The Relationship Between Employee Exchange Ideology and Knowledge Sharing: The Mediating Role of Relationship Quality with Coworker*

Dongwon Choi**
Oh Soo Park**

Knowledge is a core competency of human beings. The accumulation and exchange of knowledge is critical in the creation of new knowledge. For contemporary organizations, knowledge is considered a crucial factor that can be the momentum of their value creation. Although many organizational scholars have paid attention to the topic of knowledge management, relatively few studies have focused on the interpersonal knowledge sharing behavior of individuals. In particular, only a small number of studies have considered the relationship between individual differences and knowledge sharing behavior.

The current study investigates the relationship between the characteristics and the knowledge sharing behavior of the individual. In addition, underlying relational mechanism is indentified by examining the mediating role of the relationship quality of the employees. The effects of employee exchange ideology on coworker relationship quality and knowledge sharing are examined, and the boundary conditions that moderate the relationship between employee exchange ideology and relationship quality with coworker are investigated. The current study also considers the effects of coworker exchange ideology.

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** Dongwon Choi is a doctoral student in NUS Business School, National University of Singapore. Oh Soo Park is Professor of Organizational Behavior and Human Resources Management, College of Business Administration, Seoul National University
I. Introduction

Human beings cannot survive without the help of other people. Because their nature is to rely on others, humans interact with other people, thereby exchanging and transmitting ideas. As a result, humans learn from experience and use this knowledge to fill their own shortcomings in complementary or a supplementary ways. Through interaction, people extend the scope of their knowledge. They transform this body of knowledge into forms of literature, which later evolve as scholastic studies. Similarly, the spread of knowledge and the interaction among people facilitate the creation of something novel. This process becomes a key factor in the success of an organization.

Many scholars give importance to knowledge and pursue it continuously. In particular, the society we live in is gradually turning into a "knowledge society." Thus, the ever-increasing importance of innovation in contemporary society calls for a shift in our thinking concerning knowledge (Nonaka, 1994). As Grant (1996) points out, organizational knowledge is a valuable intangible resource that is a key to gaining competitive advantage. Many scholars insist that knowledge is a critical element to achieve organizational competence (Argote & Ingram, 2000; Bartol & Srivastava, 2002; Collins & Smith, 2006; Hansen, Mors, & Lovas, 2005; Hass & Hansen, 2007; Kogut & Zander, 1992; Mesmer-Magnus & DeChurch, 2009; Nahapiet & Ghoshal, 1998; Quigley, Tesluk, Locke, & Bartol, 2007; Wang & Noe, 2010).

At the organizational level studies, many researchers regard knowledge as a crucial factor in the concept of organizational learning (Argote, 1999; Huber, 1991; Levitt & March, 1988; March, 1991; Simon, 1991). They explain the organizational process of knowledge creation, retention, and transfer through organizational learning (Argote, Ingram, Levine, & Moreland, 2000; Huber, 1991; Nonaka, 1994). A more careful examination of organizational learning presents a variety of concepts, such as absorptive capacity (Cohen & Levinthal,

Studies suggest that the mere possession of knowledge is not sufficient, and that understanding how knowledge can be properly transferred, diffused, and exploited is more important (Hinds, Patterson, & Pfeffer, 2001). Knowledge sharing is the first and most important step in the knowledge creation process in the organizational context. Knowledge sharing means the provision of task information, the expertise to help others, and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Cummings, 2004: Wang et al., 2010). The fundamental means to achieve organizational competitiveness is by exploiting and capitalizing on knowledge-based resources (Davenport & Prusak, 1998: Wang et al., 2010).

Previous studies regarding knowledge sharing have investigated the effects of environmental factors such as organizational context (Kim & Lee, 2006: Kubo, Saka, & Pam, 2001: Lam, 1996: Yang & Chen, 2007), organizational culture and climate (Bock, Zmud, Kim, & Lee, 2005: Kankanhalli, Tan, & Wei, 2005: Willem & Scarbrough, 2006), and group characteristics (Argote, 1999: Cross & Cummings, 2004: Hass & Hansen, 2007: Phillips, Mannix, Neale, & Gruenfeld, 2004: Reagans & McEvily, 2003: Stasser & Titus, 2003). Many studies dealing with "knowledge transfer" have examined inter-organization or inter-group dynamics, whereas other studies that use the term "information sharing" have investigated the phenomena in the intra-group context using an experimental research method (Stasser et al., 2003: Wang et al., 2010).

Recently, researchers have begun to examine the effects of individual charac-
teristics, attitudes, and motivational factors on knowledge sharing, which is contrary to the tendency of examining the role of macroscopic elements in knowledge sharing (Wang et al., 2010). Despite the apparent importance of individual characteristics in knowledge sharing, few studies have empirically examined the relationship between individual personality or disposition and knowledge sharing in the management and organization science literature (Foss, Husted, & Michailova, 2010; Wang et al., 2010). According to Foss et al. (2010), among the 100 articles published in 13 top-tier management journals between 1996 and 2006, only 30 studies investigate the role of micro-related variables. In one study, Cabrera, Collins, and Salgado (2006) examine the role of openness in experience. Another study finds expertise to be related to knowledge sharing (Constant, Kiesler, & Sproull, 1994). Moreover, Steinel, Utz, and Koning (2010) suggest that dynamics in information sharing depend on the social motivation of the agents. Furthermore, Siemsen and his colleagues have examined the interactive effects of employees' motivation, opportunity, and ability on knowledge sharing based on a motivation-opportunity-ability (MOA) framework (Siemsen, Roth, & Balasubramanian, 2008).

Meanwhile, in the area of micro-foundation of knowledge sharing, social exchange theory has been used to investigate the effects of perceived benefits and costs on knowledge sharing behavior. Along with the theories of reasoned action, social capital, and network, social exchange theory is one of the most commonly used theoretical perspectives in the study of knowledge sharing (Wang et al., 2010). In contrast to expectations based on intuition, the existing literature indicates that the effects of economic exchange-related variables, such as monetary rewards, regarding knowledge sharing are mixed (Bock & Kim, 2002; Bock et al., 2005). Rather, factors related to social exchange, including justice (Kim & Mauborgne, 1998; Lin, 2007b), trust (Bakker, Leenders, Gabbays, Kratzer, & Van Engelen, 2006; Chowdhury, 2005; Mooradian, Renzl, & Matzler, 2006; Wu, Hsu, & Yeh, 2007), and perceived organizational sup-
port (Lin, 2006), have strong positive relationships with knowledge sharing.

Moreover, Ipe (2003) suggests that reciprocity is a crucial motivational factor in knowledge sharing. Chiu, Hsu, and Wang (2006) have examined the positive effects of the norm of reciprocity and identification on knowledge sharing. Cabrera and Cabrera (2002) point out that shared knowledge has attribute of common goods: thus, it places the situation of employees on the horns of a dilemma. By adopting the social exchange perspective, a number of studies tried to explain the pros and cons of knowledge sharing behavior for the actors. The concept of the studies parallels those based on social capital theory, which put stress on relational factors such as ties and trust (Chiu et al., 2006; Inkpen & Tsang, 2005; Levin & Cross, 2004; Wasko & Faraj, 2005). To sum up, these results illustrate the importance and implication of the social exchange perspective in investigating knowledge sharing behavior of employees.

