

Received: 19 October 2023

Revised: 2 January 2024

Accepted: 2 January 2024

# ORGANIZATIONAL LEARNING AND INNOVATIVE CULTURE AS A POTENTIAL MEDIATORS CONNECTING TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP WITH ORGANIZATIONAL PERFORMANCE: A STUDY ON THAI SMEs

Sudawan SOMJAI<sup>1</sup>, Parinya SIRIATTAKUL<sup>2</sup> and Sutas JAEPHO<sup>3</sup>

1 Suan Sunandha Rajabhat University, Thailand; sudawan.so@ssru.ac.th

2 Association of Legal & Political Studies, Thailand; siriattakul@hotmail.com

3 White Tiger Global Company Limited, Thailand; s.jaepho@whitetigerglobal.com

## Handling Editor:

Associate Professor Dr.Panee SUANPANG

Suan Dusit University, Thailand

(This article belongs to the Theme 2: Learning for a Sustainable Future)

## Reviewers:

1) Professor Dr.Suhas MORALE

Shri Siddheshwar Mahavidyalaya, India

2) Assistant Professor Dr.Ahmad HAKKAN

UNISMUH Makassar, Indonesia

3) Assistant Professor Dr.Ahmad MUSTANIR

UMS Rappang, Indonesia

4) Assistant Professor Dr.Naksit SAKDAPAT

UTCC, Thailand

## Abstract

The aim of this research is to determine organizational learning (OL) and innovative culture (IC) as a mediating variable between transformational and transactional leadership styles and organizational performance (OP) in SMEs in Thailand. By using postal and email approach the data was collected from top management of the organization. Results demonstrate that leadership styles have a major impact on IC, OL and OP. In addition, OL and IC positively and significantly impact OP. Likewise, the correlation between transformational and transactional leadership and OP is significantly mediated by OL and IC. Practically, this study allows owners/managers in the small and medium-sized enterprises to prioritize leadership styles through OL and IC while choosing to boost their organizational performance. This research is a landmark in the assessment of third-order leadership models through the use of two mediators such as: OL and IC.

**Keywords:** Organizational Learning, Innovative Culture, Organizational Performance, Leadership Styles, SMEs

**Citation Information:** Somjai, S., Siriattakul, P., & Jaepo, S. (2023). Organizational Learning and Innovative Culture as a Potential Mediators Connecting Transformational and Transactional Leadership with Organizational Performance: A Study on Thai SMEs. *Asian Education and Learning Review*, 1(2), 14-26. <https://doi.org/10.14456/aelr.2023.7>

## **Introduction**

The performance or failure in any type of organization is determined by successful leadership. Leadership has been the most researched area of an industry and business over the past few decades. Indeed, leadership is now a distinguishing characteristic within the companies (Ahmad, Abdul-Halim, Thurasamy, & Geare, 2018). Rapidly changing tactics and dynamic climate have maximized leadership interest in gaining advantage against its rivals by allowing leaders to boost organizational performance (OP). Organizational principal goal is to concentrate on financial performance, while taking consideration of their leadership and intrinsic resources, in order to retain competitive advantages (Mahdi & Almsafir, 2014). As indicated by these studies Rahim, Zainal Abidin, Mohtar, & Ramli (2015), Thai small and medium-sized enterprises (SMEs) have faced leadership problems that limit performance of their organizations (Patanathabutr, 2019). As regards new challenges and issues, previous studies have indicated that good leadership can contribute towards enhancing their organizational performance (Mário & Matos, 2015). Leadership types influence the success of both people and organizations. As companies do not find their members to be successful and inefficient, organizations will have to struggle as time passes (Nazarian, Soares, & Lottermoser, 2018). Leadership is a critical factor that determines the progress of the organization. The emphasis of this research is therefore on leadership styles (LS) to assess the output of SMEs (Chienwattanasook & Onputtha, 2022). Organizational learning (OL) and innovative culture (IC) are issues encountered by Thai companies (Ahmad et al., 2018; Nazarian et al., 2018). Thailand, in effect, is planning to revitalize the economy by adopting a philosophy of innovation and by promoting small and medium-sized businesses (Hanifah, Halim, Ahmad, & Vafaei-Zadeh, 2017). However, several articles related to innovations but there is dearth of studies related to innovation with respect to small and medium-sized enterprises. The aim behind this analysis is the development and success of Thai SMEs because of leadership styles, OL and IC. This research makes an important contribution to understanding, as it is a groundbreaking research that defines the mediation of OL and IC between leadership styles and OP.

