The Impact of Ambidextrous Leadership on Organizational Excellence: An Applied Study in Small and Medium Enterprises in Qatar

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Abstract

The study aimed to reveal the level of ambidextrous leadership and organizational excellence in small and medium enterprises in Qatar, and also to investigate the impact of ambidextrous leadership on organizational excellence in these companies. The study used analytical descriptive approach by designing a questionnaire that was composed of (42) items through six dimensions. The study sample included (456) employees working in SMEs in Qatar from low and medium managerial levels. Multiple and simple regression analyses were used for data analysis. The study results found that SMEs in Qatar have a high level of ambidextrous leadership and organizational excellence, and ambidextrous leadership competency has a significant impact on organizational excellence. Also, opening leader competency, closing leader competency, and flexible leader competency have a significant impact on organizational excellence. Based on these results, a set of recommendations were provided.

Keywords: ambidextrous leadership, organizational excellence, SMEs, employees

1. Introduction and Research Problem

1.1 Introduction

The successive changes in business environment and the growing competition between business organizations have led to emergence of a new concept in administrative leadership, called ambidextrous leadership, which depends on a state of integration between two types of behaviors: first; exploration behavior that is based on fostering generation of ideas as well as exploring new opportunities, and second; exploitation behavior that is based on enhancing exploitation of the current activities and ensuring that workers carry out tasks by taking corrective actions, monitoring achievement of goals, following laws and instructions, and adhering to the work routine (Shanil, 2010; Zacher, Robinson, and Rosing, 2016). On the contrary of the exploitation behavior, open driving behaviors promote exploration activities, which include experiment of new and different things giving chances for stimulating thinking, allowing mistakes, and encouraging risk tolerance (Ketkar and Puri, 2017). In the light of this integration, between exploration and exploitation, the administrative leadership should find balance between these two behaviors to enhance organizational excellence (Rosing, Frese, & Bausch, 2011).

The most important characteristic of the current business environment is the complexity and contradiction which effect business organizations positively or negatively according to the ability of these organizations to manage contradiction and complexity in such a way that guarantees their survival and growth (Rashid, 2012). Studies related to contradictory theory indicate that there is no definite leadership style that can be adopted to meet the requirements of a contradictory and complex environment, but the leadership that is characterized by ambidextrousness may have balance between closing and opening leadership behaviors through having ambidextrous competences (Andriopoulos & Lewis, 2008).

long-term development of an organization depends on its ability to exploit the current competences, and explore the new competences simultaneously (Taródy, 2016). Organizations today are practicing their business in a dynamic and heterogeneous environment that witnesses macro and micro environmental changes, which means that it is crucial for them to adapt continually to the external threats and opportunities, and react effectively with innovation and structural alignments, which needs ambidextrous leadership (Kauppila & Tempelaar, 2016).

Within this context, the application of the current study to pioneering organizations nationally, at the level of the
state of Qatar, and regionally may have important implications through which the organizational excellence achieved in business organizations can be interpreted in terms of ambidextrous leadership and its competencies. This may be more critical for small and medium enterprises (SMEs) in Qatar, as organizations that played a significant role in development of business in Qatar, and witness several innovations in the field of technology applications.

1.2 Problem Statement

Organizational excellence is one of the administrative topics that have received a great attention in the business research, because the excellent performance is the final result that organizations have been seeking to achieve. This reason prompted many researchers in the field of administrative science and business organizations to search for many administrative concepts that may have an effect on organizational excellence. Among these concepts is what is called ambidextrous leadership. Despite the emergence of the concept of ambidextrous leadership from a very short period of time and many studies have been conducted to search the impact of ambidextrous leadership behaviors in business organizations, there is a clear shortage in studies that have examined the effect of ambidextrous leadership on organizational excellence.

The study problem is manifested by revealing ambiguity of the role of ambidextrous leadership in dealing with administrative activities, and integration between exploitation of activities by ensuring that workers carry out tasks on one hand, and exploration of activities by taking risks, encouraging work, experimenting with new and different things, stimulating thinking, and allowing mistakes on the other hand. The study also investigates how this integration creates a state of balance by implementing ambidextrous leadership tasks leading to the promotion of organizational excellence in the small and medium enterprises in Qatar.

Accordingly, the study problem can be identified in answering the following main question:

What is the impact of ambidextrous leadership competences on organizational excellence from the viewpoint of employees working in SMEs in Qatar?

This main question can be answered through the following sub-questions:

1. What are the levels of ambidextrous leadership and organizational excellence at SMEs in Qatar?
2. Is there a significant impact of ambidextrous leadership on organizational excellence at (α ≤ 0.05) at SMEs in Qatar?
   a) Is there a significant impact of opening leadership competency on organizational excellence at (α ≤ 0.05) at SMEs in Qatar?
   b) Is there a significant impact of closing leadership competency on organizational excellence at (α ≤ 0.05) at SMEs in Qatar?
   c) Is there a significant impact of flexible leadership competency on organizational excellence at (α ≤ 0.05) at SMEs in Qatar?

1.3 Research Importance

The importance of the study is represented in the follows:

First, the theoretical importance:

1. This study is a valuable resource to academic researchers interested in the development of organizations’ performance through adopting new and effective leadership styles.
2. The study contributes in determining the impact of applying ambidextrous leadership on organizational excellence at SMEs opening a new gate for future attempts by researchers to investigate this topic and its hypotheses in other types of organizations.

Second, the practical importance:

1. The importance of understanding the topic of ambidextrous leadership by organizations’ managers in Qatar should result in their evaluation of to which extent they practice ambidextrous leadership competences, and thus to undertake a radical and total development in the way that may enhance their organizations performance.
2. The study provides a practical assessment of SMEs situations in terms of ambidextrous leadership and organizational excellence giving their leaders valuable opportunity to foster their ambidextrous leadership and overwhelm challenges and obstacles facing them to apply its principles and behaviours.
1.4 Research Aim and Objectives

According to the problem statement, the study aims to investigate the impact of ambidextrous leadership competences on organizational excellence from the viewpoint of employees working in SMEs in Qatar. The aim of the study can be branched in the following objectives:

1. To conceptualize the concepts of ambidextrous leadership and organizational excellence at SMEs in Qatar.
2. To reveal the levels of ambidextrous leadership competences and organizational excellence at SMEs in Qatar.
3. To investigate the impact of ambidextrous leadership competencies (closing, opening, and flexible ambidextrous leadership) on organizational excellence at SMEs in Qatar.

