

Improving the Innovation Performance for Vietnamese Firm Based on Practices of Idealized Influence and Individualized Consideration: The Mediating Role of Knowledge Sharing

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Abstract

Innovation performance is the fundamental factor for firms to survive and achieve competitive advantage in the context of increasing competitive pressure. The purpose of this paper is to investigate the impacts of two key components of transformational leadership (TL) namely idealized influence and individualized consideration on knowledge sharing (KS), as well as their influences on firm's innovation performance. The paper used Structural Equations Modeling (SEM) to elaborate the relationship among these latent factors through using survey data gathered from 235 participants of 60 medium and small-sized firms in Vietnam. The findings reveal that KS activities of employees play a crucial role in improving firm's innovation performance, and serve as a mediating role in the effects of TL on innovation performance. Moreover, the findings highlight the impact of individualized consideration on innovation performance in comparison with the impact of idealized influence on innovation performance. In general, the findings of this study have advanced the understanding and brought new initiatives for Vietnamese firms to follow and improve its innovation performance.

Keywords: transformational leadership, idealized influence, individualized consideration, knowledge sharing, innovation performance

1. Introduction

Today's increasing competitive pressure has required firms to unendingly innovate their products and services to meet the rapidly changing of customer demands (Hui et al., 2018; Phong et al., 2018; Van et al., 2018; Lei et al., 2019b; Nguyen et al., 2019). Innovation performance of firms has become the main driving force for firms to attain competitive advantages and success (Kaya & Patton, 2011; Ha et al., 2019; Lei et al., 2021a). Prior studies indicated that firms with the high degree of innovation performance can adapt effectively with the lack of certainty of both external and internal environment, and bring firms the success in the dynamic markets in long term (Le & Lei, 2019; Sengphet et al., 2019; Le & Tran, 2020; Le et al., 2020). However, it is not easy for firms to develop its innovation performance properly due to lack of understanding on leadership practice and key antecedents of innovation performance (Kaya & Patton, 2011; Yang et al., 2018; Tajasom et al., 2015; Lei et al., 2019b). To fill these theoretical gaps, the main goal of this study is to investigate the impacts of transformational leadership (TL) on innovation performance of firms based on the mediating role of knowledge sharing activities of employees in organizations. This study is expected to significantly expand the theory and bring valuable insight of innovation management by following reasons.

First, Sengphet et al. (2019) argued that "leaders play a decisive role in the failure or success of an organization... each leadership style has a certain significance and influence on organizations' specific outcomes such as innovation". Moreover, many previous studies have called for future research on exploring the role of TL style and potential antecedents in the relationship with innovation (Le & Lei, 2018; Ha et al., 2019; Sengphet et al., 2019; Lei et al., 2019c; Son et al., 2019; Le, 2020). TL is widely consented as one of the most dominant leadership styles that serves as a main driving force of innovation capabilities for firms (Le & Lei, 2018a; Le & Lei, 2019). TL has become the hot topic that attracted the much concern of researchers and practitioners (Arif & Akram, 2018; Le &

Tran, 2020). However, knowledge of the direct correlation between TL and innovation performance remains underdeveloped and insufficient that need to continue exploring and studying (Tajasom et al., 2015; Le & Lei, 2019). Second, although scholars suggested the positive effects of TL on KS (Le & Lei, 2017; Le et al., 2018) which in turn significantly related to innovation performance (Sánchez et al., 2009; Yang et al., 2018). However, according to the author's knowledge, prior works have paid little attention for examining the mediating role of KS activities of employees in the relationship between TL and innovation performance. This has limited our understanding on the mediating processes or specific solutions according to which transformation leaders can follow to successfully increase innovation performance for firms. In other words, identifying the mechanism of how TL affects employees' KS activities which in turn improves firms' innovation performance becomes more and more necessary and important.

To fill the theoretical gaps addressed above, this study develops an integrated model to investigate the relationship between TL, KS, and innovation performance in the context of Vietnamese firms. This study attempts to specify the following research questions:

RQ1. Do TL and KS activities significantly predict innovation performance?

RQ2. Do KS activities mediate the TL-innovation performance relationship?