## **Literature Review**

### **Transformational and Transactional Leadership Styles**

As per my view, leadership is defined as “the ability of a person to motivate, influence, and facilitate other persons to contribute to the success of an organization”. However, the leaders are those who promote their followers in doing a job when they ask for it; they eat at the beginning of the day, not at the end. As suggested by Daft (2014), leadership relates to a strong bond between leaders and followers, in which each has control and performance, shows its strategic outcomes and mutual objectives. The typologies of leadership are primarily focused on Bass (Rusliza & Ebrahim, 2016). Leadership styles are of two types, namely transformational leadership (TFL) style and transactional leadership (TSL) style (Bass, 1990). TFL applies to “the manner in which a shared vision for the future is articulated, setting high expectation, recognizing individual differences, providing support to the individuals and intellectually stimulating subordinates” (Bradley, Gilad, Farh, Chen, & Lowe, 2009). TFL is based on five major components namely, intellectual stimulation, inspirational communication, articulating a vision, personal recognition and supportive leadership (Bass, 1990). TSL involves an interaction between leaders and employees who are trusted and paid by the leaders for their duties. TSL has three major components such as; management exception (active), management exception (passive) and contingent rewards, (Majd, Amaugo, & Jallo, 2018).

### **Articulating Vision**

As an important feature of transformational leadership articulating vision is known by the more popular charisma model. Literature concludes that charisma is the most fundamental and

important aspect of transformational leadership, leadership of idealized influence or charisma necessary (Bass, 1985), higher moral and ethical values and can be used as a justification for doing the correct things. Charisma relates to ALLAH's gift of grace and ability and recognizes certain human attributes which are not typically expressed in the ordinary language (Levine, Muenchen, & Brooks, 2010). Charisma also means the special uniqueness of a person that allows others to influence significantly. For this research, the emphasis is on the phrase "articulating vision" the opposite of Bass and his contemporary's broader architecture of charisma strength.

### **Inspirational Communication**

An inspiring motivation for transformational leadership is a significant factor. Leaders with an excellent motivating encouragement will share their subordinates' higher expectations, encourage their subordinates to become more engaged and part of the company's shared vision. Furthermore, inspirational motivation is linked to a collective spirit, enthusiasm, positive display: organizational members invest in dedication and an appealing vision of goals and mutual vision in this area (Yaslioglu & Erden, 2018). In comparison, Inspirational leadership is more insightful than TFL in a wide variety of respects than charismatic leadership. Charismatic leaders are concerned with an individual who insists on motivational appeals and engaging interactions to inspire their followers to go further than egoism in the interests of the community (Bass, 1985; Den Hartog et al., 1999). As inspirational leaders raise their followers' aspirations and values for the goals or actions of the organization, they encourage the supporters. While researches have carried out correspondence with the leader's communication, little work has been established on inspirational communication. Consequently, we rely in this research on inspirational communication to evoke the emotions of the followers.

### **Intellectual Stimulation**

Intellectual stimulation (IS) is a seldom used aspect of transformational leadership. IS refers to the behavior of the leaders to ensure that leaders inspire their followers to be creative and imaginative, and to question their own beliefs and values (Majd et al., 2018). In addition, Intellectual stimulation also means an attitude in which follower is encouraged to lift their voices, to respond to the question, to seek answers and to find alternative strategies (Yaslioglu & Erden, 2018). Intellectual stimulation effects are generated in order to improve subordinates' ability to conceptualize, analyze and understand issues in a higher standard.

### **Supportive Leadership**

Leader has a strong approach to followers, shows his individual consideration for his followers and reacts appropriately to personal needs. Supporting leadership requires a strong knowledge of the desires of the followers, who are required to provide the necessary support (Al-Malki & Juan, 2018). It is crucial for corporate leaders to create a pleasant atmosphere of engagement with their followers in order to affirm their support for leadership effectiveness. Supporting leadership therefore represents the path-goal theory as a crucial aspect of supportive leadership. This word of supportive leadership is described as concentrating on subordinates and their personal needs.

### **Personal Recognition**

PR is defined as the benefits provided by the leaders for congratulating his supporters and for the appreciation of the fulfillment of those goals. Rafferty & Griffin (2004) described PR as workers who are valued by their superiors for their individual positions and are therefore secure among all staff. Moreover, PR is concerned with the recognition by a follower of the social benefits and gratitude that he performs his duties. PR is the award for the members from their leaders for meeting their specific targets (Imen, 2014). PR honors the representatives for achieving their specific goals. This present research used PR in terms of appreciation as well as support for their efforts to achieve organizational goals.

### **Contingent Rewards**

CR mean “rewards to followers in completing the particular task that the leaders give”. The CR represent the personality of the leader who is specifically in line with the goals to be accomplished and to award to the subordinates who carry out their work (Podsakoff, Bommer, Podsakoff, & MacKenzie, 2006). The growth and performance of the teams have been significantly assisted by contingent rewards (Al-Malki & Juan, 2018). Study points out that providing the leader's incentives to his subordinates will encourage a fair degree of loyalty, engagement, participation and, eventually, subordinate efficiency (Bass, 1985).

