



# Exploring the Effects of the Privacy-Handling Management Styles of Social Networking Sites on User Satisfaction: A Conflict Management Perspective

Jie Zhang

*Dillard College of Business Administration, Midwestern State University, Wichita Falls, TX, 76308, e-mail: jie.zhang@mwsu.edu*

Han Li and Xin (Robert) Luo

*Anderson School of Management, The University of New Mexico, Albuquerque, NM, 87131, e-mail: hanli@unm.edu, xinluo@unm.edu*

Merrill Warkentin<sup>†</sup>

*Management and Information Systems, Mississippi State University, Mississippi State, MS, 39762, e-mail: m.warkentin@msstate.edu*

## ABSTRACT

The issue of consumer information privacy, arguably the most substantial and persistent problem confronting e-commerce companies in general and online social networking service providers in particular, often results in unsatisfied customers. Researchers have investigated privacy from various perspectives and in a multitude of settings, yet there have been few attempts to understand privacy versus satisfaction, particularly from the perspective of conflict management. Because users' privacy can be negatively affected by social networking sites (SNSs), this study focuses on the privacy conflicts between SNSs and their users. Drawing on conflict management theory, this article investigates the effects of different conflict management styles exhibited by an SNS on users' satisfaction with its privacy practices, which then affects their intention to disclose personal information. The SNS examined in this study is Facebook, the most popular SNS with the largest number of users. Data were collected using an online survey and were analyzed using structural equation modeling. The results suggest that the two cooperative conflict management styles demonstrated by the SNS—accommodating and problem-solving—positively affect users' satisfaction with the privacy practices of the SNS both directly and indirectly through perceived privacy risk control. With regard to uncooperative styles, an avoiding style negatively affects user satisfaction directly, whereas an asserting style negatively affects user satisfaction indirectly through perceived privacy risk. The results also support that satisfaction is positively related to intention; users who are satisfied with the privacy practices of SNSs are more willing

---

<sup>†</sup>Corresponding author.

to disclose personal information than unsatisfied ones. [Submitted: April 19, 2015. Revised: July 12, 2016. Accepted: July 14, 2016.]

***Subject Areas: Conflict Management, Intention to Disclose Personal Information, Privacy, Social Networking Sites (SNSs), and Users' Satisfaction with SNSs' Privacy Practices.***

## INTRODUCTION

In recent years, social networking sites (SNSs) have piqued mounting interest among scholars and practitioners. These innovative technological artifacts have enabled individual users and organizational constituents to seek, share, and exchange information efficiently and effectively. This phenomenon, coupled with dynamic globalization, has raised a critical issue with regard to the ubiquitous distributed storage and sharing of information vis-à-vis information privacy. The rapid growth and development of SNSs seem to be accompanied by conflicts between the service provider and its users regarding the storing, sharing, and processing of private and personal information. By definition, conflict is “a process in which one party perceives that its interests are being opposed or negatively affected by another party” (Wall & Callister, 1995, p. 544). This study focuses on privacy conflicts between SNSs and their users. Accordingly, we offer a contextualized definition of privacy conflict as *a process in which users perceive that their privacy-related interests are contrary to those of SNSs and in which users' privacy is negatively impacted by SNSs' actions*. Such perceptions may be built over time through users' interactions with SNSs and their observations of SNSs' practices. Although users want to limit the sharing and usage of their information to what is necessary to achieve their goals (and preserve their overall privacy), SNSs seek to collect and utilize user information for use in targeted promotions and advertisements, which is one of their primary sources of revenue.

The mishandling of privacy conflict can lead to lawsuits, financial loss, feature termination, and decline in user bases. In one case, Facebook agreed to pay a \$9.5 million settlement in a class-action lawsuit and to terminate the Beacon program, a feature that monitored and published users' purchases in some participating Web sites, including Overstock.com and Blockbuster (Dwyer, 2011). In other cases, dissatisfied users issued a general call for cancelling Facebook services (Baumer et al., 2013). Although Facebook has attracted public attention regarding privacy conflict with users, other SNSs inevitably face the same problem. After its initial public offering (IPO) in November 2013, Twitter was pressured to satisfy investors who wanted to force the company to monetize user data, including those collected from the “tweet” buttons embedded in many Web sites (Harkinson, 2013). LinkedIn, a major SNS that focuses on professional networks, was sued for illegally selling users' professional data to potential employers (Todd, 2014).

Although all SNSs have the strategic objective of managing privacy conflict, there are different ways of handling such conflict, which are articulated in conflict management theory. For example, SNSs may employ cooperative (accommodating and problem-solving) and/or uncooperative (avoiding and asserting) conflict

management strategies. Moreover, users may perceive that SNSs employ one or more of these strategies based on their privacy practices. Previous research has provided evidence that the way in which conflicts are handled directly affects the outcomes of conflict management (Wall & Galanes, 1986; Tutzauer & Roloff, 1988; Barki & Hartwick, 2001; Bradford, Stringfellow, & Weitz, 2004; Lee, 2008). Satisfaction, which is one of the important conflict management outcomes reported in the conflict management literature (Rahim & Buntzman, 1989; DeChurch & Marks, 2001; Bradford et al., 2004; Lee, 2008), is of special interest in the SNS context. The Information Systems (IS) literature shows that satisfaction positively affects voluntary system usage or usage intention (Galletta & Lederer, 1989; Lai, 2004) and information disclosure intention (Knijnenburg & Kobsa, 2013). We argue that if an SNS demonstrates appropriate privacy conflict management styles, as perceived by its users, the latter's satisfaction with SNS privacy practices will be improved, and they will be willing to disclose information on that SNS. In this study, we investigate the effects of conflict management styles on users' satisfaction with the privacy practices of SNSs. To be more specific, the conflict management styles refer to the styles that users perceive that SNSs use to handle privacy conflicts. The following research questions are posed: (1) What is the impact of an SNS's conflict management styles on users' satisfaction with the SNS's privacy practices? (2) What is the mechanism of such impact? In another words, how does each style affect users' satisfaction with the SNS's privacy practices? (3) Will users' satisfaction with the SNS's privacy practices affect their intention to disclose personal information?

This research makes several important contributions to the IS literature and the research on SNSs. Because users' privacy can be negatively affected by SNSs, this study examines the privacy conflict between SNSs and their users and it investigates the management of such conflict. Users may perceive SNSs as using different conflict management styles, which are demonstrated by their privacy practices. Through the theoretical lens of conflict management, this study is the first to investigate the impact of different conflict handling styles on user satisfaction with the privacy practices of SNSs. Further, this study explores the mechanism through which different styles affect user satisfaction with SNS privacy practices. Finally, this study contributes to the privacy literature on alleviating privacy fears. Most previous privacy research focused on reducing the customer's *initial* privacy fears so he or she could engage with confidence in a transaction with an online vendor for the first time or start using an online system (e.g., Milne & Boza, 1999; Xu, Teo, & Tan, 2005). Our study sheds new light on the conflict management interventions that an SNS might adopt to alleviate the existing privacy fears of its long-time users.

## **LITERATURE REVIEW AND THEORETICAL FRAMING**

Focusing on the privacy conflicts between SNSs and their users, this study investigates SNS user self-disclosure. It proposes that self-disclosure intention is affected by user satisfaction with SNS privacy practices, which is a privacy conflict management outcome. In this section, we review the relevant information privacy and conflict management literature.

## **Information Privacy and Self-Disclosure of Personal Information**

Information privacy refers to “an individual’s self-assessed state in which external agents have limited access to information about him or her” (Dinev, Xu, Smith, & Hart, 2013, p. 299). Information privacy concerns capture individuals’ worries about their privacy (Li, 2011). Because of its implications for individual behaviors in different contexts, considerable IS research has focused on information privacy concerns and has adopted it as a measurable proxy of privacy itself (Malhotra, Kim, & Agarwal, 2004; Smith, Dinev, & Xu, 2011). For example, Smith, Milberg, and Burke (1996) developed the Concerns for Information Privacy (CFIP) scale to measure individual concerns regarding organizational privacy practices. They identified four major concerns: collection, errors, secondary use, and unauthorized access to information. The scale was developed in the offline or traditional direct marketing context and focused on organizations’ responsibility for the proper handling of customer information. Following Smith *et al.* (1996) CFIP scale, Malhotra *et al.* (2004) defined Internet users’ information privacy concerns in the e-commerce context and identified three dimensions of such concerns: collection, control, and awareness of privacy practices.

In the context of our study, the amount of personal information collected, stored, and processed by SNSs far exceeds that of traditional commerce or e-commerce companies. Because an SNS’s survival and profitability largely rely on monetizing users’ personal information through targeted advertisements and personalized products or services, an SNS has an inherent incentive to stimulate maximum disclosure. In this environment, users are likely to be subject to SNS opportunistic behaviors and to perceive that their privacy is negatively affected by SNSs’ practices, which leads to privacy conflict between an SNS and its users. As we argue in this article, if such conflict is not handled properly by an SNS, users are likely to be unwilling to disclose their personal information to the SNS, which would then adversely affect the SNS’s profitability in the long run.

Self-disclosure in an online community is defined as “what individuals voluntarily and intentionally reveal about themselves to others – including thoughts, feelings and experiences” (Posey, Lowry, Roberts, & Ellis, 2010, p. 183). Self-disclosure has been measured in multiple dimensions, including amount, depth, and duration (Wheeless & Grotz, 1976); honesty, intent, and valence (Posey *et al.*, 2010); and information versus interaction management (James, Warkentin, & Collignon, 2015; James, Nottingham, Collignon, Warkentin, & Ziegelmeier, 2016). It has also been measured in a single dimension in terms of a continuum of values of disclosing less or more personal information (Chen, 2013; Zlatolas, Welzer, Heričko, & Hölbl, 2015). In this study, self-disclosure refers to the total amount of personal information disclosed voluntarily by users on an SNS, and it is not limited to user profile information. We are interested in the amount of overall personal information that individuals intend to disclose because nonprofile information, such as location tracking, activities, experiences, and feelings, could be both valuable in SNS marketing and risky for users to disclose. The main functionality of an SNS is the support for and promotion of sharing of personal information. By using an SNS, users may assume the loss of their privacy to some extent. However, they can gauge the amount of information that they are willing to

disclose. In this study, we propose that users' satisfaction with SNS privacy practices, as an outcome of privacy conflict management, influences their willingness to disclose personal information.

