Goal Orientation and Innovation Behavior: The Mediating Effect of Knowledge Sharing

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Abstract

In this study we developed a theoretic model to account to interpret the effect of different goal orientation on innovation behavior with the mediation effect of knowledge sharing. Based on the classification of goal orientation in previous research, we distinguish them as learning goal orientation, performance goal orientation and avoid goal orientation. As learning goal orientation focuses on developing new skills and competence, performance goal orientation implies showing competence to others and avoid goal orientation usually avoids showing their incompetence, we proposed that people with different goal orientation will differ in their innovation behavior and knowledge sharing behavior. We conducted the survey in six Chinese organizations from different industries, the results of survey showed that both learning goal orientation and performance goal orientation have positive relation with knowledge sharing, and learning goal was also positively related with innovation behavior. While no significant relations were found between avoid goal orientation and innovation behavior and knowledge sharing. Unexpectedly, the mediation effect of knowledge sharing for the relationship between goal orientation and innovation behavior was not supported.

Keywords

Goal Orientation; Knowledge Sharing; Innovation Behavior.

1. Introduction

With the rapid development of science and technology and fierce market competition worldwide, an increasing number of organizations realize that innovation plays a critical role in enhancing organizational effectiveness and facilitating long term development. Innovation in organizations is proposed to encompass creative solutions to business problems, creative changes to job processes, and new technologies (Jill, 2006). In the knowledge economy, humans are the carriers of knowledge and have to take on the dual mission of generating new ideas and implementing creative ideas. However, in practice, because of the complexity of innovation process and the difficulty of innovation achievement evaluation, how to stimulate employee innovation is a complicated issue for managers. Much attention has been paid to antecedents and underlying mechanism of employee's innovation behavior, since innovation is different from other general performance, we will explore the effect of goal orientation and knowledge sharing behavior on innovation from personal attributes and social exchange perspective.

Amabile (1983) proposed that innovators are not only required to have domain-relevant skills and creativity-relevant skills, they also need motivation. Motivation theory is therefore potentially important in explaining the behavior such as challenge seeking and creative thinking, which are not driven by the outside forces. Whereas much early work has focused on the role of intrinsic motivation, in more recent research, goal orientation theory has become an important perspective in the field of achievement motivation. This theory originally emerged in the academic settings. A lot of research regarded the goal orientation theory as an important theoretical perspective on student's motivation and their academic performance in school.
(VandeWalle, 2003). This theory provides a framework for research on how different motivational orientations influence students' adaptive or maladaptive engagement. In management research, a growing number of studies also pay more attention to goal orientation in work settings.

While since goal orientation was defined as dispositions toward developing or demonstrating ability in achievement situations (Dweck, 1986), and correlational studies have suggested that individuals with different goal orientations differ in the way they approach, interpret, and respond to achievement situations (e.g., Dweck, 1999; Van Yperen, 2003). Because individual task performance, which encompasses in-role job performance and innovative behaviors, has been found to have close relation to their ability, attitude toward work and motivation, goal orientation could potentially explain why individuals differ in the aspects of innovative behavior. Researchers have proposed different definitions of goal orientation, and two major classes of underlying goals in achievement settings are identified: "learning" and "performance" goal orientations. Learning goal orientation refers to an individual purpose of developing competence and skills (Ames, 1992a) while performance goal orientation focuses on demonstrating competence, which means attempting to create an impression of high ability and avoid creating an impression of low ability (Kaplan, 2007).

Extensive research have examined the relationship between goal orientation and job performance (Dweck, 1986), and most of the study suggested that learning goal orientation is an important predictor of job performance in workplace settings. Similarly, recently innovation behavior or innovation performance has also been addressed to be related with personal attributes such as intrinsic motivation and achievement goal orientation. As Amabile (1996) stated that relevant knowledge and skills and intrinsic motivation are two main components of creativity behavior, based on this model we propose that people with different goal orientation differ in their intention towards learning new things and intrinsic motivation, which results in different innovation behavior.

