0.887	0.518	-0.077	-0.065
	RPC4	-0.133	-0.097	0.653	0.676	-0.084	0.869	0.530	-0.081	-0.099
	RR1	-0.193	-0.118	0.572	0.535	-0.115	0.517	0.898	-0.130	-0.083
	RR2	-0.197	-0.117	0.550	0.546	-0.094	0.528	0.876	-0.076	-0.104
	RR3	-0.210	-0.110	0.585	0.561	-0.114	0.536	0.909	-0.097	-0.084
	RS1	0.384	0.607	-0.071	-0.095	0.583	-0.102	-0.082	0.835	0.551
	RS2	0.361	0.580	-0.077	-0.078	0.614	-0.083	-0.099	0.832	0.563
	RS3	0.359	0.572	-0.076	-0.080	0.616	-0.045	-0.081	0.823	0.522
	RS4	0.377	0.568	-0.082	-0.071	0.585	-0.080	-0.114	0.824	0.504
	SP1	0.424	0.656	-0.099	-0.117	0.570	-0.064	-0.090	0.559	0.874
	SP2	0.377	0.597	-0.098	-0.082	0.579	-0.065	-0.073	0.552	0.846
	SP3	0.329	0.632	-0.127	-0.125	0.583	-0.086	-0.099	0.562	0.871
	Note(s): DI = disclosure intention, OP = others' presentation, OPC = others' privacy concern PPC =									
	persona	al privacy of	concern, RI	P = relatio	onship pres	entation, RI	\dot{C} = relat	ionship priv	vacy concer	n, RR =
Table 3.	relation	iship risk, R	S = relatio	nship supp	ort, $\hat{SP} = se$	elf-presentat	ion		•	
Cross-loading	Source	e(s): Autho	rs' own crea	ation						

The discrimination validity can be evaluated by observing the cross-loading values and AVE square root values of the variable (Fornell and Larcker, 1981). In general, if the factor loading value of each measurement item on its corresponding latent variable exceeds the factor loading value of each measurement item on other latent variables, and the AVE square root of each latent variable is greater than the correlation coefficient between the variable and other latent variables, it indicates that the measurement model has good discrimination validity (Fornell and Larcker, 1981). We can see from Tables 3 and 4 that the factor loading value of each measurement item on its corresponding latent variable is higher than that on other latent variables. Moreover, the AVE square root of each latent variable is greater than the correlation coefficient between the variable is greater than the discrimination validity is good.

Furthermore, we also calculate the VIF values of the main latent variables to evaluate the possible multicollinearity problems (Kock and Lynn, 2012). The results show that the VIF values of all variables are between 1.598 and 2.499, lower than the threshold of 3.3, indicating that there is no multicollinearity problem in this study.

	DI	OP	OPC	PPC	RP	RPC	RR	RS	SP	Co-owned information
DI	0.857									disclosure
OP	0.453	0.872								
OPC	-0.169	-0.119	0.863							
PPC	-0.177	-0.133	0.792	0.852						
RP	0.390	0.652	-0.085	-0.077	0.836					
RPC	-0.147	-0.100	0.725	0.750	-0.082	0.873				
RR	-0.224	-0.128	0.636	0.612	-0.121	0.589	0.894		•	
RS	0.447	0.703	-0.092	-0.098	0.724	-0.094	-0.113	0.828		
SP	0.438	0.728	-0.125	-0.125	0.668	-0.083	-0.101	0.646	0.864	
Note(s persona relation	s): DI = di al privacy uship risk, R	sclosure inte concern, RP S = relation	ention, OP = relation ship suppor	= others' p ship preser t, SP = self-	resentation, ntation, RPC presentation	OPC = oth C = relation Diagonal e	ners' privacy Iship privac lements den	y concern, by concerr ote the squ	PPC = h, RR = hare root	
of AVE Source	E e(s): Autho	rs' own crea	tion					-		Table 4.Correlations

Due to the fact that the data in this study come from participants' self-reports, common method bias may be an issue (Lindell and Whitney, 2001; Podsakoff *et al.*, 2003). Therefore, Harman's single-factor test was used to analyze common method bias (Tsai and Bagozzi, 2014). This study extracted 7 factors with eigenvalues greater than 1. And the first principal component explained 26.95% of the overall variance, which was below the threshold of 50%, indicating that common method bias is not a concern. To further examine this issue, this study used the method of comparing the variance explained by substantive and method factors (Podsakoff *et al.*, 2003). The data results showed that the method variable only explained 1.4% of the overall variance, while the trait variables explained 75.6% of the overall variance, indicating that common method bias is not a key issue in this study.

