5-2018

Knowledge Sharing in Personal Networking Instead of Professional-instrumental Context: An Integrated Perspective of Psychological Defense

Yuhao Li
Shanghai International Studies University, yuhao0725@gmail.com

Kanliang Wang
Renmin University of China, kanliang.wang@gmail.com

Mengxiang Li
Hong Kong Baptist University, mengxiangli@hkbu.edu.hk

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KNOWLEDGE SHARING IN PERSONAL NETWORKING INSTEAD OF PROFESSIONAL-INSTRUMENTAL CONTEXT: AN INTEGRATED PERSPECTIVE OF PSYCHOLOGICAL DEFENSE

Yuhao Li
Shanghai International Studies University
yuhao0725@gmail.com

Mengxiang Li
Hong Kong Baptist University
mengxiangli@hkbu.edu.hk

Kanliang Wang
Renmin University of China
kanliang.wang@gmail.com

Abstract:

The approach and structure of online networking have different implications for the knowledge sharing behavior of workers across teams within an organization. Despite studies on the topic, it is still not clear how the characteristic of social ties influences knowledge sharing behavior via online platforms, which have increasingly highlighted two opposing attributes: instrumental/task-related networks and expressive/personal networks. This study investigates the role of psychological defense in shaping the knowledge sharing behavior of employees in personal networking tools. Empirical analysis based on data collected from 455 knowledge workers demonstrated that psychological defense has a fundamental impact on knowledge sharing in personal networking context. Specifically, our results show that psychological safety, need to belong, self-integrity, sense of control, work overload, and role conflict have significant impact on the sharing behavior of knowledge workers in the personal networking context. The theory and practice contributions provided by the current study were discussed.

Keywords:
Knowledge sharing, multiple teams, personal networking, psychological defense

1. Introduction

Previous studies emphasized that social media technologies turn intra-organizational knowledge sharing from the way of centralized knowledge communication to a visible, continuous and collective knowledge conversion (Leonaridi 2014; Majchrzak et al. 2013; Majchrzak et al. 2016). Although a group of internet-based technologies provide organizations new capabilities by which knowledge sharing could be easily created, fostered, improved, and diffused via professional platforms, significance of motivational factors would vary between personal networking and professional-instrumental context. Specifically, knowledge sharing in personal networking implies a context of an individual's life, friendship, and emotional support. In contrary, knowledge sharing in professional ties refers to a background of aid in task execution, work-related affairs, and professional success (Casciaro et al. 2014). Therefore, knowledge workers might not simply choose these tools in their knowledge sharing behaviors because their emotions, attitudes, and choice would be significantly influenced by the nature of the relationships and their feelings during the development and maintenance of their social ties in these tools.

There is still a lack of understanding on how users' relationships in these tools facilitate users' knowledge sharing within an organization or even with the organization's ecosystem. It is important to note that since knowledge sharing in organization-directed tools implies various types of psychological threat, including incomplete source, questionable record, and benefit loss (Willem et al. 2007). As a result of that, personal social ties might distinctly influence the selection of defensive processes even if task goals might coexist within the same social relationships. Personal networking provides comfort in the face of barrage and threats because it is more stable, predictable, and intimacy (Jarvenpaa et al. 2010; Ma et al. 2014). By using integrative theories of psychological defense, we proposed that perceived threat and uncertainty in workplace, belongingness needs, sense of integrity and control, work overload and role conflict would significantly influence an individual's knowledge sharing in personal networking context.