### **Management by Exception Active**

The strengthening effect of the Management by Exception Active (MEA) is that leaders take proactive steps as they have come to recognize certain errors, shortcomings, rule violation and gaps in standards. MEA is the willingness of leaders to evaluate the alerts and results of followers that do not meet the standard criterion. Proactive leaders are those who will not waste time, act quickly and take action early. It focuses primarily on taking corrective measures and controlling leaders, and effectively tackling the outcomes of their followers and strictly following any rules that they disobey (Kathrin, Michael, & Harrington, 2012). Proactive leaders do not wait for issues to occur while proactive leaders behave reactively and wait for action to take place.

### **Management by Exception Passive**

Management by Exception Passive (MEP) differs or is different from MEA, this approach applies to when leaders show initiatives when a specific issue occurs or when employees do not achieve acceptable standards. MEP has comments on the part of a leaders, like; punishment, criticism, and not providing opportunities which thus lower performance of the employees and the organization. The MEP is referred to as a leadership aspect, as indicated in Bass & Riggio (2006), when leaders tackle the problem when it is urgent. This relates to contingent punishment through the application of deleterious reinforcement (Morrison, 2007).

### **Innovative Culture**

Innovative Culture (IC) refers to the shared values, beliefs such as: persistent, loyalty, honesty, avoid discrimination, diligence and norms, attitude, philosophies, behaviors, symbols, assumptions, characteristics, rituals, habits and strategies used by an organization in order to take advantage over its competitors. The IC has three components: supportive, innovative and bureaucratic culture (Wallach, 1983). This analysis is based on the IC to examine organizational performance. IC applies to a society in which businesses understand from their early behavior, ideas and values they are a source of failure and focus on the future through the use of new concepts, tactics and risk-taking, not just strategy but results, a competitive environment and a previously ignored creative culture. In reality, an organization that makes a business distinctive and dramatically affects the success of a company is recognized as a valuable asset in a creative culture. Innovative culture is based on the internal organizational structure and its competitive advantage, according to Tabassum, Ramzan, Hafiz, Akram, & Yasir (2012), by promoting openness for new concepts.

### **Organizational Learning**

For an organization that has a direct impact on success and actions, the mechanism that transmits, preserves and transmits new knowledge in an organization is called organizational learning (OL). OL performs a vital role in the existence and survival of any company, as OL greatly affects success of the company or the competitive advantage of the company. OL is based on a holistic, a process of integration and acquisition of knowledge that helps organizations to enhance performance (Sanzo, Santos, García, & Trespalacios, 2012). Therefore, because of OL between employees, this type of company enables companies that operate in an unpredictable and competitive environment to improve their performance (Majd, 2017).

### **Impact of LS on OP**

LS plays a major role in the evaluation of business results, in particular the focus of TFL and TSL researchers on assessing their business performance. In evaluating OP, leadership has gained more importance over time. The researchers have shown that TFL and TSL are a significant predictors for the organizational performance evaluations (Emre Burak, Aydintan, & Celebi, 2018). Nevertheless, TFL has a major positive impact on OP and TSL has a large negative significant effect on OP (Khajeh, 2018). This research uses IC and OL as an interaction variable between leadership styles and OP, as they have previously been overlooked.

H1: LS positively and significantly impact on OP.

H2: The relationship between LS and OP is mediated by OL.

H3: The relationship between LS and OP is mediated by IC.

### **The Relationship between OL, IC, and OP**

OL is a major factor in recognizing the success of SMEs. Various studies suggest that researchers must pay OL significant interest in evaluating their organizational performance (Shurafa & Mohamed, 2016). In evaluating the OP, organizational culture cannot be overlooked. In addition, IC has made an important part of the performance estimation (Yinghong, O'Neill, Lee, & Zhou, 2013). OL and IC were considered to be a significant predictor of OP assessment as mentioned in the above studies.

H4: OL has a positive and significant effect on OP.

H5: IC has a positive and significant effect on OP.

### **The Relationship between LS, OL, and IC**

Some researchers indicated that LS may have an affect the culture of organization (Schein, 2010). One of a research explored the link between laissez-fair, transactional and transformational styles of leadership and organizational culture. Findings show a major role of TFL and TSL in defining OP (Dariush, Khazaneh, & Nabi, 2014). TSL also performs a crucial role on IC attitude (Yanxia, Faraz, Estifo, Raza, & Ahmed, 2018). This is also a challenging area in which to describe innovative culture and how leadership affects the culture of the organization. In order to become an efficient leader, an organization needs to properly evaluate its culture and to make its followers to understand it well. Leadership has been exemplified by the fact that the organization's culture has been analyzed in recent years, but due to the lack of accuracy of the results, this aspect still suffers from scarcity. Studies suggest that leadership is important indicator for evaluating OL (Sun & Anderson, 2012). Previous studies have indicated that TFL is of significant importance when it comes to understanding the OL. Mahmoud (2017) discusses the importance of TFL in the study of OL and recommends that TSL, Including the OL dimension, should be explored in future. Organizational self-learning abilities make LS a critical mechanism that affects the OL.

H6: LS positively and significantly affects OL.

