

The Effect of Ambidextrous Leadership and Age on Lecturers' Performance Mediated By Organizational Culture in Private Higher Education

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ABSTRACT:

Higher education plays a crucial role in developing quality human resources. Fierce competition among private universities in Medan has led each university to strive to improve its accreditation. Lecturer performance is a key factor in achieving this. Various factors influence lecturer performance. This study will analyze the factors influencing the performance of lecturers at private universities in Medan. The respondents were 375 lecturers at private universities in Medan. Data processing in this study used a structured equation model. The results of this study conclude: (1) Variables significantly influencing organizational culture include ambidextrous leadership and age; (2) Variables directly influencing lecturer performance are ambidextrous leadership and organizational culture; (3) Age does not directly influence lecturer performance, but significantly influences it through organizational culture. Organizational culture mediates the influence of ambidextrous leadership. The most dominant variable influencing organizational culture is age. Meanwhile, the most dominant variable influencing lecturer performance is ambidextrous leadership.

Keywords: Ambidextrous Leadership, Age, Lecturer Performance, Organizational Culture.

1. Introduction

Higher education plays a strategic role in developing competent and innovative human resources. Lecturers, as a key element in the educational process, bear a significant responsibility in creating a quality educational ecosystem. Lecturer performance encompasses not only teaching but also research, community service, and contributions to the management of educational institutions. In the context of global competition, improving lecturer performance is a top priority to support higher education accreditation, graduate competitiveness, and the achievement of the institution's vision.

Ambidextrous leadership is a leadership approach that integrates two key competencies: exploration and exploitation. Ambidextrous leaders are able to foster innovation and creativity on the one hand, while maintaining operational efficiency on the other. In the context of higher education, ambidextrous leadership has significant potential to support lecturer performance, especially amidst changing educational policies and the demands of globalization.

In private universities in Medan, it is important to evaluate the extent to which lecturers have implemented this leadership style. Leadership

that balances the exploration of new ideas with the exploitation of existing resources is believed to foster an innovative and productive work culture. Younger lecturers are often assumed to be more adaptable to new technologies and learning methods, while more senior lecturers have rich experience in teaching and classroom management. Therefore, understanding the relationship between age and lecturer performance is crucial for designing human resource management strategies. Organizational culture reflects the values, norms, and practices implemented within an institution. In higher education, organizational culture can influence how lecturers carry out their duties and respond to change. A culture that supports collaboration, innovation, and transparency can be a catalyst for improving lecturer performance.

As an intervening variable, organizational culture serves as a link between individual factors and leadership and lecturer performance. For example, strong ambidextrous leadership may not have a maximum impact without a supportive organizational culture. Conversely, a positive culture can strengthen the influence of other factors on lecturer performance. Medan, as one of Indonesia's educational centers, faces significant challenges in maintaining the quality of higher education. Higher education institutions in Medan must compete with institutions in other major cities, both nationally and internationally. Therefore, improving lecturer performance is a top priority. This research is relevant in providing a clearer picture of the factors influencing lecturer performance in Medan, thereby providing strategic recommendations for higher education institutions in this city.

2. Literature Review

2.1 Ambidextrous Leadership

Hidayat and Haryanto (2023) concluded that ambidextrous leadership directly influences organizational culture, which in turn improves lecturer performance. Leaders who balance the exploration of new opportunities with the utilization of existing resources create an environment that supports lecturer productivity.

Prabowo and Setiawan (2022) concluded that effective ambidextrous leadership, supported by an appropriate organizational culture, significantly contributes to improving lecturer performance in higher education.

Wahyuni and Iskandar (2021) concluded that organizational culture plays a key mediator in the relationship between ambidextrous leadership and lecturer performance. When the organizational culture supports innovation and consistency, ambidextrous leadership will be more effective in improving lecturer performance. Sari and Dermawan (2021) concluded that ambidextrous leadership, which combines the exploration and exploitation of ideas, plays a significant role in improving lecturer performance, with organizational culture as a supporting factor that strengthens this relationship. Wijaya (2020) concluded that ambidextrous leadership, which combines exploration and exploitation, has a significant positive impact on lecturer performance. In addition, an organizational culture that supports collaboration, innovation, and open communication acts as a factor that strengthens this relationship.