2. Related literature
2.1. Psychological defense
The premise of psychological defense is based on the realization that people tend to maintain psychological resources (e.g., close relationships, agency, meaning) to counteract anxiety, confer equanimity, and against psychological disarray (Hart 2014). Prior studies have shown that the measurement of defense could be very crucial to understand individuals' responses to stress (Vickers et al. 1981). Defensiveness theories incorporate various areas, such as information-processing and intergroup relations, to help assess the potential reasons that cause people think, feel and act in diverse ways. The first concentrates on the factors of the management of terror management that interprets users' defensiveness stems towards threats, concerns, and anxious arousal. For instance, individuals defense their worldview with unconscious vigilance to foster social support and reduce anxiety by promoting adherence to cultural values in their social circles (Holbrook et al. 2011). The second stream centers on the principle that interpersonal needs would be critical and relevant to individual defensiveness. Prior studies investigated that individual recognition of belonging to a certain community is beneficial to their knowledge sharing behavior (Chang et al. 2011). Further, lack of attachments would cause a series of negative consequences on health, adjustment, and well-being (Baumeister et al. 1995). The third part focuses on self-affirmation and control to examine how these factors mitigates defensiveness by having control over the sense of valuable and meaningful. Scholars have suggested that integrity is a concept that attempt to measure and indicate counterproductive work behaviors for mitigating defensiveness (Berry et al. 2007). In addition, people might seek a sense of control when they exposed to relational or meaning threats (Kay et al. 2008). The fourth concerns on inconsistency by highlight the defensiveness which people confer a sense of "rightness" when the reality disrupts their sense of the way it should works. For example, prior studies emphasized that cognitive consistency is a kind of psychological need that as fundamental as hunger and thirst (Gawronski 2012).

2.2. Knowledge sharing in personal networking context
By highlighting the visibility in the communication of social media networks, prior studies indicated that communication visibility strengthens the awareness of knowledge workers and helps third-party observers improve their meta-knowledge, and thus lead to more innovations (Leonaridi 2014). Moreover, previous approaches raised issues such as knowledge protection, firm boundaries, and competitive edge when social media tools facilitate open and inexpensive platforms compared with traditional implementations (Von Krogh 2012). These perspectives provide detailed investigations for indicating barriers and potentials of the usage of social media technologies and tools in knowledge sharing context. First, workplace politics would be significantly related to users' behavior in a professional networking background

(Forret et al. 2001; Wang et al. 2014), whereas some people may feel more comfortable about asking for help in personal networking because of friendship (Ma et al. 2014). Second, prior research simply posited that information and communication technologies in professional environment can create stress while ignore the fact that stress and defensive mechanism can help people to interface with these threats and adapt to the reality and become attentive. Third, organization-wide knowledge sharing is generally handled by subgroups in a centralized process, which directed and moderated by managers and repositories and hardly throughout the whole organization. However, knowledge contributions via social media could be continuous and decentralized, which can start a relative open knowledge-sharing trajectory and create innovative outcomes among other workers at the company (Majchrzak et al. 2016).

3. Research Model and Hypotheses
3.1. Uncertainty and threats
Although sharing knowledge with colleagues among different departments is viewed as beneficial both to company and colleagues, tacit is the most fundamental source of above-normal returns to enrich oneself or his/her department (Mcevily et al. 2000). In such a situation, the collaborative efforts of employees might no longer be recognized as positive (Willem et al. 2007). Potential threats, such as substitution risk, reputation loss, and bad records, put a press on people when people decide to share their knowledge in the context of organizational tools. Thus, personal-initiative networking provides means to managing these threats by conceptualizing reality into friendship and emotional support rather than profession goals and work performance. Based on prior studies, managers can hardly influence employees' interpersonal networks by which employees find information to collaborate and improve their works because the benevolence and competence of these networks enable effective knowledge creation and sharing (Abrams et al. 2003). Psychological safety has been recognized as the shared belief of team members about the consequences of their interpersonal risk taking within a professional group (Kessel et al. 2012). The perception of organization members about this concept (how the work environment is cognitive appraised) describes a climate in which interpersonal trust and protection counteract potential threats (James et al. 1988). In our research context, we expect that employees might inclined to seek help, contribute knowledge, and share creative ideas in their personal networking tools instead of professional platforms provided by organizations when they are inhibited by a feeling of insecurity. Therefore, we hypothesize,

H1: Low psychological safety in work place is positively related to knowledge sharing in personal networking tools.