5.2 Structural model

The structural model mainly analyzes the path coefficient between variables to verify the model and assumptions, as shown in Figure 2. In terms of collective benefits, the results show that self-presentation ($\beta = 0.164$, t = 2.558, p = 0.011) and others presentation ($\beta = 0.166$, t = 2.652, p = 0.007) have a significant positive impact on co-owned information disclosure intention, indicating that H1 and H2 are supported. However, the positive impact of relationship presentation ($\beta = 0.008$, t = 0.144, p = 0.882) on co-owned information disclosure intention is not significant, indicating that H3 is not supported. Furthermore, self-presentation ($\beta = 0.111$, t = 2.307, p = 0.021), others presentation ($\beta = 0.345$, t = 7.675, p = 0.000) and relationship presentation ($\beta = 0.425$, t = 9.908, p = 0.000) have a significant positive impact on co-owned information disclosure intention is a significant positive impact on co-owned information disclosure intention ($\beta = 0.000$) and relationship presentation ($\beta = 0.425$, t = 9.908, p = 0.000) have a significant positive impact on relationship support, while relationship support ($\beta = 0.200$, t = 3.630, p = 0.000) has a significant positive impact on co-owned information disclosure intention, indicating that H2a, H2b, H2c and H3 are supported.

As for collective risk, the results show that personal privacy concern ($\beta = 0.197$, t = 3.408, p = 0.002), others' privacy concern ($\beta = 0.338$, t = 5.252, p = 0.000) and relationship privacy concern ($\beta = 0.197$, t = 3.735, p = 0.000) significantly positively affect relationship risk, while relationship risk ($\beta = -0.152$, t = 3.693, p = 0.000) significantly negatively affects co-owned information disclosure intention, indicating that H5a, H5b, H5c and H6 are supported. However, the direct negative impact of personal privacy concern ($\beta = -0.038$, t = 0.630, p = 0.537), others' privacy concern ($\beta = 0.005$, t = 0.089, p = 0.927) and relationship privacy concern ($\beta = 0.017$, t = 0.309, p = 0.755) on co-owned information disclosure intention are not significant, indicating that H4a, H4b and H4c are not supported. Overall, the model explained



62.1% of the variance of relationship support, 45.1% of the variance of relationship risk and 27.7% of the variance of co-owned information disclosure intention.

5.3 Mediating effects

One possible reason why the direct impact of collective privacy concerns and relationship presentation on co-owned information disclosure intentions is not significant is the mediating effects of relationship support and relationship risk. To further explore the vital role of social gains and losses in users' collective privacy calculation process, this study examined the mediating effects of relationship support and relationship risk based on the steps proposed by Zhao et al. (2010) and Preacher and Hayes (2008). The results (see Table 5) show that the indirect effects of self-presentation ($\beta = 0.182$, CI: 0.117–0.254), others presentation ($\beta = 0.179$, CI: 0.094-0.254) and relationship presentation ($\beta = 0.250$, CI: 0.177-0.328) on co-owned information disclosure intention via relationship support are significant. Moreover, the direct effects of self-presentation ($\beta = 0.255$, CI: 0.158–0.351), others presentation ($\beta = 0.275$, CI: 0.167–0.391) and relationship presentation ($\beta = 0.139$, CI: 0.033–0.236) on co-owned information disclosure intention are significant. The indirect effects of personal privacy concern ($\beta = -0.113$, CI: 0.161 ~ -0.067), others' privacy concern ($\beta = -0.125$, CI: 0.174 ~ -0.075) and relationship privacy concern ($\beta = -0.124$, CI: 0.167 ~ -0.083) on co-owned information disclosure intention via relationship risk are also significant. Furthermore, the direct effects of personal privacy concern ($\beta = -0.066$, CI: 0.148–0.016), others' privacy