To clarify three research questions above, this paper has reviewed the literature and used the data gathered from the survey questionnaires in the contexts of Vietnamese firms. We expect to offer specific and useful guidance for firms in developing countries to succeed in improving their innovation performance.

2. Theoretical Background

2.1 The Effects of TL on Innovation Performance

Innovation performance is one of the most important dynamics that enable firms to attain competitive advantage and success in long term in comparison with the key rivals (Rujirawanich et al., 2011; Nguyen et al., 2018; Le & Lei, 2019; Lei et al., 2021b). According to Tajasom et al. (2015), "innovation performance refers to outcomes for firms in terms of the extent to which they actually introduce inventions to the market, for example, the rate at which they introduce new products, process systems, or devices". Innovation performance is not only a basic source for firms to achieve competitive advantage but also key antecedent to product and process innovations and firm performance (Kaya & Patton, 2011; Tajasom et al., 2015; Son et al., 2019; Le & Tran, 2020; Lei et al., 2021a).

Leadership widely regarded as a decisive factor for nurturing firm's innovation performance. Indeed, previous works highlighted that transformational leaders directly affect innovation by creating appropriate conditions within an organization to positively assist the process of generating and implementing activities of innovation (Ha et al., 2019; Le & Lei, 2019; Le Ba, 2018). TL is well known as one of the super leadership styles that is notably associated with organizational capabilities for innovation (Le & Lei, 2019; Lei et al., 2020; Phong & Son, 2020). Scholars describes the transformational leaders with four attributes: (1) *idealized influence* refers transformational leaders' ability in providing a vision and insight of mission, inculcating the pride, and obtaining esteem and trust from employees; (2) *intellectual stimulation* expresses transformational leaders' capability to encourage rationality and thorough problem solving, and to stimulate intelligence of followers; (3) *inspirational motivation* manifests transformational leaders' concerns in sharing or exchanging information with high expectations, utilizing symbols to focus efforts, and conveying key intentions or objectives in simple methods; and (4) *individualized consideration* reflects transformational leader' interest in meeting employees' needs, coaching, advising, treating each employee individually (Bass, 1995). Focusing on antecedents or determinant factors for innovation, this study will examine TL via two dimensions namely idealized influence and individualized consideration because they are two most important aspects that significantly foster firm's capability for innovation (Sarros et al., 2008; Sengphet et al., 2019).

Transformational leaders create the decisive and direct influences on innovation performance (Arif & Akram, 2018; Le & Lei, 2019; Le, 2020; Lei et al., 2021). Scholars indicated that TL builds up an innovative culture by encouraging innovation initiatives from employees (Tajasom et al., 2015; Phong et al., 2018). Many prior works indicated that, TL has significant impacts on the firm's innovation performance. For example, scholars highlighted that transformational leaders encourage employees freely in discussing and trying out innovative ideas and approaches through which positively affect firm's innovation performance (Tajasom et al., 2015; Phong et al., 2018). Van et al. (2018) pointed out that, transformational leaders directly or indirectly influence firm's innovation performance through improving learning capability of a firm. Recently, the empirical research of Le and Lei (2019) confirmed that TL significantly impacts firm's innovation performance in terms of product and process innovation. Recently, Lei et al. (2021a) empirical research using data from 339 participants in 120 Vietnamese firms showed that

TL directly influences or indirectly impact on firm's capability for frugal innovation though its effects on knowledge sharing. Although TL is broadly considered as one of the determinant factors that positively and significantly associated with innovation performance, the understanding on the TL's specific dimensions on innovation performance is still limited. So, we proposed that (Figure 1):

H1a. Idealized influence of TL positively affects innovation performance

H1b. Individualized consideration of TL positively affects innovation performance