3.2. Need to belong
Another benefit for workers to engage in knowledge sharing via personal social networking tools could be the "need to belong". As prior studies demonstrated, interpersonal needs are fundamental to individual positive self-regard and psychological well-being, and thus relevant to psychological defense. Belongingness is an innate need to form and maintain a number of interpersonal relationships, so mere social contact with strangers, or with people one dislikes might not satisfy it. Specifically, people need to perceive that their personal contacts or interactions with the other person are stable, affective-based, and continuous into the foreseeable future (Baumeister et al. 1995). Professional platforms provide a relational context for employees within organizational boundaries to create instrumental ties to gain work-related benefits and exchange career-related resources (Casciaro et al. 2014). Consequently, there are two reasons that people might vary their engaging in knowledge sharing under a perception that their bonds in professional context is primary in pursuit of

job-related goals. First, organizational tools might makes people feel uncomfortable for seeking help because the norms of reciprocity regulate relationships in two networks differ. Second, the extent to which employees occupy a power position in professional tools might significantly affect their perceptions and likelihood to engage, which encourages employees to adopt a more instrumental view to evaluate the networking behaviors between themselves and others (Keltner et al. 2003). By contrast, an interaction with colleagues in the context of personal social networking tools might be more rewarding because knowledge contribution is commensurate with individual motivation to setup stable and affective bonds by providing friendship and emotional support. Therefore, we hypothesize,

H2: Need to belong is positively related to knowledge sharing in personal networking tools.

3.3. Protective adoptions: perceived integrity and control

As prior research suggested, the protective approach could leverage the abilities in response to stress and provide advantages in harsh unpredictable environments (Ellis et al. 2017). Given that the literature is laden with examples that individuals are inclined to be over optimistic in their evaluations of their knowledge and competence (Pronin 2008), the risks of knowledge sharing in professional platforms would around some motive even more central because people tend to reflect conception that self is good and valuable. Hence, the concerns of integrity and control might drive individual members to choose personal networking tools for knowledge sharing and contribution because these tools provide circumstances under which people are less defensive and more open-mined (Loiacono 2014). The concept of integrity was designed to predict employees' counterproductive work behaviors and job performance (Berry et al. 2007). Scholars developed a series of scales to describe how individual and situational variables operate in defense system to induce counterproductive behaviors in organizational context by emphasizing "valuable member to cultural norms" (Ones et al. 1993; Steel 1988). Despites some research suggested integrity is a compound trait which linked to individual personality such as conscientiousness, agreeableness, and emotional stability (Berry et al. 2007), the test of integrity indicated that dispositional characteristics are not the only influential source because the construct may be hierarchical in nature (Mumford et al. 2001). Based on the needs of people to put themselves near the core of defensiveness, self-integrity implies the necessary of regulation for employees to change sharing networking to avoid uncanny stimuli (Hart 2014). Hence, we hypothesize,

H3: Self-integrity is negatively related to knowledge sharing in personal networking tools.

Rather than integrity on the whole, empirical evidences suggested that people might seek control when they were exposed to threats because a sense of personal control is important to restore a cogent view of reality (Kay et al. 2008). As a key topic of interest in psychology, sense of control refers to the belief that people has the capability to shape their life (Wenke et al. 2010). Given that people respond to environmental uncertainty by evaluate the extent to which they perceive threats as controllable or uncontrollable, sense of control can be an important psychological driver for people to adopt behavioral strategies (Mittal et al. 2014). For instance, for individuals with low sense of control in their professional environment, personal networking tools provide an alternative by which individuals are more likely to effectively cope with stressors (Brooks 2015). Therefore, we hypothesize,

H4: low sense of control is positively related to knowledge sharing in personal networking tools.

