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The role of organizational networking capabilities and agile leadership on organizational performance through dynamic managerial capabilities with moderating professional capabilities and dynamic organizational culture

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Abstract

Education in Indonesia faces great challenges in adjusting to the demands of the times. The development of the industrial and business world is moving faster than the readiness of human resources produced by the education system. This study aims to analyze the role of Organizational Networking Capabilities and Agile Leadership on Organizational Performance through Dynamic Managerial Capabilities with the Moderation of Professional Capabilities and Dynamic Organizational Culture. This study uses a quantitative approach, employing a survey method. In this study, theoretical and empirical studies were conducted to formulate problems, followed by hypotheses. After collecting field data, calculations were performed using MPlus, and the results were used to analyze the dissertation. The sampling technique utilized a questionnaire in one stage from 75 schools, consisting of 375 school leaders and 375 senior teachers or certified teachers in Greater Surabaya and Greater Malang. From the results of hypothesis testing, it was found that Organizational Networking Capabilities has a significant effect on Dynamic Managerial Capabilities (H1) and Organizational Performance (H4), as well as through the mediation of Dynamic Organizational Culture (H8). Agile Leadership has no significant effect on Dynamic Managerial Capabilities (H2) or Organizational Performance (H5), but it has a significant effect on Organizational Performance through the mediation of Dynamic Organizational Culture (H9). Agile Leadership, moderated by Professional Capabilities, has a significant effect on Dynamic Managerial Capabilities (H3). Dynamic Managerial Capabilities has no significant effect on Organizational Performance (H6), but its effect becomes significant when moderated by Dynamic Organizational Culture (H7). Thus, some hypotheses are supported while others are not, indicating the important role of organizational capabilities, agile leadership, and organizational culture in organizational performance.

Keywords: Agile leadership, Organizational performance, Dynamic managerial capabilities, Dynamic organizational culture, Organizational networking capabilities, Professional capabilities.

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1. Introduction

Education in Indonesia faces great challenges in adjusting to the demands of the times. The development of the industrial and business world is moving faster than the readiness of human resources produced by the education system. As a result, there are concerns about the influx of foreign labor that could replace local roles in education management. The complexity of this challenge includes inequality of access, unequal quality of education, an irrelevant curriculum, and the lack of 21st-century skills taught in schools. Overcoming this requires adequate investment, improving the quality of human resources, and synergy between the government, the community, and the business world [1].

Education plays an important role in achieving the vision of a Golden Indonesia 2045, which targets a sovereign, progressive, and sustainable archipelago. However, if the quality of human resources is not addressed immediately, it will be difficult to compete in the global era. Improving the quality of education requires more adaptive and dynamic management, such as the application of Dynamic Managerial Capabilities. This approach includes managerial cognition, social capital, and human capital that can assist in strategic decision-making and effective management of educational organizations [2].

In the private education sector, challenges have become more evident with declining enrollment in several senior secondary schools in East Java, which has a direct impact on budget stability and institutional sustainability. The main problems faced include weak school management, lack of leadership flexibility, lack of synergy with business and industry, and unfulfilled professional standards in school management. In addition, there are still constraints in financial management, human resources, curriculum, facilities, and communication with the community [3].

Social and environmental aspects also play an important role in educational success. Strong relationships between schools, parents, and communities can create a better learning ecosystem. Unfortunately, many schools do not have optimal engagement with the community, so opportunities to collaborate in improving the quality of education are limited. In terms of the environment, the school's physical condition, safety, and sustainability of facilities also need to be considered to create a comfortable learning environment that supports student growth [4].

Facing these challenges, education in Indonesia requires strategic and sustainable change. Flexible management, adaptive leadership, and closer collaboration between the education and business sectors can be solutions to strengthen the national education system. Thus, Indonesia can produce a generation that is ready to compete globally and contribute to sustainable development [5].

School accessibility, which includes physical, transport, economic, information, social, health, and digital aspects, is not yet fully optimal in ensuring that every student can easily access educational facilities and services. In fact, inclusive access is an important foundation for an equal and sustainable learning environment [6].

In addition, support from local neighborhood institutions through educational partnerships, financial and non-financial assistance, community empowerment, and involvement in school programs is still not solid. In fact, this support plays a major role in enriching students' educational experience and strengthening the school's relationship with the community to create innovative learning environments [7].

Educational organizations should ideally have a clear vision and mission, effective leadership, an innovative culture, and efficient resource management. However, early research shows that student enrollment targets and financial revenues are not stable, internal and external coordination is weak, and accessibility aspects are inadequate [8]. These empirical gaps indicate the need for further research to analyze the performance of education organizations to achieve the expected targets.

The importance of research on education performance cannot be separated from the need to build an ecosystem that can produce innovative and adaptive human resources to face future challenges, including sustainable economic growth, a healthy environment, and a civilized society. Indonesia itself is still ranked 67th out of 203 countries in global education quality [9]. If educational research is not improved, the competitiveness of Indonesia's human resources will fall further behind.

The sustainability of organizational competitiveness depends on Dynamic Managerial Capabilities (DMC), which balance economic, social, and ecological pressures for sustainable performance improvement. Although DMC has not uniformly impacted MSME performance in the social, environmental, and economic spheres, empirical research is needed to further develop this theory [10].

Factors affecting the performance of education organizations include a lack of internal control, weak budget management, and unprofessional leadership. Studies in other sectors show that organizational culture and innovation have a positive effect on performance, and inclusive and exclusive talent management also play an important role [11].

Organizational networking capabilities can also enhance innovation and dynamic management performance. Agile leadership is the most influential leadership style in shaping dynamic capabilities. In addition, professionalism supports managerial decision-making and empowers individuals to achieve organizational goals. A dynamic organizational culture contributes to organizational growth, while dynamic leadership plays a role in creating an adaptive and innovative culture. Education and training are also crucial factors in developing individual capabilities [12].

Research on DMC with the dimensions of managerial cognition, managerial social capital, and managerial human capital has an influence on organizational performance, both directly and through change strategies. This study also opens up further research opportunities by adding Organizational Networking Capabilities and analyzing cross-level, multilevel, and inter-firm factors [13].

