

INFLUENCE OF TRANSFORMATIONAL LEADERSHIP TO ORGANIZATIONAL LEARNING AMONG INDONESIAN VOCATIONAL SCHOOL (THE ROLE DYNAMIC CAPABILITY)

SUNDUSIAH¹, AGUS RAHAYU² and LILI ADI WIBOWO³

^{1,2,3} Faculty of Economics and Business Education, University Pendidikan Indonesia, Indonesia

Abstract

Organizational learning can not only be applied in companies but also in organizations, including vocational schools (SMK). The existence of Vocational Schools at this time has not been able to provide maximum contribution in the provision of quality human resources. For this reason, continuous learning is needed to be able to increase its competitive advantage. This study aims to examine the effect of transformational leadership and dynamic capability on organizational learning in Vocational High Schools (SMK) in Indonesia. The analytical technique used in this research is partial least square (PLS-SEM). The population in this study are 358 SMK in West Java Province, Indonesia. The intended respondent is the Principal of the SMK. The results of this study reveal that there is a positive influence either directly or through mediation of the variables studied on organizational learning.

Keywords: transformational leadership, organizational learning, vocational school

1 INTRODUCTION

Organizational learning has attracted the attention of researchers in the last few decades. Organizational learning (OL) has been considered as one of the strategic ways to secure long-term organizational success (Liao & Wu, 2009). Organizational learning is defined as an organization that can continuously improve its performance, as its members are committed and competent individuals who can learn and share knowledge at a superficial and substantial level for the organization (Firman et al., 2019). Facing today's highly dynamic environment, businesses must continue to learn to maintain their competitiveness. And, organizational learning will develop well based on well-structured knowledge in the organization. In other words, businesses can have organizational learning capabilities that underlie good individual learning (Nonaka & Takeuchi, 1995). Pilar et al. (2005) argue that knowledge, more specifically its acquisition or creation, along with its dissemination and integration within organizations; becomes a key strategic resource for organizational learning. Organizational learning is seen as a dynamic process based on knowledge, which implies moving between different levels of action, from the individual to the group level, and then to the organizational level and beyond (Crossan et al., 1999; Huber, 1991). To develop learning abilities, organizations must complete the knowledge management process well. Without knowledge management, an organization cannot develop personal or group learning skills (Garratt, 1990; Su et al., 2004).

Organizational learning can not only be applied in companies but also in organizations, including vocational schools (SMK). The existence of Vocational High Schools is currently not capable enough to provide maximum contribution in providing quality human resources. For this reason, continuous learning is needed to be able to increase its competitive advantage. To cope with current external opportunities and threats, it is argued that organizations must learn, that is, acquire new knowledge and skills that will improve their current and future performance (Child et al., 2005; DiBella & Nevis, 1998; Örtenblad, 2001; Salim & Sulaiman, 2011). According to Senge (2006) the success of an organization, including a school, is largely determined by its ability to develop its institution into a learning organization. The role of SMK in Indonesia is expected to be able to produce students who are ready to work, which is a challenge for the government.

From a historical perspective, organizational learning is recognized as an important element in the model of sustainable competitiveness (Giniuniene & Jurksiene, 2015). Management literature emphasizes the key role that organizational learning has influences increasing the company's competitive advantage (Jiménez-Jiménez & Sanz-Valle, 2011). Organizational Learning (OL) is a concept in a dynamic organizational environment and OL is a strategy for the success of the organization. To achieve and maintain a competitive advantage in a rapidly changing business environment, organizations must be able to increase their learning capacity and the ability to innovate is essential to create competitive advantage (Larsen & Lewis, 2007). Although the role of OL on performance has been widely studied and has had a positive impact, not many studies have revealed the role of variables that affect the implementation of OL in a company. Several recent studies have considered the role of Dynamic Capabilities and Strategic Leadership in OL implementation (Farzaneh et al., 2020; Vera & Crossan, 2004). Dynamic capabilities (DC) are considered necessary for organizations to adapt and renew themselves. They are developed through reconfiguration of resources to adjust or make changes and renew competencies (Teece, 1998). In general, the dynamic capability framework can be composed of strategic and operational processes (Güttel & Konlechner, 2009). The strategic process is mostly concerned with sensing and capturing new opportunities in the dynamic environment (Teece, 2007). Therefore this process determines the formation of corporate strategy (Güttel & Konlechner, 2009; Ridder, 2012). Given the concept of dynamic capabilities, organizational learning can be treated as a way of incorporating dynamic capabilities into the company's internal processes. Furthermore, there are very few studies on strategic leadership that discuss specifically the role of CEOs and superiors of the management team in implementing organizational learning in their companies (Vera & Crossan, 2004). Or in the case of this study, school leaders inspire and motivate teachers, and teachers introduce more innovative activities into their classrooms (Hsiao & Chang, 2011).