2. Theoretical Framework

2.1 Ambidextrous Leadership (AL)

Ambidextrous leaders need to engage in complex and cognitive processes that require adopting integrative and contradictory thinking to accommodate some tensions, such as tensions in risk profile, time horizon, leader’s responsibilities, and link to the present strategy that may come out from the external business environment (Ershadi & Dehdazzi, 2019; Probst, Raisch, & Tushman, 2011). Hence, there has been a need for leaders to have sufficient behavioral and cognitive complexity that enables them to practice multiple roles simultaneously. This led to emergence of a new style of leadership called “ambidextrous leadership”, the first model of which was developed by scientists Vera and Crossan (2004). Those two scientists see that the process of organizational learning needs a complex method of leadership, as this process grows and develops under the umbrella of transactional leadership at specific times, and it also grows and develops significantly under transformational leadership (Halevi, Carmeli & Brueller 2015, p. 229).

Ambidexterity can be defined as the organization’s ability to engage simultaneously in exploiting the current capabilities of the organization (exploitation) and exploring the future opportunities (exploration) (Ketkar & Puri 2017; Raisch et al., 2009). Exploitation is related to refinement, efficiency, selection, and implementation, whereas exploration is related to search, variation, experimentation, and discovery (Birkinshaw & Gupta, 2013).

Amidextrous leaders are the leader’s ability to underpin explorative and exploitative behaviors in subordinates by reducing or increasing the differences and switching flexibility between multiple behaviors (Tung, 2016). Amidextrous leadership includes three elements: closing leader behaviors to boost exploitation, opening leader behaviors to boost exploration, and flexibility to switch between the both types of behavior according to the situation (Tunedoglan, Van Den Bosch, & Volberda, 2015). Ambidexterity can be defined as the required competences should include: opening leadership competency (OLC), closing leadership competency (CLC), and flexible leadership competency (FLC).

2.1.1 Opening Leadership Behavior

Opening leadership behavior is defined as a set of behaviors that include encouragement of subordinates to do things differently, experimenting different things, giving them opportunity to think autonomously, and motivating their attempts to interact successfully with the current situation (Coleman, 2016, p 37). Rosing et al. (2011, p 66) added that the opening behavior includes stimulating thinking in a new direction to increase the difference in worker’s behaviors, such as allowing mistakes, encouraging alternative means to achieve the required tasks, and motivating workers to face and deal with risks.

2.1.2 Closing Leadership Behavior

Closing leadership behavior includes a set of behaviors, such as corrective procedures, guidelines’ setting, and monitoring of goal achievement (Rosing et al. 2011, p 66). The leader follows this type of leadership behavior when the situation requires workers to ensure implementation of their job’s tasks (Coleman, 2016, p 39). This
type of behavior focuses on achieving the work’s task efficiently and reducing the variation in workers’ behaviors, such as adhering to work routines, making sure to follow laws, monitoring achievement of goals, and taking corrective procedures whenever necessary (Havermans et al., 2015, p. 4; Schindler, 2015, p. 73; Zacher & Wilden, 2014, p. 813).

2.1.3 Flexible Leadership Behavior
It is noted that both opening and closing leadership behaviours are integrative so that it is difficult to separate them clearly giving a single personal leadership style (AlKhawaldeh, 2020). Having combined the two types of leadership behaviours, ambidextrous leadership is defined as “the ability to boost both explorative and exploitative behaviours at followers by switching between reducing and increasing difference in their behaviour” (Rosing et al., 2011, p. 957). Such this switching between exploration and exploitation requires the leader to have a flexible mode by adopting a flexible leader behaviour, that is based on flexible leader competency (Gibson & Birkinshaw, 2017).

2.2 Organizational Excellence (OE)
The organization that looks to achieve organizational excellence must achieve all its dimensions. Organizational excellence is not a single factor, rather it is based on a number of dimensions, which are represented in the following:

2.2.1 Organizational Human Resources Excellence (OHRE)
There is no doubt that nowadays, human resources have become one of the most important assets of organizations and described as unique wealth that gives them a competitive advantage. Human resources powered by experience, knowledge, and professionalism are considered as a competitive advantage that the organization maintains and tries to develop continuously to maintain its competitive position, especially this type of the organizational assets cannot be imitated easily by other competitors (Rocha-Lona, Garza-Reyes, Lim, & Kuma, 2015). The rapid changes in the business environment dictate the organization to prepare itself to respond to new challenges or opportunities, and therefore it must empower its workers through continuous training and development to the level that it can rely on their skills and capabilities to adapt to new changes in the business environment (Wright, Geroy, & MacPhee, 2000).

2.2.2 Organizational Culture Excellence (OCE)
organizational culture is the framework that governs the behavior of individuals working in the organization and guides them towards its goals through a set of values, norms, traditions, beliefs, laws, policies, and rules followed in the organization (Nenad'al, Vykydal, & Waloszek, 2018). The level of organizational culture strength relates to the characteristics and nature of the environment in which the organization practices its operations. Generally, it can be said that a strong organizational culture leads to an increase in the level of organizational performance, and the level of organizational culture is measured by the extent to which the special characteristics of each organizational dimension are applied (adaptation, organizational mission, employee participation, consensus, etc.) (Barnes et al., 2006; Denison, Nieminen, & Kotrab, 2012). Several studies, such as (Denison et al., 2012; Isoherranen, Karkkainen, & Kess, 2015) confirmed the importance of organizational culture in the organization's excellence. These conclusions came after a great effort and over several years searching for reasons beyond the failure of some organizations planning, the lack of efficiency of their employees, and the low level of their employees’ affiliation.

2.2.3 Organizational Structure Excellence (OSE)
organizational structure reflects the way in which information and knowledge are disseminated in the organization influencing the effectiveness of its use. As a result, the organizational structure significantly affects the distribution and coordination mechanism of company resources, communication operations, and social interaction among employees of the organization (Chen & Huang, 2007). Therefore, building the organizational structure establishes and facilitates the organization's ability to adapt to different changes, gives it ability to learn and be creative, and improves its ability to create added value for its customers (Verle, Markič, Kodrič, and Zoran, 2014). Martinez- Leon and Martinez (2011) indicated that organizations today, especially those compete globally by excellence of their services and goods, seek to build organizational structure that allows them to get smooth and easy communication, flexibility of information transfer, rapid decision-making, and motivation of innovation and creativity. organic and decentralized organizational structures serve those organizations to obtain performance excellence and obtain a competitive edge (Maria et al., 2011).
3. Literature Review and Hypotheses’ Development

3.1 Literature Review

Zheng et al. (2017) examined the relationship between ambidextrous leadership, ambidextrous culture and sustainability-based project performance. Data were collected from 217 project managers working in different constructive projects in China. The results found that ambidextrous leadership positively affects project performance and ambidextrous culture. Also, ambidextrous culture mediates significantly the relationship between ambidextrous leadership and project performance.