### **Conflict Management**

In order to understand privacy conflict management in particular, we begin by illuminating conflict and conflict management in general. Conflict is "a process in which one party perceives that its interests are being opposed or negatively affected by another party" (Wall & Callister, 1995, p. 544). In general, conflict exists among interdependent parties that perceive incompatible interests or goals when they interact with each other (Thomas, 1992). Because it is a common phenomenon of profound importance, conflict has been investigated in various contexts, such as supervisor-subordinate interaction (Rahim & Buntzman, 1989), team management (Montoya-Weiss, Massey, & Song, 2001), and client-supplier collaborative product development (Lam & Chin, 2005). In the IS research realm, previous studies on conflict management mainly fall into two streams of research: (1) conflict management within IT teams, either in system development or implementation teams (Barki & Hartwick, 2001; Sawyer, 2001; Jiang, Chen, Goode, & Fernandez, 2013) or in virtual teams (Paul, Seetharaman, Samarah, & Mykytyn, 2004) and (2) information systems' influence on team conflict management practices, such as the usage of decision support systems in solving group conflict (Watson, DeSanctis, & Poole, 1988; Miranda & Bostrom, 1993).

Conflict can be managed differently. The various conflict management styles are referred to as "conflict handling modes" (Thomas, 1992), "conflict handling styles" (Lee, 2008), "approaches to conflict management" or "conflict management strategies" (Blake & Mouton, 1964), and "conflict management tactics" (Wall & Callister, 1995). In general, they mirror the actions that disputants take to manage conflict. Wall and Callister (1995) provided a list of management tactics, including violence and the competitive use of force, agreed-to symbols of defeat, compromise, converting the opponent, conciliation, avoiding, and problem-solving. However, it is common practice to differentiate five conflict management styles (Blake & Mouton, 1964; Rahim & Bonoma, 1979; Thomas, 1992), which have been named variously in the literature (Rahim & Buntzman, 1989; Kuhn & Poole, 2000; Bradford et al., 2004). Drawing upon the IS literature in particular, we adopted the names used by Barki and Hartwick (2001), who investigated the five conflict management styles—asserting, accommodating, problem-solving, avoiding, and compromising—in the context of information systems development.

It is important to note that different conflict management styles may coexist in the same entity (Rahim, 1983; Antonioni, 1998; Gross & Guerrero, 2000). Accordingly, the Rahim Organizational Conflict Inventory-II scores an individual on all five styles concurrently. A higher score for one style shows an individual's preference for that style but does not preclude the existence of other styles, which may be scored lower by different degrees. Individuals are also reported to exercise different styles when managing conflict with different people, including superiors, subordinates, and peers (Rahim, 1986). An organization such as Facebook, for example, handles privacy conflicts with different users via various channels and

therefore is likely to exhibit different, even seemingly opposite, styles at a single point in time. We view the findings of this extant research as an opportunity to investigate the effectiveness of the different conflict management styles demonstrated by an SNS and to offer suggestions to SNSs for strategically focusing on and adopting one or more effective styles.

When an SNS adopts an *asserting* conflict management style, it demonstrates high assertiveness, low cooperativeness, little intention to satisfy users' privacy concerns, and a strong intention to satisfy its own interests. An *accommodating* style is the opposite, reflecting low assertiveness, high cooperativeness, strong intention to satisfy users' privacy concerns, and little intention to satisfy its own concerns. The *problem-solving* style aims to satisfy the interests of both parties with high assertiveness and high cooperativeness. An SNS using an *avoiding* conflict management style tries to withdraw from open discussion or debate with users, showing little cooperativeness and taking no actions that could satisfy users' privacy concerns. Finally, the *compromising* conflict management style occupies a central position among the other four styles. It features moderate assertiveness and cooperativeness with respect to privacy practices. Notably, Pruitt (1983) argued that compromising is not a distinct conflict management style, and Van de Vliert and Hordijk (1989) provided empirical evidence that compromising and problem-solving lead to the same social-psychological consequences. Furthermore, previous research on conflict management styles omitted the compromising style in their hypotheses or analyses (Friedman, Tidd, Currall, & Tsai, 2000; Barki & Hartwick, 2001) because it does not represent a distinctly unique approach. For the same reason, we excluded the compromising style from our study and instead focused solely on the other four conflict management tactics: asserting, accommodating, problem-solving, and avoiding.

Research has suggested that conflict management styles have different effects on one or more conflict management outcomes, including decision quality, satisfaction, and performance (Wall & Galanes, 1986; Tutzauer & Roloff, 1988; Barki & Hartwick, 2001; Bradford et al., 2004; Lee, 2008). Kuhn and Poole (2000) examined the relationship between group conflict management styles and the effectiveness of their decision-making activities. Their study reported a positive effect of the integrative (problem-solving) style but mixed effects of the avoidance (avoiding) and distributive (asserting) styles. In investigating the effects of supervisors' conflict management styles on subordinates' job satisfaction, multiple studies (Rahim & Buntzman, 1989; Lee, 2008) found positive effects of the integrating (problem-solving), compromising, and obliging (accommodating) styles and negative effects of the dominating (asserting) and avoiding styles. DeChurch and Marks (2001) categorized conflict management styles according to their activeness and agreeableness. They examined the effects of different styles on both group member satisfaction and group performance. For example, the collaboration (problem-solving) style is considered both active and agreeable, and it positively affects satisfaction and performance outcomes. In contrast, the avoiding style is considered both passive and disagreeable, and it negatively affects the outcomes. Bradford et al. (2004) studied the effects of conflict management styles in 81 simulated retail networks. Their results suggested that the collaborative (problem-solving) style positively correlated with network satisfaction and network

continuity, which refers to the desire of network members to work together in the future. They also investigated the confrontation (asserting) and accommodating styles and discovered that their effects on the outcomes depended on the types of conflict. In summary, these extant findings indicated that the effects of conflict management styles on conflict management outcomes, including satisfaction, vary depending on the context.

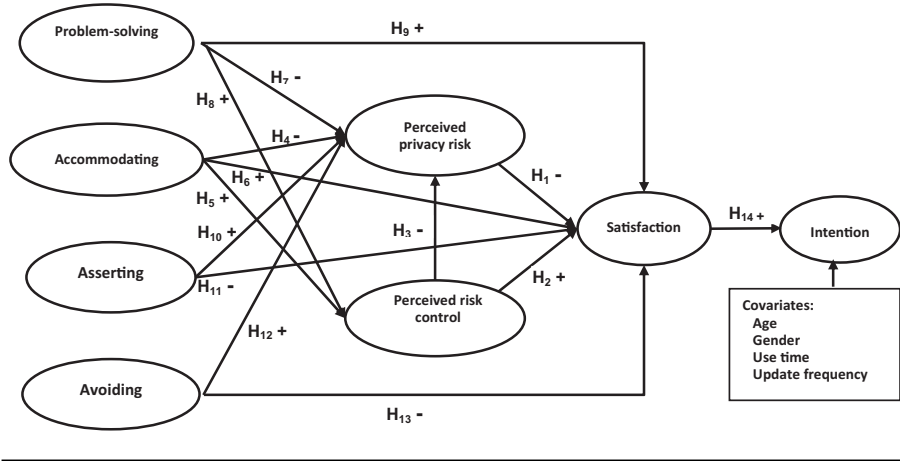
Also depending on the context, conflict management styles may affect conflict management outcomes through different mechanisms. For example, previous research showed that trust mediated the effects of conflict management styles on the job satisfaction of subordinates (Chan, Huang, & Ng, 2008) and that justice mediated the effects of conflict management styles on team effectiveness (Chen & Tjosvold, 2002). Based on the unique context of privacy conflict between SNSs and their users, in the present study, we turn to two privacy-related constructs—perceived privacy risk and perceived risk control—as mechanisms that influence the relationship between conflict management styles and user satisfaction with SNS privacy practices. The extant research indicates that each of these constructs is highly salient in the privacy context and is influential toward understanding users' disclosure behavior (Malhotra et al., 2004; Dinev & Hart, 2006; Krasnova, Spiekermann, Koroleva, & Hildebrand, 2010; Li, Sarathy, & Xu, 2011; Hajli & Lin, 2016).

Perceived privacy risk is defined as the potential loss associated with disclosing personal information on SNSs. Perceived risk control is defined as users' perception of their power to avoid or reduce privacy risk. When an individual uses an SNS to disclose personal information, he/she may suffer risk due to the SNS's opportunistic behaviors or its unwillingness or incompetency in providing privacy protection. The user's power to avoid or reduce the privacy risk is largely determined by the SNS's privacy practices, including providing privacy control settings and features on its Web sites, informing and educating users, and practicing openness in their privacy practices. Previous research found empirical evidence that users with low perceived privacy risk had more favorable expectations than others did about e-commerce companies' competency and reliability in safekeeping users' personal information (Dinev & Hart, 2006). In our study, satisfaction refers to users' satisfaction with an SNS's privacy practices, and it is considered an outcome of the conflict management styles employed by the SNS. We hypothesize that the conflict management styles of SNSs affect users' satisfaction through users' perceived privacy risk and perceived risk control. Styles that show stronger intentions to satisfy users' concerns are likely to reduce users' perceived privacy risk and increase their perceived risk control.

## **RESEARCH MODEL AND HYPOTHESES**

SNSs have a strategic objective of managing privacy conflict with users. These sites may adopt and demonstrate the use of different privacy conflict management styles to address such conflict. Drawing on conflict management theory, we posit that the different conflict management styles exhibited by SNSs can affect user satisfaction, which is a conflict management outcome. Satisfaction is defined as the extent to which users feel that an SNS's privacy practices fulfill their privacy

**Figure 1:** Research model.



needs. Such fulfillment is pleasurable and reflects a positive emotional state (Oliver, 1999). Satisfaction then affects users’ intentions to disclose personal information on the SNS. Our research model is presented in Figure 1. The following subsections elaborate each construct and its associated hypotheses.