3.4. Inconsistency and dissonance

In some respects, people tend to find a way to consonance the underlying inconsistency between expectations and reality so that their defensive efforts can explains a situation reasonably (Gawronski 2012). Prior studies explained defensiveness as a kind of palliative responses to individual aversive arousal that follows from the deviation between reality and people's sense of the way of "rightness" (Proulx et al. 2012). Cognitive dissonance described cognitive consistency as individual basic demand by which threat could be resolved and compensated in multiple ways. Inconsistency was defined as knowledge or belief about the environment or behavior is opposite to each other (Festinger 1962). In our research context, the progress of information technologies forces employees to work longer with expanded roles in an increasing complex environment (Rutner et al. 2008). Hence, the disconfirmation between expectation and actual experience on professional platforms might have a negative effect for the usage of these tools (Brown et al. 2012). Consequently, personal networking tools provide a channel to rationalize their additional sharing behaviors and counteract the feeling of role conflict because personal relationships indicates their inconsistency and dissonance could be relieved and explained by the purpose of friendship building and maintenance (Casciaro et al. 2014). Therefore, we hypothesize,

H4: Work overload is positively related to knowledge sharing in personal networking tools.
H5: Role conflict is positively related to knowledge sharing in personal networking tools.
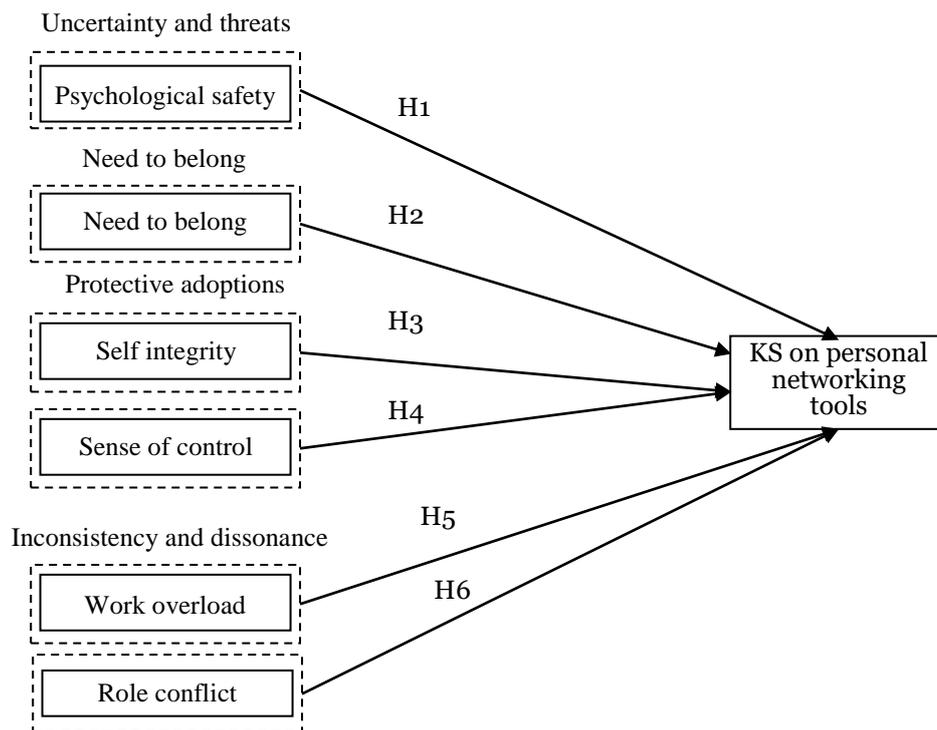

Figure 1. Research Model

4. Research Methodology
4.1. Measures
The constructs in this study include *psychological safety, need to belong, self integrity, sense of control, work overload, role conflict, and knowledge sharing on personal networking tools* (see Table 2). Based on an extensive review, established measures from previous literature

were adapted in the current study. On the basis of 23 composites and prototypical items in prior research (Wanek et al. 2003), self integrity was measured by four component: antisocial behavior (association with delinquents, theft admissions, and risk taking), socialization (achievement, locus, and emotional stability), positive outlook (accident prone, supervision attitudes), and orderliness (orderliness, and diligence). Demographical variables such gender, age, education, industry, tenure, post, were included as control variables.