Schindler (2015) conducted a study that aimed to address ambidextrous leadership model introduced by Rosing et al. (2011). The study used a qualitative method by interviewing 10 management leaders in the consulting firms in Netherlands. The study found that both ambidextrous leadership behaviors (Opening and Closing behaviors) were required to promote innovation at the employees.

Tung (2016) conducted a study that aimed to investigate transactional leadership, transformational leadership, and ambidextrous leadership on employee creativity, and to which extent psychological promotion and empowerment are affecting employee creativity. The study used analytical approach by mailing 500 questionnaires to 50 different electronics firms working in China. The results revealed that transactional leadership, transformational leadership, and ambidextrous leadership have a significant impact on employee creativity, also psychological promotion and empowerment play a significant mediating effect on the relationship between all these leadership styles (independent variable) and employee creativity.

Wang and Rafiq (2014) conceptualized ambidextrous organizational culture and investigated its effect on the relationship between contextual ambidexterity and product innovation outcomes. Data were collected from 242 Chinese and 150 UK high-tech firms. The results found significant relationship between contextual ambidexterity, ambidextrous organizational culture, and product innovation outcomes. Also, the results confirmed that ambidextrous organizational culture mediates significantly the relationship between contextual ambidexterity and product innovation outcomes.

3.2 Hypotheses Development

Tushman and O’Reilly’s (1996) rocked that organizations that support exploration and exploitation simultaneously can realize superior performance. Also, Junni et al. (2013) found that ambidextrous leadership is positively related to organizational performance. Simsek et al. (2009) argued that ambidextrous leadership is a potential source for achieving competitive edge, as it is costly, valuable, and rare to imitate. Also, ambidextrous leadership is associated positively to middle and senior level performance (Kassotaki, 2017).

Gibson and Birkinshaw (2017) asserted that an ambidextrous organizational culture supports contextual ambidexterity which is considered as a vague organizational resource, time consuming to develop, difficult to imitate, and thus invaluable to the organization. Such an organizational culture enables the business units in the organization to integrate exploration and exploitation enhancing distinctive performance (Yang & Atuahene-Gima, 2007). Wang and Rafiq (2014) confirmed that ambidextrous organizational culture, as an invaluable and distinctive organizational resource, generated by ambidextrous leadership creates distinctive performance.

Organizational structure is one of the main factors, such as behavioral contexts, and leadership characteristics that have a strong relationship with leader’s ambidexterity, and it contributes to successful implementation of ambidexterity throughout all organization’s levels (Birkinshaw & Gupta, 2013). Generally, ambidexterity should take into account organizational strategy, structure, and environmental change (Fiss, 2011; Mom, Fourné, & Jansen, 2015). Raisch and Hotz (2010) explain the interdependence between organizational structure and ambidextrous leadership by stating that by interdependence of strategies and structures with leader ambidexterity, leaders can define, plan, and implement proper models to pursue exploration and exploitation in the organization (Raisch & Hotz, 2010).

Ambidextrous leaders promote their employees to experiment their innovative ideas in their work, and tolerate errors arising from their experimentation. Moreover, they establish specific guidelines and reward mechanisms for implementation of the new ideas (Tuan, 2017). Organizational creativity depends on employee creativity (Choi & Ji-Hye, 2014; Maria and Maria, 2013). Zacher and Rosing (2015) asserted that ambidextrous leadership is positively correlated to employee’s innovation. Also. Rosing et al. (2011) found that ambidextrous leadership is positively associated with employees’ creativity. Kammerlander et al. (2015) found that an ambidextrous leadership significantly affects relationship to employees’ promotion.

Through the literature above, we can hypothesize that:
H1: Ambidextrous leadership (AL) has a significant impact on organizational excellence (OE) at SMEs in Qatar at the significant level (α ≤ 0.05).

From the main hypothesis, the following sub-hypotheses can be generated:

H1-1: Opening leadership competency has a significant impact on organizational excellence at SMEs in Qatar at (α ≤ 0.05).

H1-2: Closing leadership competency has a significant impact on organizational excellence at SMEs in Qatar at (α ≤ 0.05).

H1-3: Flexible leadership competency has a significant impact on organizational excellence at SMEs in Qatar at (α ≤ 0.05).

3.3 Research Model:

Based on the literature review and research hypotheses, the study model (Figure 1) has been developed to conceptualize the relationship between the independent variable (ambidextrous leadership competencies) in its dimensions (closing leadership competency, opening leadership competency, and flexible leadership competency) and the dependent variable (organizational excellence) in its dimensions (organizational HR excellence, organizational culture excellence, and organizational structure excellence).

![Research Model](image)

Figure 1. Research model

4. Research Methodology

According to the research problem, analytical descriptive approach was used to achieve the research’ aim and objectives. In this approach, the researcher sought to identify the effect of ambidextrous leadership on organizational excellence at SMEs in Qatar.

4.1 The Sample Size

From all SME companies working in Qatar (117), seven companies were selected randomly, with their total employees (456), who are working in low and middle management levels (Ministry of Administrative Development, Labor and Social Affairs, 2020).

From the total sample size number, (420) respondents were selected for data analysis, and (36) employees were excepted because of either no respond, incomplete, or unsuitable answers for the study’s instrument.

4.2 Description of the Study Sample

Table 1 displays the sample distribution according to their (gender, experience, and scientific qualification).
Table 1. Distribution of the study sample by (Gender, Qualification level, and Experience).

| Variables                      | Variable Categories | Frequency | Percent (%) |
|--------------------------------|---------------------|-----------|-------------|
| Gender                         | Male                | 265       | 63          |
|                                | Female              | 155       | 37          |
|                                | **Total**           | **420**   | **100**     |
| Scientific qualification level | Diploma             | 75        | 18          |
|                                | Bachelor            | 203       | 48          |
|                                | Postgraduate        | 142       | 34          |
|                                | **Total**           | **420**   | **100**     |
| Experience                     | Less than 5         | 81        | 19          |
|                                | 5 to less than 10   | 136       | 32          |
|                                | More than 10        | 203       | 49          |
|                                | **Total**           | **420**   | **100**     |

Table 1 shows that most of the study sample is from male (265), with percent of (63%). For the scientific qualification, (203) employees from the sample have bachelor qualification, and for the experience, it can be noted that most of the study sample have experience of more than (10) years, with percent of (49%).

