

Investigating the Effect of University Students' Personality Traits on Knowledge Withholding Intention: A Multi-theory Perspective

Hsin-Hui Lin and Yi-Shun Wang

Abstract—Knowledge withholding intention refers to one's propensity to choose to conceal knowledge that is important or valuable to others. Students' knowledge withholding behavior is an obstacle to social knowledge construction in the context of university commerce and management education. While several previous studies have explored the factors affecting knowledge sharing intention, little research has investigated the factors influencing knowledge withholding intention. Prior studies suggest that personality traits affect knowledge contribution behaviors. Thus, the main purpose of this study is to explore the effect of university students' personality traits on knowledge withholding intention in commerce and management education from a multi-theory perspective. Based on the concepts of Big Five personality traits, locus of control personality, social identity theory, and social exchange theory, this study proposes a multi-theory model to investigate how personality traits influence knowledge withholding intention through the mediation of perceived social identity. Additionally, expected rewards and expected associations are also hypothesized to moderate the effect of perceived social identity on knowledge withholding intention.

Index Terms—Knowledge withholding, locus of control, big five personality traits, social identity theory, social exchange theory.

I. INTRODUCTION

Previous studies have suggested that individuals are prone to withhold knowledge when they participate in knowledge contribution activities (e.g., Lin & Huang, 2010). While the extant knowledge management literature have investigated the factors affecting knowledge sharing intention (e.g., Bock et al., 2005; Chiu et al., 2006; Su et al., 2010; Hsu, et al., 2007; Chen et al. 2010; Zhang et al., 2010; Wang & Noe, 2010), few studies have explored knowledge contributions from a negative perspective, such as knowledge withholding. Knowledge withholding is an obstacle to social knowledge construction in the context of university commerce and management education. Knowledge withholding intention refers to one's propensity to choose to conceal knowledge that is important or valuable to others. Lin & Huang (2010) also define knowledge withholding as the likelihood that an individual will give less than full effort to contributing knowledge, and suggest that factors affecting positive behavior variables (e.g., knowledge sharing) are not the same as those affecting negative behavior variables (e.g., knowledge withholding).

Furthermore, students who have high knowledge sharing

intentions may tend to share much unimportant or common knowledge, but withhold critical knowledge in their knowledge contribution activities. In the context of commerce and management education, students also tend to withhold their efforts in group work, especially when asked to share knowledge. They believe that their knowledge becomes less valuable if it is shared with others in the group. Thus, there is a need for research to better understand the determinants of students' knowledge withholding intention. While several previous studies have explored the factors affecting knowledge sharing intention, few studies have investigated the factors influencing knowledge withholding intention (Lin & Huang, 2010). Nov & Kuk (2008) suggest that personality traits affect effort withdrawal intentions. Matzler et al. (2008) also found that personality traits have a significant influence on knowledge sharing. Furthermore, prior studies usually explain knowledge contribution behaviors from various theoretical perspectives (c.f., Lin & Huang, 2010; Bock et al., 2005; Chiu et al., 2006; Su et al., 2010; Hsu, et al., 2007; Chen et al. 2010; Zhang et al., 2010; Wang & Noe, 2010). Thus, the main purpose of this study is to investigate how university students' personality traits affect knowledge withholding intention in commerce and management education from a multi-theory perspective. Specifically, based on the concepts of Big Five personality traits, locus of control personality, social identity theory, and social exchange theory, this study proposes a multi-theory model to investigate how personality traits influence knowledge withholding intention through the mediation of perceived social identity. Additionally, this study also attempts to explore the moderating effect of expected rewards and expected associations on the relationship between perceived social identity and knowledge withholding intention.

II. RESEARCH MODEL AND HYPOTHESIS

The theoretical model underpinning this study is shown in Fig. 1. The model suggests that the Big Five personality traits (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience), as well as locus of control serve as antecedents of perceived social identity, which in turn is a determinant of knowledge withholding intention. In addition, expected rewards and expected association are hypothesized to have moderating effects on the relationship between perceived social identity and knowledge withholding intention. The following sections elaborate on the constructs that make up the model and the proposed relationships among them.

Manuscript received May 2, 2012; revised June 9, 2012.