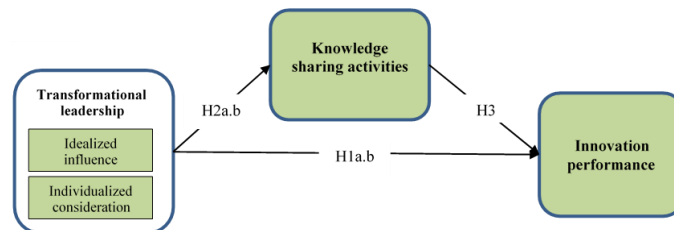


Figure 1. The proposal research model

2.2 KS Mediates the Relationship Between TL and Innovation Performance

Knowledge and firm capability for knowledge management are key antecedents for firms to attain the success and competitive advantage (Carneiro, 2000; Lee et al., 2016; Le & lei, 2018c). Thus, improving organization's capabilities to acquire, to share, to apply knowledge and turn their organizational knowledge assets into reality in organizations' outcomes is very important. KS activities are considered a key element in organization's process of managing knowledge (Wu & Lee, 2017; Le et al. 2018b; Le & Lei, 2018c; Lei et al., 2019a). Le and Lei (2019) indicated that "the successful extent of initiatives of knowledge management mainly depends on the effectiveness of KS activities in an organization". Scholars defined KS as the activities of exchanging knowledge and experience among employees. KS activities help employees to complement their new and valuable knowledge for achieving both their own and organizational goals (Van den Hooff & De Ridder, 2004; Le & Lei, 2019).

TL widely seen as a precursor for stimulating KS activities in organizations (Le & Lei, 2017; Le & Lei, 2018; Le, 2020; Son et al., 2020). In recent years, relationship between TL and KS has attracted the great attention from scholars. Indeed, TL behavior is found highly positively correlated with employees' satisfaction, extra effort, and effectiveness (Muenjohn & Armstrong, 2015). Accordingly, Le and Lei (2017) indicated that "TL characterizes leaders who emphasize clarity in their communications about organizational goals, acting as the organization's leading force, engaging in active coaching, promoting new skill development among their followers and continuously seeking new opportunities for organizational development". Their findings supposed that TL practices allow transformational leaders to build justice and the trust of their followers through which positively stimulate KS behavior among employees. Le and Lei (2018) showed that transformational leaders play an important role in promoting employees' behaviors toward KS in two ways: "willing to share knowledge in an active way without conditions" and "proactive in collecting or seeking knowledge". Recently, Lei et al. (2019) and Lei et al. (2021) supposed that TL is interested in setting up knowledge supportive culture based on developing a set of values, assumptions, and beliefs to shape followers' behaviors toward performing knowledge activities and engaging in knowledge management process. Their empirical findings showed positive effects of TL on KS activities. These arguments lead to following hypotheses:

H2a. Idealized influence of TL positively affects KS activities

H2b. Individualized consideration of TL positively affects KS activities

The importance of knowledge and KS toward innovation performance was shown by many prior researches (S é n z et al., 2009; Wang & Wang, 2012; Zheng et al., 2017; Yang et al., 2018; Le & Lei, 2018b). Le and Lei (2018b) indicated that knowledge and learning capability is positively associated with innovation speed and innovation quality of a firm. Jantunen (2005) argued that KS behavior of employees may create superior innovation capability for firms. Wang and Wang (2012) asserted that, KS process contributes to innovations in teams, units and the entire organization because innovation initiatives mainly depend on knowledge and skill of employees in the process of creating value and their capability to transform and apply knowledge in producing goods and services. The findings

of Zheng et al. (2017) showed the evidence that KS activities are positive associated with firm's innovation capability. Based on the above arguments, to have clearer understanding of how KS influences on innovation performance, we proposed following hypothesis:

H3. KS activities positively influence innovation performance.

Above discussion provides significant supports for the mediating role of employees' KS activities between TL's influence on innovation performance. KS activities is also identified as an important mediator between TL and innovation capability (Zheng et al., 2017; Le and Lei, 2019; Lei et al., 2021a). As a result, this study argued that the strong and positive traits of TL in terms of idealized influence and individualized consideration allow transformational leaders to create appropriate environment for stimulating KS activities of employees, by which, make them become more creative and innovative for improving organization's innovation performance. Although, the mediating role of KS between TL and innovation is clearly shown by current literature, it is still lacking of how KS activities mediate the effects of TL's main traits on innovation performance. So, following hypotheses are tested:

H4. KS activities mediate between influences of TL on innovation performance

3. Research Methodology

3.1 Sample and Measures

This study used a survey method to collect data from 60 small and medium firms in Vietnam during the period from August to November, 2020. Approached firms are diverse in industries, sizes and operating in distinct fields. We contacted with the representatives of the HR departments in person or via e-mail and interpret the research goals and request for their help in distributing questionnaires and collecting data. To meet the purpose of the research, the participants in our study need to be the heads of department, and key employees from major departments/divisions of administration, accounting, operation, marketing, and research and development to make the certain that they have multiple and full knowledge on their organization's operation. This study distributed 500 questionnaires and received back 360 ones in the formal data collection, of which 235 are valid (47.0% validity rate). We used the Armstrong & Overton's (1977) method to assess potential non-response bias. We implemented the chi-square and independent sample t-tests to estimate the first 75 participants and the last 75 ones through the demographic factors namely age and gender. The outcomes indicated that there is no significant differentiation among the two participant groups ($p > 0.05$).

3.2 Measurement

To ensure the validity and reliability of the study, items used to measure variables were developed from prior studies. All constructs were measured using multiple items and all items were assessed using a five-point Likert-type scale, ranging from "1 = strongly disagree" to "5 = strongly agree". To measure the perception of employees about their leader's TL behaviors, this study use nine items originated from research of Podsakoff et al. (1990) to measure idealized influence (five items) and individualized consideration (four items); to measure KS activities, this study used 10 items adapted from the research of from Yang et al. (2018); Eight items adapted from Kaya and Patton's (2011) study used to measure innovation performance. Full measurements of the latent constructs are shown in the Table 1.

Table 1. Observed variables of latent factors in the research model

| Construct | Items | Source |
|--|---|-------------------------|
| Idealized influence of transformational leadership | | |
| II1 | My supervisor has a clear understanding of we are going | Podsakoff et al. (1990) |
| II2 | My supervisor paints an interesting picture of the future for our group | |
| II3 | My supervisor is always seeking new opportunities for the organization | |
| II4 | My supervisor inspires others with his/her plans for the future | |
| II5 | My supervisor is able to get others committed to his/her dream | |
| Individualized consideration of transformational leadership | | |
| IC1 | My supervisor acts without considering my feelings (R) | Podsakoff et al. |
| IC2 | My supervisor shows his/her respect for my personal feelings. | |

| Construct | Items | Source |
|-------------------------------|--|------------------------|
| IC3 | My supervisor behaves in a manner thoughtful of my personal needs | (1990) |
| IC4 | My supervisor treats me without considering my personal feelings (R) | |
| Knowledge sharing | | |
| KS1 | Usually, I do my best and offer suggestions while discussing work-related matters with my colleagues | Yang et al. (2018) |
| KS2 | I am usually willing to share my knowledge and experience with others | |
| KS3 | When my colleagues consult me, I am willing to answer their questions as well as I can. | |
| KS4 | I usually record as much as possible when I am writing a document or a report. | |
| KS5 | If something is hard to explain, I gladly give my colleagues a demonstration | |
| KS6 | I am willing to offer less-experienced colleagues opportunities to perform | |
| KS7 | When my colleagues are in need, I do my best to offer them needed information and documents | |
| KS8 | When I can't help my colleagues solve their problems, I tell them where to look for assistance | |
| KS9 | I encourage my colleagues when they are facing difficulties at work | |
| KS10 | When I teach my colleagues, I express my ideas in a way in which they can be fully understood | |
| Innovation performance | | |
| IP1 | My firm has introduced new products to markets before their competitions | Kaya and Patton (2011) |
| IP2 | My firm has many ideas and projects concerning developing products and service | |
| IP3 | My firm's number of developing innovations concerning work, process and method is high | |
| IP4 | My firm's quality of products and services developed last three years is pretty high | |
| IP5 | My firm has decreased production costs by developing work, process and methods | |
| IP6 | Production and delivery speed in my firm is increased by developing work, process and methods | |
| IP7 | Last three years, there have been innovations with patents or will get a patent | |
| IP8 | My firm encourages new approaches and suggestions | |

3.3 Data Analysis Methods

To avoid the influences of common method bias, the paper has implemented the Harman's single-factor test to examine for common method bias. The findings pointed out that the overall variance is less than the 50% threshold for substantive common method variance. Such result has shown that common method bias is not a concern. The paper also applied the SEM to check the proposal hypotheses in initial proposal model. Beside, this paper has also implemented a bootstrapping procedure for the significance tests. Statistical Package for the Social Sciences (SPSS 22) and Analysis of Moment Structures (AMOS 22) are employed for assessing the data gathered from the 235 respondents in 60 small and medium firms.