4.3 Description of the Study Instrument

The study instrument is a questionnaire that was designed according to the literature review to fit the study aim and objectives. The questionnaire includes two major parts; first one includes the demographic data in terms of gender, scientific qualification, and experience, whereas the second part includes five dimensions with (42) items. The first main dimension is ambidextrous leadership competency. This dimension includes three sub-dimensions, which are opening leadership competency, closing leadership competency, and flexible leadership competency. Each one of these three sub-dimensions was measured by seven items, that were adopted from some previous studies, such as (Alghamdi, 2018; Iyigun, 2019; Rosing et al., 2011; Zacher & Wilden, 2014). The second main dimension is organizational excellence, which was composed of three sub-dimensions, which are organizational human resources excellence, organizational structure excellence, and organizational culture excellence with (21) items; seven items were adopted from (Belak, 2016; Ershadi & Dehdazi, 2019; Kassem et al., 2017; Mohamed et al., 2018) and addressed to measure each organizational excellence sub-dimension.

4.4 Testing Validity and Reliability

For testing the study reliability and validity, a pilot test was applied on a few sample (30) employees working in SMEs, and not included in the original study sample.

4.4.1 Testing Validity

a) Content Validity: To test the study instrument validity, the instrument in its primary design with (47) items was evaluated by (12) arbitrators specialized in business and management, and they belong to different universities in Jordan. Then, according to the arbitrators’ amendments and propositions, the instrument was adapted, where seven items were removed, four items were modified, and two items were added. Consequently, the last version of the study instrument was composed of (42) items measuring six dimensions.

b) Constructive Validity: it is measured by internal consistency and composite consistency.

- Internal Consistency:
  Pearson Correlation Coefficients were used to test the consistency between each item with its main dimension. Table (2) shows internal consistency for all instrument items.
Table 2. Correlation coefficient values to measure internal consistency

| Ambidextrous Leadership Competencies | Organizational Excellence |
|-------------------------------------|--------------------------|
| OLC                                 | CLC                      |
| FLC                                 | OHRE                     |
| OCE                                 | OSE                      |
| No. of item                         | Pearson correlation      |
| 1                                   | 0.865**                  |
| 2                                   | 0.824**                  |
| 3                                   | 0.702**                  |
| 4                                   | 0.624**                  |
| 5                                   | 0.547**                  |
| 6                                   | 0.641**                  |
| 7                                   | 0.758**                  |
| No. of item                         | Pearson correlation      |
| 1                                   | 0.541**                  |
| 2                                   | 0.658**                  |
| 3                                   | 0.825**                  |
| 4                                   | 0.751**                  |
| 5                                   | 0.714**                  |
| 6                                   | 0.498**                  |
| 7                                   | 0.721**                  |
| No. of item                         | Pearson correlation      |
| 1                                   | 0.752**                  |
| 2                                   | 0.743**                  |
| 3                                   | 0.801**                  |
| 4                                   | 0.801**                  |
| 5                                   | 0.740**                  |
| 6                                   | 0.654**                  |
| 7                                   | 0.758**                  |

** The correlation coefficient is statistically significant at the significance level (α = 0.01).

Table 2 shows indicates that each item has a significant correlation with its dimension (α ≤ 0.01), which means that all items are consistent to their own dimension.

- Composite Consistency

Pearson Correlation Coefficients were used to test the consistency of each sub-dimension with its main dimension as well as between the dimensions of each main dimension. Table (3) shows Composite Consistency for all dimensions of the study.

Table 3. The correlation coefficients between the sub-dimensions, and between each sub-dimension with its main dimension

| Ambidextrous Leadership Competencies | Organizational Excellence |
|-------------------------------------|--------------------------|
| Dimension                          | CLC                      |
| FLC                                 | Instrument (Total)       |
| OLC                                 | 0.742**                  |
| CLC                                 | 0.567**                  |
| FLC                                 | 0.567**                  |
| Instrument (Total)                  | 0.726**                  |
| OCE                                 | 0.684**                  |
| OSE                                 | 0.687*                   |
| Instrument (Total)                  | 0.717**                  |

** The correlation coefficient is statistically significant at the significance level (α = 0.01).

Table 3 shows that correlation coefficients between the dimensions of ambidextrous leadership range between (0.567) and (0.742), and significant at (α ≤ 0.01), and between these dimensions with their main dimension range between (0.687) and (0.726), and significant at (α ≤ 0.01). Also, correlation coefficients between the dimensions of organizational excellence range between (0.481) and (0.684), and significant at (α ≤ 0.01), and between these dimensions with their main dimension range between (0.624) and (0.749), and significant at (α ≤ 0.01). This means that each set of dimensions are suitable to measure its variable.

4.4.2 Testing Reliability

After verifying the validity of the study instrument, the reliability coefficients of the study instrument and its dimensions were extracted using the Cronbach's alpha equation (Table 4).

Table 4. Cronbach's alpha coefficients of the study dimensions

| Dimension          | Cronbach's alpha coefficients | Dimension          | Cronbach's alpha coefficients |
|--------------------|-------------------------------|--------------------|-------------------------------|
| OLC                | 0.841                         | OHRE               | 0.926                         |
| CLC                | 0.921                         | OCE                | 0.821                         |
| FLC                | 0.887                         | OSE                | 0.857                         |
| Instrument (Total) | 0.892                         | Instrument (Total) | 0.875                         |

The results in Table 4 shows that the reliability coefficient of the ambidextrous leadership scale is (0.892), and the values of reliability coefficients for the dimensions ranged between (0.841) and (0.921). Also, the reliability coefficient
of the organizational excellence scale is (0.875), and the values of reliability coefficients for the dimensions ranged between (0.821) and (0.926). Therefore, it can be said that the study instrument is reliable, because all its dimensions’ reliability was found to be more than the cut-off value (0.60).

4.5 Testing Multi-Collinearity and Normality

The sample size is large (420), thus the central limit can be applied. Therefore, there is not normality problem. Tolerance and Variance Inflation Factor (VIF) were used to test the study instrument against multi-collinearity problem, in which Tolerance value should be not less than (0.1), and VIF’s value not more than 10.

Table 5. Variance inflation factors (VIF) and Tolerance of the variables

| Dimension | Tolerance | VIF |
|-----------|-----------|-----|
| OLC       | 0.724     | 1.62|
| CLC       | 0.664     | 1.52|
| FLC       | 0.580     | 1.45|

Table 5 indicates that Tolerance values are greater than (0.1), and VIF values are less than 10. Which mean that there is not multi-collinearity problem.