Improving organizational performance in the context of education can be achieved through strengthening managerial cognition, managerial social capital, and managerial human capital as dimensions of Dynamic Managerial Capabilities (DMC). However, no school leader is perfect, so this study examines factors that influence DMC, such as Organizational Networking Capabilities and Agile Leadership with moderation of Professional Capabilities. In addition, the influence of DMC on organizational performance is reinforced by Dynamic Organizational Culture [14].

This research reviews previous studies examining the impact of DMC on organizational performance in industry and government sectors. Nowadays, analyzing the educational environment is very important. Using Mplus as a statistical analysis tool based on structural equation models and longitudinal analysis, this research seeks to control for the multiple effects of individuals and organizations [15].

Based on the report of the [East Java Office of Communication and Information Technology](#) [16], East Java's education performance index reached 4.2308 points, the highest in Indonesia from kindergarten to high school level. This is the basis for choosing East Java as the research location. Religious factors also influence school leadership, where faith-based leaders tend to have a risk-averse mentality, which may result in low organizational innovation. Therefore, this study focuses on excellent private schools, both faith-based and general [17].

[BPS Surabaya Data](#) [18] shows that Surabaya and Malang have high Human Development Index (HDI), 82.74 and 82.71 respectively in 2022, signaling the priority of education in these regions. With access to quality education on the rise, local governments, educational institutions, and local communities continue to endeavor to improve the quality of education to make it equally accessible.

Previous research shows that DMC plays a role in improving Competitive Advantage (CA) in the health sector and industry 4.0. However, in the Indonesian public sector, the role of DMC on organizational performance depends on the organization's capacity to change. DMC also mediates the impact of cognitive style on firms' international performance and is more effective when mediated by Research and Development [19].

In the context of small and medium-sized enterprises in the Netherlands, research shows that internal integrative dynamic capabilities have a negative impact on environmental and economic performance, but positive on social performance. Therefore, this study adds Organizational Networking Capabilities and Agile Leadership variables with moderation of Professional Capabilities to see their influence in education.

Previous studies have not used samples from the education sector and still focus on one level of analysis. As an update, this study examines superior private high schools (SMA) based on religion and general with a multilevel approach. The strategic decisions of school leaders must be supported by strong managerial human capital, managerial social capital to build social relationships and leadership influence, and managerial cognition that can create a better vision of the future, so that schools become more sustainable.

The results of this study are expected to encourage schools to build strong networks with the World of Business and Industry (DUDI), agencies, and professionals in order to create graduates who are ready to compete in the world of work and further education. Organizational Networking Capabilities, which are usually applied in the business world and universities, are now developed in the context of secondary schools to complement human resources and improve school performance. By considering various internal and external factors that affect organizational performance as well as the moderating role of Professional Capabilities and Dynamic Organizational Culture, it is expected that school organizational performance can become more competitive.

2. Literature Review

2.1. Dynamic Capabilities Theory

The concept of Dynamic Capabilities Theory was initiated by a working paper written by Teece, et al. [20], which stated that 'our view of the firm is somewhat more complete than the resource-based view in that it is not just the collection of resources that is important, but the mechanisms by which firms learn and accumulate new skills and capabilities, and the forces that limit the rate and direction of this process.' This idea finally formally explains the inability of Resource-Based Theory (RBT) to explain the processes or capabilities that organizations must have, both in coordinating and placing internal and external competency-based resources when the environment is changing rapidly. This concept was then elaborated by a third paper published by the Strategic Management Journal in 1997, emphasizing how the dynamic capability perspective can overcome the weaknesses of RBT and defining it as the organization's ability to integrate, develop, and reconfigure internal and external competency-based resources to cope with a rapidly changing environment [20].

2.2. Leadership

Some modern-day leadership writers are Max Weber, who in the early 20th century introduced the concepts of charismatic, traditional, and legal-rational leadership in his book 'The Theory of Social and Economic Organization,' which

explored how different types of authority influence leadership styles and how leadership can legitimize power. Peter Drucker, in his 1954 book *The Practice of Management*, one of the most influential authors in modern business leadership, introduced the concept of 'management by objectives' and argued that leadership is about empowering others and ensuring the organization functions effectively [21].

2.3. Organizational Performance

Organizational performance is a multifaceted concept that includes the efficiency and effectiveness of the organization in achieving its goals. Organizational efficiency and effectiveness are important measures used to evaluate organizational success and health. Understanding organizational performance involves assessing multiple dimensions. Organizational performance is an important aspect of management and business studies. Organizational performance reflects the ability of an organization to achieve its stated goals and objectives. Organizational performance can be measured through various interrelated dimensions, such as economic, internal factors, social factors, and environmental factors [22].

2.4. Dynamic Managerial Capabilities (DMC)

Dynamic Managerial Capabilities (DMC) is a concept derived from the theory of dynamic capabilities in strategic management. This theory emphasizes the ability of organizations to continuously adapt, integrate, and remodel their internal and external competencies to deal with dynamic changes in the business environment. In the context of DMC, the focus is on the role of managers in facilitating and directing this change. DMC consists of three main dimensions: managerial human capital, managerial social capital, and managerial cognition. These three dimensions work together to enable managers not only to respond to environmental change but also to proactively shape and direct the strategic evolution of their organizations [13].

2.5. Organizational Networking Capabilities

Organizational networking capabilities in an organizational context refer to an organization's ability to build, maintain, and leverage a network of relationships with various parties, both internal and external. This network includes relationships with customers, suppliers, business partners, governments, and various other stakeholders. Organizational networking capabilities are important because they allow organizations to access resources, information, and opportunities that may not be available within the organization itself. In an increasingly complex and connected business world, the ability to build and manage effective networks is key to success. Organizations that have strong organizational networking capabilities can increase innovation, speed up decision-making, and enhance flexibility in responding to market changes. Organizational networking capabilities encompass several important dimensions, including initiation capabilities, development capabilities, and ending capabilities. Each of these dimensions plays an important role in the lifecycle of an effective and sustainable network of relationships [23].