Paths	β	Indirect effect Confidence intervals (bias- corrected)	β	Direct effect Confidence intervals (bias- corrected)	Results	information disclosure
$SP \rightarrow RS \rightarrow DI$	0.182	(0.117, 0.254)	0.255	(0.158, 0.351)	Partial	
$OP \rightarrow RS \rightarrow DI$	0.179	(0.094, 0.254)	0.275	(0.167, 0.391)	Partial	
$RP \rightarrow RS \rightarrow DI$	0.250	(0.177, 0.328)	0.139	(0.033, 0.236)	Partial -	
$\frac{PPC}{PPC} \rightarrow RR \rightarrow DI$	-0.113	(-0.161, -0.067)	-0.066	(-0.148, 0.016)	Full	
$OPC \rightarrow RR$ $\rightarrow DI$	-0.125	(-0.174, -0.075)	-0.045	(-0.129, 0.045)	Full	
$RPC \rightarrow RR$ $\rightarrow DI$	-0.124	(-0.167, -0.083)	-0.024	(-0.107, 0.065)	Full	

privacy concern, PPC = personal privacy concern, RP = relationship presentation, Or C = onlers presentation, Or C = onlers privacy concern, RPC = relationship privacy concern, RR = relationship risk, RS = relationship support, SP = self-presentation Source(s): Authors' own creation

Table 5. Results of mediating effects

concern ($\beta = -0.045$, CI: 0.129–0.045) and relationship privacy concern ($\beta = -0.024$, CI: 0.107–0.065) on co-owned information disclosure intention are insignificant. The results of these data analyses indicate that relationship support partially mediated the effects of self-presentation, others presentation and relationship presentation on co-owned information disclosure intention. In contrast, relationship risk fully mediates the effects of personal privacy concern, others' privacy concern and relationship privacy concern on co-owned information.

6. Discussion

6.1 Key findings

Based on privacy calculus theory and impression management theory, this study explored the co-owned information disclosure behavior of social network platform users from a collective perspective. The main findings of this study are as follows. First, the collective impression management of social network platform users will, directly and indirectly, affect their co-owned information disclosure. The results show that self-presentation and others presentation have a direct positive impact on the co-owned information disclosure intention, which is consistent with impression management theory (Hong *et al.*, 2020; Sun *et al.*, 2021). Also, self-presentation, others presentation and relationship presentation indirectly positively affect co-owned information disclosure intention through relationship support. This indicates that the benefits of social relationships with other stakeholders are the critical factors for social network platform users to share co-owned information, which has been overlooked in traditional impression management theory (Yang and Zhang, 2022; Sun *et al.*, 2021).

Furthermore, the collective privacy concerns of social network platform users indirectly negatively affect their co-owned information disclosure through relationship risk. The results show that personal privacy concern, others' privacy concern and relationship privacy concern positively affect users' perception of relationship risk, while relationship risk perception negatively affects users' co-owned information disclosure. This result provides a deeper insight into the theory of multilevel information privacy management (Bélanger and

James, 2020). Moreover, relationship risk plays a fully mediating role in the relationship between collective privacy concerns and co-owned information disclosure. That is, users' concerns about collective privacy mainly come from the damage and destruction of these privacy issues to the social relationships between them and other stakeholders, which is the key factor preventing users from sharing co-owned information on social network platforms. This further demonstrates the crucial role of the gains and losses of social relationships in the collective privacy calculation process of users, which is also overlooked by traditional privacy calculus theory (Smith *et al.*, 2011; Nguyen *et al.*, 2023).

6.2 Theoretical implications

This study has three theoretical contributions, which are summarized as follows. First, this study enriches information systems (IS) research by theorizing and empirically analyzing coowned information disclosure on social network platforms. Disclosing co-owned information on social network platforms is a widespread and inevitable phenomenon but has received minimal attention from IS scholars. Most of the existing literature on information disclosure of social network platforms concentrates on users' self-disclosure (Trepte *et al.*, 2020; Li *et al.*, 2019a, b), while a few studies pay attention to users' disclosure of others' information (James *et al.*, 2017; Koohikamali *et al.*, 2017; Cao *et al.*, 2018; Zhang *et al.*, 2022). This study analyzes the characteristics of co-owned information and theorizes the phenomenon of co-owned information disclosure on social network platforms, which expands the research scenario and theoretical boundary of information disclosure.