In the perspective of social exchange theory, however, people in the same situation usually do not respond in the same way. Rather, they perceive and interpret their own situation uniquely from others. Therefore, individual differences affecting one's social exchange are related to attitude and perceptions including organizational justice perception, perceived organizational support, trust, and organizational commitment (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Pazy & Ganzach, 2010; Scott & Colquitt, 2007; Witt, 1992; Witt & Broach, 1993; Witt, Kacmar, & Andrews, 2001). Despite the apparent important role of individual characteristics in examining organizational phenomena based on the social exchange perspective, few studies have examined the effects of an individual's dispositional characteristics on knowledge sharing (cf. Cabrera et al., 2006; Lin, 2007a). Therefore, the purpose of this study is to examine the role of individual differences on knowledge sharing behavior. With social exchange theory as its basis, the present study investigates the effects of exchange ideology on the knowledge sharing behavior of employees.
Exchange ideology is dispositional tendency of an individual regarding exchange (Witt, 1992). It affects the attitude related to social exchange such as organizational justice, leader–member exchange (LMX), perceived organizational support, trust, and psychological contract fulfillment (Eisenberger et al., 1986; Pazy et al., 2010; Scott et al., 2007; Witt, 1992; Witt et al., 1993; Witt et al., 2001). Nearly all the above studies investigate the moderating effects of exchange ideology. With regard to knowledge sharing, only Lin (2007a) considers exchange ideology as a moderator. Unlike the other studies, the current study does not consider exchange ideology as a moderator, but as an independent variable that directly affects social exchange-related perceptions and attitude variables (Witt, 1992; Witt et al., 1993; Witt et al., 2001). Ultimately, exchange ideology has an effect on the behavior of people. Therefore, the current paper examines the relationship between exchange ideology and knowledge sharing behavior. It studies the underlying relational mechanism by examining the mediating role of relationship quality with coworker.

Furthermore, the current study investigates the conditions that moderate the relationship between employee exchange ideology and relationship quality with coworker, and between employee exchange ideology and knowledge sharing. The current study also considers the personality of the coworker who receives knowledge because the knowledge sharing behavior of the focal employee occurs through interpersonal interaction. Using the dyad as the unit of analysis, this study analyzes the interaction effects of employee exchange ideology and coworker exchange ideology on employee knowledge sharing. Through examining these factors, the current study provides a more nuanced view regarding knowledge sharing based on the theoretical foundation of social exchange theory.
II. Theoretical Background

1. Knowledge sharing

1) Definition of Knowledge sharing

Although many studies have attempted to define knowledge, researchers have yet to agree fully on a single definition of knowledge. For example, although Starbuck (1992) defines knowledge as a stock of expertise, Goldstein (1993) views knowledge as an educational training perspective, and defines it as an adequate understanding of facts, concepts, and their relationship, as well as the foundation of information. Meanwhile, Nonaka (1994) simply defines knowledge as justified truth.

In addition, no consensus has been reached regarding the distinction between knowledge and information. On the one hand, some researchers use information and knowledge interchangeably because dividing knowledge and information is impractical (Bartol et al., 2002; Ipe, 2003). Bartol and Srivastava (2002) claimed that knowledge sharing behavior requires effort, regardless of whether the knowledge to be shared is tacit or explicit. On the other hand, considering that knowledge is more than simply information, many scholars emphasize the differences between knowledge and information (Kogut & Zander, 1992; Nonaka, 1994; Zander & Kogut, 1995). Nonaka (1994) argued that, although knowledge is based on information, knowledge is justified by one's beliefs and commitment, whereas information is just a flow of messages.

Moreover, the term "sharing" in the concept of knowledge sharing is interchangeably used with "transfer" and "exchange." However, the concepts of knowledge sharing, knowledge transfer, and knowledge exchange differ. Knowledge transfer stresses the presence of both the sender and the receiver, simultaneously. This concept has been used to describe the movement of knowledge at the macro-level rather than at the individual-level in the context of diffusion.
In comparison, knowledge exchange includes both the sharing and seeking of knowledge (Wang & Noe, 2010). In other words, knowledge exchange cannot occur without interaction, whereas knowledge sharing is possible without it. Therefore, the term "sharing" can be defined as a voluntary, conscious act by an individual who participates in the knowledge exchange (Davenport & Prusak, 1998).

To sum up, knowledge sharing refers to the provision of task information, expertise to help others, collaboration with others to solve problems, development of new ideas, or implementation of policies or procedures (Cummings, 2004). It encompasses the sharing of task-relevant ideas, information, and suggestions with others (Srivastava, Bartol, & Locke, 2006).

2) Antecedents of Knowledge sharing

A large body of literature identifies the factors facilitating knowledge sharing. As previously stated, studies have examined structural factors contributing to knowledge sharing, such as network ties (Constant et al., 1996; Granovetter, 1973; Granovetter, 1983; Hansen, 1999; Hansen et al., 2005), network configuration (Hansen, 1999), organizational reward system, and managerial support (Bartol & Srivastava, 2002; Cabrera et al., 2005; Lee, Kim & Kim, 2006; Liao, 2008). Moreover, scholars have studied relational dimensions and their effects on knowledge sharing of relational factors such as trust (Borgatti & Cross, 2003; Stasser & Titus, 1987), psychological safety (Edmondson, 1999), identification, and social status (Szulanski, 1996; Phillips et al., 2004; Thomas-Hunt et al., 2003).

To date, however, studies have rarely sought how personality and individual characteristics promote or inhibit individual levels of knowledge sharing behavior (Foss et al., 2010). Considering the fact that individuals are predisposed to certain work attitudes and behaviors (Judge & Bono, 2001), surpris-
ingly, very few studies deal with the problem. Constant et al. (1994) have confirmed that employees with a higher level of education and longer work experience are more likely to share their expertise and have positive attitude toward knowledge sharing. Moreover, Endres, Endres, Chowdhury, and Alam (2007) propose that self-efficacy expedites knowledge sharing. Kang, Kim, and Bock (2010) have tested and proven the proposition that self-efficacy is positively related to knowledge sharing behavior. Furthermore, studies concerning internal motivation forces that catalyze knowledge sharing behavior are even rarer. Constant et al. (1994) find that beliefs of knowledge ownership are related to knowledge sharing behavior. Although Osterloh and Frey (2000) emphasized the role of motivation on knowledge transfer, stating that it cannot be considered as a sharing "behavior." Because its unit of analysis was not on an individual level, studies should not investigate the human mind at an in-depth level in order to gain a more comprehensive understanding of knowledge sharing.

3) The knowledge sharing dilemma and social exchange theory

As previously stated, knowledge sharing requires performers to exert a great deal of effort, whether explicit or tacit (Bartol et al., 2002). If there are no rewards or expectations, knowledge sharing behavior would not occur. Knowledge can be considered an origin of the power, individuals avoid sharing it because when knowledge is shared, their expertise and power become undermined (Bartol et al., 2002; Inkpen & Beamish, 1997; Ipe, 2003; Kahn & Boulding, 1964; Mechanic, 1962). Bartol and Sribastava (2002) emphasize impediments to knowledge sharing behavior, such as fear of losing superiority from ownership of knowledge, perception of not being adequately rewarded for knowledge sharing, and the lack of time and resources of an individual in order to affect such a transfer. Similarly, Cabrera and Cabrera (2002) point out that shared knowledge is a public good, which results in a public-good dilemma.
Based on this context, knowledge sharing behavior can be viewed as an extra-role behavior (Katz, 1964). Since Katz suggested this term, a number of scholars have proposed characteristics of extra-role behavior in several ways (Morrison, 1994; Van Dyne & LePine, 1998). First, knowledge sharing behavior as an extra-role behavior has not been formally described. Second, it is not recognized and rewarded by a formal reward system. Third, it is conducted voluntarily, and not by coercion. Similar to knowledge sharing behavior, extra-role behavior harms at the individual level; however, it may be beneficial at the group and organizational levels. For example, Bolino and Turnley (2005) suggest that organizational citizenship behavior results in role overload, job stress, and work–family conflict. In addition, Bergeron (2007) has discovered a negative relationship between organizational citizenship behavior and in-role performance in certain conditions. Although conducting extra-role behavior presumably has self-sacrificing aspects, these behaviors can be quite odd at a glance. Thus, social exchange theory can shed light on these unreasonable phenomena.