5. Results and Discussion

5.1 Levels of Ambidextrous Leadership Practice and Organizational Excellence

Results of the first question: What are the levels of ambidextrous leadership and organizational excellence at SMEs in Qatar?

To evaluate the levels of ambidextrous leadership and organizational excellence, 5-likert scale was converted to three levels as follows:

Length of category = (5-1)/3 = 1.33

1+ 1.33 = 2.33, therefore the low level is (1 to < 2.34),

2.33 + 1.33 = 3.66, therefore the medium level is (2.34 to < 3.67),

3.67 + 1.33 = 4.99, therefore the high level is (3.67 to 5).

Means and standard deviations of the main variables and their dimensions were used to determine the levels of ambidextrous leadership and organizational excellence at SME companies in Qatar (Table 6).

Table 6. Means and standard deviations of ambidextrous leadership and organizational excellence at SMEs in Qatar

| Ambidextrous Leadership | Organizational Excellence |
|-------------------------|--------------------------|
| Dimension               | Mean | S.D | Level | Dimension | Mean | S.D | Level |
| OLC                     | 3.91 | 0.40 | High  | OHRE      | 3.86 | 0.63 | High  |
| CLO                     | 3.45 | 0.65 | Medium| OCE       | 3.94 | 0.57 | High  |
| FLC                     | 3.82 | 0.52 | High  | OSE       | 3.56 | 0.84 | Medium|
| ALC (Total)             | 3.72 | 0.54 | High  | OE (Total)| 3.78 | 0.523| High  |

Table 6 shows that the level of ambidextrous leadership at SME in Qatar is high (Mean = 3.72, SD= 0.54), with opening leadership competency in the first rank, flexible leadership competency in the second rank, and closing leadership competency in the last rank with (Mean = 3.91, SD= 0.40; Mean = 3.82, SD= 0.52; Mean = 3.45, SD= 0.65) respectively. Also, it can be noted from table (6) that SME in Qatar has an organizational excellence with high level (Mean = 3.78, SD= 0.52), with organizational cultural excellence in the first rank, organizational human resources excellence in the second rank, and organizational structure excellence in the last rank with (Mean = 3.94, SD = 0.57; Mean = 3.86, SD= 0.63; Mean = 3.56, SD = 0.84) respectively.

5.2 Testing Hypotheses

Multiple regression analysis was used for testing the main hypothesis, while simple linear regression analysis was used for testing the sub-hypotheses.
5.2.1 Testing the Main Hypothesis

This part of analysis aims to test the main hypothesis, which is:

H1: Ambidextrous leadership (AL) has a significant impact on organizational excellence (OE) at SMEs in Qatar at the significant level ($\alpha \leq 0.05$).

Table 7. Results of ambidextrous leadership impact on organizational excellence

| Model Summary | ANOVA |
|---------------|-------|
| Model | R | R Square | df | F | Sig. |
| 1 | .896 | .802 | 5/420 | 479.257 | .000 |

a. Dependent Variable: organizational excellence
b. Predictors: (Constant), ambidextrous leadership

It can be noted from the table above (Table 7) that R value (0.896) indicates a strong relationship between ambidextrous leadership (IV) and organizational excellence (DV). Ambidextrous leadership explains (80.2%) of the variance related to organizational excellence in SMEs in Qatar. Also, ambidextrous leadership significantly and positively affects organizational excellence ($F = 479.257, p = 0.00 < 0.05$).

Table 8. Coefficients of ambidextrous leadership (IV) and organizational excellence (DV)

| Coefficients | Unstandardized Coefficients | Standardized Coefficients |
|--------------|----------------------------|---------------------------|
|              | B | Std. Error | Beta | t | Sig. |
| 1 (Constant) | .739 | .114 | 6.492 | .000 |
| Opening leadership competency | .680 | .044 | .807 | 15.434 | .000 |
| Closing leadership competency | .057 | .042 | .064 | 1.359 | .177 |
| Flexible leadership competency | .098 | .044 | .113 | 2.196 | .030 |

Dependent Variable: organizational excellence.

Table 8 shows that among all dimensions of ambidextrous leadership, opening leadership competency has the greatest impact on organizational excellence ($\beta = 0.807$, $p = 0.00$). This result is supported by T value (15.43). Flexible leadership competency is ranked in the second level in its impact on organizational excellence with ($\beta =0.113$, $p = 0.03$) supported by T value (2.19), whereas closing leadership competency has not significant impact on organizational excellence ($\beta = 0.064$, $p = 0.177$) and T value is (1.36).

Based on this result, we can deduce that both opening leadership competency and flexible leadership competency positively affect organizational excellence, with knowledge that opening leadership competency is more significant on organizational excellence than flexible leadership competency. However, closing leadership competency has not significant impact on organizational excellence.

Therefore, this result accepts the main hypothesis, which states that:

H1: Ambidextrous leadership (AL) has a significant impact on organizational excellence (OE) at SMEs in Qatar at the significant level ($\alpha \leq 0.05$).

5.2.2 Testing Sub-Hypotheses

Simple regression analysis was used for testing the impact of each dimension of ambidextrous leadership on organizational excellence.

a) Testing The First Sub-Hypothesis (H1-1):
### Table 9. Result of “Opening leadership competency” Impact on Organizational Excellence

| Model Summery | Coefficients. |
|---------------|---------------|
| R  | R²  | Std. Error | t    | Sig |
| 1 (Constant) | .941 | .886 | .105 | 8.566 | .000 |
| Opening leadership competency | .026 | 30.115 | .000 |

a. Dependent Variable: organizational excellence.
b. Predictors: (Constant), Opening leadership competency.

It can be noted from Table (9) that opening leadership competency significantly affects organizational excellence, where ($T = 30.115, p = 0.00 < 0.05$). The correlation coefficient ($R = 0.941$) indicates that there is a strong relationship between Opening leadership competency and organizational excellence. The variance coefficient ($R^2$) indicates that opening leadership competency explains (88.6%) of the variance related to organizational excellence. According to this result, we can accept the first sub-hypothesis (H1-1) which states that:

**H1-1**: Opening leadership competency has a significant impact on organizational excellence at SMEs in Qatar at ($\alpha \leq 0.05$).

b) Testing The Second Sub-Hypothesis (H1-2):

### Table 10. Result of “Closing Leadership Competency” Impact on Organizational Excellence

| Model Summery | Coefficients. |
|---------------|---------------|
| R  | R²  | Std. Error | T    | Sig |
| 1 (Constant) | .717 | .514 | .225 | 6.828 | .000 |
| Closing leadership competency | .058 | 11.173 | .000 |

a. Dependent Variable: organizational excellence.
b. Predictors: (Constant), Closing Leadership Competency.