Leadership gives meaning to those within an institution by defining and supporting organizational values (Fidler 2003). A successful organization needs leadership and management but these need not be combined in one person. Both leadership and

management can be dispersed within an organization (Fidler 2003). Leadership leads to procedural changes that organizations face in a dynamic competitive environment and no doubt transformational leadership plays an important role in an organization's success. Transformational leadership style increases awareness of collective interests among organizational members and helps them to achieve common goals (Mutahar et al., 2015). Several researchers have proven the effect of organizational learning on improving organizational performance (Example: Akhtar et al., 2011; Liao & Wu, 2009; Sundusiah, 2021). Other researchers suggest that an effective strategy for maintaining and enhancing competitive advantage and firm performance is organizational learning (eg Mavondo et al., 2005; Senge, 2006; Sinkula et al., 1997). Research conducted by Shane & Venkataraman (2000) found that dynamic capabilities through mediating organizational learning processes are the main source of competitive advantage. Furthermore, research from Mahdi & Almsafir (2014) found that there was a significant positive effect of strategic leadership capability on sustainable competitive advantage in the academic field. Research conducted by Giniuniene & Jurksiene (2015) suggests that organizational learning is an intermediate concept in the relationship between dynamic capabilities and firm performance. Research conducted by Vera & Crossan (2004) states that both transformational and transactional leadership styles are effective in facilitating organizational learning, although in different situations. Several other studies have also proved that transformational leadership (Transformational Leadership) is positively associated with organizational learning (Asif, 2019; Che Wan Jasimah et al., 2013; Hsiao & Chang, 2011; Mutahar et al., 2015; Noruzy et al., 2013; Waruwu et al., 2020). Departing from the phenomenon that has been described previously, in this study the author wants to examine the effect of transformational leadership, dynamic capabilities on organizational learning.

1.1 Rationale of the Study

Organizational learning is a competency “in the organization” to maintain or improve performance based on experience (Mutahar et al., 2015). Crossan et al. (1999) see organizational learning as a process of change in thought and action, both individually and collectively, which is embedded and influenced by organizational institutions. The basic challenge of organizational learning, however, is the tension between assimilating new learning (exploration) and using what has been learned (exploitation). According to Vera & Crossan (2004) learning occurs at the individual, group, and organizational levels. At the organizational level, a leader is needed who can direct the process of gathering information and knowledge to become an advantage and shape an organization into organizational learning. According to Bass (1999) Transformational leadership forms teams and provides them with the necessary direction, energy, and support needed to

carry out organizational change and learning processes. Transformational leaders will be catalytic agents, advisors, and organizers, and trainers in organizational learning. Such a leadership style also allows the leader to force his members to learn, to become his main motivating force, and to offer whatever is necessary to overcome inner suspicions and external problems and barriers to institutionalizing learning in organizations (Senge et al., 1994). Transformational leadership ability is considered as one of the most important factors in developing organizational learning in companies (García-Morales et al., 2012). Concerning the educational context, leadership contributes to learning through the development of structural processes that determine the ability of schools to improve academic performance (Southworth, 2002) For example, decision-making abilities and actions for teachers and students are characteristics of leadership (Hallinger & Heck, 2011). Thus, school leadership creates favorable conditions for developing organizational learning and changing capacities (Robinson et al., 2008). Research conducted by Waruwu et al. (2020) shows that transformational leadership has a positive and significant effect on organizational learning.

The definition of dynamic capabilities shows the importance of organizational learning, which is related to the accumulation process, the pilot process, the coordination process, and the deployment process. However, the concept of dynamic capabilities is broad enough to provide room for different and competing interpretations of phenomena. Dynamic capabilities can be thought of as the company's ability to make changes to a volatile environment and productively use existing resources to create new configurations of routines and resources. (Giniuniene & Jurksiene, 2015). Organizational learning can be treated as a way to incorporate dynamic capabilities into the company's internal processes. Dynamic capabilities (DC) are considered necessary for organizations to adapt and renew themselves (Souza & Takahashi, 2019). Eisenhardt & Martin (2000) support the above idea and suggest that dynamic abilities become more prominent through a learning process that generates new knowledge. Likewise with the research conducted by Farzaneh et al. (2020) demonstrated that OL is positively, significantly associated with DC, as well as the dimensions of learning, integrating, and reconfiguring.

Teece (2009) identified three DC activities as sensing, seizing, and reconfiguration. When the founder of the company thought of taking advantage of their activities, he shared his ideas with strategic managers, and then with professors, playing a key role in these activities (Souza & Takahashi, 2019). The procedural nature of DC refers to the role of actors during this process (Kurtmollaiev, 2020; Teece, 2012). The process of interpreting and interacting managers between individuals during periods of market monitoring and decision making enables the reduction of uncertainty and collectively constructing meaning around reality, through common sense (Maitlis & Christianson, 2014; Pandza & Thorpe, 2009; Souza & Takahashi, 2019; Thomas et al., 1993; Weick et al., 2005). In general, the dynamic capability framework can be composed of strategic and operational processes (Güttel & Konlechner, 2009). The strategic process is mostly concerned with sensing and capturing new opportunities in a dynamic environment (Teece, 2007).

Therefore, these processes determine the formation of corporate strategy (Güttel & Konlechner, 2009; Ridder, 2012). To implement dynamic capabilities, a leadership role is needed in carrying out the company's strategic functions. Leadership theory shows that leadership effectiveness depends on the organizational context (Asif, 2020). However, an understanding of the role of leadership in organizational learning may not be complete without considering contextual factors. Therefore, the role of DC in influencing the organizational learning process deserves to be explored.

1.2 Objectives of the Study

The research aims to investigate these research objectives:

1. Overview of Positional Advantages at Vocational Schools Organizing the Center of Excellence in West Java including Environmental Turbulence, Strategic Leadership, Organizational Learning Capability, Innovation and Collaborative Partnerships that influence it
2. The Effect of Environmental Turbulence on Organizational Learning Capability
3. The Influence of Strategic Leadership on Organizational Learning Capability
4. The Influence of Environmental Turbulence and Organizational Learning Capability on Innovation in Vocational High Schools Organizing the Center of Excellence in West Java
5. The Influence of Strategic Leadership and Organizational Learning Capability on Collaborative Partnerships at Vocational Schools Organizing the Center of Excellence in West Java
6. The Influence of Organizational Learning Capability and Innovation on Positional Advantages at Vocational High Schools Organizing Excellence Centers in West Java
7. The Effect of Organizational Learning Capability and Collaborative Partnership on Positional Advantages at Vocational High Schools Organizing Excellence Centers in West Java

1.3 Significance of the Study

This research is expected to provide benefits both theoretically and practically as follows:

1. Contribution in general theoretical aspects related to the study of management science, especially strategic management related to positional advantage, innovation, collaborative partnerships, organizational learning capability, environmental turbulence, and strategic leadership. This research is expected to add to the study of science on how to improve the performance of SMK in Indonesia.