Social exchange refers to a chain of actions based on norm of reciprocity and negotiated rules (Cropanzano & Mitchell, 2005). An exchange is a situation in which the actions of one person provide the rewards or punishments for the actions of another, and vice versa, in repeated interactions (Blau, 1964). Fundamentally, social exchange theory assumes that human beings are self-interested actors who transact with other actors with the same attributes to accomplish mutual goals that they cannot achieve on their own (Lawler & Thye, 1999). Thus, self-interest and interdependence are the common central concepts in economic and social exchange. However, unlike economic exchange, social exchange does not specify and negotiate the terms regarding the when, why, and how of reciprocation (Blau, 1964; Homans, 1958; Molm, Takahashi, & Peterson, 2000).

According to Cropanzano and Mitchell (2005), social exchange can be con-
ducted through various forms, such as money, goods, services, information, friendship, and love. Similarly, knowledge sharing behavior can also be considered and explained as a kind of social exchange activity. Based on this principle, a focal person who shares knowledge does not expect immediate or explicit rewards. However, the individual expects some form of correspondence, whether material or immaterial, immediate response or long-term talking, and direct or indirect one. In this context, Wang and Noe (2010) point out that more than one-third of studies concerning knowledge sharing use social exchange theory with social capital and network theories. This reflects some degree of consensus regarding knowledge sharing as an extra-role behavior based on the social exchange perspective. In the following section, we review the nature of social exchange theory.

2. Social Exchange Theory

The theory of social exchange is one of the major theoretical perspectives in the field of social psychology (Gouldner, 1960; Homans, 1958, 1961; Thibaut & Kelley, 1959), sociology (Blau, 1964; Emerson, 1976), and anthropology (Graeber, 2001; Malinowski, 1922; Mauss, 1967). This theoretical orientation is based on earlier philosophical and psychological orientations deriving from utilitarianism on the one hand and behaviorism on the other (Cook & Rice, 2003).

Homans (1961) defines social exchange as the exchange of activity, which can be tangible or intangible and rewarding or costly, between at least two persons. He emphasizes that the dyadic exchange forms the basis for much of his theoretical consideration of other important sociological concepts such as distributive justice, balance, status, authority, and power (Cook & Rice, 2003; Homans, 1961). Blau (1964) views social exchange as a process of central significance in social life and considers it as underlying the relations between
Social exchange theory provides a theoretical framework to explain various phenomena and behaviors. As stated above, Homans (1958; 1961) explains the fundamental processes of social behavior from ground up. In addition, Blau (1964) has investigated the structural characteristics of social exchange, and explains that inequalities result from the exchange because some actors control more valuable resources than do other actors. Such relations of subjugation and domination take on a self-perpetuating character and form the microfoundation of power inequality. In order to explain the limited and constrained exercise of power, Homans (1958), Thibaut and Kelley (1959), Blau (1964), and Molm (1988) have introduced the concept of fairness (Cook & Rice, 2003). Moreover, recent research on the role of emotion in social exchange reveals a distinct move away from the traditional focus. Lawler and his colleagues (Lawler & Thye, 1999; Lawler, Thye, & Yoon, 2000; Lawler & Yoon, 1993: 1996) have developed a relational cohesion theory to explain how emotional responses affect exchange outcomes, whereas Molm and her collaborators (Molm, 2003, 2009; Molm, Peterson, & Takahashi, 1999; Molm, Takahashi, & Peterson, 2003) have contemplated the role of emotion in social exchange as
Social exchange theory has influenced conceptual paradigms used in explaining and understanding the behavior of employees in the workplace. Many organizational behavior scholars have adopted a social exchange perspective to explain diverse topics such as organizational justice (Bies & Moag, 1986; Colquitt, Colon, Wesson, Porter, & Ng, 2001; Greenberg, 1987; Konovsky, 2000; Thibaut & Walker, 1975), psychological contract (Rousseau, 1989; 1995), perceived organizational support (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger, Cotterell, & Marvel, 1987; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Eisenberger, Huntington, Hutchison, & Sowa, 1986), LMX (Dienesch & Liden, 1986; Wayne, Shore, & Liden, 1997), and board independence (Westphal & Zajac, 1997).

Despite the wide-range explanation, social exchange theory has been criticized by some researchers due to theoretical ambiguities, misunderstandings of the general social exchange theory model, and the need for more empirical evidence (Coyle-Shapiro & Conway, 2004; Cropanzano, Rupp, Mohler, & Schminke, 2001). In the face of this challenge, Cropanzano and Mitchell (2005) have attempted to provide more systematic theoretical framework through contemplating the rules and norms of exchange, resource exchanged, and relationships that emerge. They point out that existing studies are mainly concerned with reciprocity and negotiated rules. In addition, similar studies have discussed the existence of other rules that are beyond the scope of reciprocity and negotiated rules. Moreover, Cropanzano and Mitchell (2005) have also underscored that not all individuals value reciprocity at the same degree. Thus, ignoring an individual’s exchange norm makes the examination of social exchange in the organization incomplete (Takeuchi, Yun, & Wong, 2011). The existence of the apparent flaw has been neglected in extant studies (cf. Eisenberger et al., 2001; Flynn & Brockner, 2003). In the following section, the current study discusses one of the internal drivers that hinder social ex-
change-based behavior of human beings: exchange ideology.

3. Exchange Ideology

Exchange ideology refers to the strength of belief of an employee that work effort should depend on the treatment by the organization (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Eisenberger et al. (1986) first examined exchange ideology because not all individuals value reciprocity to the same degree, in spite of a general norm of reciprocity in human nature (Cropanzano et al., 2005; Takeuchi, Yun, & Wong, 2011). Existing research studies describe exchange ideology as a continuum (Eisenberger et al., 1986; Witt, 1991). On the one hand, some employees perform in congruence with organizational reinforcements. On the other hand, some employees put forth the same amount of effort regardless of rewards from the organization (Witt, 1992; Witt et al., 2001).

Exchange ideology has been considered a dispositional orientation or cognitive style (Witt, 1992; Witt et al., 2001). It encompasses an employee's expectation of behavioral response to exchange relationships within a given organization or with organization members (Scott et al., 2007). Importantly, the core concept of exchange ideology is on the conditionality of effort (Pazy et al., 2010). As such, employees who have high exchange ideology place emphasis on what they receive rather than on what they give (Coyle-Shapiro & Neuman, 2004). In addition, they expect more direct and immediate means of give-and-take. In other words, they prefer a quid pro quo exchange with a quick turn-around (Eisenberger et al., 1986; Redman & Snape, 2005); therefore, they are prone to self-serving biases, which lead them to think they are receiving less than what they deserve (Takeuchi et al., 2011). They also tend to focus on the negative experience and information, which makes them more apt to fall into a negativity bias (Rozin & Royzman, 2001; Takeuchi et al., 2011).
This tendency highly discounts the value of future reciprocation. Some studies have considered the moderating effects of exchange ideology. Witt (1991) has examined exchange ideology as a moderator relationship between job attitude and organizational citizenship behavior. In addition, Witt and Broach (1993) have proved that exchange ideology moderates the relationship between procedural justice and job satisfaction. Witt et al. (2001) have verified the interactive effects of procedural justice and exchange ideology on supervisor-rated commitment. Furthermore, other researchers have contemplated the role of exchange ideology as a moderator variable (Coyle-Shapiro et al., 2004; Eisenberger et al., 1986; Orpen, 1994; Redman et al., 2005; Scott et al., 2007).