2.6. Agile leadership

Agile leadership is a leadership approach that focuses on agility and adaptability in managing teams and organizations. In an individual context, Agile leadership requires leaders to be flexible, responsive, and able to adapt quickly to change. At the organizational level, this means creating an environment that supports collaboration, innovation, and rapid decision-making. Agile leadership evolved from the Agile methodology that was originally applied in the software industry but has now expanded to various sectors. Agile principles, such as short iterations, continuous feedback, and rapid adaptation, are highly relevant in dynamic and uncertain business environments. Leaders who adopt this approach are able to encourage teams to work more effectively, achieve better results, and remain competitive in a fast-changing market [24].

2.7. Professional Capabilities

In the modern world of work, professional capabilities are important factors that determine the success of individuals and organizations. Professional capabilities refer to the skills, knowledge, and behaviors that enable a person to perform job duties and responsibilities effectively and efficiently. These capabilities include not only technical competencies but also non-technical aspects such as communication, leadership, and work ethics. In an individual context, professional capabilities help a person progress in their career, enable them to adapt to change, and contribute significantly to organizational goals. For organizations, having employees with strong professional capabilities is key to achieving a competitive advantage, increasing productivity, and creating a positive and collaborative work environment [25].

2.8. Dynamic Organizational Culture

In the era of globalization and rapid technological development, organizations are faced with ever-changing challenges that demand high adaptability. One of the key factors contributing to an organization's ability to remain relevant, innovative, and competitive is a dynamic organizational culture. A dynamic organizational culture is a system of values, beliefs, and norms that is constantly evolving and adapting to support change and continuous improvement. It encourages flexibility, creativity, and rapid response to market dynamics and customer needs.

Dynamic organizational culture has several important dimensions that form the basis for creating an adaptive work environment. Three relevant dimensions to be discussed further are relevance, innovation, and competitiveness. Relevance in organizational culture reflects the ability of an organization to stay in tune with industry developments and market needs. This involves monitoring the latest trends, understanding changes in consumer behavior, and integrating that knowledge into daily practices. A relevant culture enables an organization to not only survive but also excel in a competitive environment.

By being relevant, organizations can ensure that their products and services continue to meet customer expectations and adapt to changes in the external environment [26].

2.9. The Conceptual Framework

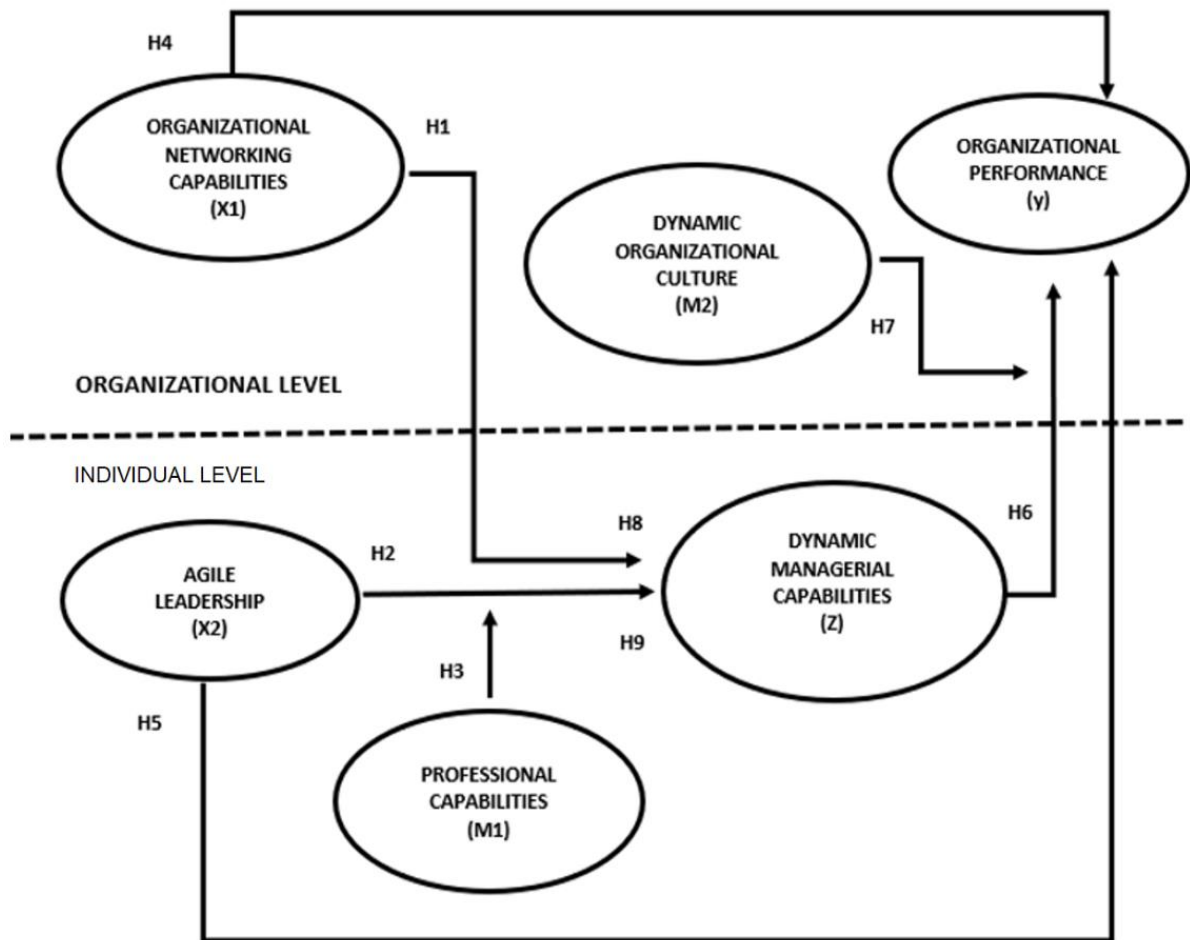


Figure 1
Research conceptual framework.

3. Research Methodology

This study uses a quantitative approach, using survey methods. Survey research is a study conducted on large or small populations, but the data studied are data from samples taken from the population, so that relative phenomena, distribution, and relationships between sociological and psychological variables are found [27].