2.2 The Influence of Organizational Culture

Kessi and Yasir (2024) concluded that a positive organizational culture in higher education, particularly one that emphasizes collaboration, good communication, and support for professional development, significantly impacts lecturer performance. Lecturers who work in a supportive cultural environment are more productive in teaching and research. Kurniawan (2024) concluded that a healthy organizational culture, such as supportive leadership and policies that prioritize lecturer well-being, can improve lecturer morale, which in turn contributes to better academic performance. Sari (2022) concluded that a strong organizational culture influences lecturers' work discipline and motivation, contributing to improved performance outcomes. Yunita (2020) concluded that an inclusive organizational culture based on positive values can improve lecturer performance, with a work environment that

supports lecturer professional development. Dirwan (2019) concluded that a good organizational culture can improve lecturer performance, with a focus on commitment, which influences lecturer work productivity.

2.3 Age

Age in humans is the time elapsed since birth. This theory argues that although physical and cognitive abilities may decline with age, extensive work experience can compensate for these declines, maintaining optimal performance. This theory also states that with age, intrinsic motivation and job satisfaction increase, which can have a positive impact on performance. Older individuals tend to have a higher commitment to their work. Therefore, negative stereotypes about older workers can affect their performance. These negative perceptions can lead to discrimination and lower the motivation and performance of older individuals. Azizah (2023) concluded that age affects lecturer performance, but not directly.

Yuniarsih (2021) concluded that age influences lecturer performance. More mature age allows lecturers to be more stable in carrying out teaching and research tasks, although there is a decline in certain aspects such as the adoption of new technology. Sali (2021) concluded that younger lecturers tend to be more productive in terms of research publications and implementing new technology in the learning process. They adapt more quickly to the latest technology and tend to use more innovative approaches to teaching.

2.4 Lecturer Performance

Lecturer performance is the concrete behavior displayed by a lecturer as a work achievement resulting from their role as a functional academic staff member (Rivai, 2004). Lecturer performance is a work outcome because it strongly links to the organization's strategic goals, customer satisfaction, and economic contribution (Mahmudi, 2007). This theory emphasizes that lecturer performance is influenced by their competencies, including knowledge, skills, and professional attitudes.

Competency development through training and continuing education is considered essential to improving lecturer performance.

Performance Theory focuses on how intrinsic and extrinsic motivation influence lecturer performance. Factors such as rewards, recognition, and a supportive work environment can increase motivation and, in turn, lecturer performance. Lecturers' job satisfaction levels are directly related to their performance. Job satisfaction is influenced by factors such as compensation, working conditions, and relationships with colleagues.

3. Research Methods

The type of research to be used uses quantitative methods and an associative approach. According to Sugiyono (2016), associative research aims to determine the influence or relationship between two or more variables. This research was conducted at a private university in Medan City. The population in this study were lecturers at a private university in Medan City, Election. The sample size can be determined based on the number of indicators in the study. The number of research samples is a minimum of 5 times the number of indicators and a maximum of 10 times the number of indicators (Hair & Harrison, 2021). In this study, there are 75 indicators, so the number of research samples is $5 \times 75 = 375$ people. Data collection in this study was carried out using documentation studies and questionnaires.

3.1 Data Analysis Methods

3.1.1. Validity and Reliability Test

Validity testing is used to measure the validity of a questionnaire. A questionnaire is considered valid if its questions are able to measure the variables it is intended to measure. The validity test in this study used Pearson's Product Moment Coefficient (r) with the decision-making criteria have been determined as stated by Ghozali (2018), namely if $r\text{-calculated} > r\text{-table}$ then the statement is declared valid. Conversely, if $r\text{-calculated} \leq r\text{-table}$ then the statement is declared invalid. Furthermore, the reliability test is used to measure the consistency of the measurement

results of the questionnaire in repeated use. The reliability test in this study uses Cronbach's alpha with the decision-making criteria as stated by Ghozali (2018), namely if the Cronbach's alpha coefficient > 0.7 then the question or statement is declared reliable. Conversely, if the Cronbach's alpha coefficient ≤ 0.7 then the statement is declared unreliable. The test was carried out with Partial Least Squares Structural Equation Modeling (PLS-SEM; also called PLS path modeling).

