Different Antecedents for Different Knowledge Transfer: A Relational Perspective

Minhyung Kang

Konkuk University, minhkang@konkuk.ac.kr

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DIFFERENT ANTECEDENTS FOR DIFFERENT KNOWLEDGE TRANSFER: A RELATIONAL PERSPECTIVE

Minhyung Kang, Department of Advanced Industry Fusion, Konkuk University, South Korea, minhkang@konkuk.ac.kr

Abstract

From a relational perspective, this study suggests new types of knowledge transfer based on the tenure difference between a knowledge source and a recipient, and explores different motivational mechanism for each type of knowledge transfer. This approach is different from previous ones treating a tenure difference as a cognitive difference that prohibits knowledge transfer. The research model based on the theory of planned behavior was verified using structural equation modeling. The results show that self-efficacy is the strongest antecedent of downward knowledge transfer. On the other hand, in upward knowledge transfer, subjective norm is the most influential. Lastly, in lateral knowledge transfer, expected reciprocity shows a significant effect, but in the negative direction. These results validate the usefulness of the relational approach in understanding the motivational mechanisms of knowledge transfer.

Keywords: Knowledge transfer, Self-efficacy, Reciprocity, Theory of planned behavior.
1 INTRODUCTION

Knowledge is the most critical resource of a firm (Grant, 1996) and knowledge transfer among employees enables the firm utilize its internal knowledge to the fullest extent (Argote & Ingram, 2000). For this reason, researchers have explored detailed mechanisms of knowledge transfer from various perspectives (Argote & Ingram, 2000; Guechtouli et al., 2013; Ko et al., 2005; Lai et al., 2015; Reagans & McEvily, 2003; Szulanski, 1996; Szulanski et al., 2014; Tsai, 2001). However, many companies are still struggling to facilitate knowledge transfer among their employees.

Knowledge transfer is defined as “dyadic exchanges of organizational knowledge between a source and a recipient unit (Szulanski, 1996).” This definition considers knowledge transfer as a dyadic relation between a knowledge source and a recipient. This ‘relational view’ on knowledge transfer makes various factors affecting knowledge transfer emerge. For instance, tenure difference between a knowledge source and a recipient can influence knowledge transfer. Seasoned employee with long tenure may transfer her knowledge to newcomer because she is confident that her knowledge can be helpful to the recipient. This help may not require any return from the recipient. However, newcomer employee with short tenure may transfer his fresh knowledge to colleagues to show-off his expertise and expect reciprocity from the recipients. As such, different dyadic relation between a source and a recipient will lead to different motivational mechanism for knowledge transfer. Therefore, knowledge transfer should be explored from a relational view where relational properties between a knowledge source and a recipient can be considered.

In this study, previously established antecedents of knowledge transfer are to be re-evaluated from the relational view. More specifically, the antecedents’ influence will be explored in the different types of knowledge transfer based on the tenure difference between a source and a recipient. This will provide detailed understanding about the knowledge transfer mechanism and validate the need for consideration of relational context between a knowledge source and a recipient. In short, the research question of this study is:

Do different (relational) types of knowledge transfer have different antecedents?

The remaining part of the paper is structured as follows. First, the theories relevant to this research are reviewed. Grounded on the comprehensive literature review, the research model and hypotheses are developed. Next, the research methodology and the analysis result are provided. Finally, implications and limitations of the research are discussed, and future research directions are suggested.

2 THEORETICAL BACKGROUND

2.1 Types of Knowledge Transfer

There have been many studies on knowledge transfer, and some of them tried to categorize the types of knowledge transfer (Kang et al., 2010; Sveiby, 1996; Uzzi & Lancaster, 2003). These categorizations are helpful to understand mechanisms of knowledge transfer by considering detailed context of knowledge transfer. Direct knowledge transfer by face-to-face communication is effective to transfer tacit knowledge, but costly (Sveiby, 1996). On the other hand, indirect knowledge transfer through information media frequently delivers meaningless information, which is not worth spreading. Thus, more interactive media should be adopted for efficient transfer of action-oriented knowledge (Sveiby, 1996).