In this study, the research design used is quantitative research. Quantitative research is a method to test certain theories by examining the relationship between variables. These variables are measured so that data consisting of numbers can be analyzed based on statistical procedures. Basically, the quantitative approach is carried out in inferential research (in the context of hypothesis testing) and relies on the conclusion of the results on an error probability of rejecting the null hypothesis. With quantitative methods, the significance of group differences or the significance of the relationship between the variables under study will be obtained. In general, quantitative research is a large sample study. In this research, theoretical studies and empirical studies are tested, the problem is formulated and then hypothesized, after finding field data, MPlus is calculated and the results are used to analyze the dissertation [27].

The sampling technique is to select part of the population elements so that conclusions about the characteristics of the population can be obtained. It is then explained that an element is the subject on which the measurement is made. Data collection using questionnaires was conducted in one stage from 75 schools, consisting of 375 school leaders and 375 senior teachers or certified teachers in Greater Surabaya and Greater Malang.

4. Result

4.1. Intraclass Correlation Coefficient

Intraclass Correlation Coefficient (ICC1) is a measure of reliability or consistency used to assess the variation between groups relative to the total variation. ICC1 is specifically used to evaluate the proportion of variance that can be explained by differences between groups (e.g., teams, organizations, or classes). In organizational research, ICC1 is used to assess

whether individual behavior is influenced by organizational characteristics, and ICC1, together with rWG, can comprehensively evaluate group agreement [28].

Intraclass Correlation Coefficient type 2 (ICC2) is a reliability measure used to assess the level of measurement consistency in the context of a two-way random effects model. ICC2 specifically evaluates whether scores given by multiple raters on the same subject are reliable and represent the true score. rWg is a measure of relative agreement within a group that helps identify whether group members' perceptions are sufficiently consistent.

Table 1.
Intraclass Correlation Coefficient.

Variable	ICC		Rule of Thumb		Rule of Thumb	Rule of Thumb
	ICC1	ICC2	ICC1	ICC2		
OP	0.78	0.93	> 0,25	> 0,50	0.77	> 0,70
DMC	0.43	0.74	> 0,25	> 0,50	0.93	> 0,70
ONC	0.53	0.81	> 0,25	> 0,50	0.99	> 0,70
AL	0.52	0.80	> 0,25	> 0,50	0.93	> 0,70
PC	0.41	0.73	> 0,25	> 0,50	0.93	> 0,70
DOC	0.77	0.93	> 0,25	> 0,50	0.99	> 0,70

Based on the Table 1 it shows that ICC Interpretation Where ICC1 is a measurement of variance between individuals in the group, by comparing variation between groups and within groups, ICC2 is measuring consistency in measurement between individuals across groups, measured based on more stable reliability data, the variables of this study can be stated as follows:

1. OP (Organizational Performance) has a measurement result of $ICC1 = 0.78 > 0.25$, meaning that the variance between groups is large, the group is very significant, and multilevel analysis is important to continue. $ICC2 = 0.93 > 0.9$, meaning that the consistency between raters is very high, which is ideal for studies that require high precision. Both measures showed excellent consistency between individuals within groups, exceeding the expected threshold (>0.25 for ICC1 and >0.50 for ICC2).
2. DMC (Dynamic Managerial Capabilities) has a measurement result of $ICC1 = 0.43 > 0.25$, meaning that the variance between groups is large, the groups are very significant, and multilevel analysis is important to continue. $ICC2 = 0.74$ is in the 0.5 - 0.75 range, indicating that the consistency between raters is good enough for exploratory research. This indicates that although there is variation within groups, the inter-rater reliability is within acceptable limits.
3. ONC (Organizational Networking Capabilities) has a measurement result of $ICC1 = 0.53 > 0.25$, meaning that the variance between groups is large, the group is very significant, and multilevel analysis is important to continue. $ICC2 = 0.81$, which is between 0.75 and 0.9. The level of consistency is considered quite strong and suitable for research that requires it, indicating that both ICC values are quite high and the reliability between observers or individuals in the group is good.
4. AL (Agile Leadership) has a measurement result of $ICC1 = 0.52 > 0.25$, meaning that the variance between groups is large. The group is very significant, and multilevel analysis is important to continue. $ICC2 = 0.80$, which is between 0.75 and 0.9. The level of consistency is considered quite strong and suitable for research that requires it. It also shows good consistency between individuals in the group.
5. PC (Professional Capabilities) measured $ICC1 = 0.41 > 0.25$, which means the variance between groups is large, the groups are highly significant, and multilevel analysis is important to continue. $ICC2 = 0.73$, which is between 0.5 and 0.75, indicates that the consistency between raters is good enough for exploratory research. This shows lower variation, but it is still within acceptable limits.
6. DOC (Dynamic Organizational Culture) measured $ICC1 = 0.77 > 0.25$, meaning the variance between groups is large, groups are highly significant, and multilevel analysis is important to continue. $ICC2 = 0.93$, indicating excellent consistency and high reliability between individuals within groups.

rWg is a measure used to see the extent to which respondents in a group give similar or agreeing judgements to each other. This is important for evaluating agreement in judgements made within a group.

The interpretation of rWg in this variable indicates a very good level of agreement in their respective variables: OP rWg = 0.77, DMC rWg = 0.93, ONC rWg = 0.99, AL rWg = 0.93, PC rWg = 0.93, and DOC rWg = 0.99.

4.2. Goodness of Fit

Goodness of Fit is a measure that indicates how well the empirical data fits the theoretical model. It can be assessed using various indices, such as CFI (Comparative Fit Index), RMSEA (Root Mean Square Error of Approximation), and Chi-Square [29]. the data in this study are measured in the following Table 2.

Table 2.
Goodness of Fit Index.