H7: LS positively and significantly affects IC.

## **Research Method**

### **Data Collection Method**

In the present analysis we adopt a quantitative method and collect the data through a questionnaire to assess the problem of the study, scope of the research and the research objectives at the same time. Moreover, this research used cross-sectional approach. The deductive research methodology was used in this analysis and was then related to the quantitative test design. The deductive method focused on testing hypothesis development and testing hypothesis through data analysis technique for this research, so that the usage of deductive approach was rational. The research has gathered data through questionnaires adapted by prior studies in the fields of OP, OL, LS, and IC. The current study sent

questionnaires to SME owners or administrators in Thailand via postal survey. This analysis incorporates four variables into its theoretical model. Moreover, the explanation and measurement scales are presented in Table 1.

**Table 1** Study Measurements

| Constructs | Dimensions                   | Items | Adapted from                   |
|------------|------------------------------|-------|--------------------------------|
| OP         | Financial performance.       | 3     | Henri (2006)                   |
|            | Non-financial performance    | 8     | Teeratansirikool et al. (2013) |
| TFL        | Articulating a vision        | 3     | House (1998)                   |
|            | Inspirational communication  | 3     |                                |
|            | Supportive leadership        | 3     |                                |
|            | Intellectual simulations     | 3     |                                |
| TSL        | Personal recognition         | 3     | Podsakoff et al. (1990)        |
|            | Contingent rewards           | 5     |                                |
|            | Management exception-Active  | 4     |                                |
|            | Management exception-Passive | 4     |                                |
| OL         | Organizational Learning      | 4     | Hult (1998)                    |
| IC         | Innovative Culture           | 8     | Wallach (1983)                 |

Population and sampling for this analysis, were identified through 747,740 SMEs firms as mentioned on Thai public websites (Office of Small and Medium Enterprise Promotion, 2020). Using the postal research approach, 800 questionnaires were floated to owners and managers. Questionnaires were assessed on a five-point Likert type scale ranged from 1-5 (strongly disagree-strongly agree). Cluster sampling is ideal where population is distributed over a larger geographical area. This research purpose is to gather data from managers and owners of small and medium-sized enterprises through cluster surveys, as the population is scattered across the country. However, only 334 questionnaires were used for the final data analyses out of 359 questionnaires received and the remaining 25 questionnaires were discarded due to missing values and incomplete information.

### Data Analysis Technique

We use Smart PLS to determine the theoretical framework in the present paper as this method is a rapidly growing, proposed and second-generation technique. PLS has several benefits over other methods such as this method, allows for a better approximation of regression compared to normality, multicollinearity checking and is best suited to a simpler or more complicated theoretical models. The literature indicates that PLS-SEM is superior to the CB-SEM covariance structural equation modeling in the estimation of results and in the establishment of constructs validities (Hair Jr, Hult, Ringle, & Sarstedt, 2014). In PLS-SEM two different methods are applied, like assessment of outer (measurement) model and inner (structural) model.

## Research Results

### Estimating Measurement Model

The current study used two approaches; like convergent validity (CV) and discriminant validity to evaluate the measurement model. CV is a condition, where the items of a construct essentially represent its own predictors. Study has reported that scholar may use three approaches to measure the CV of a construct, such as the factor loadings, average variance-extracted (AVE) and composite reliability (CR) (Hair Jr et al., 2014). Factor loadings and AVE values should be 0.5 or higher and the value of CR should be above 0.7 (Hair Jr et al., 2014). All variables with loadings of values below 0.5 should be omitted as suggested by Hair Jr, Hult, Ringle, & Sarstedt (2017) to get improved outcomes in relation to CR and AVE. Furthermore,

deleting indicators with factor loadings below 0.5 allows a good theoretical model. Some of the indicators have been omitted from this analysis because of lower factor loadings. The loadings, CR and AVE values above the suggested criteria are shown in Table 2.