According to Uzzi & Lancaster (2003), different types of social ties promote different forms of knowledge transfer and learning. Arm’s length (i.e., weak) ties promote transfer of publicly available knowledge, such as financial reports, and facilitate exploitative learning. In contrast, embedded (i.e.,
strong) ties promote transfer of privately held knowledge, such as discovery from personal experience, and facilitate explorative learning (Uzzi & Lancaster, 2003).

Lastly, the characteristics of recipients also matter in knowledge transfer (Kang et al., 2010). In case of knowledge transfer with an identified single recipient, expected reciprocity from a recipient becomes important. On the other hand, in case of knowledge transfer with unidentified group of recipients, expected rewards from companies are more important than expected reciprocity from counterparts.

Instead of treating knowledge transfer as a single concept, these categorizations of knowledge transfer, considering the detailed context of knowledge transfer, contributed to the increased understanding of mechanisms of knowledge transfer.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sveiby (1996)</td>
<td>Direct knowledge transfer: Knowledge is transferred ‘from person to person’ in an interaction, such as face-to-face meeting.</td>
</tr>
<tr>
<td></td>
<td>Indirect knowledge transfer: Knowledge is transferred ‘via a medium’, such as text books and articles.</td>
</tr>
<tr>
<td>Uzzi &amp; Lancaster (2003)</td>
<td>Private knowledge transfer: ‘Privately held’ knowledge, such as discovery from personal experience, is transferred.</td>
</tr>
<tr>
<td></td>
<td>Public knowledge transfer: ‘Publicly available’ knowledge, such as financial reports, is transferred.</td>
</tr>
<tr>
<td>Kang et al. (2010)</td>
<td>Closed knowledge transfer: Knowledge is transferred to an identified single recipient, such as a colleague</td>
</tr>
<tr>
<td></td>
<td>Open knowledge transfer: Knowledge is transferred to unidentified group of recipients, such as knowledge bulletin board readers</td>
</tr>
</tbody>
</table>

Table 1. Categorization of knowledge transfer

2.2 Theory of Planned Behavior

The theory of planned behavior is a theory providing a comprehensive theoretical framework of an individual’s attitude, intention, and behavior (Ajzen, 1985; Ajzen, 1991). This theory originates from the theory of reasoned action, which suggests that an individual’s intention for a certain behavior is determined by an individual’s subjective norm as well as his positive attitude towards that behavior (Fishbein & Ajzen, 1975). While attitude influences a behavior in an economic perspective, subjective norm does in a sociological perspective. The theory of reasoned action is a powerful theoretical framework to explain behavioral intention and behavior. However, this theory did not consider the situation where people have incomplete volitional control over a behavior of interest. For instance, even though an individual has a positive attitude and subjective norm towards knowledge transfer, her intention to transfer knowledge may be weak because she is not sure about her own expertise.

To deal with this limitation, the theory of planned behavior introduced the concept of perceived behavioral control (Ajzen, 1985). Perceived behavioral control refers an individual’s perception of the ease of performing a certain behavior (Ajzen, 1991). This concept is similar with self-efficacy, which is an individual’s confidence in his ability to perform a certain behavior (Ajzen, 2002; Godin & Kok, 1996). According to the theory of planned behavior, perceived behavioral control, as well as attitude and subjective norm, influences an individual’s intention towards a behavior.