In contrast, few studies have examined the main effects of exchange ideology (Pazy et al., 2010; Takeuchi et al., 2011). To fill this gap, the current research focuses on the main effects of exchange ideology as an independent variable that directly affects social exchange-related perceptions and attitude variables (Witt, 1992; Witt et al., 1993; Witt et al., 2001), and that ultimately has an effect on people's behavior.

III. Hypothesis Development

1. Exchange Ideology and Knowledge sharing Behavior

As stated, knowledge sharing is defined as the provision of task information and expertise to help one collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Cummings, 2004; Wang et al., 2010). Knowledge sharing requires the voluntary and proactive action of the employees (Davenport et al., 1998; Ng et al., 2010), and can be considered as an extra-role behavior. Moreover, as Cabrera and Cabrera (2002) state, knowledge
sharing behavior raises a public-good dilemma for performers. Unlike other forms of OCB which requires only minimal time and effort, knowledge sharing deprives employees of their relative knowledge-based power. Those basic characteristics of knowledge sharing are the reasons employees in an organization are often reluctant to share their own knowledge in spite of its apparent importance.

Existing research results suggest that individual differences influence the performance of knowledge sharing behavior (Cabrera et al., 2006; Lin, 2007a). In particular, exchange ideology, which is the strength of the belief of the employee that work effort should depend on the treatment by the organization (Eisenberger et al., 1986), affects their knowledge sharing behavior. First, employees who have high exchange ideology place their emphasis on what they receive (Coyle-Shapiro et al., 2004), and expect a more direct and immediate way of exchange (Redman et al., 2005). This unmet expectation later leads to a self-serving bias or the feeling that they are receiving less than what they deserve (Takeuchi et al., 2011).

Second, these employees tend to focus on negative experiences and information. According to error management theory, psychological mechanisms are designed to be predictably biased when the cost of false-positive and false-negative errors are asymmetrical over evolutionary history (Haselton & Buss, 2000). Moreover, people who have a strong exchange ideology are prone to fall into negativity bias (Rozin & Rouzman, 2001). They tend to contemplate more on their own and on the input and output of others. In addition, self-serving and negativity biases depreciate the value of future reciprocation. Consequently, knowledge has the characteristic of public goods. It exposes the loss of power of the knowledge provider, and the effect of knowledge sharing on power loss persists. Therefore, employees who are high in exchange ideology are reluctant to share knowledge. Based on the above reasoning, the current study formulates a hypothesis on the relationship between exchange ideology and knowledge sharing:
Hypothesis 1: Employee exchange ideology is negatively related to knowledge sharing.

2. Employee Exchange Ideology and Interpersonal Relationship Quality

Employees with a strong exchange ideology are likely to fall into self-serving and negativity biases. First, people who have a strong exchange ideology carefully track obligations and prefer a quid pro quo basis of exchange (Cropanzano et al., 2005; Pazy et al., 2010). On the contrary, the rapid change of environment causes contemporary organizations to require employees to conduct their own work more proactively (Grant, 2008). In addition, task interdependence among coworkers is increasing due to the flattening of organizational structures and the burgeoning tendency of team systems (Flynn, 2006; Van Der Vegt, Van De Vliert, & Oosterhof, 2003). These uncertainties make employees worry regarding successful reciprocation for their efforts. Therefore, workers who have strong exchange ideology prefer to conduct their own in-role performance, which is required by the formal job description, because of their own negative tendency to spring from negativity bias.

However, conducting an in-role performance negatively affects the evaluation of the overall task performance because extra-role behaviors such as organizational citizenship affect the job performance evaluation (Bachrach, Powell, Bendoy, & Richey, 2006; McAllister, Kamdar, Morrison, & Turban, 2007; Morrison, 1994). In comparison with employees who conduct various extra-role behaviors, high exchange ideology employees are underestimated because they are reluctant to perform extra-role behaviors. Moreover, owing to a self-serving bias, employees who overestimate their own effort, while simultaneously feel underestimated by company regarding their own work performance, may feel less obliged toward other coworker and organization (Eisenberger et al., 1986; Takeuchi et al., 2011). Furthermore, their egocentric nature leads them to
misinterpret the pro-social behavior of a coworker as calculative, regardless of the colleague’s real intention. A series of biases and misapprehensions causes conflict between employees, and may exacerbate the relational quality between employees. The current study formulates the following hypothesis on the relationship between exchange ideology and relationship quality with coworker:

*Hypothesis 2: Employee exchange ideology is negatively related to the relationship quality with coworker.*

3. Interpersonal Relationship Quality and Knowledge sharing behavior

High-quality interpersonal relationships affect the positive influence in organizations. Anderson and Williams (1996) find that relationship quality between employees positively affects perceptions of the costs regarding help-seeking and helping behavior. In addition, Setton and Mossholder (2002), Bowler and Brass (2006) also found that relationship quality is positively associated with person-focused interpersonal citizenship behavior. Moreover, high-quality LMX gives rise to a higher level of OCB (Wang, Law, Hackett, Wang, & Chen, 2005; Wayne et al., 1997). From another spectrum, Scott and Judge (2009) have proven that employees want to build good relationships with coworker who is popular, and that this makes them conduct more OCB toward the popular focal coworker.

In the perspective of social network, Levin and Cross (2004) confirmed that a strong tie is beneficial to knowledge transfer through interpersonal trust. Reagans and his colleagues (2003) also argue that tie-strength and social cohesion are positively related with knowledge transfer. Similarly, studies regarding social capital have pointed out the importance of relational factors in organizations (Adler & Kwon, 2002). To sum up, these results show that people who maintain high quality relationship would conduct favorable and
pro-social behavior, and share more knowledge with their coworker.

First, when dyadic employees are connected by high-quality relationships, they are more accessible and willing to be helpful (Kranckhardt, 1992). In other words, without forming high-quality relationships, employees may decide not to share knowledge because this requires effort and risks undermine the knowledge sharer's power (Cabrera et al., 2002). To overcome this barrier and reduce the perception about the cost of behavior, coworker should keep a high-quality relationship.

Second, in building relationships and interaction, employees become acquainted with each other. This process accumulates the information of pros and cons about their colleague. As a result, employees are able to share each other's knowledge more smoothly and in complementary ways without redundancy. This line of reasoning is parallel with studies about transactive memory systems (Austin, 2003; Lewis, 2004).

Third, the accurate understanding regarding coworker is helpful in efficient knowledge transfer because it prevents the risk of information loss and misunderstanding of coworker (Hinds et al., 2001). In other words, a dyad formed in a high-quality relationship has a smooth knowledge sharing without the risk of committing mistakes in transfer.

Finally, in maintaining close relationships, the employee who shares knowledge is able to observe the growth and advancement of the coworker who receives the knowledge. According to Grant (2007), employees are motivated by observing the prosocial impact on the beneficiary and realizing the significance and the impact of the task. Thus, a high-quality relationship facilitates the knowledge sharing behavior of employees by influencing their perception of the impact of the activity and its prosocial motivation. Therefore, the current research formulates the following on the relationship between relationship quality with coworker and employee knowledge sharing behavior:
Hypothesis 3: Relationship quality with coworker is positively related to employee knowledge sharing behavior.

