Innovational Leadership and Knowledge Sharing: The Mediator Role of Self-efficacy

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Abstract: Innovational leadership is a set of practices and skills that leaders develop to promote innovative behaviors in their workers at the individual and collective levels. This is a novel concept focused on one role of leaders: the facilitation of the generation of new or significantly improved products and services. Previous studies with other styles of leadership have shown that transformational leadership encourages a climate for innovative work behaviors, while transactional leadership influences exploitative innovation activities. Knowledge sharing involves the transfer of experience and expertise to facilitate business development and the accomplishment of organizational objectives. Self-efficacy is an individual’s confidence in their abilities to execute a particular task. It influences learning and performance. This research studied whether innovational leadership influences two types of knowledge sharing: tacit and explicit. At the same time, the role of self-efficacy as a mediator variable was evaluated. The sample consisted of 415 workers from different sectors in Colombia. According to the results, innovational leadership positively influenced tacit and explicit knowledge, although the effect on tacit knowledge was higher. Finally, self-efficacy played a mediator role in the relationship between innovational leadership and knowledge sharing. Additional research is suggested to explore the differences between innovational leadership and other types of leadership in the process of sharing tacit and explicit knowledge. At the same time, complementary investigations about the dynamics of innovational leadership are needed to understand why it affects more tacit knowledge than explicit knowledge.

Keywords: Knowledge sharing, Innovational leadership, Self-efficacy, Knowledge management

1. Introduction

For many years, researchers have explored the relationship between different leadership styles and knowledge sharing. These are some recent examples. Goswami and Agrawal (2023) found that ethical leadership has a positive impact on knowledge sharing. Le and Nguyen (2023) revealed that trust is a mediator between ethical leadership and knowledge sharing. There is also evidence about the influence of decentralized leadership on knowledge sharing (Schewer et al., 2023), the mediated role of knowledge sharing between entrepreneurial leadership and team creativity (Mehmood et al., 2022), and the influence of relational leadership on knowledge sharing (Engelsberger et al., 2022).

This paper focuses on a new concept of leadership called innovational leadership and its influence on knowledge sharing. This style of leadership promotes an environment and a climate where workers feel comfortable interacting (Contreras et al., 2022). We hypothesize that it is an ideal style of direction to facilitate knowledge sharing. Innovational leaders are good at promoting learning processes, encouraging a safe environment for change, providing monitoring and adjustment, and orienting people. In addition, this research explores the role of self-efficacy as a mediator between innovational leadership and knowledge sharing.

2. Literature Review

2.1 Innovational Leadership

The foundation of any high-performing organization is the innovative behavior of its employees (Tidd and Bessant, 2020). Leaders influence organizational learning, knowledge sharing, and employees’ innovative behavior (Alblooshi et al., 2020). There are multiple studies on the relationship between styles of leadership and innovation (Sethibe and Stteyn, 2017). Our study follows a new conceptualization that integrates those two notions and is called innovational leadership.

Innovational leadership is a style of leadership that encourages innovative behaviors in employees (Contreras et al., 2022). This style of leadership creates a work environment where employees feel free to interact and safe to share ideas. This concept proposed by Contreras et al. (2022) is different from innovative leadership, which focuses on the process of making relevant changes to solve problems and benefit people (Sen and Eren, 2012). These leaders are oriented toward innovation and work to transform ideas into assets (Alblooshi et al., 2020). Another style of leadership with a similar name is innovation leadership. This kind of leadership refers to leaders who can create a strategy and build relationships to implement something new that adds value to an organization (Contreras et al., 2022).
Innovational leadership encourages individual innovation and innovative behaviors in their employees. Innovative behavior is the intentional actions of workers oriented toward generating, applying, and implementing new ideas, products, and processes (Contreras et al., 2022). This type of leadership focuses on workers' innovative outcomes and consists of a set of practices and skills that leaders develop to promote innovative behaviors in their workers at the individual and collective levels (Contreras et al., 2022). In this research, this type of leadership is proposed as a facilitator of knowledge sharing behavior. Innovational leadership is a new conception of leadership, and so far, no publications have evaluated its relationship with knowledge sharing. In this sense, this study is a pioneer in this matter.

2.2 Knowledge Sharing

Mohajan (2016) defined knowledge as the accumulation of experiences, practical information, and skilled perception, which offers a framework for estimating and integrating new experiences and information. Davenport and Prusak (2001) affirmed that the main source of creation of a company's competitive advantage resides fundamentally in its knowledge, or more specifically, in what the organization knows, in how individuals use what they know, and in their ability to learn permanently.