As has been mentioned, one of the characteristics of goal orientation is how individuals pursue adaptive behavior, which to some extent refers to the interpersonal behavior such as the willingness to share information and knowledge with colleagues. However few studies have examined the relationship between the goal orientation and interpersonal behavior in the social context such as knowledge sharing. Some social networks theories recognize that employees do not work, learn, or share knowledge in isolation but are embedded in social networks (Mayer, Davis, & Schoorman, 1995). Given the disparity of how individuals with a learning goal orientation and performance goal orientation respond to different situation, learning goal orientation is suggested to be more beneficial to social exchange process such as knowledge sharing than performance goal orientation (Poortvliet, 2007).

Recently, some researchers suggest that innovation-related study should not only focus on psychological perspective to figure out why some employee is more creative than others, they also need to incorporate social network and interpersonal factor to elaborate innovative behavior in work settings. Innovation is a complex task includes varieties of cognitive and social activities, and social exchange process such as sharing information with colleagues helps to provide more alternative ways to solve the problem, which contribute to divergent thinking and ultimately the innovative outcome (Perry, 2007).

Overall, the main research question of present study is do different goal orientation have different effect on innovation behavior with the mediation effect of knowledge sharing? In this paper we will develop a theoretical model of how individual goal orientation influence their innovative behavior, and based on the findings of classification of goal orientation, we will examine this main effect regarding three different goal orientations, namely learning goal orientation, performance goal orientation and avoid goal orientation respectively. More specifically, we propose that learning goal orientation has positive effect on innovation
behavior while performance and avoid goal orientation have negative effect on innovation behavior. In addition, the knowledge sharing process that mediate the relationship of goal orientation and innovative behavior will be explicated. And we will conduct online survey in Chinese company to examine the hypothesis, all the sample we use in the research are from China so we do not need to take cultural difference or other related environmental factors into account.

In general, one of the major contributions of our study is that it provides new perspective on the relation between goal orientation theory to innovation behavior and it also highlights the mechanism of social exchange process in the whole model. This research further develops goal orientation theory in workplace settings and helps better explain how people with different goal orientation will behave differently regarding knowledge sharing behavior and innovation behavior.

2. Theory and hypotheses

2.1. Individual innovation behavior

In this research we focus on innovation at the individual level in organizations. Individuals’ actions are of crucial importance for continuous innovation and improvement. Van de Ven (1986) argued the foundation of innovation is ideas, and the whole process of innovation was proposed to include developing, reacting to, and then modifying ideas.

Individual innovation is a common and complex construct that has been defined and operationalized differently by various researchers in individual behavior research. And different research defined innovation behavior with different focus. Hurt et al. (1997) construed individual innovativeness as a generalized willingness to change. Kirton’s (1976) Adaptation innovation inventory measures two distinct cognitive styles ranging from adaptors who solve problems within existing perceptual frames and innovators who restructure them. In this paper, we follow the definition of West and Farr (1989), who defined innovative behavior as individual actions directed at the generation, introduction and application of new ideas at any organization level.

Susanne (1994) integrated a number of independent streams of research on the antecedents of creativity, innovation, and organizational climate and finally developed a model which viewed individual innovative behavior as the outcome of four interacting systems—individual, leader, work group, and climate for innovation. Not only the climate at the organization and subunit level affect innovation (Abbey & Dickson, 1983; Paolillo & Brown, 197), the climate at individual level which was labeled as “psychology climate” also influence innovative performance (James, & Ashe, 1990).

2.2. Goal orientation

Goal orientation theory focuses on why and how people try achieving various objectives and refers to overarching purposes of achievement behavior instead of specific objectives (Anderman & Maehr, 1994). These orientations were proposed to incorporate the experience of the person in the situation, guiding interpretation of events and producing patterns of cognition, emotion and behaviors (Ames, 1994a).

Dweck (1986) defines the goal orientation that individual pursue in terms of personality. Goal orientation in short, could be thought of as individual differences in goal preferences in achievement situations. Two major classes of goal orientations were identified: (a) a learning goal orientation of seeking to develop competence by learning new skills. (b) a performance goal orientation of seeking to demonstrate and validate the adequacy of one’s competence by seeking favorable judgments and avoiding negative judgments about one’s competence.
However, Van de Walle (1997) suggests goal orientation is better conceptualized as three-factor construct because performance goal orientation includes both the desire to gain favorable judgments and the desire to avoid negative judgments. Some goal orientation studies therefore define the performance goal orientation along two dimensions: (a) individuals with performance approach goal orientation focus on outperforming others to demonstrate competence and to gain favorable judgments (b) individuals with a performance avoid goal orientation focus on avoiding negation of competence and avoid negative judgments. Furthermore, the directions of relationships of approach and avoid dimensions with innovative behavior are different, so it is necessary to view approach and avoid orientations as two distinct motivational orientations.