Second, this study develops a collective privacy calculus model to understand the coowned information disclosure behavior of social network platform users from the collective level rather than the individual level. Since the information is co-owned by multiple stakeholders, previous literature based on impression management and privacy calculus of a single stakeholder cannot explain individual co-owned information disclosure behavior (Bélanger and James, 2020). This study confirms that individuals will attach great importance to the interests and risks of other stakeholders in the co-owned information disclosure context from a collective perspective, extending the theoretical connotation of impression management theory and privacy calculus theory.

Third, this study confirms the crucial role of relationship support and relationship risk in social network platform users' co-owned information disclosure. Under the situation of co-owned information disclosure on social network platforms, the gain and loss of social relationships between the disclosers and other stakeholders is an important influencing factor, even a decisive factor, for users to share co-owned information, which has been ignored in previous studies. This study empirically confirms the mediating role of relationship support and relationship risk in the collective privacy calculus process, which contributes to the research of social relationships and the theory of multilevel information privacy management (Bélanger and James, 2020).

6.3 Practical implications

This study has several practical implications. First, the findings of this study show that collective impression management is the main driver for users to share co-owned information on social network platforms. Social network platform service providers or managers should pay attention to users' needs in co-owned information-sharing scenarios and add some functional designs conducive to collective presentation. For example, social platform service providers or managers can set the co-editing function of information content, allowing multiple users to modify and decorate specific information content simultaneously, which can meet the impression management needs of different stakeholders. Then, the results of this study show that collective privacy concerns are the main obstacle for users to share co-owned information

LHT

on social network platforms. Social network platform service providers or managers should set up the collective privacy protection function to reduce the collective privacy concerns of users when disclosing co-owned information. For example, facial recognition can be added to remind and warn users when sharing photos containing others on social network platforms. At the same time, users are allowed to block the information of other stakeholders other than themselves with one click to protect the privacy of stakeholders. Furthermore, relevant departments need to enhance their publicity and education on data security and management topics, especially privacy protection in co-owned information disclosure. They can raise the privacy awareness of the discloser by strengthening the negative consequences (e.g. relationship risk) of co-owned information disclosure.

6.4 Limitations and future directions

This study has several shortcomings. First, the data of this study come from the questionnaire survey, which is subjective and may lead to common method bias. The following research can reexplore users' co-owned information disclosure based on the objective behavior data of real social network platform users. Then, this study mainly explores the impact of the collective privacy calculus of social network platform users on their final co-owned information disclosure from the perspective of the disclosers. The following research can explore the behavior reaction and coping strategies of social network platform users after being disclosed by others from the perspective of other stakeholders.

7. Conclusion

To understand the drivers and inhibitors of users' co-own information disclosure on social network platforms, this study develops a collective privacy calculus model based on a survey of 740 respondents. The results show that self-presentation and others presentation directly enhance users' co-owned information disclosure. Also, self-presentation, others presentation and relationship presentation indirectly improve users' co-owned information disclosure via relationship support. Furthermore, personal privacy concern, others' privacy concern and relationship privacy concern reduce users' co-owned information disclosure via relationship risk. Those findings expand the theoretical depth the theory of collective privacy calculus and impression management, and help social network platform developers to design collective privacy protection functions.

References

- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423, doi: 10. 1037/0033-2909.103.3.411.
- Bélanger, F. and James, T.L. (2020), "A theory of multilevel information privacy management for the digital era", *Information Systems Research*, Vol. 31 No. 2, pp. 510-536, doi: 10.1287/isre. 2019.0900.
- Bitterly, T.B. and Schweitzer, M.E. (2019), "The impression management benefits of humorous selfdisclosures: how humor influences perceptions of veracity", Organizational Behavior and Human Decision Processes, Vol. 151, pp. 73-89, doi: 10.1016/j.obhdp.2019.01.005.
- Cao, Z., Hui, K.L. and Xu, H. (2018), "An economic analysis of peer disclosure in online social communities", *Information Systems Research*, Vol. 29 No. 3, pp. 546-566, doi: 10.1287/isre. 2017.0744.
- Chen, J., Ping, J.W., Xu, Y. and Tan, B.C. (2015), "Information privacy concern about peer disclosure in online social networks", *IEEE Transactions on Engineering Management*, Vol. 62 No. 3, pp. 311-324, doi: 10.1109/tem.2015.2432117.