Measure	Items	Freq.	Percent	Measure	Items	Freq.	Percent
Gender	Male	305	67.03%	Education	High School	22	4.84%
	Female	150	32.97%		Diploma	56	12.31%
Age	~25	43	9.45%		Bachelors	304	66.81%
	25~34	262	57.58%		Masters	72	15.82%
	34~44	88	19.34%		Doctorate	1	0.22%
	44~54	47	10.33%	Tenure	~3	174	38.24%
	55~	15	3.30%		3~6	182	40.00%
Industry	Machinery/Equipment	48	10.55%		6~9	53	11.65%
	Finance/Investments	15	3.30%		9~	43	10.11%
	Software/Telecom	106	23.30%	Post	Staff	356	78.24%
	Oils/Mines	31	6.81%		Chief	77	16.92%
	Utilities/Energy	248	54.41		Department manager	21	4.62%
	Healthcare/Medicine	7	1.54		General manager	1	0.22%

Table 1. Demographic information of participants

4.2. Pilot study

Based on both of prior literature and our research context, a questionnaire survey was conducted to test our research model. Before the survey, five experts from IS and computer science field were convened to validate the measurement. Feedback was collected in person to improve the conciseness of these items. A pilot study involving 30 users was implemented to assess the validity and reliability of instruments. The analysis of item weights, loading and construct correlations confirmed the effectiveness of our measurement.

4.3. Data collection and sample

To test the research model, the questionnaire was administered by recruiting IT users and knowledge-related workers in 13 firms with multiple teams in Mainland China from May 2015 to April 2016. In appreciation of respondents' effort, a reward about $10 was offered for each response. All respondents were verified that they actually both have experience on firm-provided platforms and personal social media tools more than 1 year. The statement assured them that this survey would be anonymous processing with research purpose. A total 480 participants were identified as the respondents of the survey and a total of 455 valid responses were received (see Table 1).

Constructs	Items	Items Loading	AVE	Source
Psychological safety (PS)	If you make a mistake on this team, it is often held against you	0.849	0.741	(Edmondson 1999; Kessel et al. 2012)
	It is unsafe to take a risk on this team	0.852		
	People on this team would deliberately act in a way that would undermine my efforts.	0.882		
Need to belong (NB)	I need to feel that there are people I can turn to in times of need.	0.800	0.658	(Leary et al. 2012)

	I want other people to accept me.	0.781		
	It bothers me a great deal when I am not included in other people's plans.	0.811		
	My feelings are easily hurt when I feel that others do not accept me.	0.852		
Antisocial behavior (AB)	I have no friends who are a little dishonest.	0.881	0.656	(Wanek et al. 2003)
	I have never borrowed something from work without telling anyone.	0.867		
	I will not usually take someone up on a dare.	0.829		
	It is wrong to get around the law if you don't break it.	0.853		
Socialization (SO)	I usually work harder than I need to on projects.	0.911	0.579	(Wanek et al. 2003)
	In general, life has been fair to me.	0.761		
	I have never thought about taking my own life.	0.655		
Positive outlook (PO)	I'm lucky to avoid having accidents.	0.741	0.601	(Wanek et al. 2003)
	Supervisors treat their employees fairly.	0.811		
	Employees get along well with their supervisors.	0.774		
Orderliness (OR)	I always finish what I start.	0.686	0.622	(Wanek et al. 2003)
	People say that I'm a workaholic.	0.809		
	I like to plan things carefully ahead of time.	0.882		
	I make sure everything is in its place before leaving home.	0.864		
Sense of control (SC)	I cannot do just about anything that I really set my mind to.	0.848	0.709	(Mittal et al. 2014)
	Whatever happens in the future mostly does not depend on me.	0.872		
	When I really want to do something, I usually cannot find a way to succeed at it.	0.822		
	Whether or not I able to get what I want is not in my own hands.	0.823		
Work overload (WO)	I feel that the number of requests, problems, or complaints I deal with is more than expected.	0.780	0.742	(Rutner et al. 2008)
	I feel that the amount of work I do interferes with how well it is done.	0.914		
	I feel busy or rushed.	0.884		
	I feel pressured.	0.842		
Role conflict (RC)	I do things that are apt to be accepted by one person and not accepted by others.	0.887	0.684	(Rutner et al. 2008)
	I sometimes have to buck a rule or policy in order to carry out an assignment.	0.865		
	I frequently receive incompatible requests from two or more parties.	0.871		
	I often perform work for two or more parties who operate quite differently	0.829		
	In my work, I have to try to balance two or more conflicting preferences.	0.686		
Knowledge sharing via personal networking tools (KSPT)	I use social media tools to provide my work reports and official documents with collogues	0.927	0.859	(Choi et al. 2010)
	I use social media tools to provide my manuals and methodologies for collogues in our organization.	0.936		
	I use social media tools to share my experience or know-how from work with others within our organization.	0.895		