2. Contribution in practical aspects in general related to the study of management science, especially strategic management related to positional advantage, innovation, collaborative partnerships, organizational learning capability, environmental turbulence, and strategic leadership. This research is expected to add to the study of science on how to improve the performance of SMK in Indonesia.

3. This research is expected to become information and the basis for carrying out further research related to positional advantage, innovation, collaborative partnership, organizational learning capability, environmental turbulence, and strategic leadership. This research is expected to add to the study of science on how to improve the performance of SMK in Indonesia.

2 LITERATURE REVIEW

2.1 Organizational Learning (OL)

An organization's ability to identify, assimilate, and exploit knowledge from external sources reflects the organization's "absorbent capacity" (Cohen & Levinthal, 1990). The ability to learn not only involves the capacity to recognize new information, assimilate and apply it for new purposes, but also involves processes that are used offensively and defensively to improve the fit between the organization and its environment (Boal, 2015). In today's rapidly changing economic conditions and business competition, many organizations are trying to survive and stay competitive. To develop and perform, organizational learning (OL) has been considered as one of the strategic ways to secure long-term organizational success (Liao & Wu, 2009). Organizational learning is seen as a dynamic process based on implicit knowledge that moves between different levels of action, from the individual to the group level, and then to the organizational level (Crossan et al., 1999; Huber, 1991). To achieve and maintain a competitive advantage in a rapidly changing business environment, organizations must be able to increase their learning capacity (Varela, 1997). There is no general definition of organizational learning that commands widespread acceptance (Miller, 1996). This is due to the influence of various perspectives and disciplines that lead to a lack of consensus in understanding. Learning as an ability is a multidimensional construct that involves processing knowledge for change and improvement (Jerez-Gomez et al., 2005). Based on this, it is proposed that an explanation of an organization's ability to learn can be made through two dimensions that underlie the concept: what is learned (knowledge) and how it is learned (learning process) (Lopez et al., 2004). Senge (1990) describes learning as a means to reach the human heart. From a management perspective, several studies distinguish different types and levels of learning. For example, Fiol & Lyles (1985), distinguishes between higher and lower levels of learning. Senge (1990) distinguishes adaptive learning from generative learning. In addition, Dodgson (1993) identified strategic and tactical learning. Senge (1990) adaptive learning was compared with Fiol & Lyles (1985) low-level learning and Argyris & Schön (1997) single-loop learning. This level of learning leads to the

development of some basic associations of behavior and outcomes that are often short-term oriented, and take place within an organizational context (Fiol & Lyles, 1985). Companies that can learn have a better chance of sensing events and trends in the market (Day, 2000; Sinkula et al., 1997; Tippins & Sohi, 2003). As a result, learning organizations are typically more flexible and quick to respond to new challenges than competitors (Day, 2000; Slater & Narver, 1995), which enables firms to maintain long-term competitive advantages (Dickson, 1996). The measurement indicators of organizational learning are the acquisition of technology, the process of new development, learning something new, managerial and organizational, knowledge and skills, increasing knowledge for efficiency, and the ability to find solutions (Firman et al., 2019).

2.2 Transformational Leadership (TL)

The leadership style was first introduced by Bass & Bass Bernard (1985) through a transactional/ transformational leadership framework. The Bass framework was developed in a larger organizational context and has been successfully applied to studies of top managers (Vera & Crossan, 2004). Transformational leadership behavior reflects the role of the open system (innovator and broker) and human relations model (facilitator and mentor) defined by Quinn (1988). Seaver (2010) defines transformational leadership as a leadership style in which one or more people engage with others in such a way that leaders and followers elevate each other to higher levels of motivation and morality. This leadership style occurs when leaders inspire an atmosphere of trust that results in employee performance exceeding expectations. Transformational leaders have charisma, inspiration, intellectual stimulation, individual consideration of employees and the leader's ability to inspire trust seems to be one of the central components in the success of this leadership style (Noruzy et al., 2013).

2.3 Dynamic Capabilities (DC)

Some researchers focus their attention on the dynamic nature of abilities, while others emphasize the antecedents and outcomes of the concept. It is agreed that the concept of dynamic capability has been largely developed under the influence of two major papers an Eisenhardt & Martin (2000); Teece (1998) (Giniuniene & Jurksiene, 2015). (Teece, 1998) defines Dynamic Capabilities as the company's ability to integrate, build, and reconfigure internal and external competencies to cope with a rapidly changing environment. DC is formed through three types of activities, namely environmental monitoring (sensing), identifying opportunities (seizing), and reconfiguring resources (reconfiguring) (Teece, 1998). Eisenhardt & Martin (2000) understand dynamic capabilities as a specific strategic process. Furthermore, Helfat et al. (2009) defined DC as an organization's ability to build, expand and adapt its resource base in response to environmental changes. Organizations competing in today's volatile marketplace need to

not only leverage their resources but also develop new technologies to meet the needs of their customers through dynamic capabilities. Therefore, DC fulfills an important role in the growth, survival, and competitiveness of enterprises.