Goodness of Fit Index	Value Test	Cut off Value	Decision
Chi-Square	7301.442	Expected to be small	
RMSEA	0,006	<0,08	Fit
CFI	0,031	> 0,90	Tidak Fit

Goodness of Fit Index	Value Test	Cut off Value	Decision
TLI	-0,063	> 0,90	Tidak Fit
SMRS			
Within	0,607	> 0,08	Fit
Between	0,989	> 0,08	Fit

The Chi-Square with a value of 7301.442 shows a fairly large value, which means the model may not fit the data optimally. However, the Chi-Square is sensitive to large sample sizes, so it is often not used as a single indicator.

RMSEA (Root Mean Square Error of Approximation) with a value of $0.006 < 0.08$ (Fit) indicates fit, as the RMSEA value is within expected limits. Low values indicate that the model has a low level of approximation error and fits the data.

CFI (Comparative Fit Index) with a value of 0.031 and a cut-off value of > 0.90 (Fit) indicates not fit, as the CFI value is well below the threshold. A low CFI indicates that the model cannot explain the data well compared to independent models. TLI (Tucker-Lewis Index) with a value of -0.063 and a cut-off value of > 0.90 (Fit) indicates no fit because the TLI value is far below the threshold.

SMRS (Standardized Root Mean Square Residual) Within with Value: $0.607 > 0.08$ (Fit) indicates fit, as the SMRS value is greater than the minimum threshold indicating fit between within-group variables. SMRS Between with Value: $0.989 > 0.08$ (Fit) indicates fit, as the SMRS value is also greater than the threshold for between-group relationships.

Overall, the model showed an excellent fit to the data, reflecting strong quality and relevance in describing the relationship between the variables under study. This is evident from the very small RMSEA, CFI, and TLI values that exceed the ideal threshold. However, the Within SMRS with a value of $0.607 > 0.08$ indicates fit; and the SMRS value is greater than the minimum threshold, indicating fit between within-group variables. SMRS Between showed fit, as the SMRS value was also greater than the threshold for between-group relationships, indicating the model was able to accurately represent the data. With these results, the model can be considered fit and provides a solid basis for further analysis.

4.3. Common Method Bias

Common Method Bias (CMB) is a bias that arises due to the use of the same method in data collection for various research variables. Measuring and analyzing CMB is important to ensure the validity and reliability of research results. CMB is used to ensure that the relationships between variables in a study are not produced by artifacts of the same data collection methods. Ensuring Internal Validity: By detecting and addressing CMB, researchers can ensure that the observed relationships between variables are the result of true theoretical relationships, not method bias [30].

Table 3.
Total variance explained.

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	24,057	30,842	30,842	23,661	30,334	30,334
2	17,065	21,878	52,720			
3	2,832	3,630	56,350			
4	1,890	2,424	58,774			
5	1,796	2,303	61,077			
6	1,507	1,933	63,009			
7	1,358	1,742	64,751			
8	1,299	1,666	66,417			
9	1,116	1,431	67,847			
10	1,017	1,304	69,151			

Extraction Method: Principal Axis Factoring.

Measurement of all indicators of all research constructs is performed to conduct factor analysis to determine if the majority of variance can be explained by one common factor. This technique indicates whether there is a problem or not. The test results show a cumulative value of 30.334%, which is far below the cutoff at the 50% variance level, thus indicating that there is no CMB in this study.

4.4. Hypothesis Testing

The data processing in this dissertation used Muthén and Muthén [15] Mplus Version 8.3 (Mac) Muthén & Muthén 11/17/2024 3:45PM, Muthén & Muthén 3463 Stoner Ave. Los Angeles, CA 90066 Tel: (310) 391-9971 Fax: (310) 391-8971 Web: www.StatModel.com Support: Support@StatModel.com Copyright (c) 1998-2019.

Muthén & Muthén, given the multilevel nature of the data analyzed as well as the bottom-up relationship of the multilevel model, tested the hypotheses in two separate stages. Firstly, to examine the high ability of ONC on the influence of DMC (bottom-up), they tested the significance of the moderating effect of DOC on OP. Secondly, to examine the influence of AL, they tested the significance of the moderating effect of PC on DMC (bottom-up) and its impact on OP.

The following Figure 2 presents the analysis model and regression coefficients for each variable.

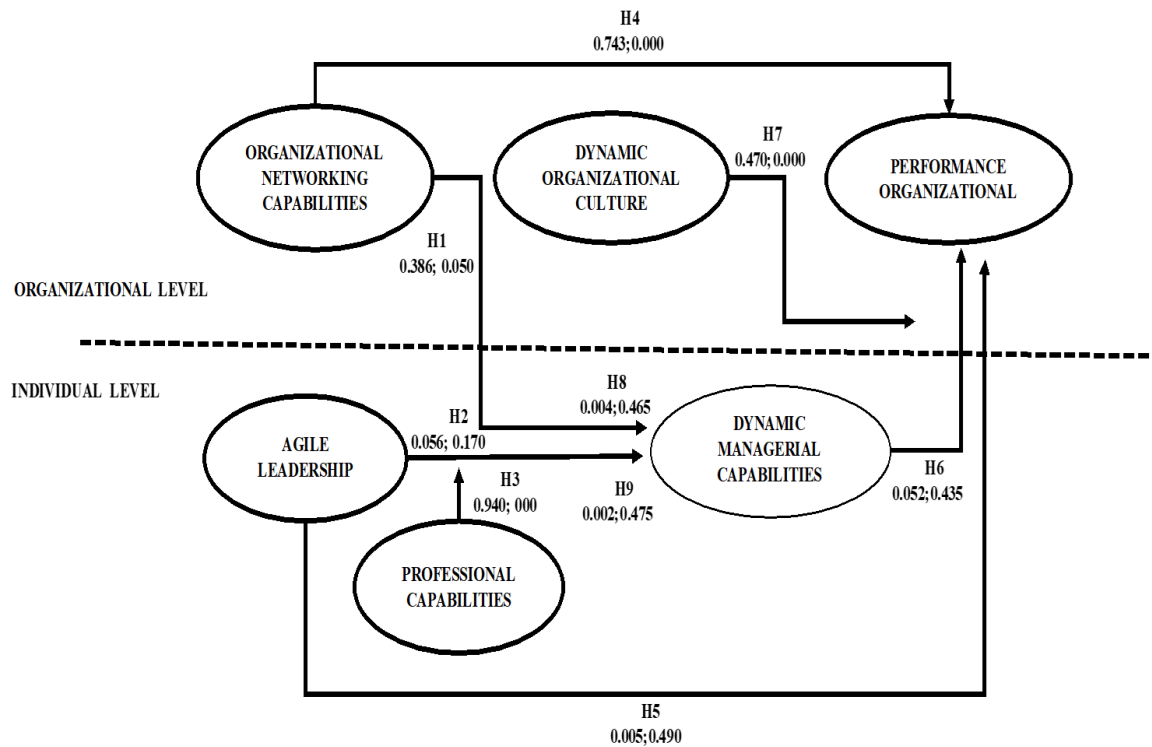


Figure 2.
Hypothesis testing results.