- Chen, L., Hu, N., Shu, C. and Chen, X. (2019), "Adult attachment and self-disclosure on social networking site: a content analysis of Sina Weibo", *Personality and Individual Differences*, Vol. 138, pp. 96-105, doi: 10.1016/j.paid.2018.09.028.
- Choi, C.F. and Jiang, Z. (2013), "Trading friendship for value: an investigation of collective privacy concerns in social application usage", *Proceedings of Thirty Fourth International Conference on Information Systems*, Milano.
- Choi, B.C., Jiang, Z., Xiao, B. and Kim, S.S. (2015), "Embarrassing exposures in online social networks: an integrated perspective of privacy invasion and relationship bonding", *Information Systems Research*, Vol. 26 No. 4, pp. 675-694, doi: 10.1287/isre.2015.0602.
- Choi, T.R. and Sung, Y. (2018), "Instagram versus Snapchat: self-expression and privacy concern on social media", *Telematics and Informatics*, Vol. 35 No. 8, pp. 2289-2298, doi: 10.1016/j.tele.2018. 09.009.
- Cozby, P.C. (1973), "Self-disclosure: a literature review", Psychological Bulletin, Vol. 79 No. 2, pp. 73-78, doi: 10.1037/h0033950.
- Dinev, T. and Hart, P. (2006), "An extended privacy calculus model for e-commerce transactions", Information Systems Research, Vol. 17 No. 1, pp. 61-80, doi: 10.1287/isre.1060.0080.
- Ellison, N.B., Steinfield, C. and Lampe, C. (2011), "Connection strategies: social capital implications of Facebook-enabled communication practices", *New Media and Society*, Vol. 13 No. 6, pp. 873-892, doi: 10.1177/1461444810385389.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, doi: 10.2307/ 3151312.
- Goffman, E. (1959), The Presentation of Self in Everyday Life, Anchor Books, New York, USA.
- Gutierrez, A., O'Leary, S., Rana, N.P., Dwivedi, Y.K. and Calle, T. (2019), "Using privacy calculus theory to explore entrepreneurial directions in mobile location-based advertising: identifying intrusiveness as the critical risk factor", *Computers in Human Behavior*, Vol. 95, pp. 295-306, doi: 10.1016/j.chb.2018.09.015.
- Hong, S., Jahng, M.R., Lee, N. and Wise, K.R. (2020), "Do you filter who you are?: excessive selfpresentation, social cues, and user evaluations of Instagram selfies", *Computers in Human Behavior*, Vol. 104, 106159, doi: 10.1016/j.chb.2019.106159.
- Hsu, C.L. and Lin, J.C. (2008), "Acceptance of blog usage: the roles of technology acceptance, social influence and knowledge sharing motivation", *Information and Management*, Vol. 45 No. 1, pp. 65-74, doi: 10.1016/j.im.2007.11.001.
- Ilia, P., Polakis, I., Athanasopoulos, E., Maggi, F. and Ioannidis, S. (2015), "Face/off: preventing privacy leakage from photos in social networks", *Proceedings of the 22nd ACM SIGSAC Conference on computer and communications security*, pp. 781-792.
- James, T.L., Warkentin, M. and Collignon, S.E. (2015), "A dual privacy decision model for online social networks", *Information and Management*, Vol. 52 No. 8, pp. 893-908, doi: 10.1016/j.im.2015. 07.010.
- James, T.L., Wallace, L., Warkentin, M., Kim, B.C. and Collignon, S.E. (2017), "Exposing others' information on online social networks (OSNs): perceived shared risk, its determinants, and its influence on OSN privacy control use", *Information and Management*, Vol. 54 No. 7, pp. 851-865, doi: 10.1016/j.im.2017.01.001.
- Javed, A., Khan, S.H., Khan, M.A.S. and Shah, H.A. (2023), "Impact of social media addiction on librarians' performance: mediating role of task distraction, moderating role of effective selfcontrol", *Library Hi Tech*, Vol. ahead-of-print No. ahead-of-print, doi: 10.1108/lht-01-2022-0078.
- Jia, H. and Xu, H. (2016), "Measuring individuals' concerns over collective privacy on social networking sites", *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, Vol. 10 No. 1, pp. 2-9, doi: 10.5817/cp2016-1-4.