3 METHODOLOGY

3.1 Subjects

The population in this study was 358 SMK in West Java, Indonesia. The intended respondents were 186 Principals of Vocational Schools in West Java. Data was collected through a survey that was sent via email to respondents. Data collection was carried out from January to October 2020.

3.2 Research Design and Instruments

To measure organizational learning, an indicator adapted from Jiménez-Jiménez & Sanz-Valle (2011) is used which consists of 4 dimensions with 13 indicators. To measure transformational leadership used indicators adapted from Vera & Crossan (2004) which consists of 4 dimensions with 12 indicators. To measure dynamic capability, an indicator adapted from Farzaneh et al. (2020) consists of 3 dimensions with 8 indicators. Respondents were asked to fill in their level of agreement with 33 statements using 5 Likert scales.

3.3 Data Collection Procedures

Google Form was used as a tool to formulate a questionnaire and collect the data. It was forwarded to the colleagues and acquaintances via emails or WhatsApp. The analytical technique used in this study is partial least square (PLS-SEM) to estimate the structural equation model (Chin, 1998; Hair et al., 2017). PLS-SEM has proven to be very useful for analyzing moderate to very complex models with relatively small sample sizes (Reinartz et al., 2009).

3.4 Hypothesis of the Research

Hypothesis testing is done by looking at the probability value and its t-statistics. For probability values, the t-table value for 5% alpha is 1.96. So, the criteria for acceptance of the hypothesis is when $t\text{-statistics} > t\text{-table}$. This test is intended to test the hypothesis which consists of the following 3 hypotheses:

H₁ : There is a positive and significant effect between transformational leadership and organizational learning.

H₂ : There is a positive and significant effect between dynamic capabilities and organizational learning.

H₃ : There is a positive and significant influence between Transformational leadership and Organizational learning through Dynamic capabilities.

3.5 Limitations of the Study

There are some limitations in this study that can be used for further research. The first is related to the research subject. This study examined 186 vocational schools in West Java. Second, the study aims to confirm the research model, so it would be interesting if further research could use another approach, for example, to compare how this model is applied in different countries with different education systems. Third, the variables involved in this study use transformational leadership, dynamic capability, and organizational learning variables. This is intended to reveal the relationship between the three variables. Future research can consider continuing to organizational performance, complementing the antecedent factors of organizational learning in educational institutions.

4 RESULT ANALYSIS

4.1 Evaluate the Outer Model

At this stage, testing is carried out using the SmartPLS version 3.0 program. And the validity test conducted is constructing validity. Testing construct validity can be done by paying attention to the strength of the correlation between constructs and construct-forming indicators, as well as their weak relationship with other constructs. Construct validity consists of two parts, namely convergent validity and discriminant validity.

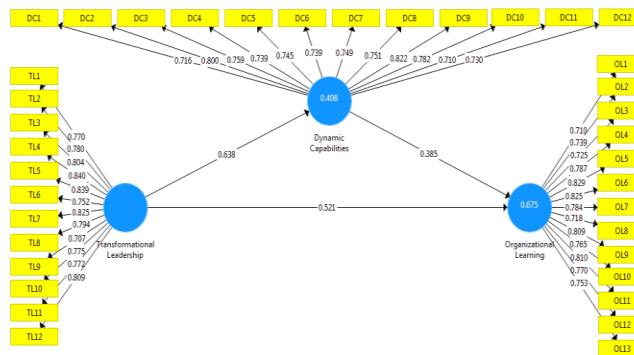


Figure 4.1. Outer Model

a. Validity test

Convergent Validity testing of each construct indicator according to Chin in Ghozali & Latan (2015), an indicator is said to be valid if the value is greater > 0.5.

1) Convergent Validity

Convergent Validity Testing of each indicator construct according to Chin in Ghozali and

Latan (2015), an indicator is considered valid if the value is greater than $> 0,5$. Convergent validity can be seen from the loading factor for each construct indicator. The rule of thumb used to assess convergent validity is that the loading factor value must be greater than 0.5. Based on the results of data processing conducted by the author, it is known that all loading factor values are above 0.5, so it can be concluded that all indicators in this study are valid.

Based on the results of the calculations carried out by the PLS Algorithm for the indicators in table 4.1 obtained the AVE value and the AVE square value as shown in table 4.1

Tabel 4.1 Results of Average Variance Extracted (AVE) Value

Variabel	Average Variance Extracted (AVE)	Keterangan
<i>Transformational Leadership</i>	0.624	Valid
<i>Dynamic Capabilities</i>	0.569	Valid
<i>Organizational Learning</i>	0.596	Valid

Source: SmartPLS Data Processing Results (2021)

From the table above, the results show that the AVE value for all variables meets the requirements value, which is above 0.5. The lowest AVE value is found in the Dynamic Capabilities variable with a value of 0.569. By paying attention to the loading factor value and AVE value, the data from this study can be declared to have met the requirements of the convergent validity test.

2) Discriminant Validity

Another method for assessing discriminant validity is to compare the value of the cross loadings for each construct with the correlation between the construct and the other constructs in the model. The discriminant validity model.

The tests carried out, it shows that the cross loading value of each item against its construct is greater than the loading value with other constructs. From these results, it can be concluded that there is no problem with discriminant validity.

b. Reliability Test

1) Composite Reliability (CR)

After testing the construct validity, the next test is the construct reliability test which is measured by two criteria, namely Composite Reliability (CR) and Cronbach's Alpha (CA)

from the indicator block that measures the CR construct used to display good reliability. A construct is declared reliable if the composite value is reliable > 0.7 .