Knowledge sharing is the exchange of knowledge among individuals. In an organizational context, knowledge sharing is the foundation for generating innovations. Knowledge sharing is a fundamental process that helps employees contribute their skills and experience on creative and organizational value dynamics. Singh et al. (2021). This behavior is a process associated with organizational improvement. It contributes to the creation, and updating of information (Ruseli et al., 2010) and adds value to the achievement of a competitive advantage (Samieh and Wahba, 2007).

Some studies report the relationship between different styles of leadership and knowledge sharing. For instance, Kim et al. (2021) found a positive influence of transformational leadership on knowledge sharing. According to Khassawneh et al. (2022), knowledge sharing has a positive effect on creativity, and the openness of a leader mediates the willingness of workers to share information. Based on the study of Zehir and Celebi (2022), empowering leadership has a positive effect on explicit knowledge sharing. Finally, Al-Husseini et al. (2021) reported a positive relationship between transformational leadership and knowledge sharing. In the present study, for the first time, the relationship between innovational leadership and knowledge sharing will be evaluated.

2.3 Self-Efficacy

Human behavior is extensively motivated and regulated through the exercise of self-influence. Among the mechanisms of self-influence, none is more pervasive than believing in one's efficacy (Bandura, 2009). Multiple studies have been emphasizing the association between self-efficacy and organizational variables like culture and organizational empowerment (Wu et al., 2023) and organizational citizenship behavior (Magdaleno et al., 2023).

Self-efficacy is an individual's confidence in his or her abilities to execute a particular task (Chen and Hung, 2010). Self-efficacy influences how people think, feel, and act and, therefore, their achievements. If an individual believes that it is not possible to produce results, then he or she will not act to make an event happen. Two people with the same knowledge can perform differently depending on their self-efficacy. This concept is related to the beliefs that an individual has about what he or she can do with his or her abilities in a variety of circumstances (Cisneros and Munduate, 2000). Chen and Gao (2023) found that self-efficacy was associated with higher self-esteem.

Self-efficacy beliefs determine people's goals and aspirations. Individuals with high self-efficacy tend to expect favorable results. In the same way, this concept also influences how obstacles are faced. People with low self-efficacy focus more on risks and costs than on opportunities (Bandura, 2002). Brown et al. (2005) stated that individuals with high self-efficacy focus their attention and motivation on the tasks necessary to achieve expected performance levels and persevere with the goal, despite obstacles. Stadkovic and Luthans (1998) stated that self-efficacy changes over time when the person obtains new information and experience in performing a task. Individuals with high self-efficacy set goals that are more ambitious and tend to perform better (Wood and Bandura, 1989).

According to Bandura (1977), self-efficacy beliefs are constructed from four sources of information: enactive mastery experiences, vicarious experiences, verbal persuasion, and psychological states. Leadership has an
impact on followers’ self-efficacy by showing models how to perform a task effectively and giving objective feedback about why it is possible to perform it.

There is a positive relationship between self-efficacy and knowledge sharing (Bilginoglu and Yozgat, 2018; Castaneda et al., 2016). Safdar et al. (2021), based on a systematic review, concluded that self-efficacy is a predictor of knowledge sharing. Cabrera et al. (2006) found an association between breadth of role self-efficacy and knowledge sharing. There are some studies in virtual communities in which an association between self-efficacy and knowledge sharing behavior has been found (Hsu et al., 2007; Tseng, 2007).

Kim et al. (2020) indicated that individual characteristics, such as self-efficacy and knowledge-creation self-efficacy, significantly predict knowledge sharing. Shao et al. (2015) found that hierarchical cultures that focus on efficacy were positively related to employees’ explicit knowledge sharing. In addition, group culture that focused on trust was positively related to employees’ tacit knowledge sharing, and their relationship was fully mediated by employees’ computer self-efficacy. Runhaar and Sanders (2016) showed that some human resources practices strengthened the relationship between occupational self-efficacy and knowledge sharing.

Brooke et al.’s (2017) findings indicate that individual-related and environmental-related factors have a significant influence on knowledge sharing behavior. The results also reveal that self-efficacy mediates the relationships between prior experiences, social support, trust, and knowledge sharing behavior. Lee et al. (2022) stated that self-efficacy positively mediated the association between knowledge sharing and sustainable happiness. Kim et al. (2021) stated that members with higher self-efficacy are more likely to share knowledge with their teammates.