The exchange ideology of the employee is negatively related to the formation of the relationship quality with the coworker. In addition, the relationship quality with the coworker can have a significant effect on the knowledge sharing behavior of the focal employee. The personality of the focal employee affects the interpersonal relationship quality between employees. The relationship quality formed from interaction works as a critical mediating mechanism that determines the behavior of the employee. Based on these, the current study hypothesizes the following:

Hypothesis 4: The relationship quality with the coworker will mediate the relationship between employee exchange ideology and knowledge sharing behavior.

4. Moderating Effects of Coworker Exchange Ideology

The relational quality between dyadic coworker are not decided by the personal characteristics decide of a single side in the relationship. The coworker relationship quality does not only the function based on the personality of one side. Rather, the relationship quality between employees results from interaction coming from the personal and impersonal characteristics of both parties. Due to the negativity and self-serving biases, employees with high exchange ideology misunderstand the favor of the other side as an impression or calculated management. Such a perception aggravates the dyadic relationship between employees.

Fundamentally, this misunderstanding usually occurs when two employees have disparate intentions and interpretations. When intention is similar and
interpretation is correct, this misunderstanding would not occur and the deterioration of relationship quality would not arise. In the dyad relationship, if both sides have strong exchange ideology, they act in a calculated and egocentric way, and construe the behavior of the opposite party in the same way. In other words, they understand and accept the perspective of the other side without misapprehension (Flynn, Reagans, & Guillory, 2010). Although there are fewer emotional interactions, they are able to fully understand each other's individuality. This permits the building of a favorable relationship quality between employees with high exchange ideology, despite their own general attributes. Similarly, when the dyad members share the same personality in weak exchange ideology, they form a favorable high-quality relationship. This result in a more generous long-term, unspecified exchange relationship and these social exchanges become more helpful in building interpersonal trust (Brockner, Siegel, Daly, Tyler, & Martin, 1997; Podolny, 1994). Therefore, their mechanisms differ, both cases result in a high-quality relationship with coworker based on the homophily assumption (McPherson et al., 2001; Rivera et al., 2010).

However, when two employees have different levels of exchange ideology, they misunderstand each other's actions and aggravate the relationship quality between them. In the perspective of an employee with high exchange ideology, he or she is more likely to perceive unfairness and feel he or she are being taken advantage of, regardless of his or her own actual state (Molm et al., 2003). However, the opposite coworker with weak exchange ideology would neglect or miss these kinds of mental state. He or she would fail to understand the focal employee with high exchange ideology. Adversely, in the eyes of an employee with low exchange ideology, dissatisfaction and overestimation in performance evaluation of a coworker who has high exchange ideology would be interpreted as unreasonable and selfish. Therefore, the dyad that has a dissimilar exchange ideology builds a low-quality relationship.
Furthermore, considering the relationship of interaction between the exchange ideology and knowledge sharing behavior of the employees, a series of reasons, as stated above, can also be applied. When both employees share similar degrees of exchange ideology, whether the degree is high or low, the focal employee will share relatively large amounts of knowledge. In case of dyads with high exchange ideology, the focal employee can expect the opposite coworker to reciprocate his/her own behavior through knowledge sharing. When a pair has low exchange ideology, they will share each other's own knowledge without further consideration or calculation. Therefore, the current research formulates the following hypothesis on the relationship between the interaction of exchange ideology and employee knowledge sharing behavior:

Hypothesis 5-A: 
Coworker exchange ideology moderates the relationship between employee exchange ideology and relationship quality with coworker.

Hypothesis 5-B: 
Coworker exchange ideology moderates the relationship between employee exchange ideology and knowledge sharing behavior.

IV. Method

1. Participants and procedures

In order to test our hypotheses, we collected data using questionnaires. Data for the current study were gathered from 18 firms in the Republic of Korea. The survey packages were initially distributed to 170 dyads in 18 firms. Out of the 170 sets of surveys distributed, 153 completed sets were returned, repre-
senting an effective response rate of 90%. Among these sets, three were excluded due to the careless and incomplete responses. In all, 150 dyads were included in the data analysis.

The average age of employees was 35.75 years (SD = 8.03): 186 employees (62%) were male and 114 employees (38%) were female. On average, tenure of employees with a coworker was 3.26 years (SD = 4.21). The education level of the employees was distributed as follows: 27 employees (9%) were high school graduates, 36 employees (12%) graduated from junior college, 182 employees (61%) had bachelor’s degree, and 55 employees (18%) earned a master’s degree or higher. In the perspective of industrial composition, 25.3% of data were from manufacturing industry, 22.7% from financial, 18% from IT and communication industry, 15.3% from service industry, 4.7% from construction industry, 3.3% from distribution industry, and 10.6% from other industries.

2. Measures

All variables in the current study were measured using self-reported data from employees, except for the coworker’s exchange ideology. The focal employee’s coworker (knowledge recipient) reported one’s own exchange ideology. The focal employee’s knowledge sharing behavior was measured simultaneously from the focal employee and his/her coworker. In addition, to control the possibility of common method bias from self-reporting, this study required the employee to report family support as a marker variable. All of the items were measured on a seven-point Likert scale (ranging from 1 = strongly disagree to 7 = strongly agree).

1) Exchange ideology

To measure exchange ideology, this study used the eight-item scale of Eisenberger et al. (1986). The following is a sample item: "An employee should
only work hard if his or her effort will lead to a pay increase, promotion, or other benefits.” Cronbach’s alpha for the exchange ideology scale of the employees was .88, and the exchange ideology scale of the coworker was .85.

2) Relationship quality with coworker
A six-item quality of working relationship scale developed by Anderson et al. (1996) was used to obtain a self-assessment of the relationship quality. A sample item stated, “My coworker understands my problems and needs well enough.” Cronbach’s alpha for the relationship quality scale for the coworker was .90.

3) Knowledge sharing behavior
The knowledge sharing behavior of the employee was measured with Srivastava and his colleagues’ (2006) 7-item scale. Following are sample items. “This employee shares business knowledge obtained from newspapers, magazines, journals, and television to me.” “This employee shares business manuals, models, and methodologies with each other to me.” “This employee shares his/her special knowledge and expertise with one another.” Cronbach’s alpha for the self-reporting of knowledge sharing of the employees was .95, and the rating of employee’s knowledge sharing for the coworker was .96.

4) Marker variable
To control the effects of common method variance, the current study measured the perception of the employee regarding family support to use it as marker variable (Lindell & Whitney, 2001).

5) Control variables
To reduce the likelihood that other factors affecting knowledge sharing would confound the relations examined in this research, the current study controlled
several demographic variables. First, this study controlled employee education level (1 = high school, 2 = junior college, 3 = bachelor's, and 4 = master's or higher degree), age (in years), and gender (1 = male, 2 = female). Second, this study also controlled the factor related to the hierarchical status of the employees in the organization such as rank, organization tenure, and work experience with the coworker. Finally, task interdependence was measured to control the effects of interaction intensity between dyads. This study used Campion, Medsker, and Higgs' (1993) three-item scale measure (Cronbach's alpha = .80).

3. Analytical strategy

To test our hypotheses, the current study used hierarchical regression analysis. Step 1 included the control variables. Step 2 included the main effect variables. Finally, Step 3 included the main effect of the moderator and the product terms of the main variable and moderator. Before generating the product terms, related variables were mean-centered to prevent potential multicollinearity problems (Aiken & West, 1991).

V. Results

1. Descriptive Statistics

Table 1 reports the means, reliability, standard deviations of variables included in this study, and the inter-correlations among them. This study measured employee knowledge sharing behavior by using both self-rating and coworker-rating method. In analyzing the results regarding self-rating data, a common method bias can occur because the current research assessed all constructs
using self-reporting measures (Park, Kim, Jeong, & Huh, 2007). To solve this problem, following the suggestion of Lindell and Whiney (2001), this study measured family support as a marker variable to rule out the possibility of overestimation of correlation from common method bias. If the partial correlation coefficient between independent and dependent variables after controlling marker variable decreases sharply, the true correlation between them is overestimated (Lindell et al., 2001). Based on the correlation coefficient in Table 1, however, bivariate correlation and partial correlation were not significantly different.