While its original version does not include perceived behavioral control, the theory of reasoned action adopted in knowledge management studies usually included the component of perceived behavioral control (Bock et al., 2005; Lin, 2007). In addition, the theory of planned behavior seems to be more appropriate to explain knowledge transfer among knowledge workers, such as physicians and researchers, than the theory of reasoned action (Ryu et al., 2003). Thus, the theory of planned behavior is adopted as a theoretical framework for this study.
3 RESEARCH MODEL AND HYPOTHESES

The research model attempts to explain an individual’s knowledge transfer behavior based on the theory of planned behavior. To represent three antecedents of the theory of planned behavior, expected reciprocity, subjective norm, and self-efficacy were adopted. These antecedents are expected to influence knowledge transfer (Figure 1). Instead of directly measuring attitude, expected reciprocity was used because it is the main antecedent of attitude in inter-personal knowledge transfer (Kankanhalli et al., 2005; Ko et al., 2005). In addition, self-efficacy is conceptually interchangeable with perceived behavioral control (Godin & Kok, 1996).

In this study, types of knowledge transfer are defined by the tenure difference between a knowledge source and a recipient. Previously, tenure difference was adopted to represent demographical difference between a knowledge source and a recipient. This difference leads to cognitive dissimilarity between them and is expected to hinder knowledge transfer (Lin et al., 2010; Reagans & McEvily, 2003). However, even with the same tenure difference, a knowledge transfer from a senior employee to a junior and the other one with opposite direction from a junior to a senior may have different motivational mechanisms. Thus, in this study, three types of knowledge transfer are suggested based on both the tenure difference and the direction of knowledge transfer.

First, there is a downward knowledge transfer, where a senior employee transfers knowledge to a junior employee. In other words, a knowledge source’s tenure is larger than a recipient. Second, there is a lateral knowledge transfer, where a knowledge source’s and recipient’s tenure are similar. Thus, the difference is little. Last, in upward knowledge transfer, knowledge is transferred from a junior employee to a senior employee. Each type of knowledge transfer is expected to have different antecedents and the detailed rationales are provided in the following sections.

![Research Model Diagram](image-url)

*Solid line is expected to be more influential than dotted line for target type of knowledge transfer

Figure 1. Research Model
3.1 **Antecedents of downward knowledge transfer**

In downward knowledge transfer, a knowledge source’s tenure in a company is longer than a recipient. This means that a knowledge source had more chance to learn and develop expertise by doing her jobs. Thus, the knowledge source will be expected to have more knowledge than a recipient. If a source’s knowledge is not correct or valuable to a recipient, the source may lose her face in the company (especially in Asian countries). If the knowledge source does not have enough self-efficacy in knowledge transfer, she may not bother to initiate knowledge transfer risking her reputation or social status within the company. Thus, self-efficacy’s influence on downward knowledge transfer will be most critical.

In addition, in downward knowledge transfer, knowledge tends to flow one way from a senior knowledge source to a junior recipient due to the knowledge asymmetry between them. A typical example is a mentor-mentee relationship (Swap et al., 2001). In this case, a mentor may not expect reciprocity from a mentee because the mentor has much more knowledge than the mentee through longer tenure and experiences in the company. Thus, expected reciprocity’s influence in downward knowledge transfer will be trivial.

The above arguments lead to the first research hypothesis:

**H1:** In downward knowledge transfer, self-efficacy is more influential than expected reciprocity.

3.2 **Antecedents of lateral knowledge transfer**

In lateral knowledge transfer, a knowledge source’s tenure and a recipient’s are similar. Thus, their relationship is not hierarchical and they may feel that they are similar or homogeneous. In this case, knowledge transfer is a fair social exchange between similar colleagues. Thus, expected reciprocity will be powerful antecedent.

On the other hand, self-efficacy’s influence may not be salient because a knowledge source has little risk of losing his face. A knowledge source and a recipient are colleagues with similar level of expertise (and tenure); thus, a recipient does not expect perfection from a source. This low level of expectation makes a knowledge source feel free to transfer knowledge without much pressure. These arguments lead to the second research hypothesis:

**H2:** In lateral knowledge transfer, expected reciprocity is more influential than self-efficacy.

3.3 **Antecedents of upward knowledge transfer**

In upward knowledge transfer, a junior employee transfers his knowledge to a senior employee. In general, a senior recipient may be more knowledgeable than a source and the source’s knowledge may be superior to the recipient’s in a very limited area. The junior source just has to transfer the requested (specific) knowledge and do not have to have much confidence in his expertise. Thus, self-efficacy’s influence will be weak.