**Table 2** Measurement Model's Reliability and Validity

| First Order Variables       | Second Order variables | Third Order variables | Item | Loadings | CR    | AVE   |
|-----------------------------|------------------------|-----------------------|------|----------|-------|-------|
| Personal Recognition        |                        |                       | PR1  | 0.931    | 0.850 | 0.814 |
|                             |                        |                       | PR2  | 0.945    |       |       |
| Supportive Leadership       |                        |                       | SL1  | 0.835    | 0.893 | 0.758 |
|                             |                        |                       | SL3  | 0.865    |       |       |
| Intellectual Simulation     |                        |                       | IS2  | 0.825    | 0.829 | 0.728 |
|                             |                        |                       | IS3  | 0.838    |       |       |
| Inspirational Communication |                        |                       | IC2  | 0.785    | 0.852 | 0.638 |
|                             |                        |                       | IC3  | 0.795    |       |       |
| Articulating a Vision       |                        |                       | AV1  | 0.932    | 0.827 | 0.818 |
|                             |                        |                       | AV2  | 0.969    |       |       |
| TFL                         |                        |                       | AV3  | 0.939    | 0.813 | 0.638 |
|                             |                        |                       | PR   | 0.852    |       |       |
|                             |                        |                       | SL   | 0.842    |       |       |
|                             |                        |                       | IS   | 0.829    |       |       |
|                             |                        |                       | IC   | 0.822    |       |       |
|                             |                        |                       | AV   | 0.819    |       |       |
|                             |                        |                       | MEP  | 0.779    |       |       |
| MEP                         | 0.779                  |                       |      |          |       |       |
| MEP                         | 0.779                  |                       |      |          |       |       |
| MEP                         |                        |                       | MEP1 | 0.759    | 0.844 |       |
|                             |                        |                       | MEP2 | 0.780    |       |       |
| Contingent Reward           |                        |                       | CR3  | 0.809    | 0.734 |       |
|                             |                        |                       | CR4  | 0.849    |       |       |
| TSL                         |                        |                       | MEP  | 0.779    | 0.814 |       |
|                             |                        |                       | CR   | 0.799    |       |       |
| LS                          |                        |                       | TFL  | 0.807    | 0.725 | 0.734 |
|                             |                        |                       | TSL  | 0.839    |       |       |
| OL                          |                        |                       | OL1  | 0.840    | 0.739 | 0.703 |
|                             |                        |                       | OL2  | 0.751    |       |       |
| IC                          |                        |                       | OL3  | 0.791    |       |       |
|                             |                        |                       | OL4  | 0.736    |       |       |
| IC                          |                        |                       | IC1  | 0.823    | 0.732 | 0.634 |
|                             |                        |                       | IC2  | 0.854    |       |       |
| OP                          |                        |                       | IC3  | 0.822    |       |       |
|                             |                        |                       | OP1  | 0.804    | 0.825 | 0.724 |
| OP3                         | 0.818                  |                       |      |          |       |       |
| OP4                         | 0.818                  |                       |      |          |       |       |
| OP5                         | 0.840                  |                       |      |          |       |       |
| OP6                         | 0.874                  |                       |      |          |       |       |
| OP7                         | 0.767                  |                       |      |          |       |       |

The constructs Cronbach alpha values should be at least 0.7, according to Darren & Mallery (2003). The criteria are illustrated in Table 3 for all constructs. The analysis thus validates all

parameters for the estimation of the theoretical model's convergent validity. Furthermore, the third order components of IC, OP and OL have been operationalized as leadership types. In this analysis, we use repeated indicator method to test our framework, as repeated indicator method enables all framework to be measured simultaneously instead of testing higher and lower order components one by one.

**Table 3** Results of Cronbach Alpha

| Variables | Values of Cronbach Alpha |
|-----------|--------------------------|
| OP        | 0.785                    |
| LS        | 0.965                    |
| OL        | 0.876                    |
| IC        | 0.923                    |

Discriminant validity applies to a condition where each theoretical model predictor varies. The recommended approach to check discriminant validity is Fornell and Larcker criterion (Fornell & Larcker, 1981). Table 4 indicates that the above criteria is satisfied in this analysis.

**Table 4** Results of Discriminant Validity

| Variables | OP           | LS           | OL           | IC           |
|-----------|--------------|--------------|--------------|--------------|
| OP        | <b>0.953</b> |              |              |              |
| LS        | 0.665        | <b>0.873</b> |              |              |
| OL        | 0.467        | 0.643        | <b>0.876</b> |              |
| IC        | 0.379        | 0.454        | 0.678        | <b>0.751</b> |

### Estimation of Structural Model

This research investigated the hypotheses by using smart PLS technique such as bootstrapping and algorithm. Bootstrapping is a method for obtaining the values of factor loadings and path coefficients and bootstrapping has been carried out with 5000 resamples to obtain meaningful values. A total of seven hypotheses were evaluated of which five were direct hypotheses and two were indirect hypotheses as shown in Table 5. Findings indicate that LS affect OP significantly with beta value = 0.342,  $t = 8.040$ ,  $p = 0.000$ , thus hypothesis 1 is supported. In addition to this, OL significantly impacts OP with a value of beta = 0.382,  $t$  value = 3.767,  $p = 0.002$ , thus accepted H2. In fact, IC has a significant impact on the OP with a beta value = 0.521,  $t$  value = 5.322,  $p = 0.000$ , thus hypothesis 3 has been supported. Moreover, LS have been significantly related with OL with beta value = 0.278,  $t = 15.02$ ,  $p = 0.000$ , thus supported hypothesis 4. Next, LS positively effect IC with a value of beta = 0.362,  $t = 5.542$ ,  $p = 0.000$ , thus supporting hypothesis 5. Moreover, OL has a positive mediating effect between LS and OP with beta value 0.050,  $t = 3.723$ ,  $p = 0.000$  and supported hypothesis 6. Moreover, IC significantly mediates between LS and OP with beta value = 0.182,  $t = 6.620$ ,  $p = 0.000$ , thus accepted our hypothesis 7.