3.1.2 Measurement Model (Outer Model)

There are three criteria for measuring the outer model: Convergent Validity, Discriminant Validity, and Composite Validity. The measurement model with reflection indicators is assessed based on the correlation between item scores, calculated using PLS. An individual reflection measure is considered high if it correlates more than 0.70 with the construct being measured. According to Ghozali (2021), for initial research on developing a measurement scale, a loading value of 0.5 to 0.6 is considered sufficient. Convergent validity can also be determined through the Average Variance Extracted (AVE). An instrument is said to meet the convergent validity test if its Average Variance Extracted (AVE) is greater than 0.50. The testing criteria state that if the composite reliability is greater than 0.70 and the Cronbach's alpha is greater than 0.60, the variable is considered reliable.

3.1.3 Structural Model (Inner Model)

The inner model is a structural model used to predict causal relationships (cause-and-effect relationships) between latent variables or variables that cannot be measured directly. Through bootstrapping (a non-parametric procedure that allows for statistical significance testing of SEM-PLS variants that produce path coefficients, Cronbach's alpha, HTMT, and other

values), the model can be used to predict causal relationships R^2 . The t-statistic test parameters obtained to predict the existence of a causal relationship. The inner model in PLS is evaluated using R^2 for dependent variables, the path coefficient value (the path that describes the strength of the relationship between variables) for the significance test between variables in the inner model (structural model).

3.1.4 Research Hypothesis

1. Ambidextrous leadership has a significant influence on organizational culture at private universities in Medan.
2. Age has a significant influence on organizational culture at private universities in Medan.
3. Ambidextrous leadership has a significant influence on lecturer performance at private universities in Medan.
4. Age has a significant influence on lecturer performance at private universities in Medan.
5. Organizational culture has a significant influence on lecturer performance at private universities in Medan.
6. Ambidextrous leadership through organizational culture has a significant influence on lecturer performance at private universities in Medan.
7. Age through organizational culture has a significant influence on lecturer performance at private universities in Medan.

4. Result and Discussion

4.1. Ambidextrous Leadership Variable

Respondents' answers to the Ambidextrous Leadership variable are provided in Table 1.

Table 1. Respondents' Answers to the Ambidextrous Leadership Variable

Indicator	Choice					Average Score	Category
	1	2	3	4	5		
X1.01	0	34	61	210	70	3.84	High
X1.02	9	4	36	252	74	4.01	High
X1.03	0	18	88	186	83	3.89	High
X1.04	0	17	46	175	137	4.15	High
X1.05	0	21	30	257	67	3.99	High
X1.06	5	17	30	270	53	3.93	High
X1.07	0	34	60	210	71	3.85	High
X1.08	9	4	35	253	74	4.01	High
X1.09	0	18	87	187	83	3.89	High
X1.10	0	18	37	266	54	3.95	High
X1.11	0	33	61	210	71	3.85	High
X1.12	8	5	34	253	75	4.02	High
X1.13	0	17	83	190	85	3.91	High
X1.14	0	18	44	178	135	4.15	High
X1.15	0	20	29	259	67	3.99	High

Table 1 shows that the highest indicators are X1.14 (calm and stable even under high pressure) and X1.04 (ensuring efficient operational processes) with an average score of 4.15, categorized as "high." This is followed by indicator X1.12 (creating a conducive work environment), which has an average score of 4.02, categorized as "high." Furthermore, indicator X1.08 (involving various parties in strategic decision-making) and indicator X1.02 (having a clear and relevant strategic vision) have an average score of 4.01, categorized as "high." This is followed by indicators X1.15 (continuously learning from experience to improve leadership quality) and X1.05 (encouraging experimentation to find new ways), which have an average score of 3.99, categorized as "high." Meanwhile, indicator X1.10 (providing clear direction), which has an average score of 3.95, categorized as "high."

Next, followed by indicator X1.06 (flexibility to the team in carrying out tasks) has an average score of 3.93 with a "high" category. Then followed by indicator X1.13 (showing courage in making difficult decisions) has an average score of 3.91 with a "high" category. For that, followed by indicator X1.09 (utilizing informal networks) and indicator X1.03 (ability to integrate long-term innovation) has an average score of 3.89 with a "high" category. Meanwhile, followed by indicator X1.11 (supporting team competency development) and indicator X1.07 (building good relationships with all stakeholders) has an average of 3.85 with a "high" category. And the lowest indicator indicator X1.01 (ability to identify new opportunities) has an average score of 3.84 with a "high" category.

4.2 Age Variable

Respondents' answers to the age variable are given in Table 2.