Rather, subjective norm’s influence will be critical in upward knowledge transfer. If a senior employee seeks knowledge from a junior employee, the junior may feel more social pressure (i.e., subjective norm) to transfer knowledge. If she breaks the norm for knowledge transfer, the information about her selfish behavior will promptly spread among senior employees, including her boss. Thus, a knowledge source’s subjective norm’s influence will be important.

**H3:** In upward knowledge transfer, subjective norm is more influential than self-efficacy.
4 METHODOLOGY

Sample data were gathered through a survey methodology and analyzed using partial least squares structural equation modeling (PLS-SEM, Hair Jr. et al., 2013).

4.1 Samples

Respondents are from the eight research and development (R&D) groups of five South Korean firms. R&D employees conduct knowledge-intensive tasks; thus, they seem to be the appropriate sample for this research. A questionnaire having a social network survey, as well as traditional attribute survey, was distributed to each respondent and collected onsite by the author. Final sample size was 337 from the target sample of 385, which resulted in the response rate of 88%.

4.2 Measures

Most measurement items were adapted from the previous research (Table 2). First, the three independent variables (i.e., expected reciprocity, subjective norm, and self-efficacy) were measured by three or four measurement items with seven-point Likert scale.

Second, the dependent variable (i.e., knowledge transfer) was measured by a social network survey (Carrington et al., 2005; Wasserman & Faust, 1994). A respondent was guided to rate each group member’s knowledge transfer behavior with five-point Likert scale from a knowledge recipient’s perspective. To help a respondent with this network question, a roster of the respondent’s group members was provided. Then, the responses were aggregated to generate knowledge transfer network among employees of each R&D group. From each network, a knowledge source’s degree centrality (i.e., number of knowledge transfer) was calculated to measure knowledge transfer, adopting prior research’s approach (e.g., Song et al., 2003). A single network question is considered reliable when it is highly specific and asking long-term relations (Freeman et al., 1987; Rogers & Kincaid, 1981).

This knowledge transfer value does not differentiate tenure difference between a knowledge source and a recipient. Thus, original knowledge transfer value was divided into three different types of knowledge transfer – downward, lateral, and upward. Downward knowledge transfer is a knowledge transfer where a source’s tenure in a company is at least one year larger than a recipient’s. Upward knowledge transfer is the opposite case; a source’s tenure is at least one year shorter than a recipient’s. Lateral knowledge transfer is a knowledge transfer where a tenure gap between a source and a recipient is within a year. For instance, if original knowledge transfer value is 15, there may be eight times of downward knowledge transfer, four times of lateral knowledge transfer, and three times of upward knowledge transfer. Then, degree centralities for each type of knowledge transfer were normalized to take into each group’s network size effect (Wasserman & Faust, 1994). In addition, to control unknown group level effect from eight R&D groups, seven dummy variables were added.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Adapted From</th>
</tr>
</thead>
</table>
| Expected Reciprocity | 1. If I transfer my knowledge to colleagues* in need, somebody will do the same when I’m in need.  
2. I know that my colleagues will help me, so it’s only fair to help them.  
3. If I help with my colleague’s problem solving, they would help me back sometime. | Wasko &Faraj (2005); Yamagishi &Cook (1993) |
| Subjective Norm      | 1. People who influence my behavior at work think that I should transfer my knowledge to colleagues.  
2. People who are important to me at work think that I should transfer my knowledge to colleagues.  
3. People who are close with me at work think that I should transfer my knowledge to colleagues. | Venkatesh &Davis (2000) |
My colleagues think that I should transfer my knowledge to them.

1. I have confidence in my ability to provide knowledge that colleagues consider valuable.
2. I have the expertise needed to provide valuable knowledge for my group.
3. Most colleagues think that the knowledge I transfer is valuable to them.