LHT

- Jiang, J.J., Klein, G. and Carr, C.L. (2002), "Measuring information system service quality: SERVQUAL from the other side", *MIS Quarterly*, Vol. 20 No. 2, pp. 145-166, doi: 10.2307/ 4132324.
- Jiang, Z., Heng, C.S. and Choi, B.C. (2013), "Research note—privacy concerns and privacy-protective behavior in synchronous online social interactions", *Information Systems Research*, Vol. 24 No. 3, pp. 579-595, doi: 10.1287/isre.1120.0441.
- Jozani, M., Ayaburi, E., Ko, M. and Choo, K.K.R. (2020), "Privacy concerns and benefits of engagement with social media-enabled apps: a privacy calculus perspective", *Computers in Human Behavior*, Vol. 107, 106260, doi: 10.1016/j.chb.2020.106260.
- Kim, H.W., Gupta, S. and Koh, J. (2011), "Investigating the intention to purchase digital items in social networking communities: a customer value perspective", *Information and Management*, Vol. 48 No. 6, pp. 228-234, doi: 10.1016/j.im.2011.05.004.
- Kock, N. and Lynn, G.S. (2012), "Lateral collinearity and misleading results in variancebased SEM: an illustration and recommendations", *Journal of the Association for Information Systems*, Vol. 13 No. 7, pp. 546-580, doi: 10.17705/1jais.00302.
- Koohikamali, M., Peak, D.A. and Prybutok, V.R. (2017), "Beyond self-disclosure: disclosure of information about others in social network sites", *Computers in Human Behavior*, Vol. 69, pp. 29-42, doi: 10.1016/j.chb.2016.12.012.
- Krämer, N.C. and Winter, S. (2008), "Impression management 2.0: the relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites", *Journal of Media Psychology: Theories, Methods, and Applications*, Vol. 20 No. 3, pp. 106-116, doi: 10.1027/ 1864-1105.20.3.106.
- Krasnova, H., Spiekermann, S., Koroleva, K. and Hildebrand, T. (2010), "Online social networks: why we disclose", *Journal of Information Technology*, Vol. 25 No. 2, pp. 109-125, doi: 10.1057/jit. 2010.6.
- Laufer, R.S. and Wolfe, M. (1977), "Privacy as a concept and a social issue: a multidimensional developmental theory", *Journal of Social Issues*, Vol. 33 No. 3, pp. 22-42, doi: 10.1111/j.1540-4560. 1977.tb01880.x.
- Leary, M.R. and Kowalski, R.M. (1990), "Impression management: a literature review and twocomponent model", *Psychological Bulletin*, Vol. 107 No. 1, pp. 34-47, doi: 10.1037/0033-2909.107. 1.34.
- Li, Y. and Hu, X. (2022), "Social network analysis of law information privacy protection of cybersecurity based on rough set theory", *Library Hi Tech*, Vol. 40 No. 1, pp. 133-151, doi: 10. 1108/lht-11-2018-0166.
- Li, F., Sun, Z., Li, A., Niu, B., Li, H. and Cao, G. (2019a), "HideMe: privacy-preserving photo sharing on social networks", *IEEE INFOCOM 2019-IEEE Conference on Computer Communications*, IEEE, pp. 154-162.
- Li, P., Cho, H. and Goh, Z.H. (2019b), "Unpacking the process of privacy management and selfdisclosure from the perspectives of regulatory focus and privacy calculus", *Telematics and Informatics*, Vol. 41 No. 8, pp. 114-125, doi: 10.1016/j.tele.2019.04.006.
- Li, K., Cheng, L. and Teng, C.I. (2020), "Voluntary sharing and mandatory provision: private information disclosure on social networking sites", *Information Processing and Management*, Vol. 57 No. 1, 102128, doi: 10.1016/j.ipm.2019.102128.
- Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 114-121, doi: 10.1037/0021-9010.86.1.114.
- Liu, Z. and Wang, X. (2018), "How to regulate individuals' privacy boundaries on social network sites: a cross-cultural comparison", *Information and Management*, Vol. 55 No. 8, pp. 1005-1023, doi: 10.1016/j.im.2018.05.006.