**Table 5** Hypotheses Results

| Relationships | Beta  | SM    | SD    | t-value | p-value | Decision  |
|---------------|-------|-------|-------|---------|---------|-----------|
| LS>OP         | 0.342 | 0.342 | 0.030 | 8.040   | 0.000   | Supported |
| OL>OP         | 0.382 | 0.380 | 0.031 | 3.767   | 0.002   | Supported |
| IC>OP         | 0.521 | 0.511 | 0.042 | 5.322   | 0.000   | Supported |
| LS>OL         | 0.278 | 0.277 | 0.052 | 15.02   | 0.000   | Supported |
| LS>IC         | 0.362 | 0.360 | 0.072 | 5.542   | 0.000   | Supported |
| SL>OL>OP      | 0.054 | 0.053 | 0.050 | 3.723   | 0.001   | Supported |
| SL>IC>OP      | 0.182 | 0.181 | 0.058 | 6.620   | 0.000   | Supported |

Furthermore, the value of  $R^2$  implies the statistical power of the construct, where all the exogenous constructs explained the variance in endogenous construct. Author proposed that removing an exogenous variable from the theoretical framework and running a theoretical model later adding the replaced variable and elimination of an exogenous variable tended to occur before exogenous variable was entirely eliminated. This process remains the same. Thus, in order to consider the effect of the eliminating variable on endogenous construct, a variance in  $R^2$  attributable to a variable elimination and will be used from the conceptual model (Hair Jr et al., 2014). There are three levels of effect size ( $f^2$ ), for example large (0.35), medium (0.15) and low (0.02). The LS and IC are 0.312 and 0.351 respectively, thus considered large effect sizes. The OL as 0.031, thus have small effect size. Moreover, model's predictive relevancy can be calculated with two approaches such as  $R^2$  and predictive relevance  $Q^2$  (Seymour, 1974). The value of  $R^2$  can be calculated by using the algorithm and displays variance degree that is described by certain exogenous latent constructs on the endogenous latent construct. Further explanation has been given in Table 6.

**Table 6** Coefficient of Determination and Predictive Relevance

| <b>Constructs</b>          | <b>R2</b> | <b>Q2</b> |
|----------------------------|-----------|-----------|
| Organizational Learning    | 0.071     | 0.052     |
| Innovative Culture         | 0.132     | 0.078     |
| Organizational Performance | 0.654     | 0.351     |

Cohen (1992) indicates that  $R^2$  can be found to be small if 0.02, if 0.13 is medium and  $R^2$  value 0.26 or above considered large. Results indicate that OP has substantial effect, OL as small effect and IC as medium effect. Our study has achieved the satisfactory results for  $R^2$  and the values of  $Q^2$  are as shown in Table 6.

## Conclusion and Discussion

The goal of this study is to examine how the IC and OL mediate between LS and OP in Thai SMEs. The current study findings explain that LS play an important role towards OP. These significant finding demonstrates that, TFL and TSL play a major role to SMEs in Thailand. The results are comparable to Nazarian et al. (2018), that TSL as well as TFL are very significant to increase OP. In addition, IC influences OP significantly and narrates that SMEs in Thailand have creative culture which allows them to achieve better OP. The findings are constant with Yinghong et al. (2013). OL also has a significant impact on OP and has the belief that Thai small and medium-sized enterprises have an IC in business firms in order to improve their organizational performance. The research is consonant with previous studies Wageeh (2015), showing that OL plays a key role in improving OP. In fact, LS have an important and positive impact on IC, which tells that SMEs in Thailand have an influence on the creation of an innovative organizational culture. Results from Yanxia et al. (2018) also favors that leaderships established IC. He collected data from 260 lower hierarchical managers in Pakistan from power departments. In addition, OL has a significant influence, showing that Thai small and medium-sized businesses operate on OL by their good leadership. These results are compatible with the outcomes of García-Morales, Llorens-Montes, & Verdú-Jover (2006). Lastly, between LS and OP, IC and OL play an essential mediating effect. This gives Thai SMEs advantages that IC and OL are not overlooked when assessing OP. The advantages are Thai SMEs which do not neglect IC and OL when deciding OP. The present research varies from other LS research in the form of its components. Moreover, the research differs by way of assessing culture, since IC and OL as a mediating variable has been given less importance.

### **Theoretical Implication**

This work theoretically contributes to the evaluation of the effects, usually ignored by previous studies, of the mediating influence of IC and OL between LS and OP. The present research is in a position to respond to further studies by integrating LS, IC, OL and OP into an individual study. This is the first research to analyze OP through OL and IC, and by incorporate LS as a third-order construct through resource-based view theory. For practical implications, through enhancing OP, the outcomes of the current study help SME managers/owners. The study emphasizes that LS (transactional and transformational leaderships, which essentially have a major impact on OP, also plays a significant role in evaluating OL and IC. The current research shows that IC and OL must be acknowledged by the managers and owners if they want to raise OP. In reality, IC produces positive outcomes as businesses also recognize the culture. Individuals should be able to know something new that will finally improve OP. Accordingly, this research indicates that certain managers, who have supportive leaders but do not have a learning atmosphere, do their job merely for the sake of service, and are not interested in acquiring new skills, that increase OP. Therefore, businesses with good executives and an IC and OL culture excel in the marketplace.