* 'Colleagues’ in this survey means the co-workers who are listed in the network questions.

Table 2. Measurement Items

4.3 Analysis Method

The research hypotheses were validated using SmartPLS 2.0 M3 – a statistical analysis software based on PLS-SEM (Ringle et al., 2005). Unlike covariance-based structural equation modeling, PLS-SEM does not have distributional assumptions and it generally achieves high levels of statistical power with small sample sizes (Hair Jr. et al., 2013).

5 RESULTS

5.1 Measurement Model

Quality of the measurement model was evaluated by testing internal consistency reliability, convergent validity, and divergent validity. First, Cronbach’s alpha (Cronbach, 1951) and composite reliability (Fornell & Larcker, 1981) were calculated to assess internal consistency reliability of each research construct. All research constructs showed Cronbach’s alpha and the composite reliability values greater than the suggested threshold value 0.7 (Table 3) (Hair et al., 2014; Nunnally & Bernstein, 1994). Second, the average variance extracted (AVE) values and factor loadings of measurement items on their assigned constructs were examined for convergent validity. AVE values for all constructs were greater than 0.5 (Table 3) and factor loading values were greater than 0.707 (Table 4), satisfying the suggested criterion (Chin, 1998; Fornell & Larcker, 1981; Hair Jr. et al., 2013). Thus, convergent validity was confirmed at both the item and the construct level.

Lastly, discriminant validity at the construct level was assessed by comparing the square root value of the average variance extracted (AVE) for each construct with the other correlation values in the correlation matrix (Fornell & Larcker, 1981). The square root values of AVE of all constructs (in the gray diagonal of Table 3) were greater than the off-diagonal elements in the corresponding row and column (i.e., correlation values with other constructs). Additionally, discriminant validity at the item level was also verified by confirming that all measurement items’ loading values on their assigned constructs were larger than cross-loading values on other constructs by more than 0.1 (Table 4) (Gefen & Straub, 2005).

The independent variables were responded by a knowledge source and the dependent variables were by a recipient; thus, common method bias (Podsakoff et al., 2003) was not a concern in this study.
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
<th>RCP</th>
<th>NORM</th>
<th>EFF</th>
<th>KTF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocity</td>
<td>6.264</td>
<td>0.819</td>
<td>.897</td>
<td>.936</td>
<td>.829</td>
<td>.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subj. Norm</td>
<td>5.486</td>
<td>1.052</td>
<td>.917</td>
<td>.942</td>
<td>.801</td>
<td>.460</td>
<td>.895</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>5.369</td>
<td>1.016</td>
<td>.862</td>
<td>.916</td>
<td>.785</td>
<td>.373</td>
<td>.536</td>
<td>.886</td>
<td></td>
</tr>
<tr>
<td>K. Transfer</td>
<td>.511</td>
<td>.196</td>
<td>1.000</td>
<td>1.000</td>
<td>.047</td>
<td>.197</td>
<td>.186</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

*Grey cells in the diagonal of the correlation matrix report the square root value of AVE.
** SD = Standard Deviation; CA = Cronbach’s alpha; CR = Composite Reliability; AVE = Average Variance