Table 2. Respondents' Answers to the Age Variable

Indicator	Choice					Average Scor	Category
	1	2	3	4	5		
X3.01	0	20	22	165	168	4.28	Very high
X3.02	0	20	33	222	100	4.07	High
X3.03	0	21	17	226	111	4.14	High
X3.04	0	25	29	227	94	4.04	High
X3.05	8	8	29	197	133	4.17	High
X3.06	0	9	55	217	94	4.06	High
X3.07	0	33	60	210	72	3.86	High
X3.08	8	5	33	251	78	4.03	High
X3.09	0	17	82	189	87	3.92	High
X3.10	0	18	44	178	135	4.15	High
X3.11	0	20	29	257	69	4	High
X3.12	0	9	34	252	80	4.07	High
X3.13	5	8	27	242	93	4.09	High
X3.14	0	13	16	206	140	4.26	Very high
X3.15	0	21	17	225	112	4.14	High

From Table 2 it can be seen that the highest indicator X3.01 (age is not an obstacle in carrying out responsibilities) has an average score of 4.28 with a "very high" category. Next followed by indicator X3.14 (career maturity helps provide maximum contribution) has an average score of 4.26 with a "very high" category. In addition, from the side of indicator X3.05 (cognitive ability supports optimal performance) has an average score of 4.17 with a "high" category. Then followed by indicator X3.10 (length of service provides advantages in understanding the work system) has an average score of 4.15 with a "high" category. On the other hand, indicator X3.15 (duration of work in this field provides confidence in carrying out tasks) and indicator X3.03 (coworkers respect experience based on age) have an average score of 4.14 with a "high" category. Then followed by indicator X3.13 (career development in line with current age) has an average score of 4.09 with a "high" category. Indicator X3.12 (knowledge of higher education supports team productivity) and indicator X3.02 (age relevant to current role) had an average score of 4.07, categorized as "high." Furthermore,

indicator X3.06 (physical and mental abilities in accordance with job demands) had an average score of 4.06, categorized as "high." Meanwhile, indicator X3.04 (having sufficient stamina to complete tasks) had an average score of 4.04, categorized as "high." Furthermore, indicator X3.08 (feelings about age influence motivation to work better) had an average score of 4.03, categorized as "high." Furthermore, indicator X3.11 (experience helping with academic or administrative issues) had an average score of 4, categorized as "high."

This was followed by indicator X3.09 (feeling energy is not much different from younger colleagues) with an average score of 3.92, categorized as "high." And the lowest indicator is indicator X3.07 (feeling younger than chronological age in carrying out tasks) which has an average score of 3.86 with the "high" category.

4.3 Organizational Culture Variables

Respondents' answers to the organizational culture variables are provided in Table 3.

Table 3. Respondents' Answers to the Organizational Culture Variables

Indicator	Choice					Average Score	Category
	1	2	3	4	5		
Z01	8	9	31	197	130	4.15	High
Z02	0	8	54	225	88	4.05	High
Z03	4	0	22	216	133	4.26	Very high
Z04	0	29	47	224	75	3.92	High
Z05	5	21	16	178	155	4.22	Very high
Z06	0	18	33	241	83	4.04	High
Z07	5	8	35	219	108	4.11	High
Z08	0	8	53	161	153	4.22	Very high
Z09	0	26	22	216	111	4.1	High
Z10	4	0	20	213	138	4.28	Very high
Z11	0	29	46	218	82	3.94	High
Z12	4	20	18	177	156	4.23	Very high
Z13	0	16	34	238	87	4.06	High
Z14	4	8	32	219	112	4.14	High
Z15	0	12	45	195	123	4.14	High

Table 3 shows that the highest indicator Z10 (encouraging close collaboration between lecturers and staff) has an average score of 4.28, categorized as "very high." This is followed by indicator Z03 (providing support for experiments in teaching or research), which has an average score of 4.26, categorized as "very high." Furthermore, indicator Z12 (team achievement is valued more than individual achievement alone) has an average score of 4.23, categorized as "very high." This is followed by indicator Z08 (input from lecturers and staff is valued in institutional decision-making) and indicator Z05 (work performance is measured based on tangible results), with an average score of 4.22, categorized as "very high." Meanwhile, indicator Z01 (encouraging lecturers and staff to propose new ideas) has an average score of 4.15, categorized as "high." This is followed by indicator Z15 (policy changes are made with careful consideration to maintain institutional stability) and indicator Z14 (standardized work processes help improve work efficiency), with an average score of 4.14, categorized as "high." This