In addition, the current study applied CFA to test the impact of common method variance (Park et al., 2007; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To be specific, this study allowed every item to load on its respective construct and an uncorrelated latent variable. The variance explained by the method factor was 10%, which is below the 25% average in published studies (Williams, Cote, & Buckley, 1989). Therefore, this result suggests that the effect of common method bias on results of this study was not notable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Employee exchange ideology</td>
<td>3.92</td>
<td>1.10</td>
<td>(88)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Coworker exchange ideology</td>
<td>3.82</td>
<td>1.03</td>
<td>23**</td>
<td>(85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Relationship quality with coworker</td>
<td>5.21</td>
<td>97</td>
<td>-24**</td>
<td>-13</td>
<td>(90)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Knowledge sharing (Self-rating)</td>
<td>5.19</td>
<td>1.12</td>
<td>-20*</td>
<td>00</td>
<td>75**</td>
<td>(95)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Knowledge sharing (Coworker-rating)</td>
<td>5.15</td>
<td>1.24</td>
<td>01</td>
<td>-14</td>
<td>44**</td>
<td>47**</td>
<td>(96)</td>
<td></td>
</tr>
<tr>
<td>6 Marker variable</td>
<td>5.73</td>
<td>88</td>
<td>00</td>
<td>-05</td>
<td>14</td>
<td>18*</td>
<td>-01</td>
<td>(89)</td>
</tr>
<tr>
<td>$\overline{R_{YM}}$</td>
<td></td>
<td></td>
<td>-21**</td>
<td>01</td>
<td>74**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 150. **p < .01, *p < .05 (two-tailed)

$\overline{R_{YM}}$ is the correlation coefficient between independent variables and knowledge sharing behavior after controlling marker variable.
5.2 Hypothesis Testing

Hypothesis 1, which posits the negative relationship between employee exchange ideology and knowledge sharing, is partially supported. Results in Model 4 in Table 2 indicate that exchange ideology had a significant, negative effect on self-rating knowledge sharing behavior \((\beta = -0.20, p < .01)\), whereas it did not have a significant effect on coworker rating knowledge sharing.

Hypothesis 2 proposes the negative main effects of employee exchange ideology on relationship quality with coworker. Model 2 shows that employee exchange ideology had a significant negative effect on relationship quality with coworker \((\beta = -0.26, p < .01)\). Thus, this result provides support for Hypothesis 2.

Hypothesis 3 suggests that relationship quality with coworker would be positively related to the employee’s knowledge sharing behavior. According to the results in Model 5 and Model 9 in Table 4, relationship quality with the coworker had significant positive impact on the employee knowledge sharing behavior (self-rating \(\beta = 0.66, p < .01\); coworker rating \(\beta = 0.41, p < .01\)). Thus, based on these results, Hypothesis 3 is supported.

The current study conducted hierarchical regression analysis to test the mediating role of relationship quality with coworker, following the steps suggested by Baron and Kenny (1986). Before conducting regression, the current study confirmed the first and second condition of mediation testing by confirming the results of Hypotheses 1 and 2. Model 3 to 6 in Table 2 presents the result of the mediation test of the self-rated knowledge sharing. After the relationship quality with coworker was regressed, the effect of employee exchange ideology was shown to be insignificant \((\beta = -0.02)\), whereas the relationship quality with coworker had a significant effect on knowledge sharing \((\beta = 0.65, p < .01)\). This satisfied the last condition for the mediation test. When the influence of the mediator is included, the contribution of the independent variable on the dependent variable should become insignificant. Thus, this result supports
<Table 2> Hierarchical regression analytical results
(Main effects and mediating effects of relationship quality with coworker)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Relationship quality with coworker</th>
<th>Knowledge sharing (Self-rating)</th>
<th>Knowledge sharing (Coworker-rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Step 1 Control Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee age</td>
<td>-20</td>
<td>-27</td>
<td>-22</td>
</tr>
<tr>
<td>Employee gender</td>
<td>-23*</td>
<td>-20*</td>
<td>-20*</td>
</tr>
<tr>
<td>Employee education</td>
<td>20*</td>
<td>22*</td>
<td>19*</td>
</tr>
<tr>
<td>Employee rank</td>
<td>09</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Coworker age</td>
<td>-15</td>
<td>-16</td>
<td>-28</td>
</tr>
<tr>
<td>Coworker gender</td>
<td>06</td>
<td>04</td>
<td>01</td>
</tr>
<tr>
<td>Coworker education</td>
<td>17*</td>
<td>17*</td>
<td>08</td>
</tr>
<tr>
<td>Coworker rank</td>
<td>13</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Dyad co-work experience</td>
<td>01</td>
<td>03</td>
<td>02</td>
</tr>
<tr>
<td>Employee tenure</td>
<td>01</td>
<td>01</td>
<td>09</td>
</tr>
<tr>
<td>Coworker tenure</td>
<td>-08</td>
<td>-07</td>
<td>-08</td>
</tr>
<tr>
<td>Task interdependence</td>
<td>16*</td>
<td>14*</td>
<td>28**</td>
</tr>
<tr>
<td>Step 2 Main effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee exchange ideology</td>
<td>-26**</td>
<td>-20**</td>
<td>-02</td>
</tr>
<tr>
<td>Step 3 Mediating variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship quality with coworker</td>
<td>66**</td>
<td>65**</td>
<td>41**</td>
</tr>
<tr>
<td>R²</td>
<td>213</td>
<td>277</td>
<td>287</td>
</tr>
<tr>
<td>R² Change</td>
<td>064**</td>
<td>037**</td>
<td>311**</td>
</tr>
</tbody>
</table>
| N = 150, **p < .01, *p < .05, †p < .10 (two-tailed)
Hypothesis 4. However, the result of the mediation test of coworker rated knowledge sharing in Model 7 to 10 in Table 2 did not meet the first condition of the mediation test. After the relationship quality with coworker was regressed, the employee exchange ideology had a positive impact on knowledge sharing. This result contradicts the hypothesis in this study ($\beta = 0.17, p < .05$). These results are interpreted in discussion section.

Hypotheses 5-A and 5-B, which posit the moderation effects of coworker exchange ideology on the relationship between employee exchange ideology and relationship quality with coworker, between employee exchange ideology and knowledge sharing, are not supported. In Table 3, the results from Models 2, 4, and 6 indicate that the coworker exchange did not have a significant moderation effect.