**Privacy Issues and User Satisfaction**

As defined earlier, perceived privacy risk refers to the potential loss associated with disclosing personal information on SNSs. SNSs and users have conflicting motivations and goals regarding the disclosure of users’ information. Privacy risk may result from the opportunistic behavior of an SNS, such as selling user information, disclosing user information to third parties, and using the information for marketing/advertising purposes. Satisfaction refers to users’ satisfaction with an SNS’s privacy practices, and it is considered an affective outcome of the conflict. Previous research has shown a negative relationship between perceived privacy risk and satisfaction. For example, Knijnenburg and Kobsa (2013) examined individual behavior regarding information disclosure in the mock-up of a recommendation system. Their results suggested the negative effects on users’ satisfaction of perceived privacy risk in using the system. Ayanso, Herath, and O’Brien (2015) discovered that privacy risk, as one of the risk factors, negatively affected physicians’ satisfaction with electronic medical record systems. In the SNS context, we hypothesize that when users perceive high levels of privacy risk, they may attribute the SNS’s failure to provide adequate privacy protection to its conflicting interests, and they may be unsatisfied with the SNS’s privacy practices. Therefore, we propose the following hypothesis:

*H1: Users’ perceived privacy risk has a negative effect on their satisfaction with the privacy practices of an SNS.*

Perceived risk control is defined as the user’s perception of his or her power to avoid or reduce privacy risk. Users expect SNSs to empower them with privacy



control options so they can control their exposure to privacy risks. For example, James et al. (2015) and James et al. (2016) empirically showed that Facebook users not only expected to have the right to control *what* information they shared or disclosed but also believed they should have the right to control *with whom* they shared the information in their interactions with others. We expect that the high risk control empowered by the privacy practices of SNSs helps meet users' expectations and increases their satisfaction with those practices. Users with high perceived risk control would feel that they are able to reduce the potentially adverse effects of the privacy practices of SNSs. As a result, they tend to form favorable perceptions of such practices. We therefore state the following hypothesis:

*H2: Users' perceived risk control has a positive effect on their satisfaction with the privacy practices of an SNS.*

The ability to control risk leads to the high likelihood that the user exerts that control (Rippetoe & Rogers, 1987) to reduce the risk. For example, when users are enabled to reduce privacy risk by selectively sharing only certain personal information with trustworthy friends, they are more likely to exercise this control and perceive lower privacy risk. Perceived control was also reported to be negatively associated with perceived risk level due to optimistic bias (Helweg-Larsen & Shepperd, 2001), which indicates that when people believe that they have greater control over the outcome (high privacy risk control), they perceive more favorable outcomes (low privacy risk). Regarding online privacy risk, people with high controllability perceived that they were less vulnerable to privacy risk than others were (Cho, Lee, & Chung, 2010). We therefore posit the following hypothesis:

*H3: Users' perceived risk control has a negative effect on their perceived privacy risk.*

### **Conflict Management Styles**

Following the conflict management literature, the management styles investigated in this study—asserting, accommodating, problem-solving, and avoiding—are differentiated by assertiveness, cooperativeness, and the disputants' intention to satisfy their own or others' concerns. We propose that the accommodating style affects users' satisfaction with the privacy practices of SNSs both directly and indirectly through perceived privacy risk and perceived risk control. When its users perceive that an SNS uses an accommodating approach, they believe that the provider is attempting to fully satisfy users' concerns and that users' satisfaction is the top priority. An accommodating SNS strives to protect users' privacy, even if it means sacrificing its own interests. An example of such actions is that Facebook first allowed users to opt out of and then in 2009 fully shut down its Beacon system due to the public outcry. The Beacon system had been used to target advertisements and automatically share users' purchasing activities with their friends. Sacrificing the opportunity to monetize user information through Beacon, Facebook reduced its users' privacy risk of exposing their purchasing activities. Believing that an SNS had good intentions to protect their privacy, users would be confident that a solution could be worked out in their favor, and they would perceive low privacy risk. Therefore, we state the following hypothesis:

*H4: An accommodating style has a negative effect on perceived privacy risk.*

When an SNS uses the accommodating style, it yields to the will of its users (De Dreu, Evers, Beersma, Kluwer, & Nauta, 2001). In this style, the needs and requests of users are fully accepted and accommodated. In other words, the users are able to influence or control the SNS's privacy practices. Therefore, the users perceive a higher capability to avoid or reduce privacy risk. We therefore state the following hypothesis:

*H5: The accommodating style has a positive effect on perceived risk control.*

The accommodating style is considered cooperative (Blake & Mouton, 1964; Hocker & Wilmot, 1978) and agreeable (Van de Vliert & Euwema, 1994). Previous research has shown the positive effects of cooperative conflict handling styles on employee satisfaction (Rahim & Buntzman, 1989; Lee, 2008), customer satisfaction with service recovery (Mazaheri, Basil, Yanamandram, & Daroczi, 2011), and team satisfaction (Behfar, Peterson, Mannix, & Trochim, 2008). When an SNS accommodates the privacy needs and requests of its users, it may develop proactive, user-friendly privacy control tools, limit third-party access to user information to minimum levels, and address social issues such as government surveillance of personal information. The accommodating conflict management style demonstrates the benevolent attitude of an SNS, and it leads to pleasant and positive feelings in its users. Therefore, we state the following hypothesis:

*H6: The accommodating style has a positive effect on users' satisfaction with the privacy practices of an SNS.*

The problem-solving style is also called the integrating style or collaborating style. It is considered the most active and agreeable style (Van de Vliert & Euwema, 1994). When an SNS exhibits this style, it shows high concern for both users and itself. In using this approach, an SNS tries to find a solution that satisfies both the SNS and its users. Facebook demonstrated the problem-solving approach when it redesigned its data use policy in 2012. By integrating input from users, the new policy improved Facebook's transparency regarding how it collected and applied user data. The policy also provided examples and explanations to help users understand the meaning of the data use policy in practice. Both Facebook and its users have benefitted from the new data use policy. By applying the problem-solving approach, an SNS demonstrates an open and collaborative attitude to its users. Aware of an SNS's benevolent intention and effort to protect user privacy, users would perceive a low privacy risk. Therefore, we state the following hypothesis:

*H7: The problem-solving style has a negative effect on perceived privacy risk.*

When SNSs use the problem-solving style, they seek a solution that allows users to share personal information without worrying about their privacy. SNSs benefit when their users share personal information. The users benefit from the reduced worry about their privacy. For example, Facebook introduced the privacy checkup feature in 2014. This feature helps users review their privacy settings for status updates, permissions for third-party applications using their Facebook data,

and settings for some of the sensitive data on their profiles. Based on the results of the privacy checkup, users may adjust the settings and gain better control of their exposure to privacy risk. Therefore, when SNSs adopt the problem-solving approach, their users are expected to perceive increased privacy risk control. We therefore state the following hypothesis:

*H8: The problem-solving style has a positive effect on perceived risk control.*

Because the problem-solving style is collaborative, it is acceptable to both parties involved in the conflict (Van de Vliert & Euwema, 1994). The literature provides evidence that the problem-solving style leads to positive outcomes, including better decision making and greater satisfaction (Wall & Galanes, 1986; Tutzauer & Roloff, 1988; Barki & Hartwick, 2001; Bradford et al., 2004; Lee, 2008). Paul et al. (2004) suggested that the collaborative conflict management style positively affected satisfaction with the decision-making process in virtual teams. Furthermore, Barki and Hartwick (2001) showed that the problem-solving style led to increased satisfactory conflict resolution in information system development projects. An SNS that is perceived as using a problem-solving approach will integrate users' perspectives and work with users to create solutions that meet the goals and objectives of both the SNS and its users. In this environment, the SNS respects users' interests. The resulting solution to the problem of privacy protection then leads to a satisfactory outcome. Therefore, we state the following hypothesis:

*H9: The problem-solving style has a positive effect on users' satisfaction with the privacy practices of an SNS.*

The asserting style is also called the dominating style (Rahim, 1983), the forcing style, and the competing style (Thomas, 1992). When an SNS uses this style, it imposes its opinions, goals, and objectives on users, showing a high concern for itself and a low concern for its users. In this situation, an SNS prioritizes its own perspective, defends its privacy practices, and argues that the users are wrong. For example, some users have criticized the Facebook "real name" policy, which requires users to use their real names on the site and may put vulnerable groups at risk of physical harm. The CEO of Facebook defended this policy and insisted that it "helps keep people safe" (Davidson, 2015). Because of the uncooperative nature of the asserting style, users would not believe that the SNS would be willing to seek a solution to protect their privacy; therefore, the users would perceive a higher privacy risk. We therefore state the following hypothesis:

*H10: The asserting style has a positive effect on perceived privacy risk.*

The asserting style is considered direct and uncooperative (Blake & Mouton, 1964) and disagreeable and unpleasant (Van de Vliert & Euwema, 1994). The literature provides evidence of the negative relationship between the asserting style and satisfaction (Beersma & De Dreu, 1999; Barki & Hartwick, 2001; DeChurch, Hamilton, & Haas, 2007). When an SNS uses the asserting style, it insists that users' concerns about privacy are unnecessary or unjustified, which may make users angry or frustrated with the SNS's practices. We therefore state the following hypothesis:

*H11: The asserting style has a negative effect on users' satisfaction with the privacy practices of an SNS.*

An avoiding style is related to low cooperativeness and low assertiveness (Thomas, 1992). This style is exhibited by behaviors such as circumventing confrontations and hiding disagreement. It sometimes reflects negative disengagement and hides higher levels of aggressiveness (Aritzeta, Ayestaran, & Swailes, 2005). When an SNS is perceived as using an avoiding approach, it limits disclosure of its privacy practices and hides its disagreement with users for the purpose of avoiding tension and conflict. Avoiding the conflict does not lead to any constructive solution *per se*. Instead, avoiding discussion of privacy practices or even failure to explain details may make people read between the lines and suspect higher privacy risk (Goodchild, 2010). Therefore, we state the following hypothesis:

*H12: An avoiding style has a positive impact on perceived privacy risk.*

The avoiding style is considered both passive and disagreeable, and it negatively affects outcomes (DeChurch & Marks, 2001). In using this style, SNSs try to avoid confrontations with users, and they hide their disagreement on privacy issues. However, users may question the transparency and responsiveness of SNSs' privacy practices. Therefore, we state the following hypothesis:

*H13: An avoiding style has a negative effect on users' satisfaction with the privacy practices of an SNS.*

There is theoretical and empirical evidence to support the relationship between attitudes and behavioral intentions (Ajzen, 1991; Liaw, 2007). Schwaig, Segars, Grover, and Fiedler (2013) provided empirical support for the positive relationship between consumers' attitudes toward a company's information practices and the intention to engage with that company. Knijnenburg and Kobsa (2013) examined information disclosure in a personalized recommendation system and found that user satisfaction with the system positively affected information disclosure. When users are satisfied with SNS privacy practices and feel that an SNS fulfills their privacy needs, they are comfortable with disclosing personal information. Therefore, we state the following hypothesis:

*H14: Users' satisfaction with the privacy practices of an SNS has a positive effect on their intention to disclose personal information.*

## **RESEARCH METHOD**

### **Research Design**

An online survey was developed and deployed to collect data from a relevant sampling frame. Because Facebook is the largest SNS, we constructed the questionnaire in the Facebook setting and surveyed active Facebook users who remained anonymous in the study. At the beginning of the online survey, the subjects were requested to read an informed consent form that explained that the focus of the study was on online social networking and that participation in the study was voluntary. After the subjects agreed to participate, they were then required to indicate

**Table 1:** Demographic distribution of survey respondents in two pilot studies.

Gender	Age		Education		
Male	43.9%	18–24	22.2%	Some school, no degree	0.0%
Female	56.1%	25–34	37.6%	High school graduate	8.5%
		35–44	22.2%	Some college, no degree	37.6%
		45–54	12.8%	Bachelor's degree	47.0%
		55–64	4.3%	Master's degree	5.1%
		>64	0.9%	Professional degree	0.0%
			Doctorate degree	1.7%	

**Table 2:** Demography distribution of the survey respondents in the final study.

Gender	Age		Education		
Male	42.7%	18–24	17.5%	Some school, no degree	3.4%
Female	57.3%	25–34	22.3%	High school graduate	23.3%
		35–44	17.5%	Some college, no degree	33.5%
		45–54	18.9%	Bachelor's degree	28.2%
		55–64	10.2%	Master's degree	8.3%
		>64	13.6%	Professional degree	1.9%
			Doctorate degree	1.5%	

which social networking sites they used. Only the participants who used Facebook were selected to respond to the survey questionnaire.