Table 3. Results of Reliability and Validity Tests

<table>
<thead>
<tr>
<th></th>
<th>Reciprocity</th>
<th>Subj. Norm</th>
<th>Self-efficacy</th>
<th>K. Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP1</td>
<td>0.913</td>
<td>0.385</td>
<td>0.326</td>
<td>0.091</td>
</tr>
<tr>
<td>RCP2</td>
<td>0.913</td>
<td>0.463</td>
<td>0.347</td>
<td>-0.002</td>
</tr>
<tr>
<td>RCP3</td>
<td>0.906</td>
<td>0.404</td>
<td>0.343</td>
<td>0.044</td>
</tr>
<tr>
<td>NORM1</td>
<td>0.434</td>
<td>0.901</td>
<td>0.500</td>
<td>0.154</td>
</tr>
<tr>
<td>NORM2</td>
<td>0.395</td>
<td>0.922</td>
<td>0.523</td>
<td>0.148</td>
</tr>
<tr>
<td>NORM3</td>
<td>0.392</td>
<td>0.889</td>
<td>0.414</td>
<td>0.220</td>
</tr>
<tr>
<td>NORM4</td>
<td>0.428</td>
<td>0.868</td>
<td>0.485</td>
<td>0.186</td>
</tr>
<tr>
<td>EFF1</td>
<td>0.385</td>
<td>0.476</td>
<td>0.926</td>
<td>0.158</td>
</tr>
<tr>
<td>EFF2</td>
<td>0.288</td>
<td>0.459</td>
<td>0.927</td>
<td>0.142</td>
</tr>
<tr>
<td>EFF3</td>
<td>0.319</td>
<td>0.504</td>
<td>0.799</td>
<td>0.207</td>
</tr>
<tr>
<td>KTF</td>
<td>0.047</td>
<td>0.197</td>
<td>0.186</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 4. Loading Values for Measurement Items

5.2 Structural Model and Hypotheses Testing

Before hypotheses testing, the structural model’s collinearity was checked (Hair Jr. et al., 2013). Significant collinearity among independent variables brings about bias in the path coefficient estimation. The largest variance inflation factor (VIF) value for independent variables was 2.755, which is much smaller than the suggested criterion, five (Hair Jr. et al., 2013); thus, collinearity was not an issue. To test the research hypotheses, the bootstrap re-sampling method with 337 cases and 500 re-samples was adopted. Two research hypotheses (H1 and H3) were supported, but the second research hypothesis suggesting expected reciprocity as the most positive antecedent in lateral knowledge transfer was rejected.

More specifically, self-efficacy was the only and positively significant antecedent of download knowledge transfer (path coefficient = 0.217; t = 4.069; p < 0.01). Expected reciprocity and subjective norm’s influence was insignificant. Thus, H1 was supported. In lateral knowledge transfer, expected reciprocity was the only significant antecedent. However, its influence on lateral knowledge transfer was negative. Thus, H2 was not supported. Lastly, in upward knowledge transfer, both subjective norm (path coefficient = 0.111; t = 2.053; p < 0.05) and self-efficacy (path coefficient = -0.252; t = 4.742; p < 0.01) were significant. However, the direction of path coefficient of self-efficacy was negative; thus, subjective norm was the most positively significant antecedent. This result supports H3.
Originally, in each type of knowledge transfer, the path coefficient comparison among three antecedents of knowledge transfer was planned to validate the research hypotheses. However, all types of knowledge transfer had single significant or single positively significant antecedent. Thus, the comparison to find out the most positively significant antecedent was not necessary.

5.3 Discussion

First, downward knowledge transfer was predominantly influenced by self-efficacy. A senior knowledge source seems to transfer knowledge based on the confidence in her expertise and not by any expectation for reciprocity. If she wants immediate reciprocity for her contribution, she may seek more competent counterpart.

Second, in lateral knowledge transfer, expected reciprocity’s influence was negative. This is the opposite of the original hypothesis based on a source’s extrinsic motivation. This unexpected result may imply that this extrinsic motivation deteriorates a knowledge source’s intrinsic motivation for knowledge transfer (Osterloh & Frey, 2000). This type of knowledge transfer among similar colleagues seems to be promoted more by intrinsic motivation from close relationship based on homophily (i.e., similarity in tenure) (Zenger & Lawrence, 1989), rather than an extrinsic motivation.

Lastly, upward knowledge transfer was mainly influenced by subjective norm. This type of knowledge transfer seems to be driven by a knowledge source’s perceived obligation from social pressure. Surprisingly, the less self-efficacy a knowledge source has, the more knowledge was transferred to a senior recipient. Low self-efficacy may make a junior knowledge source more responsive to a senior recipient’s request for knowledge. On the other hand, junior knowledge source with high self-efficacy can behave more independently from seniors and focus more on helping colleagues with similar or low tenure.