Table 2. Psychometric properties of measures

5. Data Analysis

The survey data was analyzed to estimate the research model by using partial least squares (PLS). As a second-generation causal modeling statistical technique, it is suitable for the beginning step of a theoretical research (Hair et al. 2011). Second, PLS is able to examine the measurement model and structural model of a research at the same time (Fornell et al. 1982). Third, PLS is a suitable method for analyzing our model with interaction analysis (Gefen et al. 2011). In this section, the measurement validity and method bias of the research were tested. Next, the testing of our hypotheses was discussed.

5.1. Measurement validity

Our measurement model was tested by convergent validity and discriminant validity (Hair et al. 2011). Convergent validity was assessed by examining the composite reliability (> 0.7), average variance extracted (AVE) (> 0.5), and items loading (> 0.6). The results in Table 2 satisfy the criteria for adequate convergent validity. Discriminant validity was assessed by the correlations among research constructs (see Table 3) and the factor analysis. Each square root of the construct's AVE should be greater than the construct's correlations with other constructs. Further, items should load higher on their construct than on others. Thus the test of discriminant validity fulfilled the criteria from previous studies.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
PS	5.144	1.308	**0.861**									
NB	4.959	1.248	0.543	**0.811**								
AB	4.108	1.581	0.448	0.260	**0.810**							
SO	3.621	1.759	0.501	0.496	0.165	**0.760**						
PO	5.965	1.406	0.450	0.594	0.261	0.534	**0.775**					
OR	4.981	1.481	0.492	0.564	0.270	0.480	0.565	**0.788**				
SC	4.959	1.247	0.325	0.432	0.565	0.492	0.575	0.520	**0.842**			
Woo	3.834	1.574	0.339	0.330	0.479	0.292	0.281	0.204	0.330	**0.861**		
RC	4.800	1.309	0.533	0.587	0.080	0.522	0.463	0.331	0.587	0.296	**0.827**	
KSPT	5.570	1.229	0.638	0.450	0.206	0.569	0.615	0.583	0.483	0.314	0.638	**0.927**

Notes:
1. Diagonal elements are the square root of average variance extracted (AVE).
2. Psychological safety (PS), Need to belong (NB), Antisocial behavior (AB), Socialization (SO), Positive outlook (PO), Orderliness (OR), Sense of control (SC), Work overload (WO), Role conflict (RC), Knowledge sharing in personal networking tools (KSPT).