To increase the measurement reliability, we conducted two rounds of pilot studies using Amazon Mechanical Turk participants in order to pretest and refine the survey questionnaire. The first round of the pilot study yielded 59 completed responses (male = 47.5%, female = 52.5%). We found that the reliability of asserting and avoiding styles was below the recommended threshold of 0.7. Accordingly, we reworded the self-developed items that measured asserting and avoiding to increase their clarity. For example, for the avoiding style, “Facebook would avoid open discussions of its privacy practice . . .” was reworded as “Facebook tried to hide its privacy practice . . .” The second round of the pilot study yielded 58 completed responses (male = 40.2%, female = 59.8%). In the second round of the pilot study, all scales were found to have acceptable reliability and validity. The demographic information about the subjects used in the two pilot studies is summarized in Table 1.

Based on the above two pilot studies, the questionnaire was refined and then delivered through SurveyMonkey to the prospective panel members, who remained anonymous in the study. The survey invitation was sent to 600 prospective panel members, and 243 subjects responded to the survey request, resulting in a survey response rate of 40.5%. We received 206 usable responses (88 males and 118 females). The demographic information about the survey respondents who participated in the final study is presented in Table 2. Similar to the subjects in the two pilot studies, most of the survey respondents in the final study were less than 55 years old and had some college education.

## **Covariates**

In our study, we also controlled for users' age, gender, use time, and update frequency on Facebook, which may also influence their intention to disclose personal information on the site. For example, users who frequently update their Facebook status may be less concerned about their information privacy and more willing to disclose their personal information on Facebook.

## **Variable Measurement**

When valid scales were available, we used existing scales in prior research with slight modifications to fit the context. Privacy risk was measured using modified forms of four items used by Malhotra *et al.* (2004). The risk control measures consisted of three items adapted from the scale in Bulgurcu (2011). The satisfaction measures were adopted from Hausknecht (1990). The intention to disclose personal information was measured by scales created by Malhotra *et al.* (2004). The four management style constructs were measured using items that we developed for this study to fit the research context. All scales were operationalized as reflective instruments and measured on a fully-anchored seven-point Likert scale in which 1 = strongly disagree and 7 = strongly agree. The detailed items in each core construct are provided in the Appendix. In addition to these core constructs, we developed two questions to gauge Facebook usage in terms of time and update frequency. The subjects were asked how much time they spent using Facebook in a typical week and how frequently they updated their Facebook status in the past six months.

## **DATA ANALYSIS AND FINDINGS**

SmartPLS (Ringle, Wende, & Will, 2005), which is a type of partial least squares (PLS) technique, was applied to test the quality of the measurement models and the research hypotheses. SmartPLS is used to perform component-based structural equation modeling (SEM). We chose to use the SmartPLS technique instead of covariance-based SEM (CB-SEM) techniques because PLS is well suited for exploratory theory building, whereas CB-SEM was designed for use in confirmatory studies that have a well-established nomological network (Lowry & Gaskin, 2014). Our study uses a new, emerging research model to explore the effects of various conflict management styles on SNS users' privacy attitudes and behaviors. PLS requires the sample size to be at least 10 times the largest number of paths leading to an endogenous construct (Chin, 1998). In our research model, the maximum number of paths that enter an endogenous variable is six. Therefore, our sample size of 206 was sufficient for the use of the PLS technique. In the following subsections, we first verify the reliability and validity of our measurement model and then provide the results of the hypothesis testing.

### **Measurement Model**

Because all instruments used to measure latent constructs were implemented as reflective scales, their measurement quality was evaluated based on their convergent validity, reliability, and discriminant validity. Convergent validity reflects the extent

**Table 3:** Mean, *SD*, and discriminant validity of reflective measurement scales.

	Mean	<i>SD</i>	1	2	3	4	5	6	7	8
1. ProSolv	4.357	1.260	<b>.931</b>							
2. Accom	3.742	1.351	.682	<b>.919</b>						
3. Assert	4.936	1.114	.237	.069	<b>.895</b>					
4. Avoid	4.490	1.312	-.076	-.071	.543	<b>.894</b>				
5. PriRisk	4.960	1.379	-.156	-.209	.188	.212	<b>.914</b>			
6. RiskCtrl	4.486	1.468	.410	.456	.121	-.014	-.355	<b>.932</b>		
7. Satisf	4.374	1.436	.591	.586	.086	-.185	-.403	.596	<b>.972</b>	
8. Int	2.617	1.419	.326	.509	-.087	-.027	-.240	.323	.438	<b>.956</b>

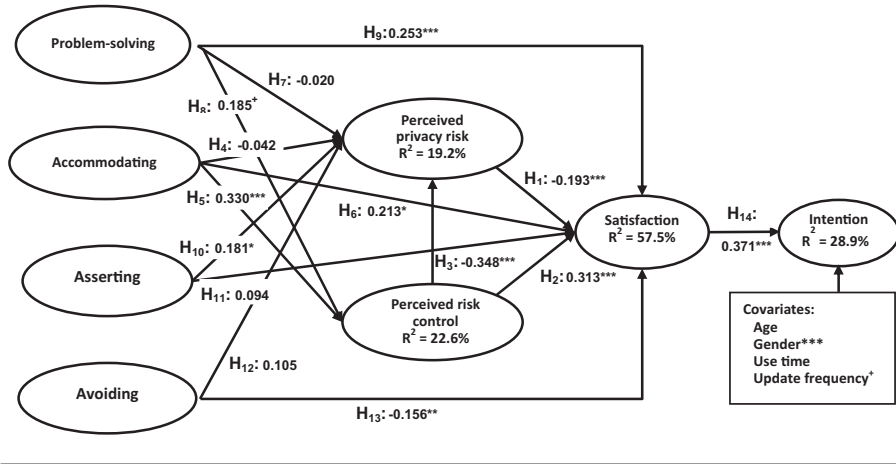
*Note:* Diagonal elements are the square root of the AVE values of all reflective constructs. Off-diagonal elements are the correlations among latent constructs. All bold values are significant with  $p < .001$ .

to which the items measuring the same construct load closely together. Convergent validity is verified if the outer loading value of each item on its corresponding latent construct is 0.6 or higher (Bagozzi & Yi, 1988) and is statistically significant (Gefen & Straub, 2005). We found that all items loaded significantly on their respective latent constructs, and all outer loadings except Assert3 were above 0.6. Therefore, we dropped Assert3 and reconducted the analysis using SmartPLS. The results of the data analysis provided in this section are based only on the remaining items except Assert3.

Discriminant validity evaluates the extent to which the measures of latent constructs are different from each other. Discriminant validity is suggested when measurement items load more strongly on their corresponding latent constructs than on any other constructs. In other words, the outer loading of each item should be higher than its cross-loadings. Another criterion that is commonly used to test discriminant validity is that the square root of the AVE of each reflective latent construct should be higher than the correlations between that construct and any other constructs (Fornell & Larcker, 1981). From the outer loading and cross-loading matrix (see the online Appendix) and correlation matrix (Table 3), both criteria were satisfied by all latent constructs in our research model. Scale reliability was then evaluated based on composite reliability (CR) and the average variance extracted (AVE) measures as suggested by Bagozzi and Yi (1988). All scales in this study have their CR and AVE values far above the recommended cutoffs of 0.7 for CR and 0.5 for AVE. Therefore, our measurement model exhibited sound reliability and validity.

As in previous cross-sectional studies that measured all variables through the same survey conducted with the same set of subjects, our study might be susceptible to common method variance (CMV) bias. To test the potential impact of CMV, we applied the partial correlation procedure based on the marker-variable technique suggested by Lindell and Whitney (2001). The partial correlation procedure not only provides an estimate of the magnitude of CMV but also assesses its impact on correlation among latent constructs. The second smallest positive correlation among the manifest variables was selected as a more conservative estimate of CMV (i.e.,  $r_m$ ), which was found to be .008. CMV-adjusted correlations among

**Figure 2:** Results of testing the hypotheses using PLS analysis. Completely standardized estimates, including control variables in the research model, <sup>+</sup>*p* < .1, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.



latent constructs were then computed by partialing out  $r_m$  from the uncorrected correlations using equation (4) in Lindell and Whitney (2001).<sup>i</sup> EXCEL was used to perform the actual calculation by converting the uncorrected correlations among the latent constructs shown in Table 3 into CMV-adjusted correlations. The CMV-adjusted correlations were only slightly different from the original correlations; differences were less than or equal to .011. The significance levels of all correlations remained the same. Therefore, CMV was not a significant source of variance that biased the results of our study.

### Hypothesis Testing

The results of the hypothesis testing are summarized in Figure 2 and Table 4. The completely standardized path coefficients and their significance levels are displayed near each path in Figure 2. The  $R^2$  values of endogenous constructs reflect the amount of variance that could be explained by the structural model. Our research model explained 28.9% of the variance in intention, 57.5% of the variance in satisfaction, 19.2% of the variance in perceived privacy risk, and 22.6% of the variance in perceived risk control.

We performed nonparametric bootstrapping to compute the t statistics for each hypothesized path and the potential effect of the covariates. Among the four covariates, gender was statistically significant and update frequency was marginally significant. Males were more willing to disclose their personal information on Facebook than females were. This result is consistent with previous findings that males were more likely than females to disclose personal information online (Lewis, Kaufman, & Christakis, 2008; Joinson, Reips, Buchanan, &

<sup>i</sup>  $r_{j*}$  (CMV Adjusted Correlation) =  $[r(\text{Uncorrected Correlation}) - r_m(\text{Estimate of CMV})] / [1 - r_m(\text{Estimate of CMV})]$ .