In the innovation literature, innovative behavior usually associates with motivational orientation at the individual level. More specifically, innovation requires that individuals are motivated to engage in the activities that may have innovative outcome. Some studies found that learning goal orientation predicts interest and continuing motivation (Cury, Elliot, Da Fonseca, & Moller, 2006). Individuals with learning goal orientation enjoy challenge and therefore they are more likely to discover opportunities involving innovative behavior.

Performance-approach goal orientation implies demonstrating competence and outperforming colleagues. They have been found to be associated with surface processing rather than deep learning strategies, so performance-approach orientated people tend to devote most of their time to regular work rather than challenging tasks in order to compete with peers and then show their superiority to other coworkers. And individuals with performance-avoid goal orientation hold a more negative attitude to events involving challenge or difficulty, because of their concern that their incompetence may exposure to other peers when they face hard and complicated task. So people with performance goal orientation or avoid goal orientation are probably not likely to engage in innovative task which are unpredictable and challenging.

Another possibility is that people generate innovative or creative ideas may face skepticism and criticism from their colleagues (Janseen & Van Yperen, 2004), this negative feedback may also decrease their motivation to innovation task.

Additionally, learning and performance goal orientation also relate to personal attributes such as skills and ability (Dweck, 1999). For individuals who are oriented towards learning goals, personal ability is viewed as a malleable attribute that can be developed. In contrast, individuals with a performance orientation view ability as a fixed attribute which is difficult to develop. Because innovative idea generation requires relevant knowledge and skills as prerequisite, so the skills and abilities that individuals with learning goal orientation have developed support their innovative idea generation as well as implementation. But individual with performance goal orientations may lack of the necessary knowledge to support their innovative behavior.

Furthermore, different goal orientations also influence how individuals response to task difficulty and task failure. The process of innovation inevitably involves new challenges and unfamiliar experience, and in most cases the result of innovation associate with high uncertainty and risk. Learning goal oriented employees usually responds to the difficulties and obstacles with positive attitude and makes more effort to solve the problem, they view effort as a productive means to achieve the goals and activate their current abilities (Ames, 1992).

Considerable research have shown the positive relation between learning goal orientation and job performance, Heintz and Miller (2008) described that people with learning goal respond to challenge and difficulty positively, they always have higher performance when they possessed the necessary cognitive ability. While the effect of learning goal on innovation and creativity has also been demonstrated in recent studies, Gong et al (2009) found that employee learning orientation facilitated the individual creativity with the mediating role of creative self-efficacy.
Hirst (2009) explained that goal orientation not only influenced individual creativity but also team learning behavior from cross-level perspective. But individuals with performance goal orientation tend not to take the risk to persist when facing challenge, as Janssen and Van Yperen (2004) proposed that people with performance goal orientation tend to hide or avoid their disadvantages, they would refrain from exhibiting innovative behavior because they are concerned that their incompetence will be exposed when the task end in failure. As the innovative task are always challenging and difficult task with high risk of failure, so learning goal oriented people are more likely to engage in innovative work than performance or avoid goal orientation people who usually evade challenges and obstacles. Accordingly, based on argument above, we put forward following hypothesis:

Hypothesis 1a. learning goal orientation has positive influence on individual innovation behavior.
Hypothesis 1b. Performance-approach orientation has negative influence on individual innovation behavior.
Hypothesis 1c. Performance-avoid orientation has negative influence on individual innovation behavior.

2.3. Knowledge sharing

Extensive research about innovation suggests that interpersonal behavior and social networks also associate with individual innovative behavior. In terms of interpersonal behavior, we will particularly focus on knowledge sharing as an important factor. Knowledge sharing refers to the process of sharing knowledge and then creating new knowledge through interpersonal communication, including knowledge contribution and knowledge acquisition (Hooff & Ridder, 2004). Knowledge contribution means that the individual communicates his own intellectual capital with colleagues while knowledge acquisition implies that the individual consult with other co-workers to share their intellectual capital and expertise.