Description:

H1: X1 to Z

H2: X2 against Z

H3: X2 Against Z Moderation M1

H4: X1 against Y

H5: X2 against Y

H6: Z against Y

H7: Z to Y Moderation M2

H8: X1 to Y Mediation Z

H9: X2 Against Y Mediation Z

Table Test Results with Path Details, Hypothesis (H), Estimate, P-value, and Decision.

Path		Estimate ^a	P-value	Decision
Test of direct effect				
1. Organizational networking capabilities on dynamic managerial capabilities.	H1	0.386	0.050	Accepted
2. Agile leadership on dynamic managerial capabilities.	H2	0.056	0.170	Rejected
3. Agile leadership on dynamic managerial capabilities: mediation effect of professional capabilities.	H3	0.940	0.000	Accepted
4. Organizational networking capabilities and organizational performance.	H4	0.743	0.000	Accepted
5. Agile leadership and organizational performance.	H5	0.005	0.490	Rejected
6. Dynamic managerial capabilities on Organizational performance.	H6	0.052	0.435	Rejected
7. Dynamic managerial capabilities on Organizational performance moderation effect of dynamic culture capability.	H7	0.470	0.000	Accepted
Test of indirect effect				
8. Organizational networking capabilities on organizational performance: mediation effect of dynamic managerial capabilities.	H8	0.432	0.005	Accepted
9. Agile leadership on organizational performance: mediation effect of dynamic managerial capabilities.	H9	0.265	0.040	Accepted

The test results, which include details of the path, hypothesis (h), estimate, p-value, and decision, can be used for analysis to evaluate the direct effect between independent variables and the dependent variable as follows:

4.4.1. Hypothesis Test Organizational Networking Capabilities has a Significant effect on Dynamic Managerial Capabilities

The estimated value of 0.386 indicates the strength and direction of the relationship between the Organizational Networking Capabilities variable and Dynamic Managerial Capabilities (H1). This positive value of 0.386 means that the relationship between the two variables is positive, indicating that when Organizational Networking Capabilities increases, Dynamic Managerial Capabilities also tends to increase.

The value of 0.386 indicates a fairly strong relationship. This regression analysis indicates that Organizational Networking Capabilities have a significant direct contribution to changes in Dynamic Managerial Capabilities. The p-value of 0.050 for this relationship is at the significant threshold (usually, the significant cutoff is 0.05). Therefore, hypothesis H1 is accepted, although it is close to the significance threshold, so it can be decided to be accepted because $p \leq 0.05$ can be used to explain that Organizational Networking Capabilities have a significant and positive influence on Dynamic Managerial Capabilities.

4.4.2. Hypothesis Test Agile Leadership Has a Significant Effect on Dynamic Managerial Capabilities

The estimated value of 0.056 indicates the strength and direction of the relationship. A positive 0.056 indicates that when Agile Leadership increases, Dynamic Managerial Capabilities also increase slightly, indicating that the effect of Agile Leadership on Dynamic Managerial Capabilities is very small.

P-value = 0.170 > 0.05; this effect is not statistically significant. That is, this result is most likely due to chance in the sample, not a real relationship. Agile Leadership has a very small and insignificant influence on Dynamic Managerial Capabilities in the context of this study, indicating that the Agile Leadership factor does not have a significant direct influence. It may not be the main determinant in building Dynamic Managerial Capabilities, or a mediator/moderator is needed so that it may play a more important role.

4.4.3. Hypothesis Test Professional Capabilities is able to significantly strengthen the influence of Agile Leadership on Dynamic Managerial Capabilities

The estimated value of 0.940 indicates a very strong relationship between Agile Leadership and Dynamic Managerial Capabilities through mediation by Professional Capabilities. This means that when leaders apply an agile leadership style, they tend to enhance professional capabilities in the organization, which in turn strengthens Dynamic Managerial Capabilities. Agile leadership significantly promotes the development of dynamic managerial capabilities, mainly through strengthening professional capabilities in the organization.

The P-value of 0.000 (often displayed as <0.001) indicates that the probability of the relationship between Agile Leadership and Dynamic Managerial Capabilities occurring is very small (almost zero). In other words, the observed relationship has a very high statistical significance.

P-value < 0.05 (let alone 0.000) means rejecting the null hypothesis (which states that there is no relationship) and accepting the alternative hypothesis H3 as valid. In organizations, Agile Leadership encourages the development of professional competencies of individuals in the team, thereby creating management that is dynamic, innovative, and responsive to change. Hypothesis H3 is proven to be true with a very high level of confidence. Agile Leadership has a real positive impact on Dynamic Managerial Capabilities through mediation.

4.4.4. Hypothesis Test Organizational Networking Capabilities has a Significant effect on Organizational Performance

The estimated value of 0.743 indicates that there is a strong positive relationship between Organizational Networking Capabilities and Organizational Performance. This relationship is quite high, indicating that an increase in Organizational Networking Capabilities has a significant impact on improving Organizational Performance.

The estimated value of 0.743 confirms that Organizational Networking Capabilities is a significant driver of Organizational Performance. By strengthening external networks, organizations can optimize performance in various operational and strategic aspects.