### **Limitations and Suggestions**

This research focuses on Thai SMEs. Though the study results have a significant contribution to literature on LS, IC, OL along with enhancing OP, but the study results are not generalizable in other contexts and sectors. Therefore, the current theoretical analysis in other countries needs further work in order to generalize the results. For addition, more variables need to be introduced for future studies.

This research reveals that LS has a significant influence on OL, IC and OP. IC and OL have a big role to play in enhancing OP. This means that the LS cannot be overlooked by the researchers to examine the OP. LS also positively strengthens both OL and IC which make a positive difference to OP. LS is used in this research, which provides positive outcomes to SMEs in Thailand, for both transactional leadership and transformational leadership. IC and OL also mediate between LS and OP in a meaningful way. Accordingly, the results of recent studies indicate that the concept of resource-based view theory was fully applicable to the research model.

### **References**

- Ahmad, N., Abdul-Halim, H., Thurasamy, R., & Geare, A. (2018). Innovation culture in SMEs: The importance of organizational culture, organizational learning and market orientation. *Entrepreneurship Research Journal*, 9(3), 1-13.
- Al-Malki, M., & Juan, W. (2018). Leadership styles and job performance: A literature review. *Marketing*, 3(3), 40-49.
- Bass, B. (1985). *Leadership and Performance beyond Expectations*. London: Collier Macmillan.
- Bass, B. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B., & Riggio, R. (2006). *Transformational Leadership*. New York: Psychology Press.
- Bradley, K., Gilad, C., Farh, J., Chen, Z., & Lowe, K. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, 52(4), 744-764.
- Chienwattanasook, K., & Onputtha, S. (2022). The Impact of Inspirational Leadership on Green Supply Chain Management and Organizational Performance of Food and Beverage Companies. *Asian Administration and Management Review*, 5(1), 29-40.
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3), 98-101.

- Daft, R. (2014). *The leadership experience*. Massachusetts: Cengage Learning.
- Dariush, G., Khazaneh, A., & Nabi, M. (2014). The impact of leadership styles on organizational culture in Mafsa company. *Management Science Letters*, 4(9), 2161-2170.
- Darren, G., & Mallery, M. (2003). *Using SPSS for Windows step by step: a simple guide and reference*. Massachusetts: Allyn and Bacon.
- Den Hartog, D., House, R., Hanges, P., Ruiz-Quintanilla, S., Dorfman, P., Abdalla, I., & Akande, A. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed?. *The Leadership Quarterly*, 10(2), 219-256.
- Emre Burak, E., Aydintan, B., & Celebi, M. (2018). The effect of charismatic leadership on coordinated teamwork: a study in Turkey. *Leadership & Organization Development Journal*, 39(8), 1051-1070.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- García-Morales, V., Llorens-Montes, F., & Verdú-Jover, A. (2006). Antecedents and consequences of organizational innovation and organizational learning in entrepreneurship. *Industrial Management & Data Systems*, 106(1), 21-42.
- Hair Jr, J., Hult, G., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles: SAGE.
- Hair Jr, J., Hult, G., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. 2<sup>nd</sup> ed. California: Sage publications.
- Hanifah, H., Halim, H., Ahmad, N., & Vafaei-Zadeh, A. (2017). Innovation culture as a mediator between specific human capital and innovation performance among Bumiputera SMEs in Malaysia. In *Handbook of research on small and medium enterprises in developing countries* (pp. 261-279). Pennsylvania: IGI Global.
- Henri, J. (2006). Management control systems and strategy: A resource-based perspective. *Accounting, organizations and society*, 31(6), 529-558.
- House, R. (1998). Measures and assessments for the charismatic leadership approach: Scales, latent constructs, loadings, Cronbach alphas, and interclass correlations. *Monographs in Organizational Behavior and Industrial Relations*, 24(1), 23-30.
- Hult, G. (1998). Managing the international strategic sourcing process as a market-driven organizational learning system. *Decision Sciences*, 29(1), 193-216.
- Imen, K. (2014). Relationship between leadership styles and dimensions of employee organizational commitment: A critical review and discussion of future directions. *Intangible Capital*, 10(1), 26-51.
- Kathrin, R., Michael, O., & Harrington, R. (2012). The impact of transformational, transactional and non-leadership styles on employee job satisfaction in the German hospitality industry. *Tourism and Hospitality Research*, 12(4), 201-214.
- Khajeh, E. (2018). Impact of leadership styles on organizational performance. *Journal of Human Resources Management Research*, 2018, 687849.
- Levine, K., Muenchen, R., & Brooks, A. (2010). Measuring transformational and charismatic leadership: Why isn't charisma measured?. *Communication Monographs*, 77(4), 576-591.
- Mahdi, O., & Almsafir, M. (2014). The role of strategic leadership in building sustainable competitive advantage in the academic environment. *Procedia-Social and Behavioral Sciences*, 129(1), 289-296.
- Mahmoud, E. (2017). Transformational leadership style and organizational learning: The mediate effect of organizational culture. *International Journal of Economics & Management Sciences*, 6(6), 1-10.