There are circumstances when knowledge sharing may be considered a learning process for the sharer. For example, employees high in learning goal orientation may perceive knowledge sharing as a learning opportunity, so they tend to be more active to engage in events involving knowledge and skill sharing. On the other hand, the willingness of sharing information and knowledge with other colleagues within the organization usually results in that they can acquire other valuable information from others in the future. But employees high in performance goal orientation, in the opposite way, are more concerned about demonstrating their competence and effectively performing while avoiding risks and negative judgments (e.g., Dweck & Leggett, 1988). They may feel that knowledge sharing depletes the time and effort available for other work activities that can result in greater personal benefits and rewards by exceeding expectations on performance goals (Szulanski, 1996). They tend to regard their colleagues as rivals rather than cooperator, in order to sustain their own competitive advantage in the organization they tend not to share knowledge with other people. Similarly, the individuals who have avoid performance goal orientation rarely join knowledge sharing activities because they worry that when sharing expertise or discussing how to deal with the problem with co-workers their shortcomings may be exposed, in this case, they will not take the risk that the colleagues may have negative judgments of them. Consequently, we put forward the hypothesis:

Hypothesis 2a. learning goal orientation has a positive influence on knowledge sharing
Hypothesis 2b. Performance-approach goal orientation has a negative influence on knowledge sharing
Hypothesis 2c. Performance-avoid goal orientation has a negative influence on knowledge sharing
Perry-Smith and Shalley (2003) addressed creativity from a social perspective, the process through which social exchange processes influence innovative behaviors can be related to two factors: creativity-relevant cognitive processes and domain-relevant knowledge. A creativity-relevant cognitive process is any problem-solving approach that helps one come up with different alternatives, and it has been described as an individual’s searching his or her mind and surroundings to generate potential ideas (Amabile, 1983). Sharing knowledge with colleagues can provide a different perspective of the problem, which helps to generating fresh views and novel solutions to the problem (Mumford & Gustafson, 1988).

Similarly, social interaction such as teamwork and provide some critical outside information to partners can affect domain-relevant knowledge. Domain-relevant knowledge is an individual’s knowledge of facts, circumstances, and issues surrounding a given problem or area (Amabile, 1983). It involves technical expertise and the experience necessary to be able to come up with feasible solutions to a given problem. From social exchange perspective, sharing knowledge with colleagues helps to build reciprocal relationship between coworkers, which could be developed into an effective way to learn more useful knowledge or expertise and receive timely feedback. The timely critical feedback could then in turn enhance the knowledge contributor’s understanding of domain relevant knowledge or even provide new insight of the traditional view.

When individuals have more domain-relevant knowledge, the incidence of individual behavior is enhanced (Mumford & Gustafson, 1988; Simonton, 1999) by an increased ability to generate potential solutions. Knowledge sharing in a domain could enhance one’s understanding of the area and facilitate the generation of approaches that are feasible and unique. And the two dimensions of knowledge sharing also affect each other, for example, the more knowledge employee acquire from their colleagues, the more willing they are to contribute knowledge to others; the more intellectual capital employee communicate to others, the group innovative climate would be better. So we propose the following hypothesis:

**Hypothesis 3.** Knowledge sharing has positive effect on individual innovation behavior.

Based on the argument about the effect of goal orientation on knowledge sharing behavior, learning goal orientation is proposed to have positive influence on knowledge sharing while performance goal orientation have negative influence on knowledge sharing, and integrated with the positive effect of knowledge sharing on innovation behavior we put forward following hypothesis:

**Hypothesis 4a** Knowledge sharing has mediation effect between learning goal orientation and individual innovation behavior.

**Hypothesis 4b** Knowledge sharing has mediation effect between performance-approach goal orientation and individual innovation behavior.

**Hypothesis 4c** Knowledge sharing has mediation effect between performance-avoid goal orientation and individual innovation behavior.