Table 4.2 Composite Reliability (CR)

Variabel	Composite Reliability	Keterangan
<i>Transformational Leadership</i>	0.952	Reliable
<i>Dynamic Capabilities</i>	0.940	Reliable
<i>Organizational Learning</i>	0.950	Reliable

Source: SmartPLS Data Processing Results (2021)

Based on table 4.2, the results of the composite reliability test show a value of > 0.7 , which means that the value on each instrument is reliable.

2) Cronbach's Alpha

A construct is declared reliable if the composite value is reliable or Cronbach's Alpha > 0.6 .

Table 4.3 Cronbach's Alpha

Variabel	Cronbach's Alpha	Keterangan
<i>Transformational Leadership</i>	0.945	Reliable
<i>Dynamic Capabilities</i>	0.932	Reliable
<i>Organizational Learning</i>	0.943	Reliable

Source: SmartPLS Data Processing Results (2021)

Based on table 4.3, the Cronbach alpha test results show a value > 0.7 , which means that the value on each instrument is reliable.

4.2 Evaluation of the Structural Model (Inner Model)

After evaluating the model and it is found that each construct has met the requirements of Convergent Validity, Discriminant Validity, and Composite Reliability, then what follows is an evaluation of the structural model which includes testing the path coefficient, t , and R^2 .

The inner model (inner relation, structural model, and substantive theory) describes the relationship between latent variables based on substantive theory. The structural model is evaluated using the R-square for the dependent construct, the Stone-Geiser Q-square test for the relevant predictive. The value of R^2 can be used to assess the effect of certain independent latent variables, whether the dependent latent variable has a substantive

effect (Ghozali, 2014). The higher the R^2 value, the greater the ability of the independent latent variable to explain the dependent latent variable. R^2 results of 0.67, 0.33, and 0.19 indicate that the models are "good", "moderate", and "weak" (Ghozali, 2014).

Table 4.4 R-squared coefficients

	R Square
<i>Dynamic Capabilities</i>	0.408
<i>Organizational Learning</i>	0.675

Source: SmartPLS Data Processing Results (2021)

Based on table 4.4, it is obtained that the R-Square value for the variable Dynamic Capabilities of 0.408 this means that 40.8% of the variation or alteration Dynamic Capabilities influenced by Transformational Leadership, while the remaining 59.2% is explained by other causes.

Based on this, the results of the calculation of R^2 indicate that R^2 is moderate. Based on table 4.4, the R-Square value for the variable Organizational Learning for 0.675 this means that 67.5% of the variation or change Organizational Learning is affected by the Transformational Leadership and Dynamic Capabilities and, while the remaining 32.5% is explained by other causes. Based on this, the results of the calculation of R^2 show that R^2 is good.

Besides looking at the R-square value, the model is also evaluated by looking at the predictive relevance Q-square for the constructive model. The Q-square measures how well the observed values are generated by the model and also the parameter estimates. The magnitude of Q^2 has a range value of $0 < Q^2 < 1$, is equivalent to the total coefficient of determination in the path analysis. The value of $Q^2 > 0$ indicates that the model has predictive relevance, on the contrary, if the value of $Q^2 \leq 0$ indicates that the model has less predictive relevance.

Calculation of Q^2 total variable Organizational Learning is done with the formula:

$$Q^2 = 1 - [(1 - R^2) * (1 - R^2)]$$

$$Q^2 = 1 - [(1 - 0.408) * (1 - 0.675)]$$

$$Q^2 = 1 - 0.192$$

$$Q^2 = 0.808$$

This value indicates that the information contained in the data 80,8% can be explained by the model, while 19,2% is explained by other variables (which are not contained in the model), as well as an element of error.

4.3 Bootstrapping Results

In PLS, testing of each relationship is carried out using a simulation with the bootstrapping method of the sample. This test aims to minimize the problem of abnormalities in research. The test results with the PLS bootstrapping method are as follows:

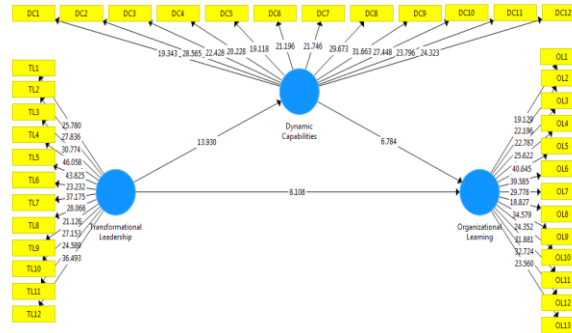


Figure 4.2 Inner Model

Source: SmartPLS Data Processing Results (2021)

Meanwhile, the calculation results can be seen based on the direct effect below.

4.4 Direct Effect Analysis

Table 4.5 Direct Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
<i>Transformational Leadership</i> -> <i>Organizational Learning</i>	0.521	0.518	0.064	8.108	0.000
<i>Dynamic Capabilities</i> -> <i>Organizational Learning</i>	0.385	0.387	0.057	6.784	0.000

Source: SmartPLS Data Processing Results (2021)

Based on the table above shows the results of the PLS calculation which states the direct influence between variables. It is said that there is a direct effect if the value of T Statistics > 1.96 and said to have no effect if T Statistics < 1.96. Based on table 4.5 it can be stated as follows:

1. The Transformational Leadership variable has a significant effect on the Organizational Learning variable with a T Statistics value of 8.108 > 1.96.
2. The Dynamic Capabilities variable has a significant effect on the Organizational Learning variable with a T Statistics value of 6.784 > 1.96.

4.5 Influence Not Direct

Table 4.6 Effect Not Direct

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
<i>Transformational Leadership - > Dynamic Capabilities -> Organizational Learning</i>	0.246	0.248	0.036	6.795	0.000

Source: SmartPLS Data Processing Results (2021)

Based on table 4.6 shows the results of calculation PLS stating the effect is not directly between variables. From the calculation results it can be seen that the Transformational Leadership variable has a significant effect on the Organizational Learning variable through Dynamic Capabilities with a T Statistics value of $6.795 > 1.96$.