is followed by indicator Z07 (caring for the welfare of lecturers and staff), with an average score of 4.11, categorized as "high." This is followed by indicator Z09 (individual contributions are formally recognized by the institution), with an average score of 4.1, categorized as "high." Meanwhile, indicator Z13 (having clear and consistent rules and policies) has an average score of 4.06, categorized as "high." This is even followed by indicator Z02 (errors that occur) when trying new methods is considered part of learning) has an average score of 4.05 with a "high" category. In this case, it is followed by indicator Z06 (awards are given for extraordinary individual and team achievements) with an average score of 4.04 with a "high" category. Next, followed by indicator Z11 (open communication and collaboration between units are a priority in this institution) with an average score of 3.94 with a "high" category. And the lowest indicator is indicator Z04 (setting clear performance targets for lecturers and staff) with an average score of 3.92 with a "high" category.

4.4 Lecturer Performance Variables

Respondents' answers to the lecturer performance variables are provided in Table 4.

Table 4. Respondents' Answers to the Lecturer Performance Variables

Indicator	Choice					Average Score	Category
	1	2	3	4	5		
Y01	0	17	52	196	110	4.06	High
Y02	5	13	26	237	94	4.07	High
Y03	5	13	35	280	42	3.91	High
Y04	0	14	42	203	116	4.12	High
Y05	0	17	43	190	125	4.13	High
Y06	0	18	8	215	134	4.24	Very high
Y07	0	14	48	176	137	4.16	High
Y08	0	16	43	185	131	4.15	High
Y09	0	16	9	213	137	4.26	Very high
Y10	0	12	51	177	135	4.16	High
Y11	0	17	52	193	113	4.07	High
Y12	0	16	29	166	164	4.27	Very high
Y13	0	12	51	195	117	4.11	High
Y14	0	14	42	205	114	4.12	High
Y15	0	17	44	189	125	4.13	High

Table 4 shows that the highest indicator Y12 (demonstrating high ethics and integrity in carrying out their duties) had an average score of 4.27, categorized as "very high." This was followed by indicator Y09 (community service programs relevant to their academic expertise), which had an average score of 4.26, categorized as "very high." Furthermore, indicator Y06 (presenting research results in academic forums such as seminars or conferences) had an average score of 4.24, categorized as "very high." This is followed by indicator Y10 (regularly attending training, seminars, or workshops to improve competency) and indicator Y07 (implementing community service programs that have a positive impact) with an average score of 4.16, categorized as "high." Meanwhile, indicator Y08 (collaborating with local communities to solve community problems) has an average score of 4.15, categorized as "high." This is followed by indicator Y15 (demonstrating leadership that encourages collaboration and innovation) and indicator Y05 (research results contribute to the

development of science) with an average score of 4.13, categorized as "high." Meanwhile, indicator Y14 (effective in communicating and coordinating with students and colleagues) and indicator Y04 (actively publishing scientific papers in national or international journals) have an average score of 4.12, categorized as "high." This is followed by indicator Y13 (able to manage academic programs or activities well) with an average score of 4.11, categorized as "high." Meanwhile, indicator Y11 (having professional certification or awards related to their field) and indicator Y02 (teaching methods used are effective in helping students understand) had an average score of 4.07, categorized as "high." Even Y01 (developing clear and curriculum-aligned lesson plans) had an average score of 4.06, categorized as "high." And the lowest indicator was Y03 (providing objective and transparent assessment of learning outcomes), with an average score of 3.91, categorized as "high".

4.5 PLS-SEM analysis

4.5.1 Measurement Model Evaluation (Outer Model)

Evaluation of the measurement model, or outer model, is conducted to assess the validity and reliability of the construct model. The outer model, with reflective indicators, is evaluated using convergent validity, discriminant validity, research variable.

and composite reliability, as well as Cronbach's alpha for each indicator (Ghozali, 2021).