### 3. Method

Data collection was conducted by an online survey. We asked respondents to assess their goal orientation, knowledge sharing behavior and other workplace related questions. Because individual innovation behavior always relate to an employee's innovation performance, which is appraised and evaluated by a team leader or supervisor, we asked team leaders to answer the question about evaluation of team members or employee’s innovation behavior. Therefore the questionnaires for employees and team leaders were created on Qualtrics. Since the response of team leader will be linked to the response of individual employees, we conducted non-anonymous survey so that the respondent identifying information could be tracked during the survey distribution process. Before the survey distribution process, team leaders who will
evaluate and rate the employee were contacted and then they were informed about the general introduction of the research and survey. They gave us permission to conduct the survey in the organization and provided us with team member's personal information.

The organizations participated in survey are quite diverse, including real estate company, primary school, insurance company, media company, consulting company and pharmaceutical company. The employees from the six organizations have different job functions, but their work is somewhat relevant to their colleagues within one team. One hundred and fifty invitation emails were sent to the employees and we finally received one hundred and six responses, so the response rate is 68.4 percent. As for the team leaders rating survey, we received eighty eight responses from all the team leaders. After check the questionnaire completeness, we excluded several uncompleted questionnaire and the questionnaire with problematic response, so finally eighty four responses of employee corresponding to their team leaders rating become valid data of the whole sample. Usually each team leader had to rate more than one subordinate, only the immediate subordinates of the leader were asked to do the survey.

Among all the respondents, 48.8% are male employee and 51.2% are female employee. And majority of respondent are 21-40 years old, their average age is 27 years old (s.d=.797). Regard to education level, the average level is bachelor degree. The organization tenure of them ranged from 2 years to 26 years, and the average tenure is 8.6 years (s.d=6.807). The team tenure of all the respondents ranged from 1 year to 23 years, and the average team tenure is 6.95 years (s.d=5.75). The demographic characteristic of team leaders are presented as follows: of all the 6 team leaders participated in the survey, four of them are male leaders and two of them are female leaders. The number of team members for each team leader evaluated ranges from 10 to 16, the average number is 13. The organization tenure of all the team leaders are also varied, 16.7% worked in current organizations for 8years, 16.7% worked for 10years, 33.3% worked for 20 years and 33.3% worked for 25years. Similarly, team tenure of all the team leaders ranged from 5 years to 20 years. Considering the type of team, 50% are project team, 33.3% are advice team and 16.7% are production team.

4. Measures

To measure the construct goal orientation, we will use the scale developed by Vandewalle which aims at different organization context, a total of 16 items was written to measure three goal orientation dimensions. More specifically, six items were related to learning goal orientation, the sample items include “I am willing to accept the challenging work which can help me to gain new skills.” and Cronbach’s alpha of learning goal scale was good (α=.84); five items were related to approach goal orientation, sample items include “I am willing to do the work which helps to demonstrate my competence” (α=.72); five items were related to avoid goal orientation, sample items include “I tend not to accept the work which may exposure my incompetence” (α=.84). A 6-point Likert-type response scale (ranging from 1=strongly agree to 6=strongly disagree,) was used for each item (Vandewalle, 1997)

For knowledge sharing, we used items of a knowledge management scan tested and used in a number of organization (Van den Hooff et al., 2003). The scale consists of knowledge contribution and knowledge acquisition these two dimensions, respondent were asked to assess to which degree they agree of knowledge sharing behavior between colleagues within the department, such as “I share my skills with colleagues within my department.” (1=strongly agree to 5=strongly disagree; α=.82)

Innovative behavior was assessed using Janssen’s (2001) nine-item scale of individual innovation. Immediate supervisors rated how often the subjects exhibited the nine innovative work behaviours described in the items. The response format was a 7-point scale ranging from 1, never, to 7, always, (α=.48). Despite the reliability of innovation behavior is low, we will still
use it in the following analysis because the total reliability did not improved when we excluded some items.

In this research, control variables are respondent demographic variables, gender (1=male, 2=female), organization tenure (in years), team tenure (in years) position (1=employee, 2=low level manager, 3=middle level manager, 4=high level manager) and education level.