It can be noted from Table (10) that closing leadership competency significantly affects organizational excellence, where ($T = 11.17, p = 0.00 < 0.05$). The correlation coefficient ($R = 0.717$) indicates that there is a strong relationship between closing leadership competency and organizational excellence. The variance coefficient ($R^2$) indicates that closing leadership competency explains (51.4%) of the variance related to organizational excellence. According to this result, we can accept the second sub-hypothesis (H1-2) which states that:

**H1-2**: Closing leadership competency has a significant impact on organizational excellence at SMEs in Qatar at ($\alpha \leq 0.05$).

c) Testing The Third Sub-Hypothesis (H1-3):

### Table 11. Result of “Flexible Leadership Competency” Impact on Organizational Excellence

| Model Summery | Coefficients. |
|---------------|---------------|
| R  | R²  | Std. Error | T    | Sig |
| 1 (Constant) | .786 | .617 | .196 | 6.822 | .000 |
| Flexible leadership competency | .050 | 13.789 | .000 |

a. Dependent Variable: organizational excellence.
b. Predictors: (Constant), Flexible Leadership Competency.

It can be noted from Table (11) that flexible leadership competency significantly affects organizational excellence, where ($T = 13.789, p = 0.00 < 0.05$). The correlation coefficient ($R = 0.786$) indicates that there is a strong relationship between flexible leadership competency and organizational excellence. The variance coefficient ($R^2$) indicates that flexible leadership competency explains (61.7%) of the variance related to organizational excellence. According to this result, we can accept the third sub-hypothesis (H1-3) which states
that:

**H1-3**: Flexible leadership competency has a significant impact on organizational excellence at SMEs in Qatar at (α ≤ 0.05).

### 5.3 Discussion

Results of the study showed that the level of ambidextrous leadership practiced in SMEs in Qatar was found at the high level, which means that leaders of these companies practice the principles and behaviors of ambidextrous leadership in their companies to enhance and develop their performance. Leaders of SME in Qatar try to manage their companies ambidextrously by motivating creativity and innovation at individuals working in the companies as well as the innovative teamwork. This behavior of SME leaders in Qatar comes in consistence with the government’ policies and strategies, which are focused on encouragement of the organizations to change their strategies of leadership by prompting employees to be innovative, opening in thinking, flexible work task, etc. This can be manifested obviously in the public SMEs that try to practice ambidextrous leadership in leadership as response to the government’ strategies to reinforce their competitive position.

Opening leadership competency and flexible leadership competency have come within the high level, whereas closing leadership competency has come within the medium level. This means that SME leaders try to practice their ambidextrous leadership in their companies by applying opening and flexible behaviors that boost opening in thinking and motivating creative ideas rather than closing in thinking and keeping on conventional work. Such this method of leadership accommodates flexibility in decision making and tolerance of work’s mistakes giving the employees and work teams independence in their functional responsibility.

Organizational excellence was found at the high level in SMEs in Qatar. This is realized as respond to a set of factors, such as organizational culture, organizational structure, human resources, etc. that integrate with each other consistently. The ambidextrous leadership that prevails at SMEs in Qatar is the main agent activating all these factors and determines the appropriate way to integrate them in order to achieve organizational excellence.

Organizational culture excellence was found in its high level, which indicates that the organizational leadership in SMEs supports the culture that is characterized by flexibility and adaptability to the accelerating changes occurring in the business environment. Such this organizational culture enables SMEs to respond rapidly to the requirements of business environment, its challenges, and opportunities.

Human resources excellence represented by all working employees in all their levels in SMEs in Qatar was found in a high level. This indicates that ambidextrous leadership in these companies empower their employees to be more innovative and interactive to the changing business demands. Thus, they adopt training and development programs that may improve their employees’ skills and abilities, and concentrate on continuous learning to make them more capable of knowledge gaining, sharing, and implementation.

From the organizational excellence dimensions, organizational structure excellence was found at medium level in SMEs in Qatar. This may return to that many SMEs in Qatar still adopt the hierarchical organizational structure that is characterized by its multiple managerial procedures and complexity. Such these companies attempt to get more monitoring and control on its different processes.

The results proved that ambidextrous leadership affects significantly on organizational excellence. We conclude from the current study that the ambidextrous leadership adopted by SMEs is based on three factors; opening leadership competency, closing leadership competency, and flexible leadership competency. Each one of these factors has its own principles and characteristics. Definitely, opening leadership competency and flexible leadership competency are today considered essential factors for the organizational leadership that strives to gain organizational excellence, because organizations today are operating in a rapidly changing environment, which requires thinking that charts the future and identifies risks, challenges and opportunities. Today, traditional leadership thinking is no longer feasible for such inevitable changes. Furthermore, the traditional leadership skills required are insufficient to enable the leader to manage the organization towards the planned goals in the accelerating business environment. Therefore, an ambidextrous leader should have unconventional leadership competencies that enable him to guide the organization in the light of the turbulent business environment.

When tested particularly, each one of the ambidextrous leadership dimensions was found affecting significantly organizational excellence in SMEs in Qatar. Opening leadership competency, flexible leadership competency, and closing leadership competency were found significantly affecting organizational excellence respectively. This result confirms the significant role of each ambidextrous leadership competency in enhancing the organizational performance in all its dimensions. Which means that the leader may behave in opening behavior to underpin the innovative and creative thinking of the employees in their work practice in a particular situation,
but monitor and control their work according to definite rules and principles in other situation, and try to switch between those two behaviors to improve and activate the work performance.

6. Conclusion

With ongoing changes in the turbulent business environment, conventional leadership today is no longer feasible to develop an organization and steer it toward growth and sustainability. Therefore, organizations today have to change their policies and strategies to adapt to the new situations. SMEs in Qatar have been striving huge efforts to keep their competitive position worldwide. Thus, they have changed their orientation toward new business concepts and terminology, such as ambidextrous leadership, strategic leadership, strategic competencies, etc. and organizational excellence has become as a measurement of their performance in terms of financial and non-financial situation.

Research in the field of business and management has tackled ambidextrous leadership as a very critical factor for the organizational development and excellence. The why that entails to search its role in SMEs in Qatar, because SMEs are considered suitable environment for practicing all leadership styles, as these organizations witness active and effective responses to the rapid changes in the business environment. This indicates that evaluating practice of ambidextrous leadership and its role in organizational excellence in SMEs in Qatar should provide a comprehensive understanding of the role of organizations’ leadership in raising the level of their organizations’ performance and reinforcing their competitive position.