(Table 3) Hierarchical regression analytical results
(Moderating effects of coworker exchange ideology)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Relationship quality with coworker</th>
<th>Knowledge sharing (Self-rating)</th>
<th>Knowledge sharing (Coworker-rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Control Variable</td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Employee age</td>
<td>- .36†</td>
<td>- .35†</td>
<td>- 28</td>
</tr>
<tr>
<td>Employee gender</td>
<td>- .18†</td>
<td>- .18†</td>
<td>- .17†</td>
</tr>
<tr>
<td>Employee education</td>
<td>.22*</td>
<td>.22*</td>
<td>21*</td>
</tr>
<tr>
<td>Employee rank</td>
<td>.27</td>
<td>.25</td>
<td>.20</td>
</tr>
<tr>
<td>Coworker age</td>
<td>- .16</td>
<td>- .16</td>
<td>- .29†</td>
</tr>
<tr>
<td>Coworker gender</td>
<td>.04</td>
<td>.04</td>
<td>01</td>
</tr>
<tr>
<td>Coworker education</td>
<td>.21*</td>
<td>.20*</td>
<td>.08</td>
</tr>
<tr>
<td>Coworker rank</td>
<td>.03</td>
<td>.03</td>
<td>.24</td>
</tr>
<tr>
<td>Dyad co-work experience</td>
<td>.07</td>
<td>.07</td>
<td>.03</td>
</tr>
<tr>
<td>Employee tenure</td>
<td>- .06</td>
<td>- .05</td>
<td>.07</td>
</tr>
<tr>
<td>Coworker tenure</td>
<td>- .08</td>
<td>- .09</td>
<td>.07</td>
</tr>
<tr>
<td>Task interdependence</td>
<td>.15*</td>
<td>.15*</td>
<td>26**</td>
</tr>
<tr>
<td>Step 2: Main effects</td>
<td>Employee exchange ideology</td>
<td>- .23**</td>
<td>- .23**</td>
</tr>
<tr>
<td>Coworker exchange ideology</td>
<td>- .22**</td>
<td>- .22**</td>
<td>- .01</td>
</tr>
<tr>
<td>Step 3: Moderating effects</td>
<td>Employee EI + Coworker EI</td>
<td>- .04</td>
<td>- .07</td>
</tr>
<tr>
<td>R²</td>
<td>.314</td>
<td>.315</td>
<td>.323</td>
</tr>
<tr>
<td>R² Change</td>
<td>.004</td>
<td>.001</td>
<td></td>
</tr>
</tbody>
</table>

N = 150. **p < .01, *p < .05, †p < .10 (two-tailed)
VI. Discussion

6.1 Summary of the Study

Knowledge and its creation are crucial factors for contemporary organizations. Many organizational scholars have paid attention to the topic of knowledge management. However, few studies have focused on interpersonal knowledge sharing behavior of the individual in spite of its being terminus a quo in the creation process of knowledge. The purpose of the current study is to investigate the relationship between the characteristics of individuals and their knowledge sharing behavior. In addition, this research has studied the underlying relational mechanism by examining the mediating role of the relationship quality of employees with coworker. Moreover, it has investigated the boundary conditions that moderate the relationship between exchange ideology and coworker relationship quality. In particular, this study has considered the moderating effects of exchange ideology of coworker on relationship quality and knowledge sharing. Furthermore, the current study has examined the interaction effects on relationship quality with coworker in relation to the social status and perspective taking of the focal employee, and the popularity and ability of the coworker.

The findings of the current study partially support Hypothesis 1, which posits the negative relationship between employee exchange ideology and knowledge sharing. Employee exchange ideology had a significant negative effect on self-rating knowledge sharing behavior, whereas it did not have a significant effect on coworker-rating knowledge sharing behavior. However, through an analysis using the polynomial regression method, this study found that there is a curvilinear relationship between employee exchange ideology and coworker-rating knowledge sharing behavior. Hypothesis 2, which proposes the negative main effects of employee exchange ideology on relationship quality with cow-
orker, is also supported by the findings. Hypothesis 3 suggests that the relationship quality with coworker would be positively related to the knowledge sharing behavior of the employee. According to the results, the relationship quality with coworker affects a significant positive impact on employee knowledge sharing behavior. Thus, Hypothesis 3 is strongly supported.

Based on coworker-rating knowledge sharing behavior, Hypothesis 4 is not supported. Interestingly, after the relationship quality with coworker was regressed, the employee exchange ideology had a positive impact on knowledge sharing, which contradicted the hypothesis in this study. These results are open to interpretation.

First, there is a possibility of the common method bias. As mentioned earlier, this study conducted a variety of statistical verifications and the results suggested that biased effects through common method variance were not notable. Moreover, from a common-sense point of view, confounding effects due to untruthful reporting can make it difficult to prove a negative relationship between exchange ideology and knowledge sharing behavior because people tend to focus only on their activity. Nevertheless, a negative relationship between them was found to be insignificant in case of coworker-rating. This implies the possibility that differences between self-rating and coworker-rating originate from different perceptions regarding the behavior of the employees (Flynn et al., 2003; Flynn et al., 2009).

Second, after controlling the effects of dyadic relationship quality on the coworker rating of knowledge sharing behavior, the results show that employee exchange ideology was positively related to the knowledge sharing behavior of the employees. This can be interpreted in many ways. At a glance, this result weakens the assertion about the mediating role of the dyadic relationship quality in determining exchange ideology and knowledge sharing. Looking at this issue from another angle, this result can be viewed in the same line as the results of Levin and Cross (2004), who have confirmed that tie strength is related neg-
atively to knowledge transfer after controlling the mediating effects of trust on the relationship between tie strength and knowledge transfer. This sheds light on the possibility of a partial mediating role of the dyadic relationship quality. In other words, after excluding the negative effects of a strong exchange ideology on relationship, the employee exchange ideology positively was shown to affect the behavior of the employee. In the context of current study, this means that an employee with high exchange ideology will share more knowledge. This sharing can be evaluated as valuable from the viewpoint of coworker.

Both Hypotheses 5-A and 5-B, which posit the moderation effects of coworker exchange ideology on the relationship between employee exchange ideology and relationship quality with coworker, between employee exchange ideology and knowledge sharing, respectively, are not supported. With regard to the association with dyadic relational quality, coworker exchange ideology was proven to be directly but negatively related to the relationship quality with the coworker.

2. Theoretical Implication

Many scholars have pointed out the importance of knowledge management in organizations, and most established literature has intensively considered the macro aspects of knowledge transfer and its dynamics (Foss et al., 2010). In view of this, researchers have emphasized the necessity of an underground theory that can explain the micro foundation of knowledge transfer dynamics in organizations. Based on this critical mind, the current study has examined the individual's knowledge sharing behavior, which is the starting point and micro-foundation of knowledge management.

First, by adopting a social exchange perspective as a theoretical framework, this research has attempted to identify the factors that would determine the behavioral pattern of people, and that would work as the crucial mediating mechanism that could result in the specific behavior of individuals. Most of
all, existing studies on the effects of individual characteristics on employee behavior have been conducted through a disorganized and exploratory way without contemplating the nature of construct. To overcome this limitation, the current study conducted a more in-depth investigation on the role of individual differences on behavioral aspects of people. This was achieved by paying more attention to the different ways of cognition and interpretation. To be specific, this study has examined the role of employee exchange ideology, which refers to the strength of an employee’s belief regarding the norm of reciprocity on employee knowledge sharing behavior.

Moreover, as a critical mediating mechanism, the current research investigated the mediation effects of relationship quality with coworker in connection with employee exchange ideology and knowledge sharing. The dyadic relationship quality is similar to the concept of tie-strength, which has been investigated by social network theorists. Social network scholars have studied the effects of tie-strength on interpersonal dynamics and related behavioral patterns on other boundary conditions. The current research investigated the factors of the individual that could affect the strength of tie and dyadic relational quality. Whereas established social network studies have focused on the examination of structural factors, this study focuses on the coworkers who are in the equivalent structural position. Also, this study focused on actor characteristics and attributes as antecedents of inter-personal tie states. In this vein, the current study contributes to the literature through introducing and suggesting the expansion of existing research boundaries. It would be helpful to complete more nuanced and comprehensive theoretical framework.