**Table 4:** Summary of the results of the hypothesis testing

Hypotheses	Path Coefficients	<i>t</i>	<i>p</i>
H1: Privacy risk → Satisfaction	-0.193	3.469	<.001 (supported)
H2: Risk control → Satisfaction	0.313	4.331	<.001 (supported)
H3: Risk control → Privacy risk	-0.348	4.908	<.001 (supported)
H4: Accommodating → Privacy risk	-0.042	0.549	>.05 (not supported)
H5: Accommodating → Risk control	0.330	3.583	<.001 (supported)
H6: Accommodating → Satisfaction	0.213	2.456	<.05 (supported)
H7: Problem-solving → Privacy risk	-0.020	0.259	>.05 (not supported)
H8: Problem-solving → Risk control	0.185	1.878	<.1 (marginally supported)
H9: Problem-solving → Satisfaction	0.253	3.732	<.001 (supported)
H10: Asserting → Privacy risk	0.181	1.973	<.05 (supported)
H11: Asserting → Satisfaction	0.094	1.489	>.05 (not supported)
H12: Avoiding → Privacy risk	0.105	1.151	>.05 (not supported)
H13: Avoiding → Satisfaction	-0.156	2.867	<.01 (supported)
H14: Satisfaction → Intention	0.371	6.045	<.001 (supported)

Schofield, 2010; Chang & Heo, 2014). Update frequency reflects the degree of activeness in using Facebook. Active users who updated their status frequently were more likely to disclose their personal information. However, the relationship was only marginally significant. Although updating frequency matters, it might reveal more to identify the content and the nature of the updates. Use time was insignificant. The amount of time the users spent on Facebook did not affect their disclosure intention. Users may spend more time checking other users' profiles or pages (i.e., "lurking") than posting about themselves (disclosing personal information). Age did not affect disclosure intention. The result was consistent with previous research on online disclosure (Joinson et al., 2010; Keith, Thompson, Hale, Lowry, & Greer, 2013).

We then tested the hypotheses by examining the sign and significance level of each path coefficient. As shown in Table 4, the results supported ten of the fourteen hypotheses. The hypotheses relating to perceived privacy risk, perceived risk control, satisfaction, and intention were supported ( $p < .05$ ). These results indicate that risk appraisal and control appraisal served as an important basis for these Facebook users in forming their attitudes toward Facebook's privacy practices. These attitudes then further influenced their intention to disclose their personal information on Facebook.

As hypothesized, the path coefficients related to the accommodating and problem-solving styles all had correct signs. In addition, they had significant or marginally significant influence on perceived risk control and satisfaction. However, their direct effects on perceived privacy risk were not statistically significant. The asserting style was found to significantly increase the perceived privacy risk ( $p < .05$ ) but had no significant direct impact on satisfaction. In comparison, the

avoiding style had no significant impact on perceived privacy risk. It largely exerted a direct, negative impact on satisfaction ( $p < .01$ ). Furthermore, the results supported the positive relationship between satisfaction and intention. Overall, most of our research hypotheses are supported.

The results of the hypothesis testing also suggest that some effects of the conflict management styles were indirect and were mediated through the Facebook users' cognitive appraisals of potential privacy risks and the extent of their ability to control privacy risk. In particular, perceived privacy risk mediated the effect of the asserting style on satisfaction, whereas perceived risk control mediated the effects of the accommodating and problem-solving styles. It is interesting to formally test the mediating effects of perceived privacy risk and perceived risk control to have a more fine-grained understanding of *how* conflict management styles influence satisfaction through the two privacy-related cognitive appraisals. Following the suggestions made in a recent study (Vance, Lowry, & Eggett, 2015), we applied the bootstrapping method by Shrout and Bolger (2002) to test the mediation effect as it does not require the mediation effects to be normally distributed and has stronger statistical power than the traditional methods proposed by Baron and Kenny (1986) and Sobel (1982). Similar to the traditional method, three paths were evaluated in this study: (1) the path from an independent variable, such as a conflict management style, to its mediating variable (path *a*); (2) the path from the mediating variable to the dependent variable such as satisfaction (path *b*); and (3) the direct path from the independent variable to the dependent variable (path *c*, or *c'* when tested simultaneously with the indirect paths involving *a* and *b*). One thousand bootstrap samples were generated in SmartPLS. The path coefficients resulting from these samples were then further processed in EXCEL. The indirect effects were computed for each sample by multiplying the coefficients of paths *a* and *b*. For example, in testing the mediating effect of perceived privacy risk on the relationship between asserting style and satisfaction, the indirect effect was equal to the product of the coefficient of the path from the asserting style to perceived privacy risk and the coefficient of the path from perceived privacy risk to satisfaction. Bootstrap percentile intervals of 90% were then constructed for both indirect and direct effects (i.e., coefficient of path *c'*). This interval corresponded to a one-tailed significance test at the 0.05 level. The existence of indirect and direct effects was tested by checking whether the interval contained zero. If the interval did not contain zero, the effect was nonzero. Full mediation occurred when the direct effect was zero but the indirect effect was nonzero. Partial mediation was suggested when both the direct and the indirect effects were nonzero.

Table 5 shows the 90% bootstrap percentile intervals for both direct and indirect effects and the results of the mediation testing. The effects of the accommodating and problem-solving styles on satisfaction were partially mediated by perceived risk control whereas the effect of the asserting style was fully mediated through perceived privacy risk. To determine partial mediation, we further computed the effect ratio using 1,000 samples to test the strength of the indirect effect, following the suggestion by Shrout and Bolger (2002). The effect ratio is the ratio of the indirect effect to the total effect (i.e., indirect effect plus direct effect). The mean effect ratio of bootstrap samples was 0.346 for the accommodating style

**Table 5:** Summary of mediation testing results

Conflict management style	Mediating variable	Indirect Effect (ab)			Direct Effect (c')			Mediation type
		5% Lower bound	95% Upper bound	Zero included?	5% Lower bound	95% Upper bound	Zero included?	
Accommodating	Risk control	0.047	0.166	No	0.071	0.353	No	Partial
Problem-solving	Risk control	0.005	0.115	No	0.143	0.363	No	Partial
Asserting	Privacy risk	-0.067	-0.005	No	-0.007	0.203	Yes	Full

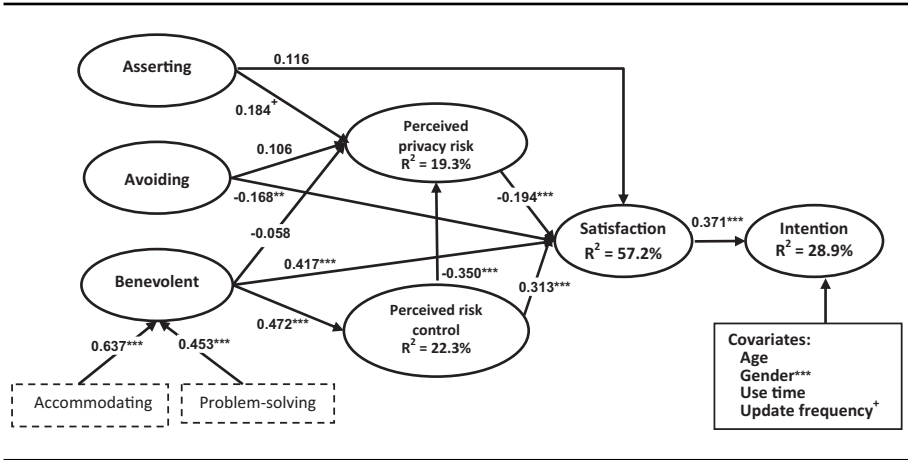
and 0.185 for the problem-solving style. Both mean effect ratios were less than 50%, suggesting that these two conflict management styles primarily exerted direct effects on satisfaction.

## DISCUSSION

Our findings suggested that the way in which SNSs handle privacy issues has a significant impact on users' satisfaction with the privacy practices of these sites. The four management styles were distinguished by assertiveness (attempting to satisfy one's own concerns) and cooperativeness (attempting to satisfy other's concerns) (Thomas, 1992). These styles affected users' satisfaction with SNSs' privacy practices in different ways. The two cooperative styles—accommodating and problem-solving styles—positively affected users' satisfaction with the privacy practices of Facebook both directly and indirectly through perceived privacy risk control. Regarding the two uncooperative styles, the avoiding style negatively affected user satisfaction directly, whereas the asserting style negatively affected user satisfaction indirectly through perceived privacy risk.

The literature shows that the accommodating and problem-solving styles both reflect that a company cares about its customers' information privacy and is willing to actively work with customers to resolve issues in its privacy practices. In our study, these styles were hypothesized to have the same effects on perceived privacy risk, perceived risk control, and satisfaction. To achieve a parsimonious view of variable relationships, we built a *post hoc* model by including a new second-order construct named the *benevolent* style, which consisted of accommodating and problem-solving as underlying first-order constructs (see Figure 3). In Figure 3, the first-order factors constituting the second-order factor are shown in dashed rectangles, and their weights are displayed on the paths leading to the second-order factor. In particular, we modeled benevolent style as a formative construct because accommodating and problem-solving were moderately correlated (see Table 3). A reflective second-order factor would show extremely high correlations among its first-order factors (often above .8) (Pavlou & Sawy, 2006). The analytical results of this alternative research model suggested that benevolence-based conflict management style clearly helped increase the perceived risk control and satisfaction with SNSs. The results of the other hypotheses mainly were the same, thus verifying the stability of our research model.

**Figure 3:** Results of the *post hoc* analysis. Completely standardized estimates controlled for covariates in the research model, <sup>+</sup>*p* < .1, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.



Interestingly, we found that the two uncooperative styles—avoiding style and asserting style—affected users’ satisfaction with SNSs’ privacy practices in different ways. The avoiding style reflected the SNS’s withdrawal from the conflict, leaving the privacy issue untouched. Users were unsatisfied with SNS inaction, whereas the situation of privacy risk remained the same. The asserting style reflected the SNS’s intention to satisfy its own concerns and serve its own interests. In this case, the users suspected that an SNS would further jeopardize their privacy in aggressively pursuing its own goal, which is contrary to users’ interests. Therefore, the asserting style affected users’ satisfaction with SNSs’ privacy practices only indirectly through the increased privacy risk.

**Theoretical and Practical Implications**

As the first attempt at investigating the impact of different conflict management styles on perceived privacy risk and perceived risk control versus users’ satisfaction with the privacy practices of an SNS and their intention to disclose personal information on the SNS, this study provides both theoretical and practical contributions. First, the study extends the research on conflict management theory to the context of information privacy. No previous research has investigated the privacy issue with regard to the conflict between SNSs and their users. In an effort to fill the gap and advance this stream of research, this study makes significant contributions by taking a unique approach to adopting conflict management theory to the context of online SNS privacy and to test the effects of different conflict management styles on users’ satisfaction with the privacy practices of SNSs. The conflict management approach has allowed us to investigate the overall effects of various privacy-related practices, including the SNS’s policies, announcements, protective features and tools, responses to users, and interaction with users. Our findings suggest that practices that use the accommodating or problem-solving style help improve customer satisfaction, whereas practices that use the avoiding or asserting style diminish users’ satisfaction with the privacy practices of SNSs.