4. Results

4.1 Measurement Model

Before testing the hypotheses, a series of tests are performed to assess the validity and reliability of the constructs (See Table 2). Specifically, to assess the reliability of the latent variables, basing on suggestion of Nunnally and Bernstein (1994), this study used the Cronbach's alpha coefficients of each one that require greater than the level of 0.7. Confirmatory factor analysis (CFA) to test for the convergent validity; comparing the squared correlations between the latent variables and square root of average variance extracted (AVE) to test the discriminant validity of measures (Fornell & Larcker, 1981).

Table 2. Descriptive statistics and average variances extracted from constructs

| Construct | AVE | CR | $C\alpha$ | Mean | SD | II | IC | KS | IP |
|---|------|------|-----------|------|------|-------------|-------------|-------------|-------------|
| Idealized influence of TL (II) | 0.75 | 0.94 | 0.93 | 3,41 | 0.60 | 0.86 | | | |
| Individualized consideration of TL (IC) | 0.66 | 0.89 | 0.89 | 3.45 | 0.62 | 0.56 | 0.81 | | |
| Knowledge sharing (KS) | 0.67 | 0.95 | 0.95 | 3.70 | 0.59 | 0.68 | 0.67 | 0.82 | |
| Innovation performance (IP) | 0.77 | 0.96 | 0.96 | 3.91 | 0.64 | 0.62 | 0.69 | 0.76 | 0.87 |

Note: $C\alpha \geq 0.7$; $CR \geq 0.7$; $AVE \geq 0.5$; Diagonal elements (in bold) are the square root of the AVE.

Results in Table 2 showed AVE, CR, mean, standard deviation (SD) and $C\alpha$. These results have provided the evidence for the evidence on the reliability of scales as well as the convergent validity of constructs.

In addition, to evaluate the discriminant validity of latent constructs in the proposal model, the paper used the squared correlations among the latent factors to control whether they are smaller than each latent variable's square root of AVE or not. Table 1 also points out that the squared correlations among the latent factors are lower than square root of AVE of each one (diagonal elements in bold). Thus, according to Fornell and Larcker (1981), the results have provided significant support for the scales' discriminant validity.

Fit indices of the measurement model obtained from CFA model show that the model fits the data (see Table 3).

Table 3. Overall fit index of the CFA model

| Fit index | Scores | Recommended value |
|--------------------------|--------|-------------------------------|
| Absolute fit measures | | |
| CMIN/df | 1.608 | $\leq 2^a$; $\leq 5^b$ |
| GFI | 0.866 | $\geq 0.90^a$; $\geq 0.80^b$ |
| RMSEA | 0.051 | $\leq 0.8^a$; $\leq 0.10^b$ |
| Incremental fit measures | | |
| NFI | 0.922 | $\geq 0.90^a$; |
| AGFI | 0.840 | $\geq 0.90^a$; $\geq 0.80^b$ |
| CFI | 0.969 | $\geq 0.90^a$; |

Notes: a Acceptability: acceptable; b Acceptability: marginal

4.2 Findings

The paper applied Structural equation model with procedures of maximum likelihood estimation to examine the proposal hypotheses. The findings indicated that the fit indices of the proposal model are satisfactory ($\chi^2=508.10$; $df = 316$; $RMSEA = 0.051$; $GFI = 0.866$; $CFI = 0.969$; $TLI = 0.965$). The results have pointed out that the correlation among latent factors fit the data. The main findings of this study are shown in Table 4 and Figure 2.

4.3 Direct Effect Analysis

The results in Table 4, and Figure 2 verified that direct effects of independent factors on dependent factors are found to be significant supported hypotheses H1a.b, H2a.b, and H3.