5. Result

Descriptive statistics and correlations

In table 1, means, standard deviations and Pearson correlations of all the variable are presented. Learning goal orientation had a positive correlation with the mediating variable of knowledge sharing behavior and dependent variable of innovation behavior as we supposed. While performance goal orientation also showed a positive correlation with knowledge sharing and innovation behavior, which was contrary to what we expected. And no significant correlations were found between avoid goal orientation and the mediating and outcome variables. As we predicted in hypothesis, knowledge sharing behavior is positively correlated to innovation behavior. Considering personal demographic variables, both respondent gender and their team tenure have positive association with knowledge sharing, which indicate that they are potentially important variable that have influence on knowledge sharing behavior. Therefore it would provide more explanation if we add these two variable into predictor when we proceed with testing hypothesis analysis.

Table 1. Mean, standard deviation and Pearson correlation among the variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d</th>
<th>1</th>
<th>2</th>
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<th>6</th>
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<th>8</th>
<th>9</th>
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<tr>
<td>Age</td>
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<td>Org Tenure</td>
<td>8.60</td>
<td>6.81</td>
<td>.61**</td>
<td>.69**</td>
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<td>Team tenure</td>
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<td>5.75</td>
<td>.43**</td>
<td>.62**</td>
<td>.85**</td>
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<tr>
<td>Position</td>
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<tr>
<td>Education</td>
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<td>.05</td>
<td>-.23*</td>
<td>-.30**</td>
<td>-.30**</td>
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<td>LGO</td>
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<td>PGO</td>
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<td>AGO</td>
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<tr>
<td>KS</td>
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<td>.23*</td>
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<td>.39**</td>
<td>.06</td>
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<td>.43**</td>
<td>.32**</td>
<td>-.09</td>
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<td></td>
</tr>
<tr>
<td>INO</td>
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<td>.33</td>
<td>.14</td>
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</table>

*p<.05(two-tailed test) **p<.01(two-tailed test) ***p<.001(two-tailed test)

LGO=learning goal orientation; PGO=performance goal orientation; AGO=avoid goal orientation; KS=knowledge sharing; INO=innovation behavior

We mainly use mixed linear model to test hypothesis in the research model because it helps to handle correlated data and unequal variances. First the effects of goal orientation on knowledge sharing and innovation behavior were tested, we set organization as subject variable and three goal orientations as covariate. We see from the Table 2 that the regression coefficient of learning goal orientation is .35 and the correlation between learning goal orientation and knowledge sharing behavior is significant, therefore learning goal orientation is positively correlated to knowledge sharing behavior, which is consistent with hypothesis 1a. However performance goal orientation appeared to have positive correlation with knowledge sharing behavior as well, which is opposite to hypothesis 1b as it was supposed to have negative influence on knowledge sharing behavior. And hypothesis 1c was not supported since no significant correlation were found between avoid goal orientation and knowledge sharing behavior.

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In the next step we tested the direct effect of goal orientation on dependent variable innovation behavior. Hypothesis 2a predicted that learning goal orientation has positive influence on innovation behavior while hypothesis 2b and 2c predicted both performance and avoid goal orientation have negative influence on innovation behavior, as can be seen from table3 the regression coefficient of learning goal orientation, performance goal orientation and avoid goal orientation are .18(p<.01), .14(p<.05) and -.04 respectively, which suggesting that hypothesis 2a is supported while hypothesis 2b and 2c are not.

As table 1 showed, the relation between knowledge sharing and innovation behavior is significant (β=.45, p<.01), which provided support for hypothesis3. Finally, to test the mediation effect of knowledge sharing behavior in the model, we included it as covariate in mixed model analysis. However the relationship between three goal orientation and innovation behavior were not significant(β=.14,ns), (β=.10, ns), (β=-.04,ns). And no significant relation between knowledge sharing behavior and innovation behavior (β=.15,ns), taken as a whole, the results provided no support for the mediating role of knowledge sharing in the effect of goal orientation on innovation behavior.