Naan et al. (2019) concluded that self-efficacy had a strong positive influence on employee job performance, perceived environmental support, and knowledge sharing, while perceived environmental support and knowledge sharing positively influenced employee job performance. Mshaly and Al-Azawei (2022) showed that knowledge acquisition, knowledge sharing, and online self-efficacy were determinants of performance expectancy, and online self-efficacy was a predictor of effort expectancy. Yilmaz (2016) working with university students, found that self-efficacy positively affects knowledge sharing.

We propose that a new conception of leadership, innovational leadership, influences knowledge sharing. Leaders may persuade workers’ beliefs. In this sense, it is expected that innovational leadership relates to knowledge sharing and that self-efficacy is a mediator variable.

3. Methodology

3.1 Participants

The sample consisted of 415 workers from different sectors in Colombia. In the sample, 249 were women (55.6%) and 199 were men (44.4%). About the level of the position, 6.92% were technical, 66.07% were professionals, 9.38% were advisors, and 17.63% were directives. The demographic characteristics of the sample are presented in Table 1.

Table 1: Demographic Data of the Sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>199</td>
<td>44.42%</td>
</tr>
<tr>
<td>Female</td>
<td>249</td>
<td>55.58%</td>
</tr>
<tr>
<td><strong>Position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>79</td>
<td>17.63%</td>
</tr>
<tr>
<td>Adviser</td>
<td>42</td>
<td>9.38%</td>
</tr>
<tr>
<td>Professional</td>
<td>296</td>
<td>66.07%</td>
</tr>
<tr>
<td>Technical</td>
<td>31</td>
<td>6.92%</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>214</td>
<td>47.77%</td>
</tr>
<tr>
<td>Professional</td>
<td>205</td>
<td>45.76%</td>
</tr>
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To measure innovational leadership, the scale designed by Contreras et al. (2022) was used. The scale has 16 items. The Cronbach’s alpha reliability of the instrument was 0.96. The instrument used in this study for evaluating tacit and explicit knowledge that workers share was the one designed by Castaneda et al. (2015). The instrument measures perceived evaluations of workers using a Likert scale with five levels of response and has 12 items. The validation of this instrument obtained a Cronbach’s alpha reliability score of 0.94. A scale designed by Castaneda et al. (2016) evaluated self-efficacy. This instrument has four items and uses a Likert scale with five levels of response. The reliability of the instrument is 0.92.

### 3.2 Instruments

<table>
<thead>
<tr>
<th>Technical</th>
<th>29</th>
<th>6.47%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of experience in the company in months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-12</td>
<td>162</td>
<td>36.16%</td>
</tr>
<tr>
<td>13-24</td>
<td>48</td>
<td>10.71%</td>
</tr>
<tr>
<td>25-36</td>
<td>40</td>
<td>8.93%</td>
</tr>
<tr>
<td>37-48</td>
<td>37</td>
<td>8.26%</td>
</tr>
<tr>
<td>49-60</td>
<td>28</td>
<td>6.25%</td>
</tr>
<tr>
<td>61-72</td>
<td>23</td>
<td>5.13%</td>
</tr>
<tr>
<td>Over 72</td>
<td>110</td>
<td>24.55%</td>
</tr>
<tr>
<td>Total</td>
<td>448</td>
<td></td>
</tr>
</tbody>
</table>

| Time of experience in the position in months |
| 0-12       | 120| 26.79%|
| 13-24      | 49 | 10.94%|
| 25-36      | 54 | 12.05%|
| 37-48      | 32 | 7.14% |
| 49-60      | 34 | 7.59% |
| 61-72      | 28 | 6.25% |
| Over 72    | 131| 29.24%|
| Total      | 448|

### 4. Results

To evaluate the model, a simple measurement was taken with a single mediator variable using process regression analysis, which performs three regression analyses with the variables of the model (Fernández-Muñoz and García-González, 2017; Hayes, 2018), being leadership (lead) the independent variable, knowledge sharing (ks) the dependent variable, and self-efficacy (Se) the mediating variable. The analysis was performed with information from 448 subjects. The confidence level for the construction of intervals was 95%.

The first regression analyzed the influence of the independent variable on the mediating variable (coefficient \( a \)). The influence of leadership on self-efficacy was statistically significant (\( B_{KS} = 0.4161, p = 0.000 \)). The second regression analyzed whether the mediating variable predicted the dependent variable (coefficient \( b \)) and the direct effect of the independent variable on the dependent (coefficient \( c' \)). The influence of self-efficacy on knowledge sharing (coefficient \( b \)) is statistically significant (\( B_{Lead} = 0.2272, p = 0.000 \)). The direct effect of leadership on knowledge sharing (coefficient \( c' \)) is statistically significant (\( B_{KS} = 0.5785, p = 0.000 \)). This allows for the observation that the effect of self-efficacy on knowledge sharing is significant, as is the direct effect of leadership on knowledge sharing.