Specifically, TL's idealized influence and individualized consideration on innovation performance are statistically significant, favoring for hypothesis H1a.b. The results showed that the impacts of TL's individualized consideration on innovation performance ($\beta = 0.315$; $p < 0.001$) is more significant than idealized influence's influences on innovation performance ($\beta = 0.146$; $p < 0.05$).

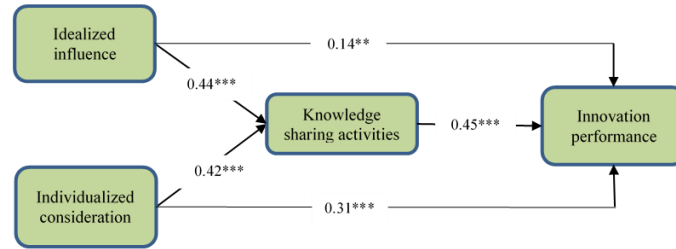


Figure 2. Path coefficients of the structural model

Note: ***P < 0.001; **P < 0.05; *P < 0.1

For H2a and H2b relating to the influences of TL’s idealized influence and individualized consideration on KS activities are also statistically significant and quite large (see Table 4), so hypothesis H2a.b is supported. The findings revealed that effect of TL’s idealized influence on KS ($\beta = 0.442$; $p < 0.001$) is more significant than impact of TL’s individualized consideration on KS ($\beta = 0.424$; $p < 0.001$).

The results in Table 4 also confirmed the positive effect of KS activities on innovation performance ($\beta = 0.452$; $p < 0.001$). Hypothesis of H3 is, therefore, also supported.

Table 4. Structural model results

| Hypotheses | Effect | Estimate | t-value | Results |
|--|--------|----------|---------|-----------|
| H1a. Idealized influence → Innovation performance | + | 0.146** | 2.346 | Supported |
| H1b. Individualized consideration → Innovation performance | + | 0.315*** | 4.801 | Supported |
| H2a. Idealized influence → KS activities | + | 0.442*** | 6.873 | Supported |
| H2b. Individualized consideration → KS activities | + | 0.424*** | 6.381 | Supported |
| H3. KS activities → Innovation performance | + | 0.452*** | 6.050 | Supported |

Notes: ***P < 0.001; **P < 0.05.

4.4 Indirect Effect and Total Effect

The paper does not just give evidence about the direct influence of TL on innovation performance. It also demonstrates how KS activities mediate the relationship between TL and innovation performance.

According to the recommendation of Preacher and Hayes (2008), to show the evidence for KS’s mediating role between two main components of TL’s behavior and innovation performance, the paper has applied procedure of bootstrap confidence intervals with 3,000 iterations to examine and assert the indirect effects’ immensity and statistical significance. The results are shown in the Table 5.

Table 5. Test for indirect effects

| Path | Direct effects | Indirect effects | Total effects | Bias-corrected confidence intervals | |
|----------|----------------|------------------|---------------|-------------------------------------|------------------------|
| | | | | Lower confidence level | Upper confidence level |
| II→KS→IP | 0.146** | 0.200*** | 0.346*** | 0.116 | 0.303 |
| IC→KS→IP | 0.315*** | 0.191*** | 0.506*** | 0.122 | 0.277 |

Note: ***P < 0.001; **P < 0.05; *P < 0.1.

Table 5 showed indirect effect of *idealized influence* ($\beta = 0.200$; $p < 0.001$) and *individualize consideration* ($\beta = 0.91$; $p < 0.001$) on innovation performance are statistically significant and lies in the confidence interval. Consequently, hypothesis H4 is significantly supported. In other words, the result of testing in Table 5 has confirmed that employees' KS activities significantly mediate the effects of TL's specific components on innovation performance. The findings show that total effect of TL's *individualize consideration* on innovation performance is very significant. This reveals that TL's *individualize consideration* plays an important role in improving innovation performance.