- Majd, M. (2017). Leadership styles and organizational learning in UK for-profit and non-profit sports organizations. *International Journal of Organizational Analysis*, 25(4), 596-612.
- Majd, M., Amaugo, A., & Jallo, S. (2018). Transformational and transactional leadership and skills approach. *International Journal of Public Leadership*, 14(4), 245-259.
- Mário, F., & Matos, P. (2015). Leadership styles in SMEs: a mixed-method approach. *International Entrepreneurship and Management Journal*, 11(2), 425-451.
- Morrison, J. (2007). Leadership: Theory and practice. *Journal of Education for Business*, 83(2), 116.
- Nazarian, A., Soares, A., & Lottermoser, B. (2018). Inherited organizational performance? The perceptions of generation Y on the influence of leadership styles. *Leadership & Organization Development Journal*, 38(8), 1078-1094.
- Office of Small and Medium Enterprise Promotion. (2020). *Situation and promotion of SMEs*. Retrieved from <https://new.sme.go.th/>.
- Patanathabutr, R. (2019). An Exploratory Factor Analysis of Learning Leadership Characteristics of Thai SME Entrepreneurs. *PSAKU International Journal of Interdisciplinary Research*, 8(1), 139-151.
- Podsakoff, P., Bommer, W., Podsakoff, N., & MacKenzie, S. (2006). Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions, and behaviors: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes*, 99(2), 113-142.
- Podsakoff, P., MacKenzie, S., Moorman, R., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142.
- Rafferty, A., & Griffin, M. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The leadership quarterly*, 15(3), 329-354.
- Rahim, H., Zainal Abidin, Z., Mohtar, S., & Ramli, A. (2015). The effect of entrepreneurial leadership towards organizational performance. *International Academic Research Journal of Business and Technology*, 1(2), 193-200.
- Rusliza, Y., & Ebrahim, F. (2016). Leadership styles and organizational commitment: Literature review. *Journal of Management Development*, 35(2), 190-216.
- Sanzo, M., Santos, M., García, N., & Trespalacios, J. (2012). Trust as a moderator of the relationship between organizational learning and marketing capabilities: Evidence from Spanish SMEs. *International Small Business Journal*, 30(6), 700-726.
- Schein, E. (2010). *Organizational Culture and Leadership Vol 2*. New York: John Wiley & Sons.
- Seymour, G. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107.
- Shurafa, R., & Mohamed, R. (2016). Management control system, organizational learning, and firm's performance: An empirical study from developing economy. *International Journal of Advanced and Applied Sciences*, 3(10), 79-88.
- Sun, P., & Anderson, M. (2012). The combined influence of top and middle management leadership styles on absorptive capacity. *Management learning*, 43(1), 25-51.
- Tabassum, R., Ramzan, M., Hafiz, M., Akram, M., & Yasir, K. (2012). Transformational leadership and employees career salience; an empirical study conducted on banks of Pakistan. *International Journal of Business and Social Science*, 3(8), 152-160.
- Teeratansirikool, L., Siengthai, S., Badir, Y., & Charoenngam, C. (2013). Competitive strategies and firm performance: the mediating role of performance measurement. *International Journal of Productivity and Performance Management*, 62(2), 168-184.

- Wageeh, N. (2015). Organizational learning and organizational performance: A correlation study in the Kingdom of Saudi Arabia. *American International Journal of Social Science*, 4(2), 191-208.
- Wallach, E. (1983). Individuals and organizations: The cultural match. *Training & Development Journal*, 37(2), 28-36.
- Yanxia, C., Faraz, N., Estifo, Z., Raza, A., & Ahmed, F. (2018). The influence of transactional leadership on innovative work behavior—a mediation model. *European Journal of Business and Social Sciences*, 7(1), 51-62.
- Yaslioglu, M., & Erden, N. (2018). Transformational leaders in action: Theory has been there, but what about practice?. *IUP Journal of Business Strategy*, 15(1), 42-53.
- Yinghong, W., O'Neill, H., Lee, R., & Zhou, N. (2013). The impact of innovative culture on individual employees: The moderating role of market information sharing. *Journal of Product Innovation Management*, 30(5), 1027-1041.

**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

**Conflicts of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.



**Copyright:** © 2023 by the authors. This is a fully open-access article distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0).