7. Limitations and Future Research

The study has been exposed to a set of limitations through its applications, some of these limitations are represented in the follows:

The data of the current study were collected from the viewpoints of employees working in SMEs in Qatar, therefore the collected data may be exposed to partiality, because the employees try to reflect a positive reputation of their companies, and try to give a deceptive imagination about that their companies are more competitive than other companies in the same sector. A future research could be directed to get data from the customers’ perspective. Second, the study has been applied in SMEs in Qatar, and its results in some situations have been generalized to other organizations working in that country. Rather, some organizations in Qatar, especially, large ones may be different in their applied strategies and policies, which may change the level and effect of some ambidextrous leadership dimensions on organizational excellence to be different from their synonymous dimensions in SMEs. A future research may be applied on the large organizations.

Third, the study was applied on SMEs in Qatar. Yet, these companies are included in different industries, which may reflect slightly on the study results. It is better for the future research to be focused on a particular industry, such as information technology, pharmaceutical industry, or marketing industry. Finally, the study has been focused on investigating the impact of ambidextrous leadership on organizational excellence in a direct mode. However, a future research may consider other variables, such as strategic alertness or strategic agility, that may play a significant mediating or moderating role that may strengthen or weaken this relationship.

8. Recommendations

Form the results above, the following recommendations can be provided:

• Organizations in Qatar should reinforce the ambidextrous leadership to enhance their organizational performance.
• SMEs in Qatar have to boost creativity and innovation at their employees by adopting continuous training and development programs.
• SMEs in Qatar have to adopt flexible and decentralized organizational structure that streamlines the information communication among all business units in the organization, and facilitates decision making at the employees in all their managerial levels.
• Leaders of SMEs in Qatar should make a sufficient balance between closing and opening leadership behaviours in a suitable manner that acknowledge opening in thinking and decision making with a balanced monitoring and control of task’s implementation in such a way that realize employees’ satisfaction without minimizing work quality.

References

Alghamdi, F. (2018). Ambidextrous leadership, ambidextrous employee, and the interaction between ambidextrous leadership and employee innovative performance. Journal of Innovation and Entrepreneurship, 7(1), 1-14. https://doi.org/10.1186/s13731-018-0081-8
AlKhawaldeh, S. S. (2020). The ambidextrous leadership and its impact on organizational performance in the Jordanian government schools from the viewpoint of teachers. British Journal of Education, 8(2), 63-73. https://doi.org/10.37745/bje/vol8.no2.pp63-73.2020

Andriopoulos, C., & Lewis, M. (2009). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. Organization Science, 20(4), 696-717. https://doi.org/10.1287/orsc.1080.0406.

Barnes, J. W., Jackson, D. W., Hutt, M. D., & Kumar, A. (2006). The role of culture strength in shaping sales force outcomes. Journal of Personal Selling and Sales Management, 26(3), 255-270. https://doi.org/10.2753/PSS0885-313426030

Belak, J. (2016). Management and governance: organizational culture in relation to enterprise life cycle. Kybernetes, 45(4), 680-696. https://doi.org/10.1108/K-04-2014-0082

Birkinshaw, J., & Gupta, K. (2013). Clarifying the distinctive contribution of ambidexterity to the field of organization studies. The Academy of Management Perspectives, 27(4), 287–298. https://doi.org/10.5465/amp.2012.0167

Chen, C. J., & Huang, J. W. (2007). How organizational climate and structure affect knowledge management: The social interaction perspective. International Journal of Information Management, 27(2), 104-118. https://doi.org/10.1016/j.ijinfomgt.2006.11.001

Choi, H. J., & Ji-Hye, P. (2014). The relationship between learning transfer climates and innovation in public and private organizations in Korea. International Journal of Manpower, 35(7), 956-972. https://doi.org/10.1108/IJM-07-2012-0101

Coleman, N. J. (2016). An Exploration of the role of leadership behaviors and ambidexterity in online learning units. PhD Dissertation, George Washington University.

Denison, D., Nieminen, L., & Kotrba, L. (2012). Diagnosing organizational cultures: a conceptual and empirical review of culture effectiveness surveys. European Journal of Work and Organizational Psychology, 23(1), 145-161. https://doi.org/10.1080/1359432X.2012.713173.

E-Resources (2020). Ministry of Administrative Development. Labour and Social Affairs.

Ershadi, M. J., & Dehdaziz, R. E. (2019). Investigating the role of strategic thinking in establishing organizational excellence model. The TQM Journal, 31(4), 620-640. https://doi.org/10.1108/TQM-05-2018-0062

Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. Academy of Management Journal, 54(2), 393-420. https://doi.org/10.5465/AMJ.2011.60263120.

Gibson, C., & Birkinshaw, J. (2017). The antecedents, consequences, and mediating role of organizational ambidexterity. Academy of Management Journal, 47(2), 209-226. https://doi.org/10.5465/20159573

Halevi, M., Carmeli, A., & Brueller, N. (2015). The ambidexterity in SBUs: TMT behavioral integration and environmental dynamism. Human Resource Management, 54(S1), 223-238. https://doi.org/10.1002/hrm.21665

Havermans, L. A., Den Hartog, D. N., Keegan, A., & Uhl-Bien, M. (2015). Exploring the role of leadership in enabling contextual ambidexterity. Human Resource Management, 54(S1), 179-200. https://doi.org/10.1002/hrm.21764

Isoherranen, V., Karkkainen, M., & Kess, K. (2015). Operational excellence driven by process maturity reviews: A case study of the ABB corporation, Paper presented at International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore: Institute of Electrical and Electronics Engineers (IEEE), 1372-1376.

Iyigun, N. (2019). Creating business value and competitive advantage with social entrepreneurship. IGI Global, USA.

Junni, P., Sarala, R., Taras, V., & Tarba, S. (2013). Organizational ambidexterity and performance: A meta-analysis. Academy of Management Perspectives, 27(4), 299-312. https://doi.org/10.5465/amp.2012.0015

Kammerlander, N., Burger, D., Fust, A., & Fueglistaller, U. (2015). Exploration and exploitation in established small and medium-sized enterprises: The effect of CEOs’ regulatory focus. Journal of Business Venturing.
Kassem, R., Ajmal, M., Hussain, M., & Helo, P. (2017). Critical factors for culture of judicial excellence: Benchmarking study of Emirati courts. Benchmarking: An International Journal, 24(2), 341-358. https://doi.org/10.1108/BII-03-2016-004

Kassotaki, O. (2017). Ambidexterity and leadership: a multilevel analysis of the aerospace and defense organizations. PhD thesis, University of Warwick.