Second, we extended the current research and investigated *how* each conflict management style affected users' satisfaction with privacy practices of SNSs. Previous research examined the relationship between conflict management styles and satisfaction (Wall & Galanes, 1986; Tutzauer & Roloff, 1988; Barki & Hartwick, 2001; Bradford et al., 2004; Lee, 2008). In our study, we examined not only the positive and negative relationships between conflict management styles and users' satisfaction with the privacy practices of SNSs but also the particular context of online SNS privacy and how different styles affected user satisfaction through perceived privacy risk and perceived risk control. The findings of our mediating tests showed that the two types of appraisals—perceived privacy risk and perceived risk control—were mediators, but their effects varied according to different conflict management styles. In particular, perceived privacy risk fully mediated the effect of the asserting style on satisfaction, whereas perceived risk control partially mediated the effects of the accommodating and problem-solving styles.

Third, our study contributes to the body of privacy research on mitigating privacy fears. Regarding the actions that e-commerce companies can take to ease customer privacy fears, the previous research prescribed methods such as the development and communication of privacy policy (Milne & Boza, 1999; Xu et al., 2005), the display of privacy seals (LaRose & Rifon, 2006), and the enhancement of privacy features (Lucas & Borisov, 2008), all of which were designed with the purpose of reducing *initial* customer privacy fears. However, these studies overlooked the conflict management interventions that companies could use to mitigate *existing* privacy fears arising from privacy conflicts. The manner in which an organization manages such conflicts results in significant numbers of complex messages that may either increase or mitigate existing customer privacy fears. The findings of our research suggest that SNSs should pay attention to their interventions in privacy issues and use them strategically.

From a practical perspective, our study has instrumental implications for SNS practitioners. Our findings suggest that in handling privacy conflicts with users, SNSs should demonstrate cooperative attitudes and benevolent intentions by using accommodating or problem-solving approaches. SNSs should promote and facilitate two-way communication, actively solicit input from users, and listen and respond to customer privacy needs and requests. Designated blogs and discussion forums could be used as communication channels. In addition to business blogging, individual bloggers could serve as part-time relationship marketers and help gather immediate feedback and suggestions from users (Hsu & Yang, 2013). User participation and contribution to the development and refinement of privacy protection practices could help to increase their satisfaction and create constructive and effective solutions to privacy issues. Furthermore, our results suggest that tactical interventions, such as accommodating and problem-solving, are effective in improving users' perceptions of risk control. Although it is imperative to safeguard SNS users' privacy, a comparatively collaborative and cooperative environment would help SNS practitioners to obtain and cater to users' privacy risk concerns effectively and efficiently. Through such interventions, SNS practitioners could leverage the communication media to disseminate crucial information, such as updated SNS privacy policies and procedures to users, in order to improve their perceptions of privacy risk.

Our empirical findings also showed that both the asserting and avoiding approaches negatively affected users' satisfaction with the privacy practices of SNSs. Therefore, these approaches are not recommended. The asserting approach forces the opinions, goals, and objectives of the SNS on its users, which only serves to emphasize the differences in their interests. For example, Facebook believed that privacy was no longer a social norm and that users should not be too concerned about it (Bosker, 2010) and LinkedIn's founders thought that "privacy is for old people" (Cenedella, 2011). Many users would be unlikely to perceive that their privacy concerns were being addressed. On the contrary, they would see that SNSs have a different perspective on the privacy issue, and they would expect less protection and greater risk in the privacy practices of the SNSs in the future. The avoiding approach was reportedly used by Facebook in many cases. Facebook's traditional response was to "ignore the concerns until any associated furor dies down; and carry on" (Infosecurity, 2013). However, the avoiding approach increases users' frustration and allows constant conflict to escalate over time (Barki & Hartwick, 2001). Our findings further showed that the asserting approach triggers users' perceived privacy risk. This finding implies that SNS providers should implement cooperative interventions to satisfy user concerns rather than focus on SNS interests. Regarding perceptions of privacy risk, our evidence shows that there is need for SNS practitioners to make concerted efforts to understand users' privacy concerns in order to better address users' needs for privacy protection and to satisfy their interests. Therefore, users could contribute actively and jointly to an SNS's goals, objectives, and long-term development, resulting in their satisfaction with the SNS.

This study focused on SNS conflict management styles from the perspective of users, which could vary according to their experiences and subjective interpretations. The same SNS provider may be perceived to have different conflict management styles by different users. The mean values reported in Table 3 suggest that Facebook is perceived to have moderate to high problem-solving, asserting, and avoiding styles. However, the mean of accommodating style was below 4, and it had the largest standard deviation or variability among the four styles, suggesting that Facebook users are less likely to agree that Facebook is willing to accommodate users' privacy concerns. This phenomenon suggests that Facebook does not have a consistent conflict management style. Knowing which style works the best and how each style works would help SNSs gauge their future practices. Furthermore, when we discuss the effects of different conflict management styles on users' satisfaction with the privacy practices of SNSs, the most important point to consider is the style that users *perceive* is being used. SNSs may choose the problem-solving approach, but their users may perceive the style differently. SNSs should focus on users' interpretation of their privacy practices instead of their own intentions and interpretations. If the response of users signals the possible misinterpretation of an SNS's conflict management style, the SNS should take immediate action to ameliorate such misunderstanding.

### **Limitations and Future Research**

Our study inevitably has several limitations. First, similar to many behavioral investigations, we investigated behavioral intention, in this case users' intention to

share personal information on SNSs, instead of their actual behavior. Although the theory of planned behavior (Ajzen, 1991), the theory of reasoned action (Ajzen & Fishbein, 1975), and the IS literature support that behavioral intention is an accurate predictor of actual behavior, a recent note by Xu and Bélanger (2013) called for further studies on the contextual nature and actual outcomes of privacy. Although we recognize that our study is limited by the focus on behavioral intention, we believe that the intention to share personal information on an SNS is a functional approximation of actual behavior. Future studies may test the effects of conflict management styles on actual behavior, especially users' disclosure behavior following the response of SNSs to a major outcry against invasions of privacy on these sites.

Second, we selected Facebook as the SNS setting in which to test our model empirically. Data were collected only from Facebook users. Because different SNS platforms provide different benefits and pose different risks for their users, collecting data from a single SNS helped to avoid these confounding factors. Although Facebook usage constitutes a valid sample of the population of SNS users because of its dominant position and influence, future studies could test the model in the settings of multiple popular SNSs, including Facebook, Twitter, LinkedIn, and Google+. Possible variances in conflict management styles demonstrated by different SNS platforms would allow for the improved testing of our research model. Additionally, investigations of SNS platforms in other cultures, such as Sina Weibo, Tencent Weibo, WeChat, and Renren, could yield further interesting results because of the effects of various cultural value systems (Warkentin, Charles-Pauvers, & Chau, 2015).

Third, another limitation of this study concerns the cross-sectional survey that we employed to capture users' responses at a single temporal moment. Although we cannot claim true causation without further experimentation that controlled for the interval between cause and effect, the associations we have validated make valuable contributions to the theory that informs our understanding of this important phenomenon. Nevertheless, it may prove fruitful to examine these factors in a future longitudinal study.

Our study is based on the assumption that privacy issues are a form of conflict. It opens another avenue for future research, which is expected to further examine and test existing conflict management findings in the context of information privacy. For example, when eliminating the cause of conflict is not feasible, it could be important to address the effects of conflict, such as "distrust, linking of issues, negative attributions, and/or the results of an escalation" (Wall & Callister, 1995, p. 549). Furthermore, when disputants cannot resolve their conflict, a third party may intervene by acting fairly to help improve relationships and resolve conflict (Fisher, 1972).

In addition, this study examined the causal effects of satisfaction on behavioral intention. Though a significant amount of research has been conducted on satisfaction versus crucial outcomes such as the use and success of an IS, it is worth noting that the underlying concept of satisfaction could be further enriched and explored. Although the manifestation of certain factorial attributes may result in satisfaction, their absence does not automatically lead to dissatisfaction. We assume that the cognitive sources of satisfaction and dissatisfaction may differ

especially in the SNS context. Therefore, future studies may shed light on dissatisfaction and its influence on behavioral intention, thereby providing additional valuable insights into the issue of information privacy.

## CONCLUSION

Privacy conflict between SNSs and their users is a persistent problem. This study applies conflict management theory to investigate the effects of different conflict management styles on user satisfaction in an SNS context. Our study makes an original contribution to the literature by specifying the contextual nature of privacy and gauging the affective outcomes of privacy conflict. We believe that the results derived from our study could inform business decision-makers regarding how organizations should manage policies and procedures to satisfy their users in situation of privacy conflict. In particular, the accommodating style and the problem-solving style were found to positively affect users' satisfaction with the privacy practices of SNSs, both directly and indirectly through perceived risk control. In contrast, the asserting style and the avoiding style were found to negatively affect users' satisfaction with SNSs' privacy practices. The effect of the avoiding style on satisfaction is a direct effect, whereas the effect of the asserting style is mediated through perceived privacy risk. Because our study focused on users' satisfaction with the privacy practices of SNSs, which is an affective outcome of conflict management styles, our study provides a general theoretical foundation that sets the stage for future research on SNS privacy and stimulates further research in this emerging paradigm in IS research. We anticipate that future research may investigate the effect of conflict management styles on behavioral outcomes, such as the continued behavior of sharing personal information on SNSs.

## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher's website:

### Online Appendix

## REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179–211.
- Ajzen, I., & Fishbein, M. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Boston, MA: Addison-Wesley.
- Antonioni, D. (1998). Relationship between the big five personality factors and conflict management styles. *International Journal of Conflict Management*, 9(4), 336–355.
- Aritzeta, A., Ayestaran, S., & Swales, S. (2005). Team role preference and conflict management styles. *International Journal of Conflict Management*, 16(2), 157–182.