Table 3. Mean, SD and Correlations

## 5.2. Nonresponse bias and common method bias

A time-trend extrapolation test was conducted to examine the possible influence of nonresponse bias. The results of a multivariate analysis between early 25% and late 25% collected data showed that the influence of nonresponse bias is insignificant in our research. To address the influence of common method bias, a Harmon one-factor test was applied. The results showed that the highest variance percentage explained by one factor was 35.26%. Further, a common method factor linked to all principal constructs' indicators was included in the research model to test the influence of common method bias. The results indicated that the average substantively explained variance of the indicators is 0.714, while the average method-based variance is 0.012 (The ratio of substantive variance to method variance is about 1.68%).

5.3. Results of hypotheses testing

Figure 2 shows the results of hypotheses testing. The results indicated that all control variables were found to be insignificant. Tenure has a negative impact on employees' knowledge sharing in their personal networking context ($\beta = -0.180$, $t = 3.951$). The R^2 value suggested that our model explain 60.9% of users' knowledge sharing behavior in their

personal networking environment. The significant antecedents were psychological safety (β = 0.253, t = 4.319), need to belong (β = 0.149, t = 1.985), self-integrity (β = -0.204, t = 3.381), sense of control (β = 0.209, t = 2.865), work overload (β = 0.214, t = 2.965), and role conflict (β = 0.266, t = 3.900). Further, four dimensions of self-integrity such as antisocial behavior (β = 0.370, t = 10.260), socialization (β = 0.251, t = 22.281), positive outlook (β = 0.312, t = 21.828), and orderliness (β = 0.440, t = 22.640) were proved as significant indicators to the second order construct. Therefore, all hypotheses in the current study were supported.

On the basis of various defensive responses, the results revealed that employees are motivated to sharing knowledge via their personal networking tools to counteract threats, self-integrity, and dissonance to provide comfort in the face of life barrages (Hart 2014). Further, prior research has indicated that concerns of security maintenance would facilitates employees to engage organizational knowledge sharing through personal networking tools to build and maintain relationships for friendship and emotional support (Yan et al. 2014). The results in the current study also suggested that tenure might hinder users' knowledge sharing behavior in personal networking platforms. Potential explanations could be summarized as follows. First, knowledge works with longer job tenure are able to absorb and utilize the knowledge from organizational platforms than those with less job experience (Ko et al. 2011). Second, employees with longer tenure are likely to build and nurture more personal and professional relationships than those with less job experience.
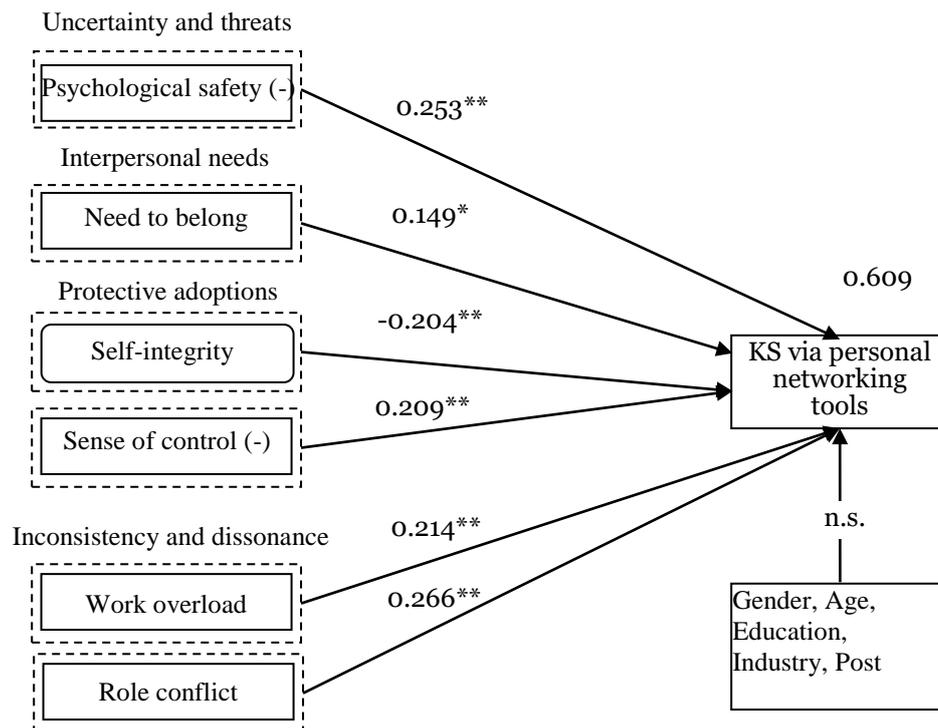
Notes: *p < 0.05, **p < 0.01, (-) reverse items measurement.
Figure 2. Hypotheses Testing Results