4.5.1.1 Convergent Validity Test

The results of data processing using SmartPLS produce Loading Factor values for each research variable as presented in Table 5. This is done to see the suitability of each indicator for each

Table 5. Initial Model Loading Factor Values

Variables	Indicator	Loading Factor	Conclusion
Ambidextrous Leadership	X1.01	0.776	Fulfil
	X1.02	0.823	Fulfil
	X1.03	0.774	Fulfil
	X1.04	0.743	Fulfil
	X1.05	0.706	Fulfil
	X1.06	0.805	Fulfil
	X1.07	0.778	Fulfil
	X1.08	0.826	Fulfil
	X1.09	0.777	Fulfil
	X1.10	0.700	Fulfil
	X1.11	0.746	Fulfil
	X1.12	0.794	Fulfil
	X1.13	0.750	Fulfil
	X1.14	0.720	Fulfil
Age	X1.15	0.693	Fulfil
	X3.01	0.762	Fulfil
	X3.02	0.798	Fulfil
	X3.03	0.708	Fulfil
	X3.04	0.751	Fulfil
	X3.05	0.841	Fulfil
	X3.06	0.756	Fulfil
	X3.07	0.758	Fulfil
	X3.08	0.759	Fulfil
	X3.09	0.729	Fulfil
	X3.10	0.749	Fulfil
	X3.11	0.726	Fulfil
	X3.12	0.711	Fulfil
	X3.13	0.685	Fulfil
	X3.14	0.718	Fulfil
	X3.15	0.052	Not Fulfilled
Organizational culture	Z01	0.768	Fulfil

		Z02	0.741	Fulfil
		Z03	0.724	Fulfil
		Z04	0.825	Fulfil
		Z05	0.761	Fulfil
		Z06	0.791	Fulfil
		Z07	0.752	Fulfil
		Z08	0.706	Fulfil
		Z09	0.749	Fulfil
		Z10	0.719	Fulfil
		Z11	0.812	Fulfil
		Z12	0.754	Fulfil
		Z13	0.776	Fulfil
		Z14	0.741	Fulfil
		Z15	0.720	Fulfil
	Lecturer Performance	Y01	0.745	Fulfil
		Y02	0.755	Fulfil
		Y03	0.751	Fulfil
		Y04	0.787	Fulfil
		Y05	0.859	Fulfil
		Y06	0.794	Fulfil
		Y07	0.783	Fulfil
		Y08	0.820	Fulfil
		Y09	0.772	Fulfil
		Y10	0.745	Fulfil
		Y11	0.745	Fulfil
		Y12	0.673	Fulfil
		Y13	0.732	Fulfil
		Y14	0.784	Fulfil
		Y15	0.858	Fulfil

Table 5 shows that several indicators did not meet the requirements because their values were <0.6. These indicators were X2.12, X2.13, X2.14, X2.15, and X3.15. Therefore, these indicators were removed from the model.

The loading factor values for the revised model are presented in Table 6. Table 6 shows that the

indicators for each variable have a loading factor of 0.6 or higher. Furthermore, a convergent validity test was conducted by examining the Average Variance Extracted (AVE) value for each variable. Table 7 shows that the AVE value for all study variables is greater than 0.5. Thus, the requirements for the convergent validity test are met.

Table 6. Revised Model Loading Factor Values

Variable	Indicator	Loading Factor	Conclusion
Ambidextrous Leadership	X1.01	0.776	Fulfil
	X1.02	0.823	Fulfil
	X1.03	0.774	Fulfil
	X1.04	0.743	Fulfil
	X1.05	0.706	Fulfil
	X1.06	0.805	Fulfil
	X1.07	0.778	Fulfil
	X1.08	0.826	Fulfil
	X1.09	0.777	Fulfil
	X1.10	0.700	Fulfil
	X1.11	0.746	Fulfil
	X1.12	0.794	Fulfil
	X1.13	0.750	Fulfil
	X1.14	0.720	Fulfil
	X1.15	0.693	Fulfil
Age	X3.01	0.763	Fulfil
	X3.02	0.798	Fulfil
	X3.03	0.709	Fulfil
	X3.04	0.751	Fulfil
	X3.05	0.841	Fulfil
	X3.06	0.755	Fulfil
	X3.07	0.758	Fulfil
	X3.08	0.759	Fulfil
	X3.09	0.729	Fulfil
	X3.10	0.749	Fulfil
	X3.11	0.726	Fulfil
	X3.12	0.711	Fulfil
	X3.13	0.685	Fulfil
	X3.14	0.718	Fulfil
Organizational culture	Z01	0.768	Fulfil
	Z02	0.741	Fulfil
	Z03	0.724	Fulfil
	Z04	0.825	Fulfil
	Z05	0.761	Fulfil
	Z06	0.791	Fulfil
	Z07	0.752	Fulfil
	Z08	0.706	Fulfil
	Z09	0.749	Fulfil
	Z10	0.719	Fulfil
	Z11	0.812	Fulfil