4.6 Hypothesis Testing

Hypothesis testing is done by looking at the probability value and its t-statistics. For probability values, the t-table value for 5% alpha is 1.96. So the criteria for acceptance of the hypothesis is when t-statistics $>$ t-table. This test is intended to test the hypothesis which consists of the following 3 hypotheses:

Hypothesis Test 1

H₁ : There is a positive and significant effect between transformational leadership and organizational learning.

Based on table 4.5 with a value of T-statistics 8.108 which means $>$ 1.96 then H₁ accepted, which means that Transformational leadership have influence positively and significantly to Organizational Learning, meaning that changes in the value of Transformational leadership influence the direction of the change of Organizational Learning, or in other words when Transformational leadership increases, there will be an increase in Organizational Learning and statistically has a significant effect. Based on the results of data processing by SmartPLS version 3.0 is known that the path coefficient value of Transformational Leadership on Organizational Learning for 0521, which means Transformational leadership was positively related to Organizational Learning with the degree of closeness of relationship that was.

Hypothesis Test 2

H₂ : There is a positive and significant effect between dynamic capabilities and organizational learning.

Based on table 4.5 with a value of T-statistics 6.784 which means > 1.96 then H₂ is received, which means that the Dynamic Capabilities influence positively and significantly to Organizational Learning, meaning that changes in the value of Dynamic Capabilities influence the direction of the change of Organizational Learning, or in other words when the Dynamic Capabilities increase, there will be an increase in Organizational Learning and statistically has a significant effect. Based on the results of data processing by SmartPLS version 3.0 is known that the path coefficient Dynamic Capabilities to Organizational Learning for 0385, which means the Dynamic Capabilities positively related to Organizational Learning with the degree of closeness of relationship that was.

Hypothesis Test 3

H₃ : There is a positive and significant influence between Transformational leadership and Organizational learning through Dynamic capabilities.

Based on table 4.5 with a value of T-statistics 6.795 which means > 1.96 then H₃ is received, which means that Transformational Leadership have influence positively and significantly to the Organizational Learning through Dynamic capabilities, meaning that changes in the value of Dynamic Capabilities influence the direction of the change in effect between Transformational Leadership and Organizational Learning, or in other words, if Dynamic Capabilities increase, there will be an increase in the influence of Transformational leadership on Organizational Learning and statistically have a significant effect. Based on the results of data processing by SmartPLS version 3.0 is known that the path coefficient value of Transformational Leadership on Organizational Learning through Dynamic capabilities by 0.246, which means the Dynamic capabilities able to positively influence mediate between Transformational Leadership and Organizational Learning.

5 DISCUSSION

Organizational Learning is one of the important capabilities needed in the context of a knowledge-based economy for organizations to gain competitive advantage, win the competition, and have long-term organizational success (Liao & Wu, 2009; Day, 2000; Slater & Narver, 1995; Dickson, 1996). Organizations must also learn to be able to respond to the external environment to improve their performance (Child et al., 2005;

DiBella & Nevis, 1998; Örtenblad, 2001; Salim & Sulaiman, 2011). This research contributes in uncovering important factors that influence Organizational Learning as a capability for the case of educational institutions. The results of the study reveal that Organizational Learning is influenced by Transformational Leadership and Dynamic Capability. These two factors have a substantial effect ($R^2 = 0.675$) (Ghozali, 2014). While the model in this study proved fit ($Q^2 = 0.808$). Transformational Leadership has been shown to have a positive effect on Organizational Learning. These findings support the study of García-Morales et al. (2012) in general and more specifically in the context of educational institutions support several findings (Southworth, 2002); Robinson et al., 2008; Waruwu et al., 2020). The next finding from this research is that Dynamic Capability is proven to have a positive effect on Organizational Learning. This finding supports the study of Farzaneh et al. (2020). The third finding is that that Dynamic Capability proven to mediate the effect of Transformational Leadership on Organizational Learning. This fills a research gap related to the relationship between Transformational Leadership and Dynamic Capability in terms of Organizational Learning. Transformational Leadership has a greater direct effect on Organizational Learning ($\beta = 0.521$) than indirectly through Dynamic Capability ($\beta = 0.246$).

The findings of this study have managerial implications for several things. First, Organizational Learning is proven to be influenced by leadership, especially Transformational Leadership. This emphasizes the leader or school structure to use a Transformational Leadership style approach. This could be due to a more open environment, so that in an effort to create learning at the organizational level, it is not only driven by transactional incentives but also self-development and transformational matters. The second implication is that school leaders or structures must pay attention to their Dynamic Capabilities. This means that sensitivity skills are needed to reconfigure all levels of schools in order to be able to create learning at the organizational level. This is relevant because of the current dynamic environmental conditions, so that relevant Dynamic Capability is needed for schools. The third implication is that although it is mediated by Dynamic Capability, Transformational Leadership has a greater direct influence on Organizational Learning. Thus, school leaders or structural members have a major role in efforts to create or improve Organizational Learning. This does not mean that Dynamic Capability does not need to be considered, but the main factor that needs to be encouraged is Transformative Leadership.

6 RECOMMENDATIONS/SUGGESTIONS

Apart from the contribution made in this research, there are some limitations in this study that can be used for further research.

The first is related to the research subject. This study examined 186 vocational schools in West Java. It will be more meaningful if the research population can be expanded and consider the type of school, between vocational and non-vocational.