- Malhotra, N.K., Kim, S.S. and Agarwal, J. (2004), "Internet users' information privacy concerns (IUIPC): the construct, the scale, and a causal model", *Information Systems Research*, Vol. 15 No. 4, pp. 336-355, doi: 10.1287/isre.1040.0032.
- Marengo, D., Fabris, M.A., Longobardi, C. and Settanni, M. (2022), "Smartphone and social media use contributed to individual tendencies towards social media addiction in Italian adolescents during the COVID-19 pandemic", *Addictive Behaviors*, Vol. 126, 107204, doi: 10.1016/j.addbeh. 2021.107204.
- Mouakket, S. and Sun, Y. (2020), "Investigating the impact of personality traits of social network sites users on information disclosure in China: the moderating role of gender", *Information Systems Frontiers*, Vol. 22 No. 6, pp. 1305-1321, doi: 10.1007/s10796-019-09933-x.
- Nabi, M.N.U., Zohora, F.T. and Misbauddin, S.M. (2023), "Social media links with social capital to trust in healthcare facilities: empirical evidence from Bangladesh", *Library Hi Tech*, Vol. 41 No. 1, pp. 210-228, doi: 10.1108/lht-09-2022-0443.
- Nabity-Grover, T., Cheung, C.M. and Thatcher, J.B. (2020), "Inside out and outside in: how the COVID-19 pandemic affects self-disclosure on social media", *International Journal of Information Management*, Vol. 55, pp. 102-118, doi: 10.1016/j.ijinfomgt.2020.102188.
- Nguyen, T.T., Tran Hoang, M.T. and Phung, M.T. (2023), "To our health! Perceived benefits offset privacy concerns in using national contact-tracing apps", *Library Hi Tech*, Vol. 41 No. 1, pp. 174-191, doi: 10.1108/lht-12-2021-0461.
- Osatuyi, B. (2013), "Information sharing on social media sites", *Computers in Human Behavior*, Vol. 29 No. 6, pp. 2622-2631, doi: 10.1016/j.chb.2013.07.001.
- Paliszkiewicz, J. and Madra-Sawicka, M. (2016), "Impression management in social media: the example of LinkedIn", *Management*, Vol. 11 No. 3, pp. 203-212.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: 10.1037/0021-9010.88.5.879.
- Pounders, K., Kowalczyk, C.M. and Stowers, K. (2016), "Insight into the motivation of selfie postings: impression management and self-esteem", *European Journal of Marketing*, Vol. 50 Nos 9/10, pp. 1879-1892, doi: 10.1108/ejm-07-2015-0502.
- Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891, doi: 10.3758/brm.40.3.879.
- Reed, P. and Saunders, J. (2020), "Sex differences in online assertive self-presentation strategies", *Personality and Individual Differences*, Vol. 166, 110214, doi: 10.1016/j.paid.2020.110214.
- Rui, J.R. and Stefanone, M.A. (2013), "Strategic image management online: selfpresentation, self-esteem and social network perspectives", *Information, Communication and Society*, Vol. 16 No. 8, pp. 1286-1305, doi: 10.1080/1369118x.2013.763834.
- Rui, J.R. and Stefanone, M.A. (2018), "That tagging was annoying: an extension of expectancy violation theory to impression management on social network sites", *Computers in Human Behavior*, Vol. 80, pp. 49-58, doi: 10.1016/j.chb.2017.11.001.
- Satici, S.A. and Uysal, R. (2015), "Well-being and problematic Facebook use", Computers in Human Behavior, Vol. 49, pp. 185-190, doi: 10.1016/j.chb.2015.03.005.
- Schlosser, A.E. (2020), "Self-disclosure versus self-presentation on social media", Current Opinion in Psychology, Vol. 31, pp. 1-6, doi: 10.1016/j.copsyc.2019.06.025.
- Smith, H.J., Dinev, T. and Xu, H. (2011), "Information privacy research: an interdisciplinary review", MIS Quarterly, Vol. 35 No. 4, pp. 989-1015, doi: 10.2307/41409970.
- Such, J.M. and Criado, N. (2018), "Multiparty privacy in social media", Communications of the ACM, Vol. 61 No. 8, pp. 74-81, doi: 10.1145/3208039.