Kaupila, O. P., & Tempelaar, M. P. (2016). The social-cognitive underpinnings of employees’ ambidextrous behavior and the supportive role of group managers’ leadership. Journal of Management Studies, 53(6), 1019-1044. https://doi.org/10.1111/joms.12192

Ketkar, S., & Puri, R. (2017). Ambidextrous Human Resource Practices and Employee Performance. International Conference on Strategies in Volatile and Uncertain Environment for Emerging Markets. New Delhi.

Maria, G., & Maria, M. (2013). Driving human resources towards quality and innovation in a highly competitive environment. International Journal of Manpower, 34(8), 839-860. https://doi.org/10.1108/IJM-07-2013-0183

Martinez-Leon, I., & Martinez, J. (2011). The influence of organizational structure on organizational learning. International Journal of Manpower, 32(5/6), 537-566. https://doi.org/10.1108/01437721111158198.

Mohamed, M., Khalifa, J., Ameen, A., & Alshibani, A. (2018). Effect of Organizational Excellence and Employee Performance on Organizational Productivity with in Healthcare Sector in the UAE. Journal of Engineering and Applied Sciences 13(15), 6199-6210. https://doi.org/10.3923/jaesaci.2018.6199.621

Mom, T. J., Fourné, S. P., & Jansen, J. J. (2015). Managers’ work experience, ambidexterity, and performance: the contingency role of the work context. Human Resource Management, 54, 1-21. https://doi.org/10.1002/hrm.21663

Nenad’al, J., Vykydal, D., Waloszek, D. (2018). Organizational Excellence: Approaches, Models and Their Use at Czech Organizations. Quality Innovation Prosperity OIP Journal, 22 (2), 47-64. https://doi.org/10.12776/qip.v22i2.1129

Probst, G., Raisch, S., & Tushman, M. (2011). Ambidextrous leadership: Emerging challenges for business and HR leaders. Organizational Dynamics, 40(4), 326-334. https://doi.org/10.1016/j.orgdyn.2011.07.010

Raisch, S., & Hotz, F. (2010). Shaping the context for learning: Corporate alignment initiatives, environmental munificence and firm performance. ”, Chapters, in: Stuart Wall and Carsten Zimmermann and Ronald Klingebiel and Dieter Lange (ed), Strategic reconfigurations: Building dynamic capabilities in rapid innovation-based industries, 62–85. Cheltenham, UK: Edward Elgar Publishing Limited.

Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. (2009). Organizational ambidexterity: balancing exploitation and exploration for sustained performance. Organization Science, 20(4), 685-695. https://doi.org/10.1287/orsc.1090.0428

Rashid, S. A. (2012). Ambidextrous leaders in educational institutions: the interactive role of behavioral and cultural complexity. International Scientific Conference globalization of management in the era of knowledge, 15-17 December, 2012, Tripoli, Lebanon.

Rocha-Lona, l., Garza-Reyes, J. A., Lim, M. K., and Kumar, V. (2015, 3-5 March). Corporate Sustainability and Business Excellence. Paper presented at International Conference on Industrial Engineering and Operations Management (IEOM), Dubai, United Arab Emirates (UAE). Institute of Electrical and Electronics Engineers (IEEE). 1-7.

Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: ambidextrous leadership. The Leadership Quarterly, 22(5), 956-974. https://doi.org/10.1016/j.leaqua.2011.07.014

Schindler, A. (2015). Ambidextrous leadership: The role of flexibly switching between opening and closing leadership behaviors for team innovative outcome in the case of management consultancies. Master Thesis, University of Twente.

Shanil, M. (2010). The association between ambidexterity, strategic orientation and business performance in the financial services (Banking) sector. Unpublished Thesis, University of Pretoria.
Simsek, Z., Heavey, C., Veiga, J., & Souder, D. (2009). A typology for aligning organizational ambidexterity’s conceptualizations, antecedents and outcomes. *Journal of Management, 46*(5), 865-894. https://doi.org/10.1111/j.1467-6486.2009.00841.x

Táródy, D. (2016). Organizational ambidexterity as a new research paradigm in strategic management. *Vezetéstudomány-Budapest Management Review, 47*(5), 39-52. Retrieved from http://unipub.lib.uni-corvinus.hu/2363/1/VT_2016n5p39.pdf

Tuan, L. T. (2017). Reform in public organizations: the roles of ambidextrous leadership and moderating mechanisms. *Public Management Review, 19*(4), 518-541. https://doi.org/10.1080/14719037.2016.1195438

Tuncdogan, A., Van Den Bosch, F., & Volberda, H. (2015). Regulatory focus as a psychological micro-foundation of leaders’ exploration and exploitation activities. *The Leadership Quarterly, 26*(5), 838-850. https://doi.org/10.1016/j.leaqua.2015.06.004

Tung, F. C. (2016). Does transformational, ambidextrous, transactional leadership promote employee creativity? Mediating effects of empowerment and promotion focus. *International Journal of Manpower, 37*(8), 1250-1263. https://doi.org/10.1108/IJM-09-2014-0177

Tushman, M. L., & O’Reilly, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review, 38*(4), 8-30. Retrieved from: http://web.mit.edu/curlhan/www/docs/Articles/15341_Readings/Organizational_Learning_and_Change/Tushman_and_OReilly_1996_Ambidextrous_Organizations.pdf

Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *The Academy of Management Review, 29*(2), 222–240. doi: 10.5465/AMR.2004.12736080.

Verle, K., Markič, M., Kodrič, B., & Zoran, A. (2014). Managerial competencies and organizational structures. *Industrial Management and Data Systems, 114*(6), 922-935. https://doi.org/10.1108/IMDS-01-2014-0019

Wang, C., & Rafiq, M. (2014). Ambidextrous Organizational Culture, Contextual Ambidexterity and New Product Innovation: A Comparative Study of UK and Chinese High-tech Firms. *British Journal of Management, 25*, 58-76. https://doi.org/10.1111/j.1467-8551.2012.00832.x

Wright, P., Geroy, G., & Macphee, M. (2000). A human resource model for excellence in global organization performance. *Management Decision, 38*(1), 36-42. https://doi.org/10.1108/00251740010311816

Yang, H., & Atuahene-Gima, K. (2007). Ambidexterity in product innovation management: the direct and contingent effects on product development performance. Paper presented at the Annual Meeting of the Academy of Management, Philadelphia, PA.

Zheng, J., Wu, G., Xie, H., & Xu, H. (2017). Ambidextrous Leadership and Sustainability-Based Project Performance: The Role of Project Culture. *Sustainability, 9*(12), 1-24. https://doi.org/10.3390/su9122336