Second, in adopting the dyad as the unit of analysis, this study simultaneously considers the characteristics of the knowledge provider and the recipient. Generally, existing studies on knowledge sharing have taken either the individual level or the group level as the unit of analysis. Most group-level studies that investigate knowledge sharing behavior usually regard knowledge sharing
as a variable and have simply examined the effects of the average degree or deviation of knowledge sharing among group members. Thus, these studies have been unable to present a more detailed dynamics of knowledge sharing between employees. Moreover, their processes are impossible to investigate. In other words, although embracing a broader contextual dynamic regarding group-level knowledge sharing among employees, these studies only provide a coarse view of the phenomenon. The current study also aims to overcome the limitation of individual-level research. Existing studies that adopt the individual as the unit of analysis fail to consider broader contextual differences. On the contrary, when considering the contextual factor as a moderator, individual-level studies generally regard their effects as unilateral. Based on these reasons, individual-level analysis has been extremely limited in the comprehensive understanding of the behavior of the employee in an organization. Therefore, the current research takes the dyad as the unit of analysis. In identifying the factors that determine the dynamics of interpersonal knowledge sharing behavior, this study provides a more vivid picture on the matter. The factors related to the behavior of the employee include the characteristics of the employee and that of the coworker who received the impact of behavior (Tett & Burnett, 2003).

Finally, this study questions the meaning of individual differences in organizational research. Existing literature has focused on individual factors that are considered positive in organization and thus promoted, whereas some individual factors are considered negative and shunned. However, as shown in the current study, individual differences are two sides of the same coin. As presented by the current study, a certain characteristic of an individual may interact with the other individual's characteristics in a convoluted way. No absolute negative characteristic exists. Depending on the situation, the characteristics of the focal employee or that of the opposite party could have a positive or negative effect. Specifically, this study has verified that employee ex-
change ideology is negatively related to knowledge sharing. At the same time, high-level employee exchange ideology has been proven to not be a negative phenomenon. Depending on other boundary conditions, it could facilitate the knowledge sharing behavior of the focal employee. To sum up, this study has shown a need for close investigation of the boundary conditions when examining the effects of individual differences and other characteristics in organizational behavior research.

6.3 Practical Implications

By establishing the relationship quality with coworker as a crucial mechanism in interpersonal knowledge sharing, the current research has emphasized the role of the relational factor in knowledge management. In addition, this study has confirmed that the social exchange perspective is a fundamental driver in the sharing of knowledge. Therefore, managers who want to facilitate the knowledge sharing in organizations need to find ways to facilitate the interpersonal relationship among employees without ignoring work-related tasks and interpersonal fellowship. Concentrating on designing and implementing systematic incentive schemes and forming an amicable and sociable workplace climate are difficult challenges. However, conflicts of interest in the pursuit of common goals are a part of corporate reality. In such situations, managers face the challenge of maintaining favorable interpersonal relationship among coworker in groups while avoiding personal involvement in public and private affairs. They must also minimize time consumption on personal matters and prevent the formation of factions. In the face of this challenge, managers must set up higher-order goals, establish a superordinate identity, and enhance group cohesion. They must pursue the integration of the organization and facilitate constructive criticism without falling in the groupthink phenomenon (Choi & Kim, 1999; Park, 2000).
This study also has emphasized the importance of interpersonal fit. In general, even though exchange ideology has a negative impact on building relationships and pro-social and proactive behavior, some combinations of people encourage the sharing of knowledge relative to employees who have low exchange ideology. Therefore, administrators need to pay attention to team composition. This implies that the current research can be expanded to diversity management research. In the same vein, results of this study suggest that no "best employee" exists. Employees can be the best workers or the worst ones depending on their working condition and their own coworker. For instance, employees with high neuroticism are good performers in research and development, but are poor in sales (Barrick & Mount, 1991). In addition, even if a focal employee has a good ability, if he/she has troubles with coworker or supervisors due to the lack of fit between them, the focal employee would be dissatisfied with situation. As a result, the focal employee would underperform relative to his/her ability. Thus, human resource managers must pay attention in their selection and assignment of employees by considering the personality of the new employee and the personality traits and task characteristics of existing employees. Such effort can be the cornerstone in the creation of synergy in the organization.

6.4 Limitations and Conclusions

As in the case of most academic research, the current study suffers from some limitations. First, the data were collected at one point of time, thereby undermining the persuasive power regarding causality between independent and dependent variables. Moreover, the results are based on self-reporting knowledge sharing, and are likely to fall into the common method bias that tends to overestimate the relation among variables. However, through the after-treatment marker variable, this study has confirmed that real effects of common method variance are not significant. Adversely, considering that the
main hypothesis of this study has not been supported by coworker rating, the existence of tendency of leniency in coworker ratings cannot be ruled out. Therefore, considering the purpose and nature of this study, the self-reported data on employee knowledge sharing behavior are strong points of the current study. For example, reporting results can be used to investigate the nature of asymmetric perception regarding the same behavior.

Moreover, other individual characteristics beyond the scope of the current study would have an impact on the interpersonal knowledge sharing behavior. These factors would interact with one another and influence individual behavior. For example, goal orientation and individual motives of employees would independently or jointly affect knowledge sharing behavior. Moreover, conjoint analysis with individual and organizational/group climate factors, such as leadership style and organizational culture, is recommended.

In conclusion, the current study has attempted to fill the gap of established literature, which has focused on macro-oriented organizational factors or has investigated the restricted and incomplete effects of several individual characteristics in a unidirectional way. With the emergence of a knowledge-based economy, the importance of knowledge management, which efficiently appropriates knowledge of individuals, is increasing. This research challenges to shed light on the micro-foundation of knowledge sharing through considering human nature. This effort is not only helpful to academics, but also to practitioners. Overall, as one of the most crucial research topics in organizational science literature, knowledge sharing issue has many rooms for future research need to be investigated.
REFERENCE


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Toward a productivity perspective on knowledge sharing in organizations.


근로자 교환의식과 지식공유행동의 관계에 대한 연구:
근로자 간 관계적 질의 매개효과를 중심으로

최 동 원*  
박 오 수**

요 약

지식은 인류에게 있어 핵심역량이며, 지식의 촉진 및 교환은 새로운 지식 창출에 있어서 핵심적인 역할을 수행한다. 특히 현대 사회의 조사에서 지식은 가치창출의 핵심 동인으로 간주되어 왔다. 많은 학자들이 지식관리에 주의를 기울여왔음에도 불구하고, 상대적으로 적은 수의 연구들만이 개인의 지식공유 행동에 대하여 고찰하였다. 특히, 개인 특질과 지식공유행동의 관계에 대한 연구는 소수에 불과하다. 따라서 본 연구에서는 개인의 특질적 차이와 지식공유행동 간의 관계에 대해 고찰해보고자 하였다.

특히, 본 연구는 근로자의 지식공유행동이 사회 교환 이론의 관점에서 해석되어 왔음에 착안하여, 근로자가 사회적 교환에 대해 갖는 기질적 성향 변수인 근로자 교환의식이 지식공유행동에 미치는 영향력을 고찰하였다. 또한, 이들 두 관계를 매개하는 핵심 매커니즘으로 근로자 간 관계적 질의 매개효과를 검증하였다. 뿐만 아니라, 본 연구에서는 근로자 간 관계가 형성될 때에 있어서 그리고 지식공유행동의 수행에 있어서 행위자의 특성뿐만 아니라 동료의 특성도 동시에 영향을 미칠 것임에 주목하였다. 따라서 지식공유행동의 수행자인 동료의 교환의식이 근로자 교환의식과 상호작용하여 근로자 간 관계적 질 및 지식공유행동에 미치는 영향을 고찰하였다.

* 서울대학교 경영대학 인사조직전공 석사  
** 서울대학교 경영대학 인사조직전공 교수(ospark@snu.ac.kr)