	Z12	0.754	Fulfil
	Z13	0.776	Fulfil
	Z14	0.741	Fulfil
	Z15	0.720	Fulfil
Lecturer Performance	Y01	0.745	Fulfil
	Y02	0.755	Fulfil
	Y03	0.751	Fulfil
	Y04	0.787	Fulfil
	Y05	0.859	Fulfil
	Y06	0.794	Fulfil
	Y07	0.783	Fulfil
	Y08	0.820	Fulfil
	Y09	0.772	Fulfil
	Y10	0.745	Fulfil
	Y11	0.745	Fulfil
	Y12	0.673	Fulfil
	Y13	0.732	Fulfil
	Y14	0.784	Fulfil
	Y15	0.858	Fulfil

Table 7. Average Variance Extracted (AVE) Value

Variable	Average Variance Extracted (AVE)
Organizational Culture	0.573
Ambidextrous Leadership	0.581
Lecturer Performance	0.601
Age	0.559

4.5.1.2 Discriminant Validity Test

One way to test the discriminant validity of a structural model is by using the Fornell Larcker Criterion. The Fornell Larcker values for each research variable are given in Table 8. From these

results, it can be seen that the AVE root value for each variable is greater than the correlation value of that variable with other variables. Thus, it can be stated that the discriminant validity requirements are met.

Table 8. Fornell-Larcker

Variable	Organizational culture	Ambidextrous Leadership	Lecturer Performance	Age
Organizational Culture	0.757			
Ambidextrous Leadership	0.736	0.762		
Lecturer Performance	0.738	0.734	0.775	
Age	0.742	0.746	0.719	0.748

4.5.1.3 Composite Reliability

Reliability testing is conducted to demonstrate the accuracy, consistency, and precision of an instrument in measuring a construct (Ghozali, 2021). Measuring the reliability of a construct

using reflective indicators can be done in two ways: Cronbach's Alpha and Composite Reliability, often referred to as Dillon-Goldstein's. Composite Reliability values for each variable are shown in Table 9.

Table 9. Construct Validity and Reliability Results

Variable	Cronbach's Alpha	rho_A	Composite Reliability
Organizational Culture	0.946	0.947	0.953
Ambidextrous Leadership	0.948	0.949	0.954
Lecturer Performance	0.952	0.953	0.957
Age	0.939	0.940	0.946

Based on Table 9, it can be seen that the Composite Reliability and Cronbach's Alpha values for all research constructs are > 0.70 , thus fulfilling the reliability requirements.

4.6 Structural Model Evaluation (Inner Model)

The results of data processing to examine the influence between variables are presented in Table 10.

Table 10. Direct Influence Between Variables

Influence between variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ($ O/STDEV $)	P Values
Leadership Ambidextrous □ Organizational culture	0.249	0.244	0.052	4.757	0.000
Age □ Organizational culture	0.489	0.497	0.068	7.212	0.000
Ambidextrous Leadership □ Lecturer Performance	0.413	0.413	0.061	6.797	0.000
Age □ Lecturer Performance	-0.067	-0.065	0.068	0.984	0.326
Organizational culture □ Lecturer Performance	0.396	0.392	0.066	6.016	0.000

While the indirect influence between variables is given in Table 11 and the total influence between variables is given in Table 12.

Table 11. Indirect Effects Between Variables

Indirect Influence	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Ambidextrous Leadership $\square$ Organizational Culture $\square$ Lecturer Performance	0.098	0.096	0.026	3.858	0.000
Age $\square$ Organizational Culture $\square$ Lecturer Performance	0.194	0.196	0.045	4.343	0.000

Table 12. Total Influence Between Variables

Total Influence	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Ambidextrous Leadership $\square$ Organizational Culture	0.249	0.244	0.052	4.757	0.000
Age $\square$ Organizational Culture	0.489	0.497	0.068	7.212	0.000
Ambidextrous Leadership $\square$ Lecturer Performance	0.511	0.509	0.063	8.135	0.000
Age $\square$ Lecturer Performance	0.127	0.131	0.084	1.514	0.131
Organizational Culture $\square$ Lecturer Performance	0.396	0.392	0.066	6.016	0.000

4.7 Quality Model Evaluation

Evaluation of the quality of the research model consists of R-Square, F-Square, and Q-Square.