The p-value of 0.000 (often written as <0.001) means that the probability of the relationship between Organizational Networking Capabilities and Organizational Performance is very small, almost zero, rejecting the null hypothesis (no relationship) and concluding that the relationship between Organizational Networking Capabilities and Organizational Performance is highly statistically significant. This supports hypothesis H4 and suggests that Organizational Networking Capabilities have a clear positive impact on performance.

4.4.5. Hypothesis Test Agile Leadership has a Significant effect on Organizational Performance

The estimated value of 0.005 indicates a very weak relationship between Agile Leadership and Organizational Performance, meaning that Agile Leadership does not have a significant impact directly on Organizational Performance, or Agile Leadership may not contribute directly to improving organizational performance outcomes.

The P-value of 0.490 means that the probability of the relationship between Agile Leadership and Organizational Performance occurring by chance is 49%. Because the P-value is > 0.05, this relationship is not statistically significant. That is, there is not enough evidence to conclude that Agile Leadership directly affects Organizational Performance; in other words, H5 is rejected.

4.4.6. Hypothesis Test Dynamic Managerial Capabilities Has a Significant Effect on Organizational Performance

The estimated value of 0.052 indicates that the relationship between Dynamic Managerial Capabilities and Organizational Performance is very weak, meaning that every one unit increase in Dynamic Managerial Capabilities only

provides an increase of 0.052 units in Organizational Performance. The direct effect of Dynamic Managerial Capabilities on Organizational Performance is almost insignificant.

The P-value of 0.435 indicates that this relationship is not statistically significant. With a P-value > 0.05, there is not enough evidence to support the hypothesis that Dynamic Managerial Capabilities directly influence Organizational Performance; in other words, H6 is rejected.

4.4.7. Hypothesis Test Dynamic Organizational Culture is able to Significantly Strengthen the Influence of Dynamic Managerial Capabilities on Organizational Performance

The estimated value of 0.470 indicates that Dynamic Organizational Culture significantly strengthens the relationship between Dynamic Managerial Capabilities and Organizational Performance. In the presence of Dynamic Organizational Culture, the effect of Dynamic Managerial Capabilities on Organizational Performance increases substantially (47%).

The p-value of 0.000 (often written as <0.001) indicates that the moderating effect of Dynamic Organizational Culture is highly statistically significant. This means that the observed results have a very small probability of occurring by chance, so this relationship can be trusted; in other words, H7 is accepted. This means that to improve Organizational Performance, organizations must combine Dynamic Managerial Capabilities with Dynamic Organizational Culture.

4.4.8. Hypothesis Test Organizational Networking Capabilities has a significant effect on Organizational Performance through Dynamic Managerial Capabilities

The estimated value of 0.432 indicates that the effect of Organizational Networking Capabilities on Organizational Performance through the mediation of Dynamic Managerial Capabilities is positive and quite strong. This means that if Organizational Networking Capabilities increases, the impact on Organizational Performance will be more significant if Dynamic Managerial Capabilities are also strengthened.

The P-value of 0.005 indicates that the relationship between Organizational Networking Capabilities and Organizational Performance through Dynamic Managerial Capabilities is statistically significant. A P-value < 0.05 means there is strong evidence that the relationship is not coincidental, and mediation by DMC makes a real contribution to organizational performance. In other words, H8 is accepted: Organizational Networking Capabilities have a significant effect on Organizational Performance through Dynamic Managerial Capabilities.

4.4.9. Hypothesis Test Agile Leadership has a significant effect on Organizational Performance through Dynamic Managerial Capabilities

The Estimate value of 0.265 indicates that the relationship between Agile Leadership and Organizational Performance through Dynamic Managerial Capabilities is quite positive, meaning that each increase in Agile Leadership contributes 0.265 units to Organizational Performance through the mediation path of Dynamic Managerial Capabilities.

The P-value of 0.040 indicates that this relationship is statistically significant (P-value < 0.05). This means there is empirical evidence that the mediation path is not the result of chance, showing the real contribution of Dynamic Managerial Capabilities in translating Agile Leadership into improved organizational performance. In other words, H9 is accepted, indicating that the mediation path through Dynamic Managerial Capabilities has a significant contribution in connecting Agile Leadership with Organizational Performance.

5. Discussion

5.1. The Role of Organizational Networking Capabilities and Agile Leadership on Organizational Performance through Dynamic Managerial Capabilities with Moderating Professional Capabilities and Dynamic Organizational Culture

Organizational performance has become a major focus in management and business studies, especially in dynamic and uncertain environments [20]. In the era of digitalization and globalization, organizations are required to be more adaptive and innovative to remain competitive. One of the main factors that determine organizational performance is dynamic managerial capabilities (DMC), which play a role in strategic decision-making and effective resource allocation [10]. However, the role of DMC cannot stand alone without being influenced by other factors such as organizational networking capabilities and agile leadership.

Organizational networking capabilities (ONC) refer to an organization's ability to build and leverage networks to improve performance [31]. Strong networks allow organizations to access a wider range of information, resources, and business opportunities, which in turn positively impacts innovation and competitiveness. By having a high ONC, organizations can increase flexibility in the face of market changes and accelerate strategic decision-making.

Agile leadership is a leadership approach that emphasizes flexibility, adaptability, and rapid response to changes in the business environment. Agile leaders are able to manage uncertainty more effectively and create an innovative and collaborative work culture. In the context of organizational performance, agile leadership plays a crucial role in accelerating the decision-making process and increasing organizational resilience to industry disruption [24].

DMC serves as a mechanism that links ONC and agile leadership with organizational performance. DMC includes three main capabilities: sensing, seizing, and reconfiguring. Sensing enables organizations to identify external opportunities and threats, seizing helps in making strategic decisions, while reconfiguring ensures that organizations can adjust to changes in the business environment effectively. Thus, DMC strengthens the relationship between ONC, agile leadership, and organizational performance [32].

Professional capabilities refer to the skills, knowledge, and competence of individuals in performing their duties effectively. In this context, professional capabilities can act as a moderating factor that strengthens the relationship between

DMC and organizational performance. Organizations with a workforce that has high professional capabilities are better able to implement strategies developed through DMC, resulting in superior performance [33].