H. H. Lin is with National Taichung University of Science and Technology, Taiwan (e-mail: brenda@ntit.edu.tw).

Y. S. Wang is with National Changhua University of Education, Taiwan.

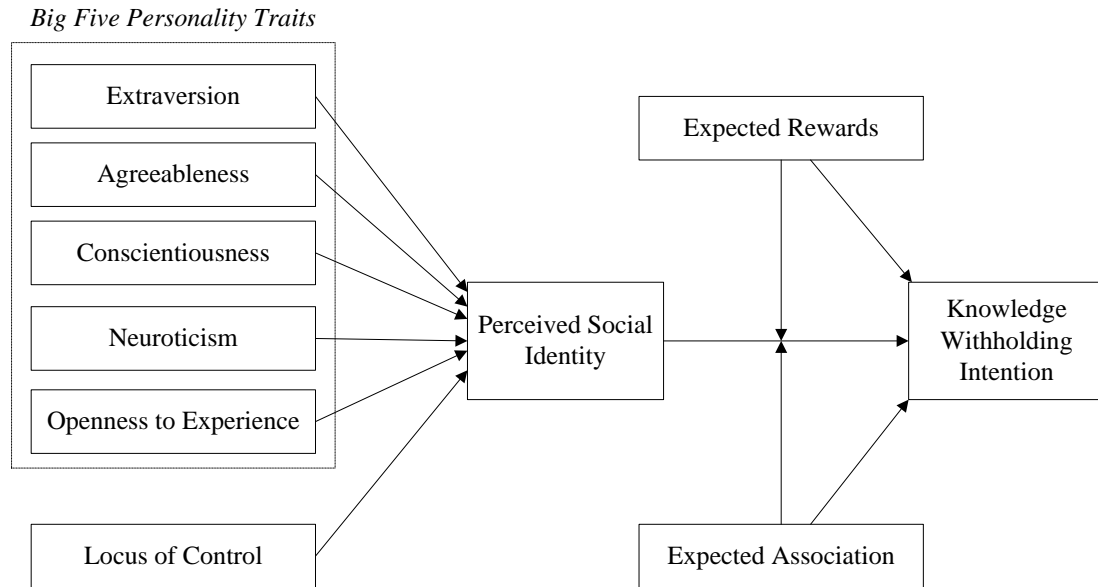


Fig. 1. Research model.

It has been empirically confirmed that Big Five personality traits can effectively predict human's key behavior in various conditions (Barrick & Mount, 1991). As noted earlier, locus of control has also become an important aspect of personality studies. Thus, this study investigates how personality (i.e., Big Five personality traits and locus of control) affects student's perceptions of social identity. People who score high on extraversion tend to be more confident, active, friendly, outgoing, easy-going, and good at interpersonal skills (Barrick & Mount, 1991; Costa & McCrae, 1992). In group works, extraverts like to engage in group discussion and work with others. The more that one feels comfortable with other people in a group, the higher he or she is likely to identify himself/herself a member of the group. Hence, this study proposes:

Hypothesis 1: Extraversion has a positive effect on perceived social identity.

Costa & McCrae (1992) pointed out that people who score high on agreeableness tend to be more supportive, cooperative, conflict-avoiding, tolerant, and kind-hearted; people who score low on this dimension tend to be more critical, skeptical, rude, and dominating. Besides, people with higher level of agreeableness usually view interpersonal harmony a behavioral norm or criterion and dislike to offend others. They show compliance in most occasions (Hsu, 2002) and usually play the role of a follower in groups. They avoid interpersonal clashes and verbal assaults, and are also more forgiving to unpleasant experiences (Hsu, 2002). It can be inferred that highly agreeable students will more identify themselves a member of the group to which they belong to maintain harmonious relations with others in this group. Thus, this study proposes:

Hypothesis 2: Agreeableness has a positive effect on perceived social identity.

Conscientiousness refers to the quality of being concentrated and focused in pursuit of goals. People with higher level of conscientiousness tend to be more independent, careful, self-disciplined, undaunted, responsible, and also more goal-oriented. They usually seek to reduce uncertainties and occurrence of negative

consequences and view goal achievement a uniform norm for all behaviors (Barrick & Mount, 1991; Neuman et al., 1999). It has been pointed out that group cohesiveness and performance can be enhanced if all members of a group have a high level of conscientiousness (Neuman et al., 1999). In other words, higher conscientiousness leads to higher group cohesiveness and identity. Therefore, this study proposes:

Hypothesis 3: Conscientiousness has a positive effect on perceived social identity.

Neuroticism is a measure of emotional stability. People who score high on this dimension are emotionally reactive and vulnerable to stress. They feel upset, frustrated, afraid, guilty, and agitated easily. Besides, they are also more emotional, nervous, and sensitive than others (Barrick & Mount, 1991; Neuman et al., 1999). If a team has a high average level of neuroticism among its members, its members' tendency to become emotionally unstable and show negative emotions easily may diminish the possibility of cooperation within the team (Watson & Tellegen, 1985). Negative emotions reduce the quality of communication and group cohesiveness (Chang, 2004) and further affect members' identification with the group. Hence, this study proposes:

Hypothesis 4: Neuroticism has a negative effect on perceived social identity.