6 CONCLUSION

This paper reviewed previous research on the types of knowledge transfer and suggested a new way of categorization of knowledge transfer based on the tenure difference between a knowledge source and a recipient. The three types of knowledge transfer (i.e., downward, lateral and upward knowledge transfer) are expected to have different motivational mechanisms respectively.

More specifically, in downward knowledge transfer, a knowledge source’s self-efficacy was most influential (in a positive direction). On the contrary, in upward knowledge transfer, self-efficacy showed a negative effect. Instead, subjective norm positively affected the level of knowledge transfer. Finally, in lateral knowledge transfer, expected reciprocity’s influence was significant, but the direction was the opposite of the original expectation. In short, each type of knowledge transfer showed different motivational mechanisms. This finding validates the value of new categorization of knowledge transfer for deeper understanding of underlying motivational mechanisms of knowledge transfer.

6.1 Limitations

This study has some limitations that should be pointed out. First, the survey respondents are R&D employees in a single country. Although a knowledge-intensive R&D department seems appropriate for validating a knowledge management-related research model, generalization of the results requires future studies replicating them in different contexts, such as in a different department or geographic region. Second, instead of measuring attitude directly, this study used expected reciprocity as a proxy measure. Expected reciprocity is a typical extrinsic motivation factor in knowledge transfer (Kankanhalli et al., 2005; Ko et al., 2005) and does not have any logical relationship with intrinsic motivation, such as
subjective norm or perceived behavioral control. Thus, using expected reciprocity as a proxy measure for attitude seems acceptable, but this surely reduces the methodological rigor of the study.

6.2 Implications

There are a few academic implications in this study. First, focusing on the tenure difference between a knowledge source and a recipient, this study suggests new approach categorizing types of knowledge transfer. The usefulness of this categorization was validated by showing different motivational mechanisms for each type of knowledge transfer.

Second, this study validated the usefulness of a relational view on knowledge transfer. Knowledge transfer is a kind of dyadic relationship between a knowledge source and a recipient; thus, a relational view which considers relational factors between participants can bring more insightful findings along with traditional individual attribute-based approach.

Along with the academic implications, the current study provides some practical contributions. First, to facilitate knowledge transfer among employees, relational factors between a source and a recipient should be considered. A certain relational context, such as a senior source and a junior recipient (i.e., downward knowledge transfer), can increase or decrease a certain motivator’s importance.

Second, extrinsic motivation should be applied with a caution to facilitate knowledge transfer. Instead of motivating knowledge transfer, extrinsic motivational factor, such as expected reciprocity, can harm a knowledge source’s intrinsic motivation (Osterloh & Frey, 2000). In addition, from a recipient’s perspective, a superficial or limited knowledge transfer from a source expecting reciprocity may not be appreciated.

6.3 Possible Directions for Future Research

There are several ways to extend the current study. First, a longitudinal study could more rigorously validate the current research model with causal relationships. Multiple waves of surveys certainly require more research effort, but it can validate temporal sequence between independent and dependent variables, which is one of three conditions of causal relationship. Second, the findings of the research could be cross-validated across different countries or cultures to improve the external validity of the study. Generally speaking, Asian people are more concerned about losing face (Hofstede, 1980). Thus, the results of this study may not be replicated in Western countries. This extension will also increase the data collection efforts and need global collaboration among researchers from various geographical regions or cultural areas. Finally, this study includes only ‘intra-department’ knowledge transfer. In ‘inter-department’ knowledge transfer, junior employee of a certain department may have much knowledge valuable to another department’s senior employee because their knowledge domain may not overlap. Thus, a future study including inter-department knowledge transfer may bring more interesting findings about motivational mechanisms of knowledge transfer.

References