Second, the study aims to confirm the research model, so it would be interesting if further research could use another approach, for example, to compare how this model is applied in different countries with different education systems.

Third, the variables involved in this study use transformational leadership, dynamic capability, and organizational learning variables. This is intended to reveal the relationship between the three variables. Future research can consider continuing to organizational performance, complementing the antecedent factors of organizational learning in educational institutions.

CONCLUSION

Organizational learning is one of the important capabilities needed in the context of a knowledge-based economy for organizations to gain competitive advantage, win the competition, and have long-term organizational success. This research contributes to uncovering important factors that influence organizational learning as a capability for the case of educational institutions. The results of the study reveal that organizational learning is influenced by transformational leadership and dynamic capability. The direct effect of transformational leadership is proven to be greater than its effect through dynamic capability on organizational learning.

REFERENCES

- 1) Akhtar, Is., Arif, A., Rubi, E., & Naveed, S. (2011). *Impact of Organizational Learning on Organizational Performance*. 3(4), 424–428.
- 2) Argyris, C., & Schön, D. A. (1997). Organizational learning: A theory of action perspective. *Reis*, 77/78, 345–348.
- 3) Asif, M. (2019). Exploring the role of exploration/exploitation and strategic leadership in organizational learning. *International Journal of Quality and Service Sciences*, 11(3), 409–423. <https://doi.org/10.1108/IJQSS-04-2018-0038>
- 4) Asif, M. (2020). Strategic leadership and ambidextrous learning: Exploring the role of dynamic

- capabilities and intellectual capital. *International Journal of Quality and Service Sciences*, 12(1), 1–14. <https://doi.org/10.1108/IJQSS-03-2019-0034>
- 5) Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9–32.
 - 6) Bass, B. M., & Bass Bernard, M. (1985). *Leadership and performance beyond expectations*.
 - 7) Boal, K. B. (2015). *Strategic Leadership, Organizational Learning and Network Ties*.
 - 8) Che Wan Jasimah, W. M. R., Huang, H., Hashem Salarzadeh, J., Farihah, A. K., & Radu, S. (2013). The Relationship Among Transformational Leadership, Organizational Learning, and Organizational Innovation: A Case Study in Asian Manufacturing Food Industry Literature Review. Linkage between TI and OI Linkage between OI and Oi. *Asian Journal of Empirical Research*, 3(8), 1051–1060.
 - 9) Child, J., Faulkner, D., Tallman, S., & Tallman, S. B. (2005). *Cooperative strategy*. Oxford University Press, USA.
 - 10) Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In *Modern methods for business research*.
 - 11) Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 128–152.
 - 12) Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24(3), 522–537.
 - 13) Day, G. S. (2000). The Market Driven Organization. *Direct Marketing*, 62(10), 20–24.
 - 14) DiBella, A. J., & Nevis, E. C. (1998). *How organizations learn: An integrated strategy for building learning capability*. Jossey-Bass.
 - 15) Dickson, P. R. (1996). The static and dynamic mechanics of competition: a comment on Hunt and Morgan's comparative advantage theory. *Journal of Marketing*, 60(4), 102–106.
 - 16) Dodgson, M. (1993). Organizational learning: a review of some literatures. *Organization Studies*, 14(3), 375–394.
 - 17) Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105–1121.
 - 18) Farzaneh, M., Ghasemzadeh, P., Nazari, J. A., & Mehralian, G. (2020). Contributory role of dynamic capabilities in the relationship between organizational learning and innovation performance. *European Journal of Innovation Management*, 24(3), 655–676. <https://doi.org/10.1108/EJIM-12-2019-0355>
 - 19) Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. *Academy of Management Review*, 10(4), 803–813.
 - 20) Firman, F., Yuniza, N., & Thabrani, G. (2019). *Effect Of Organizational Learning And Innovation On Competitive Advantage Of Higher Education In Padang City*. 64, 658–666. <https://doi.org/10.2991/piceeba2-18.2019.50>
 - 21) Garratt, B. (1990). *Creating a learning organisation: A guide to leadership, learning and development*. Director Books.
 - 22) Ghozali, I. (2014). *Alternative Structural Equation Modeling Method with Partial Least Squares (PLS)*. Semarang: Diponegoro University Publishing Agency.
 - 23) Giniuniene, J., & Jurksiene, L. (2015). Dynamic Capabilities, Innovation and Organizational Learning:

- Interrelations and Impact on Firm Performance. *Procedia - Social and Behavioral Sciences*, 213(1997), 985–991. <https://doi.org/10.1016/j.sbspro.2015.11.515>
- 24) Güttel, W. H., & Konlechner, S. W. (2009). Continuously hanging by a thread: Managing contextually ambidextrous organizations. *Schmalenbach Business Review*, 61(2), 150–172.
 - 25) Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Second Edition. In *California: Sage*.
 - 26) Hallinger, P., & Heck, R. H. (2011). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. In *International handbook of leadership for learning* (pp. 469–485). Springer.
 - 27) Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2009). *Dynamic capabilities: Understanding strategic change in organizations*. John Wiley & Sons.
 - 28) Hsiao, H. C., & Chang, J. C. (2011). The role of organizational learning in transformational leadership and organizational innovation. *Asia Pacific Education Review*, 12(4), 621–631. <https://doi.org/10.1007/s12564-011-9165-x>
 - 29) Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88–115.
 - 30) Jerez-Gomez, P., Céspedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning capability: a proposal of measurement. *Journal of Business Research*, 58(6), 715–725.
 - 31) Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408–417. <https://doi.org/10.1016/j.jbusres.2010.09.010>
 - 32) Kurtmollaiev, S. (2020). Dynamic capabilities and where to find them. *Journal of Management Inquiry*, 29(1), 3–16.
 - 33) Larsen, P., & Lewis, A. (2007). How award-winning SMEs manage the barriers to innovation. *Creativity and Innovation Management*, 16(2), 142–151.
 - 34) Liao, S., & Wu, C. (2009). The Relationship among Knowledge Management, Organizational Learning, and Organizational Performance. *International Journal*, 11(2), 177–184. <https://doi.org/10.1108/09696470410521628>
 - 35) Lopez, S. P., Peon, J. M. M., & Ordás, C. J. V. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of Knowledge Management*.
 - 36) Mahdi, O. R., & Almsafir, M. K. (2014). The Role of Strategic Leadership in Building Sustainable Competitive Advantage in the Academic Environment. *Procedia - Social and Behavioral Sciences*, 129, 289–296. <https://doi.org/10.1016/j.sbspro.2014.03.679>
 - 37) Maitlis, S., & Christianson, M. (2014). Sensemaking in organizations: Taking stock and moving forward. *Academy of Management Annals*, 8(1), 57–125.
 - 38) Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: Relationship with innovation, human resource practices and performance. *European Journal of Marketing*.
 - 39) Miller, D. (1996). A preliminary typology of organizational learning: Synthesizing the literature. *Journal of Management*, 22(3), 485–505.
 - 40) Mutahar, A. Y., Rasli, A. M., & Al-Ghazali, B. M. (2015). International Journal of Economics and Financial Issues Relationship of Transformational Leadership, Organizational Learning and

Organizational Performance. *International Journal of Economics and Financial Issues*, 5(5), 10–11.
<http://www.econjournals.com>

- 41) Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press.
- 42) Noruzy, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: An empirical investigation of manufacturing firms. *International Journal of Advanced Manufacturing Technology*, 64(5–8), 1073–1085. <https://doi.org/10.1007/s00170-012-4038-y>
- 43) Örténblad, A. (2001). On differences between organizational learning and learning organization. *The Learning Organization*.
- 44) Pandza, K., & Thorpe, R. (2009). Creative search and strategic sense-making: missing dimensions in the concept of dynamic capabilities. *British Journal of Management*, 20, S118–S131.
- 45) Quinn, R. E. (1988). *Beyond rational management: Mastering the paradoxes and competing demands of high performance*. Jossey-Bass.
- 46) Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*. <https://doi.org/10.1016/j.ijresmar.2009.08.001>
- 47) Ridder, A.-K. (2012). External dynamic capabilities: creating competitive advantage in innovation via external resource renewal. *Academy Management Proceeding*, 1–48.
- 48) Salim, I. M., & Sulaiman, M. (2011). Organizational Learning, Innovation and Performance: A Study of Malaysian Small and Medium Sized Enterprises. *International Journal of Business and Management*, 6(12), 118–125. <https://doi.org/10.5539/ijbm.v6n12p118>
- 49) Seaver, D. S. (2010). *Effect of transformational leadership in a cross-cultural organization: A case study*. Capella University.
- 50) Senge, P. M. (1990). *The art and practice of the learning organization*. New York: Doubleday.
- 51) Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. Currency.
- 52) Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- 53) Sinkula, J. M., Baker, W. E., & Noordewier, T. (1997). A framework for market-based organizational learning: Linking values, knowledge, and behavior. *Journal of the Academy of Marketing Science*, 25(4), 305–318.
- 54) Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59(3), 63–74.
- 55) Southworth, G. (2002). Instructional leadership in schools: Reflections and empirical evidence. *School Leadership & Management*, 22(1), 73–91.
- 56) Souza, C. P. da S., & Takahashi, A. R. W. (2019). Dynamic capabilities, organizational learning and ambidexterity in a higher education institution. *Learning Organization*, 26(4), 397–411. <https://doi.org/10.1108/TLO-03-2018-0047>
- 57) Su, K.-J., Huang, L.-C., & Hsieh, H.-L. (2004). The development of a knowledge flow paradigm in engineering education: Empirical research in Taiwanese universities. *World Transactions on*

Engineering and Technology Education, 3(1), 125–128.

- 58) Teece, D. J. (1998). Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assets. *California Management Review*, 40(3), 55–79.
- 59) Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- 60) Teece, D. J. (2009). *Dynamic capabilities and strategic management: Organizing for innovation and growth*. Oxford University Press on Demand.
- 61) Teece, D. J. (2012). Dynamic capabilities: Routines versus entrepreneurial action. *Journal of Management Studies*, 49(8), 1395–1401.
- 62) Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic sensemaking and organizational performance: Linkages among scanning, interpretation, action, and outcomes. *Academy of Management Journal*, 36(2), 239–270.
- 63) Tippins, M. J., & Sohi, R. S. (2003). IT competency and firm performance: is organizational learning a missing link? *Strategic Management Journal*, 24(8), 745–761.
- 64) Varela, L. M. (1997). *Building the learning organization: a systems approach to quantum improvement and global success*. Taylor & Francis.
- 65) Vera, D., & Crossan, M. (2004). Strategic Leadership and Organizational Learning. *The Academy of Management Review*, 29(2), 222. <https://doi.org/10.2307/20159030>
- 66) Waruwu, H., Asbari, M., Purwanto, A., Nugroho, Y. A., Fikri, M. A. A., Fauji, A., Shobihi, A. W. I., Hulu, P., Sudyono, R. N., Agistiawati, E., & Dewi, W. R. (2020). The Role of Transformational Leadership, Organizational Learning and Structure on Innovation Capacity: Evidence from Indonesian Private Schools. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 378–397. <https://ummaspul.e-journal.id/Edupsyscouns/article/view/499>
- 67) Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421.