Dynamic organizational culture refers to an organizational culture that supports innovation, collaboration, and adaptability. A dynamic culture allows organizations to more easily adopt change and optimize the utilization of internal capabilities, including DMC. When organizational culture supports experimentation and continuous learning, the positive impact of DMC on organizational performance becomes more significant [26].

ONC, agile leadership, and DMC must work synergistically to produce optimal impact on organizational performance. ONC provides access to strategic information, agile leadership encourages rapid decision-making, and DMC ensures that the implemented strategy can deliver sustainable results. The combination of these three elements creates an environment conducive to organizational growth and innovation.

Several empirical studies show that ONC has a significant impact on organizational performance. For example, it was found that companies with extensive business networks tend to have better financial performance than those with limited networks. In addition, another study by Inkpen and Tsang [34] showed that ONC contributes to the improvement of a firm's innovation capability [26].

Agile leaders are able to create organizations that are responsive to market changes and customer needs. In the technology industry, for example, agile leadership has been shown to increase the speed of innovation and operational efficiency. Therefore, agile leadership is not only a competitive advantage but also a determining factor for organizational success in the long run [24].

Managers with strong DMC are better able to deal with business uncertainty and complexity. In an increasingly dynamic business environment, DMC development is a necessity that cannot be ignored. Organizations need to invest in training and leadership development to strengthen DMC at all levels of management. Professionalism in organizations not only contributes to operational effectiveness but also plays an important role in strategic decision-making. With a workforce that has high professional capabilities, organizations can be more effective in implementing business strategies and achieving a competitive advantage.

A dynamic organizational culture allows the organization to be more flexible in adopting new strategies. In a rapidly changing business environment, having an adaptive culture becomes a valuable asset that supports the long-term success of the organization. Although this study provides important insights into the relationship between ONC, agile leadership, DMC, and organizational performance, there are some limitations. One is the lack of longitudinal data that can measure the long-term impact of these factors. Future studies could explore how the interactions between these factors change in various industry and cultural contexts.

This research confirms that ONC and agile leadership play an important role in improving organizational performance through DMC. In addition, professional capabilities and dynamic organizational culture serve as moderating factors that strengthen this relationship. The practical implications of these findings suggest that organizations need to systematically develop their internal capabilities to achieve sustainable competitive advantage.

6. Conclusion

Based on the results of the hypothesis proposed and the research results obtained, it can be concluded that this dissertation is:

1. The first hypothesis states that there is an effect of Organizational Networking Capabilities on Dynamic Managerial Capabilities, with a positive estimate value and a p-value smaller than the tolerable error rate. It can be concluded that there is a significant effect of Organizational Networking Capabilities on Dynamic Managerial Capabilities at the organizational level. Thus, the first hypothesis is supported.
2. The second hypothesis states that there is an effect of Agile Leadership on Dynamic Managerial Capabilities, with a positive estimate value and a p-value greater than the tolerable error rate. It can be concluded that there is an insignificant effect of Organizational Networking Capabilities on Dynamic Managerial Capabilities at the individual level. Thus, the second hypothesis is not supported.
3. The third hypothesis, which suggests that there is an effect of Agile Leadership on Dynamic Managerial Capabilities with the moderation of professional capabilities, obtained a positive estimate value and a p-value smaller than the tolerated error rate. It can be concluded that there is a significant effect of Organizational Networking Capabilities on Dynamic Managerial Capabilities at the individual level. Thus, the third hypothesis is supported.
4. The fourth hypothesis, which suggests that there is an effect of Organizational Networking Capabilities on Organizational Performance with a positive estimate value and a p-value smaller than the tolerated error rate, concludes that there is a significant effect of Organizational Networking Capabilities on Organizational Performance at the organizational level. Thus, the fourth hypothesis is supported.
5. The fifth hypothesis, which suggests that there is an effect of Agile Leadership on Organizational Performance with a positive estimate value and a p-value greater than the tolerated error rate, concludes that there is an insignificant effect of Agile Leadership on Organizational Performance at the individual level compared to the organizational level. Thus, the fifth hypothesis is not supported.
6. The sixth hypothesis suggests that there is an effect of Dynamic Managerial Capabilities on Organizational Performance, with a positive estimate value and a p-value greater than the tolerable error rate. It can be concluded that there is an insignificant effect of Dynamic Managerial Capabilities on Organizational Performance at both the individual and organizational levels. Thus, the sixth hypothesis is not supported.

7. The seventh hypothesis, which suggests that there is an effect of Dynamic Managerial Capabilities on Organizational Performance, moderating Dynamic Organizational Culture with a positive estimate value and a p-value smaller than the tolerated error rate, leads to the conclusion that there is a significant effect of Dynamic Managerial Capabilities on Organizational Performance, moderating Dynamic Organizational Culture at both the individual and organizational levels. Thus, the seventh hypothesis is supported.
8. The eighth hypothesis, which suggests that there is an effect of Organizational Networking Capabilities on Organizational Performance mediated by Dynamic Organizational Culture, has a positive estimate value and a p-value smaller than the tolerated error rate. It can be concluded that there is a significant effect of Organizational Networking Capabilities on Organizational Performance mediated by Dynamic Organizational Culture at the organizational level. Thus, the eighth hypothesis is supported.
9. The eighth hypothesis suggests that there is an effect of Agile Leadership on Organizational Performance, mediated by Dynamic Organizational Culture, with a positive estimate value and a p-value smaller than the tolerated error rate. It can be concluded that there is a significant effect of Agile Leadership on Organizational Performance, mediated by Dynamic Organizational Culture, at both the individual and organizational levels. Thus, the ninth hypothesis is supported.

6.1. Managerial Implications

ONC optimization shows that strengthening external networks can help organizations (e.g., private schools) overcome challenges and adjust strategies to improve performance. By building strong relationships with business partners, customers, and communities, organizations can discover new opportunities and accelerate innovation. DMC implementation in management allows managers to identify and leverage ONCs through DMCs, which can significantly improve organizational performance, especially in the education sector, such as private schools. This provides insights for management in using a capability-based approach to achieve strategic goals.

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