Then, the total effect was analyzed, which corresponds to a regression analysis with a single predictor, the independent variable over the dependent (coefficient \( c \)). Thus, the effect of leadership on knowledge sharing was analyzed, and it was significant (\( B_{KS} = 0.6731, p = 0.000 \)). The total and direct effects presented in the coefficients \( c \) and \( c' \) measure the total effect of leadership on knowledge sharing (\( B = 0.6731, p = 0.000 \)). Lastly, the indirect effect of leadership on knowledge sharing was evaluated, taking into account the role of the mediating variable (ab coefficient) (\( B_{SE} = 0.0946; BootSE = 0.0268; BootLLCI = 0.0462; BootULCI = 0.1505 \)). Given that the value in the coefficient ab is positive and the values of the lower limit (BootLLCI) and upper limit
(BootULCI) of the confidence interval did not include the value of 0, it can be affirmed that the indirect effect is statistically significant and that there is a positive relationship between leadership and knowledge sharing. In this way, the self-efficacy of a worker influences knowledge sharing. This analysis is presented in Figure 1 through the mediation model.

**Figure 1: Model of Mediation of Self-Efficacy Between Leadership and Knowledge Sharing**

**Leadership** → **Self-efficacy** → **Knowledge sharing**

- \( a = 0.41^{**} \)
- \( b = 0.23^{**} \)
- \( c' = 0.58^{**} \)
- \( c = 0.67^{**} \)

Note: ** significance \( P<0.01 \). SE means standard error via Bootstrap. CI means interval confidence.

**5. Discussion**

The purpose of this research was to evaluate if a new conception of leadership called innovational leadership influences knowledge sharing and the mediator role of self-efficacy in the relationship between innovational leadership and knowledge sharing.

According to the results, it was found that innovational leadership has a positive relationship with both types of knowledge sharing: tacit and explicit, although the effect on tacit knowledge was higher. There is also statistical support to state that self-efficacy is a mediator between innovational leadership and tacit and explicit knowledge sharing.

This is the first article that relates innovational leadership to knowledge sharing. Results were equivalent to what was found with other styles of leadership, for example, transformational (Kim et al., 2021; Al-Husseini et al., 2021) and empowering (Zehir and Celebi, 2022).

This research went a step further, evaluating if innovational leadership impacted tacit and explicit knowledge in the same way. It was found that the positive effect was higher with tacit knowledge. A possible explanation is that the innovational leadership style creates a safe work environment where employees feel free to interact and share ideas (Contreras et al., 2022). What people share when interacting with others is mainly tacit knowledge. This opens a line of research where the differential impact of leadership styles on tacit and explicit knowledge may be studied. For example, it may be hypothesized that transactional leadership, which is focused on tasks and agreements on results, may impact explicit knowledge better than tacit knowledge.

In this research, support was also found for the role of self-efficacy as a mediator variable between innovational leadership and knowledge sharing. Self-efficacy relates to the beliefs that an individual has about what he or she can do with his or her abilities in a variety of circumstances (Cisneros and Munduate, 2000), and it can be influenced by vicarious experiences and verbal persuasion (Bandura, 1977). Innovational leadership has an impact on followers’ self-efficacy by showing models of how to perform a task effectively and giving objective feedback about why it is possible to perform it. Self-efficacy may change depending on context variables, so a worker with low self-efficacy to share knowledge may change it with a leadership style that supports the worker and incentivizes him or her to share knowledge through interaction.
6. Conclusion and Recommendations

It may be concluded that innovational leadership facilitates workers’ knowledge sharing, especially the tacit one. It is also concluded that self-efficacy is a mediator in the relationship between innovational leadership and tacit and explicit knowledge sharing.

From a theoretical perspective, this article contributes to the validation of this recently created construct called innovational leadership. Likewise, it is the first time that this construct has been contrasted in the field of knowledge management. From an applied point of view, the article guides decision-makers to strengthen actions that contribute to worker knowledge sharing.

It is recommended to do additional research to understand why this style of leadership impacts tacit knowledge better. Considering that the concept of innovational leadership is new, maybe study its advantages over other styles of leadership in different processes of knowledge management and innovation.

References