- Such, J.M., Porter, J., Preibusch, S. and Joinson, A. (2017), "Photo privacy conflicts in social media: a large-scale empirical study", *Proceedings of the 2017 CHI conference on human factors in computing systems*, pp. 3821-3832.
- Sun, Y., Fang, S. and Zhang, Z.J. (2021), "Impression management strategies on enterprise social media platforms: an affordance perspective", *International Journal of Information Management*, Vol. 60, 102359, doi: 10.1016/j.ijinfomgt.2021.102359.
- Taddei, S. and Contena, B. (2013), "Privacy, trust and control: which relationships with online self-disclosure?", *Computers in Human Behavior*, Vol. 29 No. 3, pp. 821-826, doi: 10.1016/j.chb. 2012.11.022.
- Trepte, S., Scharkow, M. and Dienlin, T. (2020), "The privacy calculus contextualized: the influence of affordances", *Computers in Human Behavior*, Vol. 104 No. 3, pp. 106-115, doi: 10.1016/j.chb. 2019.08.022.
- Tsai, H.T. and Bagozzi, R.P. (2014), "Contribution behavior in virtual communities: cognitive, emotional, and social influences", MIS Quarterly, Vol. 38 No. 1, pp. 143-164.
- Wang, J. and Xie, J. (2022), "Exploring the factors influencing users' learning and sharing behavior on social media platforms", *Library Hi Tech*, Vol. 41 No. 5, pp. 1436-1455, ahead-of-print, doi: 10. 1108/lht-01-2022-0033.
- Wang, J., Zareapoor, M., Chen, Y.-C., Shamsolmoali, P. and Xie, J. (2022), "What influences news learning and sharing on mobile platforms? An analysis of multi-level informational factors", *Library Hi Tech*, Vol. 41 No. 5, pp. 1395-1419, ahead-of-print, doi: 10.1108/lht-11-2021-0408.
- Xu, H., Teo, H.H., Tan, B.C. and Agarwal, R. (2009), "The role of push-pull technology in privacy calculus: the case of location-based services", *Journal of Management Information Systems*, Vol. 26 No. 3, pp. 135-174, doi: 10.2753/mis0742-1222260305.
- Yang, T. and Ying, Q. (2021), "Online self-presentation strategies and fulfillment of psychological needs of Chinese sojourners in the United States", *Frontiers in Psychology*, Vol. 8 No. 5, pp. 40-59, doi: 10.3389/fpsyg.2020.586204.
- Yang, H. and Zhang, S. (2022), "Social media affordances and fatigue: the role of privacy concerns, impression management concerns, and self-esteem", *Technology in Society*, Vol. 71, 102142, doi: 10.1016/j.techsoc.2022.102142.
- Yin, C., Zhou, Y., He, P. and Tu, M. (2021), "Research on the influencing factors of the switching behavior of Chinese social media users: QQ transfer to WeChat", *Library Hi Tech*, Vol. 41 No. 3, pp. 771-787, ahead-of-print, doi: 10.1108/lht-09-2020-0234.
- Yu, L., Motipalli, S.M., Lee, D., Liu, P., Xu, H., Liu, Q., ... Luo, B. (2018), "My friend leaks my privacy: modeling and analyzing privacy in social networks", *Proceedings of the 23nd ACM on Symposium on Access Control Models and Technologies*, pp. 93-104.
- Yuan, C.W. and Bi, N. (2022), "Too close to lie to you: investigating availability management on multiple communication tools across different social relationships", *Library Hi Tech*, Vol. 41 No. 3, pp. 877-902, ahead-of-print, doi: 10.1108/lht-01-2022-0080.
- Zhang, N.A., Wang, C.A., Karahanna, E. and Xu, Y. (2022), "Peer privacy concern: conceptualization and measurement", *MIS Quarterly*, Vol. 46 No. 1, pp. 491-530, doi: 10. 25300/misq/2022/14861.
- Zhao, X., Lynch, J.G. Jr and Chen, Q. (2010), "Reconsidering baron and kenny: myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No. 2, pp. 197-206, doi: 10.1086/ 651257.
- Zhao, P., Lapierre, M.A., Rains, S.A. and Segrin, C. (2021), "When and why we disclose distress on SNSs: perceived affordances, disclosure goals, and anticipated negative evaluations", *Computers in Human Behavior*, Vol. 125, 106964, doi: 10.1016/j.chb.2021.106964.

LHT About the authors

Yafei Feng is a teacher in the School of Business at South China Normal University. His research interests include social media, e-commerce and e-health.

Yan Zhang is a teacher in the School of Management at Lanzhou University. Her research interests focus on information systems and users' information behavior. Yan Zhang is the corresponding author and can be contacted at: yanzh@lzu.edu.cn

Lifu Li is a PhD candidate in the Faculty of Engineering and Information Technology at University of Technology Sydney. His research interest focuses on the information behavior of ethnic minorities.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com