Table 2. Results of mixed model analysis

<table>
<thead>
<tr>
<th>Step and variables</th>
<th>Knowledge sharing</th>
<th>Innovation behavior</th>
<th>Innovation behavior</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.27**</td>
<td>-.05</td>
<td>-.01</td>
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<tr>
<td>Team tenure</td>
<td>-.03**</td>
<td>-.01*</td>
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</tr>
<tr>
<td>Learning goal orientation</td>
<td>.30***</td>
<td>.18**</td>
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<tr>
<td>Performance goal orientation</td>
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<tr>
<td>Avoid goal orientation</td>
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<tr>
<td>Knowledge sharing</td>
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<td>.15</td>
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</tbody>
</table>

*p<.05(two-tailed test) **p<.01(two-tailed test) ***p<.001(two-tailed test)

6. Conclusion

This research aimed to investigate the influence of different individual goal orientation on innovation behavior with the mediation effect of knowledge sharing. At a theoretical level, this research has extended goal orientation theories by considering the relationship between goal orientation and knowledge sharing behavior, which draw attention on the interpersonal behavior and social exchange process in workplace settings. As we distinguish the three different types of goal orientation, people with different goal orientations are expected to show different preference to knowledge sharing behavior. Learning goal orientation was tested to have positive effect on knowledge sharing behavior, which is consistent with our hypothesis. However, contrary to what we expected, performance goal orientation was found to positively influence knowledge sharing behavior as well. One of the explanation of this finding is that people with performance goal orientation probably intend to acquire information or knowledge from other colleagues to improve their own work behavior and outperform their colleagues rather than learn from colleagues.

As Hirst et al (2009) have found that performance goal orientation sometimes has a positive relation with innovation performance under certain situations, people with performance goal may engage in knowledge sharing behavior when they need the information from colleagues to complete their work, in other words, when the task interdependence is high in the team. It is also possible that they perceive information sharing behavior as a way to show their competence, for example, telling others some information related to their work achievements. Regard to avoid goal orientation, no significant relation were found between avoid goal and knowledge sharing and innovation behavior, the null findings of avoid goal orientation may derive from our speculation that avoid goal tend to inhibit their communication or social
behavior as a concern of exposing their incompetence. Further study could investigate the effect of goal orientation on innovation behavior from other perspective, for example, the psychological mechanisms underlying the effects of goal orientation on innovative performance, and include the influence of contextual factors in the model.

Furthermore, this study contributes to the knowledge management research. An extensive body of literature has found varieties of the predictor and outcome of knowledge sharing, we focused on the social exchange process and examined the positive effect of knowledge sharing on innovation behavior. Knowledge sharing is an reciprocal process which includes knowledge contribution and knowledge acquisition, both of which are beneficial learning process and facilitate the innovation behavior at individual level, but we did not distinguish the particular effect of knowledge contribution and knowledge acquisition on innovation behavior respectively, the differences between these two process could be explored in future research. And it is important to note that Knowledge sharing behavior also occurs in team level and organization level, for example share knowledge or expertise with the team leader or the employees from other department. How does the knowledge sharing stimulate innovation performance in team level and organization level could be given more attention in future knowledge management study.

Another important finding of this research is that it sheds light on the mechanism underlying the relationship between learning goal orientation and innovation behavior with the effect of knowledge sharing. Recent studies have examined the underlying mechanism of the relationship between learning goal orientation and innovation with the mediating effect of creative self-efficacy (Gong & Fan, 2006), feedback seeking (VandeWalle & Cummings, 1997) and goal setting (Payne et al., 2007). More research is needed to build a comprehensive model include other mediators in the mechanism of the relationship between goal orientation and innovation behavior, the relation between these variables could be explored to explain how the whole model works.

7. Practical Implications

The findings of our research also provided important practical implications. In the era of knowledge economics, innovation is one of the most critical competitive advantage to the organization which cannot be easily imitated or transferred to other competitors. The results emphasized the importance of learning goal orientation for innovation behavior at individual level, therefore the organizations which value employee innovation and creativity should hire more employees with learning goal orientation or people who have a strong motivation to learning new things. Within the department or team, the leader should develop activities to stimulate subordinate’s learning goal orientation. As Kwok (2013) has suggested that leadership behavior characterized by intellectual stimulation has the effect of buffering against the lower learning goal orientation, other effective strategies relating to leadership behavior and incentive practice could also be implemented in practice.

In terms of the social exchange process, we highlighted the importance of knowledge sharing behavior between coworkers. Organizations that have high requirement of innovation should attach importance to the information exchange and interpersonal communication, employees could share knowledge and information in both formal and informal way, so it is necessary for the organization to develop an open and free communication environment to provide employees more opportunity to share information with others. On the other hand, team climate and organization value should also be taken into account, because only when people feel they are respected and supported will they have strong motivation to share what they know with colleagues.
References