People who score high on openness to experience are characterized by high imagination, curiosity, and a strong preference for diversity, unusual ideas, and changes (Digman, 1990; Barrick & Mount, 1991; Costa & McCare, 1992). They are open to new experiences, more tolerant, and more likely to accept different opinions and voices. In a group context, they can better accept how their position and positions of others are arranged and more identify themselves with the group. Thus, this study proposes:

Hypothesis 5: Openness to experience has a positive effect on perceived social identity.

Students with a high internal locus of control are more likely to assume that their efforts will be successful. They are more active in seeking information and knowledge

concerning their situation. Additionally, students with a high internal locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external (or low internal respectively) locus of control (Wikipedia, 2010). It can be inferred that students with a high internal locus of control will more identify themselves a member of the group to which they belong to maintain harmonious relations with others in this group.

Hypothesis 6: Internal locus of control has a positive effect on perceived social identity.

Social identity also means one's acceptance of and sense of belonging to a group of people (Ashforth and Mael, 1989). Mael and Ashforth (1992) found that employees with high organizational identity have more prosocial behavior. For instance, they are more likely to offer financial support to informal activities of their alma maters or promote their organizations in their alma maters. According to O'Reilly and Chatman (1986), employees and students with high organizational identity are more engaged in prosocial behavior that is positive for their future goals or tasks. Such behavior includes helping others spontaneously to improve the organizational image. Kramer (1993) concluded that people with strong organizational identification can better work with others in the organization. Organizational identity derives from social identity. It can be inferred that if one strongly feels himself a member of a group, he or she will be more committed to this group, and withholding efforts will be less likely to occur to him or her. Some students identify themselves with their class, but some do not. Those who do will share their knowledge selfishly to make contribution to their class, and those who do not may have intentions to withhold knowledge. We argue that students' attitude toward knowledge withholding in class is affected by their class identification. Hence, this study proposes:

Hypothesis 7: Perceived social identity has a negative effect on knowledge withholding intention.

Knowledge contribution is a kind of human interaction in the society. According to the economic exchange theory, individuals tend to evaluate self-interest first before engaging in any activity. In other words, knowledge sharing occurs when one thinks that such action can bring him or her more than its costs (Constant et al., 1994). Hall (2001) mentioned that tangible rewards (such as pay raise and bonus giveaway) are one of effective drivers of knowledge sharing. The rewards can encourage employees to share knowledge with others in the company and thus reduce occurrence of knowledge withholding behavior. In a research of the effects of rewards and punishments on social loafing, George (1995) found that extrinsic rewards have negative effects on social loafing. It can be inferred that expected rewards will reduce knowledge withholding intentions and will also moderate the relationship between perceived social identity and knowledge withholding intention. Hence, we propose:

Hypothesis 8: Expected rewards have a negative effect on knowledge withholding intention.

Hypothesis 9: When expected rewards are higher, the negative effect of perceived social identity on knowledge withholding intention is higher.

Voluntary exchange between people is mainly driven by

friendship and interpersonal contacts (O'Reilly & Chatman, 1986). Bock et al. (2005) also pointed out that interpersonal relationship is a determinant of knowledge sharing. The social exchange theory is considered important for the research of withholding effort (Murphy et al., 2003). According to the social exchange theory, individuals tend to contribute more of their efforts and knowledge to people they have close associations with. From the perspective of affective bonding, individuals will offer knowledge spontaneously under the stimulation of affective exchange (Kidwell & Bennett, 1993). Affective bonding facilitates growth of interpersonal interactions within organizations. Affective exchange has become a part of social exchange processes. It offers motivation that helps reduce occurrence of withholding efforts (Kidwell & Bennett, 1993). It can be inferred that students who believe that they can improve their associations with classmates by sharing knowledge with them have less withhold knowledge intentions. Besides, positive associations may moderate the effect of perceived social identity on knowledge withholding intention. Hence, we proposed:

Hypothesis 10: Expected associations have a negative effect on knowledge withholding intention.

Hypothesis 11: When expected associations are higher, the negative effect of perceived social identity on knowledge withholding intention is higher.

III. CONCLUSION

Considering that knowledge withholding is an important obstacle to social knowledge construction, gaining a better understanding of the factors affecting knowledge withholding behaviors has become an important topic for academics and practitioners. Based on the concepts of Big Five personality traits, locus of control personality, social identity theory, and social exchange theory, this study proposes a multi-theory model to investigate how personality traits influence knowledge withholding intention through the mediation of perceived social identity. Additionally, expected rewards and expected associations are also hypothesized to moderate the effect of perceived social identity on knowledge withholding intention. Data will be collected from university students in commerce and management education in Taiwan to test the research model and hypotheses using the partial least squares approach. The findings of this study will provide several important theoretical and practical implications for university students' knowledge withholding behaviors in the context of commerce and management education.

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