6. Discussion and Conclusion
The finding of this study offers several implications to the literature. First, our research highlights people's usage of personal networking tools for the intra-organizational knowledge sharing. For decades, previous studies have extensively examined the motives to share

knowledge through organizational information systems. Knowledge sharing in organizational platforms (organizational practice, skill development, and role clarity) and personal networking tools (personal life, friendship, and emotional support) refers to different type of social interactions and purposes (Casciaro et al. 2014). This paper contributes by clarifying that the nature of social relationships in social media platforms might have broad potential consequences in the outcome of employees' knowledge sharing behavior. Second, we also contribute to IS literature by identifying the perspective of psychological defense as fundamental concept that explains employees' knowledge sharing and contribution behaviors in their personal networking tools instead of professional platforms. Previous studies pointed to the necessity of investigation on how contextual factors shape users' knowledge sharing and contribution decisions in online environment. Our results contribute to existing literature by revealing that the theories of psychological defense are useful to explain employees' knowledge sharing behavior in their personal networking tools. Third, this research provides an integrative understanding of employees' protective mechanism by highlighting their motivations, such as threats and uncertainty, relationships strengthening, perceived integrity and sense of control, and inconsistency perceptions (work overload and role conflict). Despite the similar predictions from a proliferation of theories, our results indicated that each component promote larger explanatory of the integrated defensiveness framework on individuals' protective mechanisms.

Our study has several important managerial and practical implications. Our findings suggest that managers intend to leverage employees' knowledge sharing and contribution in professional tools initiated by organizations must encourage employees to choice these tools in a right order. Managers can solicit employees to model and moderate their knowledge sharing and contribution to reduce their perceived threats, perceived integrity and control so that employees might less likely choose personal social media tools to contribute their knowledge. Second, personal social media tools should help users to contribute their knowledge within an organization by providing various opportunities for them to connect personal ties. These personal ties could be beneficial by increasing members' exposure and personal learning in the high psychological defense context. Third, managers should aware that the emotional and friendship attributes of personal tools compensate the violation of desired, equanimity-providing meanings, such as over workload and role conflict. As prior studies demonstrated, individual concern of time and effort cost is the most significant barrier for employees to share knowledge in professional platforms (Vuori et al. 2012). Consequently, the personal context makes significant adjustments for employees to benefit themselves to regain consistency from a rudimentary preference.

This study also has several limitations that could be addressed in future research. First, the findings of this study are based on survey data. We measured employees' motivations of knowledge contributions on personal social tools from self-report scales. Thus, we were not able to estimate the difference between their actual online behaviors in two contexts and examine the change of motivations when employees choose personal networking tools from organization-provided professional tools. Future researcher can adopt a multilevel analytical approach by using actual online data. Second, current although samples with a single background could be effective to decrease extra interferences, caution should be taken in generalizing our findings. For instance, the impact of regional culture discrepancy might influence our results. It is possible that the impact of culture difference in media choice study could be assessed in the further research. Third, we examined a series of antecedents of users' knowledge sharing on their personal networking tools just from a psychological defense perspective, indicating that our theoretical model could be extended with other unexplained

variance in the future. Therefore, future studies could provide more valuable insights by exploring employees' choice of knowledge sharing from other related constructs and theoretical perspectives.

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