- Ayanso, A., Herath, T. C., & O'Brien, N. (2015). Understanding continuance intentions of physicians with electronic medical records (EMR): An expectancy-confirmation perspective. *Decision Support Systems, 77*, 112–122.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74–94.
- Barki, H., & Hartwick, J. (2001). Interpersonal conflict and its management in information system development. *MIS Quarterly, 25*(2), 195–228.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology Review, 51*(6), 1173–1182.
- Baumer, E. P., Adams, P., Khovanskaya, V. D., Liao, T. C., Smith, M. E., Schwanda Sosik, V., & Williams, K. (2013). Limiting, leaving, and (re) lapsing: an exploration of Facebook non-use practices and experiences. *Proceedings of the SIGCHI conference on human factors in computing systems: ACM*. 3257–3266.
- Beersma, B., & De Dreu, C. (1999). Negotiation processes and outcomes in prosocially and egotistically motivated groups. *International Journal of Conflict Management, 10*(4), 385–402.
- Behfar, K. J., Peterson, R. S., Mannix, E. A., & Trochim, W. M. K. (2008). The critical role of conflict resolution in teams: A close look at the links between conflict type, conflict management strategies, and team outcomes. *Journal of Applied Psychology, 93*(1), 170–188.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston, TX: Gulf Publishing.
- Bosker, B. (2010). Zuckerberg's privacy stance: Facebook CEO 'Doesn't Believe In Privacy', accessed November 7, 2014, available at [http://www.huffingtonpost.com/2010/04/29/zuckerberg-privacy-stance\\_n\\_556679.html](http://www.huffingtonpost.com/2010/04/29/zuckerberg-privacy-stance_n_556679.html).
- Bradford, K. D., Stringfellow, A., & Weitz, B. (2004). Managing conflict to improve the effectiveness of retail networks. *Journal of Retailing, 80*, 181–195.
- Bulgurcu, B. (2011). Understanding users' coping with information privacy threats in online social networks. *Mediterranean Conference on Information Systems (MCIS)*. Limassol, Cyprus: AIS.
- Cenedella, M. (2011). Privacy is for old people says LinkedIn founder, accessed August 5, 2015, available at <http://www.theladders.com/career-newsletters/privacy-is-for-old-people-says-linkedin-founder>.
- Chan, K. W., Huang, X., & Ng, P. M. (2008). Managers' conflict management styles and employee attitudinal outcomes: The mediating role of trust. *Asia Pacific Journal of Management, 25*(2), 277–295.
- Chang, C.-W., & Heo, J. (2014). Visiting theories that predict college students' self-disclosure on Facebook. *Computers in Human Behavior, 30*, 79–86.

- Chen, G., & Tjosvold, D. (2002). Conflict management and team effectiveness in China: The mediating role of justice. *Asia Pacific Journal of Management*, *19*(4), 557–572.
- Chen, R. (2013). Living a private life in public social networks: An exploration of member self-disclosure. *Decision support systems*, *55*(3), 661–668.
- Chin, W. W. (1998). Issues and opinions on structural equation modeling. *MIS Quarterly*, *22*(1), 7–16.
- Cho, H., Lee, J.-S., & Chung, S. (2010). Optimistic bias about online privacy risks: Testing the moderating effects of perceived controllability and prior experience. *Computers in Human Behavior*, *26*(5), 987–995.
- Davidson, J. (2015). Facebook's Zuckerberg defends controversial 'Real Name' policy, accessed August 5, 2015, available at <http://time.com/money/3942997/facebook-real-name-policy/>.
- De Dreu, C. K., Evers, A., Beersma, B., Kluwer, E. S., & Nauta, A. (2001). A theory-based measure of conflict management strategies in the workplace. *Journal of Organizational Behavior*, *22*(6), 645–668.
- DeChurch, L. A., Hamilton, K. L., & Haas, C. (2007). Effects of conflict management strategies on perceptions of intragroup conflict. *Group Dynamics: Theory, Research, and Practice*, *11*(1), 66–78.
- DeChurch, L. A., & Marks, M. A. (2001). Maximizing the benefits of task conflict: The role of conflict management. *International Journal of Conflict Management*, *12*(1), 4–22.
- Dinev, T., & Hart, P. (2006). An extended privacy calculus model for e-commerce transactions. *Information Systems Research*, *17*(1), 61–80.
- Dinev, T., Xu, H., Smith, J. H., & Hart, P. (2013). Information privacy and correlates: An empirical attempt to bridge and distinguish privacy-related concepts. *European Journal of Information Systems*, *22*(3), 295–316.
- Dwyer, C. (2011). Privacy in the age of Google and Facebook. *Technology and Society Magazine, IEEE*, *30*(3), 58–63.
- Fisher, R. J. (1972). Third party consultation: A method for the study and resolution of conflict. *The Journal of Conflict Resolution*, *16*(1), 67–94.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50.
- Friedman, R. A., Tidd, S. T., Currall, S. C., & Tsai, J. C. (2000). What goes around comes around: The impact of personal conflict style on work conflict and stress. *International Journal of Conflict Management*, *11*(1), 32–55.
- Galletta, D. F., & Lederer, A. L. (1989). Some cautions on the measurement of user information satisfaction. *Decision Sciences*, *20*(3), 419–434.

- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, 16(5), 91–109.
- Goodchild, J. (2010). 4 things Facebook doesn't tell you about privacy, accessed August 5, 2015, available at <http://www.networkworld.com/article/2209318/collaboration-social/4-things-facebook-doesn-t-tell-you-about-privacy-security.html>.
- Gross, M. A., & Guerrero, L. K. (2000). Managing conflict appropriately and effectively: An application of the competence model to Rahim's organizational conflict styles. *International Journal of Conflict Management*, 11(3), 200–226.
- Hajli, N., & Lin, X. (2016). Exploring the security of information sharing on social networking sites: The role of perceived control of information. *Journal of Business Ethics*, 133(1), 111–123.
- Harkinson, J. (2013). Here's how Twitter can track you on all of your devices, accessed August 5, 2015, available at <http://www.motherjones.com/politics/2013/09/twitter-could-threaten-your-privacy-more-facebook>.
- Hausknecht, D. R. (1990). Measurement scales in consumer satisfaction/dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 3(1), 1–11.
- Helweg-Larsen, M., & Shepperd, J. A. (2001). Do moderators of the optimistic bias affect personal or target risk estimates? A review of the literature. *Personality and Social Psychology Review*, 5(1), 74–95.
- Hocker, J. L., & Wilmot, W. W. (1978). *Interpersonal conflict*. Dubuque, IA: W. C. Brown Co.
- Hsu, C., & Yang, S. (2013). Achieving online relationship marketing via tourism blogs: A social network perspective. *Pacific Asia Journal of the Association for Information Systems*, 5(4), 1–25.
- Infosecurity (2013). Facebook delays its new privacy policy, accessed September 10, 2015, available at <http://www.infosecurity-magazine.com/view/34408/facebook-delays-its-new-privacy-policy/>.
- James, T. L., Nottingham, Q., Collignon, S. E., Warkentin, M., & Ziegelmayer, J. (2016). The interpersonal privacy identity (IPI): Development of a privacy as control model. *Information Technology and Management*, 17(4), 341–360.
- James, T. L., Warkentin, M., & Collignon, S. E. (2015). A dual privacy decision model for online social networks. *Information & Management*, 52(8), 893–908.
- Jiang, J. J., Chen, V., Goode, S., & Fernandez, W. (2013). Conflict resolution satisfaction and IS program effectiveness: Constructive controversy theory. *8th Pre-ICIS International Research Workshop on Information Technology Project Management*. Milan, Italy. 15–26.
- Joinson, A. N., Reips, U.-D., Buchanan, T., & Schofield, C. B. P. (2010). Privacy, trust, and self-disclosure online. *Human-Computer Interaction*, 25(1), 1–24.

- Keith, M. J., Thompson, S. C., Hale, J., Lowry, P. B., & Greer, C. (2013). Information disclosure on mobile devices: Re-examining privacy calculus with actual user behavior. *International Journal of Human-Computer Studies*, 71(12), 1163–1173.
- Knijnenburg, B. P., & Kobsa, A. (2013). Making decisions about privacy: Information disclosure in context-aware recommender systems. *ACM Transactions on Interactive Intelligent Systems (TiiS)*, 3(3), 20:1–20:23.
- Krasnova, H., Spiekermann, S., Koroleva, K., & Hildebrand, T. (2010). Online social networks: Why we disclose. *Journal of Information Technology*, 25(2), 109–125.
- Kuhn, T. I. M., & Poole, S. (2000). Do conflict management styles affect group decision making? Evidence from a longitudinal field study. *Human Communication Research*, 26(4), 558–590.
- Lai, T. L. (2004). Service quality and perceived value's impact on satisfaction, intention and usage of short message service (SMS). *Information Systems Frontiers*, 6(4), 353–368.
- Lam, P.-K., & Chin, K.-S. (2005). Identifying and prioritizing critical success factors for conflict management in collaborative new product development. *Industrial Marketing Management*, 34(8), 761–772.
- LaRose, R., & Rifon, N. (2006). Your privacy is assured-of being disturbed: Websites with and without privacy seals. *New Media and Society*, 8(6), 1009–1029.
- Lee, K. L. (2008). An examination between the relationships of conflict management styles and employees' satisfaction. *International Journal of Business and Management*, 3(9), 11–25.
- Lewis, K., Kaufman, J., & Christakis, N. (2008). The taste for privacy: An analysis of college student privacy settings in an online social network. *Journal of Computer-Mediated Communication*, 14(1), 79–100.
- Li, H., Sarathy, R., & Xu, H. (2011). The role of affect and cognition on online consumers' decision to disclose personal information to unfamiliar online vendors. *Decision Support Systems*, 51(3), 434–445.
- Li, Y. (2011). Empirical studies on online information privacy concerns: Literature review and an integrative framework. *Communications of the Association for Information Systems*, 28(1), 453–496.
- Liaw, S.-S. (2007). Computers and the Internet as a job assisted tool: Based on the three-tier use model approach. *Computers in Human Behavior*, 23(1), 399–414.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to

- choose it and how to use it. *IEEE Transactions on Professional Communications*, 57(2), 123–146.
- Lucas, M., & Borisov, N. (2008). Flybynight: Mitigating the privacy risks of social networking. *WPES '08 Proceedings of the 7th ACM Workshop on Privacy in the Electronic Society*: ACM New York, NY. 1–8.
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, 15(4), 336–355.
- Mazaheri, E., Basil, D. Z., Yanamandram, V., & Daroczi, Z. (2011). The impact of pre-existing attitude and conflict management style on customer satisfaction with service recovery. *Journal of Retailing and Consumer Services*, 18(3), 235–245.
- Milne, G. R., & Boza, M. E. (1999). Trust and concern in consumers' perceptions of marketing information management practices. *Journal of Interactive Marketing*, 13(1), 5–24.
- Miranda, S. M., & Bostrom, R. P. (1993). The impact of group support systems on group conflict and conflict management. *Journal of Management Information Systems*, 10(3), 63–95.
- Montoya-Weiss, M. M., Massey, A. P., & Song, M. (2001). Getting it together: Temporal coordination and conflict management in global virtual teams. *The Academy of Management Journal*, 44(6), 1251–1262.
- Oliver, R. L. (1999). Whence consumer loyalty? *The Journal of Marketing*, 63, 33–44.
- Paul, S., Seetharaman, P., Samarah, I., & Mykytyn, P. P. (2004). Impact of heterogeneity and collaborative conflict management style on the performance of synchronous global virtual teams. *Information & Management*, 41(3), 303–321.
- Pavlou, P. A., & Sawy, O. A. E. (2006). From IT leveraging competence to competitive advantage in turbulent environments: The case of new product development. *Information Systems Research*, 17(3), 198–227.
- Posey, C., Lowry, P. B., Roberts, T. L., & Ellis, T. S. (2010). Proposing the online community self-disclosure model: The case of working professionals in France and the UK who use online communities. *European Journal of Information Systems*, 19(2), 181–195.
- Pruitt, D. G. (1983). Strategic choice in negotiation. *American Behavioral Scientist*, 27(2), 167–194.
- Rahim, A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, 26(2), 368–376.
- Rahim, A., & Bonoma, T. V. (1979). Managing organizational conflict: A model for diagnosis and intervention. *Psychological Reports*, 44, 1323–1344.
- Rahim, M. A. (1986). Referent role and styles of handling interpersonal conflict. *The Journal of Social Psychology*, 126(1), 79–86.