5. Discussions and Conclusions

The organizational capability for innovation is increasingly important in creating sustainable competitive advantages for firms. Scholars emphasized the necessity of fostering innovation performance in enhancing organizational performance (Hui et al; 2018; Son et al., 2019; Le & Tran, 2020; Son et al., 2020). However, many firms are still facing challenges and do not find out the suitable pathways to improve it correctly and effectively (Le & Lei, 2018b; Nguyen et al., 2019; Lei et al., 2019b). This attracted and created great awareness and motivation among scholars to explore for what allow organization to change and innovate successfully (Le & Lei, 2018b; Yang et al., 2018; Van et al., 2018; Le & Lei, 2019; Le, 2020). The examination of the hypotheses proposed in current study have significantly improved and brought deeper insight on determinants or antecedents of innovation performance. The paper has provided new and useful initiatives on both theory and practice in the fields of leadership, knowledge management, and innovation management by following main points.

First, the paper contributes to bridge the theoretical cavity on TL-innovation relationship by proposing an integrated model discussing the influences of TL on KS activities of employees, which in turn affect innovation performance. The empirical findings have verified the correlation among latent variables in the proposal model and confirmed the key role of TL in stimulating KS activities of employees and innovation performance of organizations. More importantly, the findings revealed that the individualized consideration of TL has a greater impact on innovation performance in comparison with the effect of idealized influence. The findings imply that to improve innovation performance especially in case of small and medium firms, managers/directors should pay much attention to employees' personal thoughts and feelings. The main reason can explain for the important role of the individualized consideration is that it might serve "as a carrot or motivational tool" for arousing the greater affection and efforts of employees for increasing innovation performance (Le & Lei, 2019; Sengphet et al., 2019).

Second, an important contribution of this study is that providing deeper insight on the relationship between two key components of TL and KS activities of employees. Consequently, the findings on relationships between these constructs have brought many specific and useful guides for firms to enhance KS activities of employees. Specifically, the findings disclosure that idealized influence brings employees greater motivation for KS compared to individualized consideration of transformational leaders. The findings have contributed to deeper understandings on specific ways leading to KS behavior of employees. These findings are very interesting and valuable because employees tend to be reluctant to share their key knowledge and expertise with the others.

Finally, this study contributes to finding the right way to successfully implement innovation performance for Vietnamese SMEs based on multiple and simultaneous influences of leadership style and knowledge management. By assessing the effects of TL on KS activities which in turn lead to innovation performance, the findings of this study showed the evidence that TL practice might help firms to improve activities of sharing knowledge between employees in an organization which may be the root of forming new ideas and successful implementing of innovation. Moreover, the mediating roles KS activities in the relationship between TL and innovation performance is supported. The implication is that TL practices will create significant impacts on innovation performance directly or indirectly through improving employees' behaviors toward KS. Consequently, to create the appropriate environment for KS and innovation, leaders of SMEs need to pay great attention on TL style practice.

5.1 Limitations

Beside significant contributions, the paper still has some certain limitations. First, the paper use cross-sectional design, thus it might expose the cases that causal correlations might alter in the long-run. Therefore, longitudinal studies are necessary to surpass this restriction and confirm the findings of this study. Second, the paper has not investigated the impacts of various moderating or/and mediating factors like industry type, firm size, and individual psychological capital in the connection among the latent factors. Future works should inspect and examine deeper the correlation among them in case of having these mediators and moderators to bring more valuable understanding for scholars and practitioners. Third, the paper is only performed in the circumstances of medium and small firms, so the future work should examine the relationship among the latent factors in the broader circumstances to provide more meaning for firms. Finally, Le et al. (2020) indicated that tacit and explicit knowledge sharing are two distinct and

major aspects of knowledge sharing behavior of employees. This study only investigates the correlation among the latent factors in the research model in the relationship with knowledge sharing activities as a whole. Hence, future research should clarify the mediating role of tacit and explicit knowledge sharing between TL and innovation performance to bring deeper insight on these relationships.

5.2 Conclusions

Overall, the paper has shown the empirical evidence to spotlight that TL style and employees' KS activities significantly contribute to foster firm's innovation performance. The paper has significantly advanced the innovation management theory by offering an integrative model and specific pathways leading to improving innovation performance. The paper implies that by focusing on practicing transformational leadership style, especially in terms of idealized influence and individualized consideration, directors and managers can successfully stimulate KS activities of employees for improving firm's innovation performance.

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