- Rahim, M. A., & Buntzman, G. F. (1989). Supervisory power bases, styles of handling conflict with subordinates, and subordinate compliance and satisfaction. *The Journal of Psychology, 123*(2), 195–210.
- Ringle, C. M., Wende, S., & Will, A. (2005). *SmartPLS*. Hamburg, Germany.
- Rippetoe, P. A., & Rogers, R. W. (1987). Effects of components of protection-motivation theory on adaptive and maladaptive coping with a health threat. *Journal of Personality and Social Psychology, 52*(3), 596–604.
- Sawyer, S. (2001). Effects of intra-group conflict on packaged software development team performance. *Information Systems Journal, 11*(2), 155–178.
- Schwaig, K. S., Segars, A. H., Grover, V., & Fiedler, K. D. (2013). A model of consumers' perceptions of the invasion of information privacy. *Information & Management, 50*(1), 1–12.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*(4), 422–445.
- Smith, H. J., Dinev, T., & Xu, H. (2011). Information privacy research: An interdisciplinary review. *MIS Quarterly, 35*(4), 989–1015.
- Smith, H. J., Milberg, S. J., & Burke, S. J. (1996). Information privacy: Measuring individuals' concerns about organizational practices. *MIS Quarterly, 20*(2), 167–196.
- Sobel, M. E. (1982). Asymptotic confidence intervals for direct effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology*. San Francisco: Jossey-Bass, 290–312.
- Thomas, K. W. (1992). Conflict and conflict management: Reflections and update. *Journal of Organizational Behavior, 13*(3), 265–274.
- Todd, R. (2014). LinkedIn sued for furnishing reference reports on users, accessed September 8, 2015, available at <http://www.therecorder.com/id=1202673121942/LinkedIn-Sued-for-Furnishing-Reference-Reports-on-Users?slreturn=20140913120639>.
- Tutzauer, F., & Roloff, M. E. (1988). Communication processes leading to integrative agreements: Three paths to joint benefits. *Communication Research, 15*, 360–380.
- Van de Vliert, E., & Euwema, M. C. (1994). Agreeableness and activeness as components of conflict behaviors. *Journal of Personality and Social Psychology, 66*(4), 674–687.
- Van de Vliert, E., & Hordijk, J. W. (1989). A theoretical position of compromising among other styles of conflict management. *The Journal of Social Psychology, 129*(5), 681–690.
- Vance, A., Lowry, P. B., & Eggett, D. (2015). Increasing accountability through user-interface design artifacts: A new approach to addressing the problem of access-policy violations. *MIS Quarterly, 39*(2), 345–366.
- Wall, J. A. J., & Callister, R. R. (1995). Conflict and its management. *Journal of Management, 21*(3), 515–558.

- Wall, V. D., Jr., & Galanes, G. (1986). The SYMLOG dimensions and small group conflict. *Communication Studies*, 37(2), 61–78.
- Warkentin, M., Charles-Pauvers, B., & Chau, P. Y. (2015). Cross-cultural IS research: Perspectives from Eastern and Western traditions. *European Journal of Information Systems*, 24(3), 229–233.
- Watson, R. T., DeSanctis, G., & Poole, M. S. (1988). Using a GDSS to facilitate group consensus: Some intended and unintended consequences. *MIS Quarterly*, 12(3), 463–478.
- Wheless, L. R., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. *Human Communication Research*, 2(4), 338–346.
- Xu, H., & Bélanger, F. (2013). Information systems journal special issue on: Reframing privacy in a networked world. *Information Systems Journal*, 23, 371–375.
- Xu, H., Teo, H. H., & Tan, B. C. Y. (2005). Predicting the adoption of location-based services: The roles of trust and privacy risk. *Proceedings of 26th International Conference on Information Systems*. Las Vegas, NV. 897–910.
- Zlatolas, L. N., Welzer, T., Heričko, M., & Hölbl, M. (2015). Privacy antecedents for SNS self-disclosure: The case of Facebook. *Computers in Human Behavior*, 45, 158–167.

## Appendix

### Survey Instrument

---

#### **Problem-solving (developed for this study) (Strongly Agree/Strongly Disagree)**

- What is your impression about how Facebook handles users' privacy concerns?
- ProSolv1 Facebook works with its users to create solutions so that both Facebook and the users can achieve their goals and objectives.
- ProSolv2 Facebook integrates users' perspectives with its own when solving privacy issues.
- ProSolv3 Facebook cooperates with its users to create a win-win solution.

#### **Accommodating (developed for this study) (Strongly Agree/Strongly Disagree)**

- What is your impression about how Facebook handles users' privacy concerns?
- Accom1 Facebook is fully cooperative when handling users' privacy concern.
- Accom2 Facebook is willing to totally sacrifice its own goals for the sake of its users when handling users' privacy concern.
- Accom3 Facebook is willing to completely go along with users' wishes when handling users' privacy concern.
- Accom4 Facebook is willing to entirely give in to users' request when handling users' privacy concern.

#### **Asserting (developed for this study) (Strongly Agree/Strongly Disagree)**

- What is your impression about how Facebook handles users' privacy concerns?
- Assert1 Facebook would argue that its privacy practice is for users' benefits.
- Assert2 Facebook would defend its way of handling users' personal information.
- Assert3 Facebook would try to justify the appropriateness of its privacy practices.
- Assert4 Facebook would assert that users' privacy concerns are exaggerated.

#### **Avoiding (developed for this study) (Strongly Agree/Strongly Disagree)**

- What is your impression about how Facebook handles users' privacy concerns?
- Avoid1 Facebook tried to hide its privacy practice to avoid confrontation with its users.
- Avoid2 Facebook tried to minimize the disclosure of its privacy practices to avoid tensions between its users and Facebook.
- Avoid3 Facebook tried to conceal the fact of its privacy practice to avoid conflict between its users and Facebook.
- Aviod4 Facebook tried to avoid arousing users' privacy concerns.

#### **Perceived privacy risk (Malhotra et al., 2004) (Strongly Agree/Strongly Disagree)**

- PriRisk1 There is high risk associated with providing information on Facebook.
- PriRisk2 There is high potential for loss associated with providing information on Facebook.
- PriRisk3 There is too much uncertainty associated with providing information on Facebook.
- PriRisk4 Providing information on Facebook can cause many unexpected problems.

#### **Perceived risk control (Bulgurcu, 2011) (Strongly Agree/Strongly Disagree)**

- I feel that ----- that may result from using Facebook.
- RiskCtrl1 I have enough control to avoid any privacy risks
-



---

RiskCtrl2 I can reduce any threats to my privacy

RiskCtrl3 I can protect my personal information against any privacy risks

**Satisfaction with privacy practice (Hausknecht, 1990) (Strongly Agree/Strongly Disagree)**

Satisf1 I am satisfied with the privacy offered by Facebook.

Satisf2 I am satisfied with the way Facebook handles users' personal information.

Satisf3 I am satisfied with Facebook's privacy practice.

**Intention (Malhotra et al., 2004) (Strongly Agree/Strongly Disagree)**

Int1 I would be willing to release more of my personal information on Facebook.

Int2 I would be willing to provide more of my personal information on Facebook.

Int3 I would be willing to disclose more of my personal information on Facebook.

---

**Jie Zhang** is an associate professor of MIS in the Dillard College of Business Administration at Midwestern State University. She received her PhD in management information systems from the University of Mississippi. She has published in *Decision Support Systems*, *European Journal of Information Systems*, *Information Systems Journal*, *Journal of Computer Information Systems*, *Information Management & Computer Security*, and *Journal of Information Privacy and Security*. Her research interests include behavioral information security, privacy, and SMEs information systems management.

**Han Li** is an assistant professor in Anderson School of Management at the University of New Mexico. She received her doctorate in management information systems from Oklahoma State University. She has published in *Decision Support Systems*, *Operations Research*, *European Journal of Information Systems*, *Information Systems Journal*, *Journal of Database Management*, *Journal of Computer Information Systems*, *Information Management & Computer Security*, and *Journal of Information Privacy and Security*. Her current research interests include health IT, privacy and confidentiality, data and information security and the adoption of information technology.

**Xin (Robert) Luo** is an endowed regent's professor and associate professor of MIS and information assurance in the Anderson School of Management at the University of New Mexico, USA. He is the associate director of Center for Information Assurance Research and Education at UNM. He received his PhD in MIS from Mississippi State University, USA. He has published research papers in leading journals including *European Journal of Information Systems*, *Decision Support Systems*, *Communications of the ACM*, *Journal of the AIS*, *Journal of Strategic Information Systems*, *Information & Management*, and *Computers & Security*. He is currently serving as an ad hoc associate editor for MIS Quarterly and an associate editor for *European Journal of Information Systems*, *Electronic Commerce Research*, *Journal of Electronic Commerce Research*, and Interna-

*tional Conference on Information Systems*. His research interests center around information assurance, innovative technologies for strategic decision-making, and global IT management. He is the editor-in-chief for *International Journal of Information and Computer Security* and coeditor-in-chief for *International Journal of Accounting and Information Management*.

**Merrill Warkentin** is a professor of MIS and the Drew Allen Endowed Fellow in the College of Business at Mississippi State University. His research, primarily on the impacts of organizational, contextual, and dispositional influences on individual behaviors in the context of information security and privacy, has appeared in *MIS Quarterly*, *Journal of the Association for Information Systems*, *European Journal of Information Systems*, *Information & Management*, *Decision Support Systems*, *Information Systems Journal*, and others. He is the author or editor of seven books, and has authored or coauthored over 250 published manuscripts, including almost 70 peer-reviewed journal articles. He serves or has served as associate editor of *MIS Quarterly*, *Information Systems Research*, *European Journal of Information Systems*, *Information & Management*, and other journals. He is senior editor of the *AIS Transactions on Replication Research* and an eminent area editor (MIS) for *Decision Sciences*. He has held officer and other leadership positions at AIS, DSI, IFIP, and ACM. His work has been funded by NATO, NSF, NSA, DoD, Homeland Security, IBM, and others. He has chaired several international conferences and will be the Program Co-Chair for the 2016 AIS Americas Conference on Information Systems (AMCIS).