4.7.1 R-Square

The R-Square values for each mediator variable and dependent variable are given in Table 13.

Table 13. R-Square Results

Variable	R Square	R Square Adjusted
Organizational Culture	0.927	0.926
Lecturer Performance	0.914	0.913

Structural model testing (Inner Model) is carried out by looking at the R Square value (R^2). R-Square can be used to explain the influence of certain exogenous latent variables on endogenous latent variables, whether they have a substantive

influence (Ghozali, 2021). Values of 0.75 (strong), 0.50 (moderate), and 0.25 (weak) (Hair et al. 2011). Based on Table 13, it can be seen that the R Square value explains the variation in the organizational culture construct that can be

explained by variations in the Ambidextrous leadership construct and age by 92.7%. So the model is said to be strong because the variation in organizational culture is explained by variations in other constructs by only 7.3%. The R Square value explains the variation in the lecturer performance construct that can be explained by variations in the Ambidextrous

leadership construct, age, and culture by 91.4%. So the model is said to be strong because the variation in lecturer performance is explained by variations in other constructs by only 8.6%.

4.7.2 F-Square

The F-square value for each research variable is given in Table 14.

Table 14. F-Square Results

	Organizational culture	Lecturer Performance
Organizational Culture		0.133
Ambidextrous Leadership	0.080	0.173
Lecturer Performance		
Age	0.266	0.003

Based on Table 14, it can be concluded that:

- a. Ambidextrous Leadership on Organizational Culture = 0.080, a weak effect
- b. Age on Organizational Culture = 0.266, a moderate effect
- c. Ambidextrous Leadership on Lecturer Performance = 0.173, a moderate effect
- d. Age followed by internal communication on Lecturer Performance = 0.003, a very weak effect
- e. Organizational Culture on Lecturer Performance = 0.133, a moderate effect.

B. Q^2 Predictive Relevance

Mark Q^2 for each research variable is given in Table 16.

Table 15. Results Q^2 Predictive Relevance

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Lecturer Performance	5625.000	2571.501	0.543
Organizational Culture	5625.000	2671.393	0.525
Ambidextrous Leadership	5625.000	5625.000	
Age	5250.000	5250.000	

Based on Table 15, it can be seen that the value $Q^2 > 0$ indicates that the model has predictive relevance. The results Q^2 from Organizational Culture = 0.525 > 0.35 and Lecturer Performance the value = 0.543 > 0.35 which shows that the model obtained is very strong for predicting organizational culture and lecturer performance

at PTS in Medan City (Ghozali, 2021).

4.7.4 Hypothesis Test Results

Based on the results of the data processing and analysis conducted in the previous section, the answers to the research hypotheses are presented in Table 16.

Table 16. Answers to the Hypothesis

Hypothesis	Influence Coefficient	p-value	Conclusion
H1 : Ambidextrous Leadership has a significant influence on Organizational Culture in Private Universities in Medan City.	0.249	0.000	Accepted
H2 : Age has a significant influence on Organizational Culture in Private Universities in Medan City.	0.489	0.000	Accepted
H3 : Ambidextrous leadership has a significant influence on the performance of lecturers at private universities in Medan City.	0.413	0.000	Accepted
H4 : Age has a significant influence on the performance of lecturers at private universities in Medan City.	-0.067	0.326	Rejected
H5 : Organizational culture has a significant influence on the performance of lecturers at private universities in Medan City.	0.396	0.000	Accepted
H6 : Ambidextrous Leadership through Organizational Culture has a significant influence on lecturer performance at private universities in Medan City.	0.098	0.000	Accepted
H7 : Age through Organizational Culture has a significant influence on the performance of lecturers at Private Universities in Medan City.	0.194	0.000	Accepted

4.8 Discussion

4.8.1 The Influence of Ambidextrous Leadership on Organizational Culture

The results of the hypothesis test indicate that ambidextrous leadership has a significant influence on organizational culture at private universities in Medan. These findings align with research by Fadhila (2022), which concluded that ambidextrous leadership supports organizational culture, specifically innovative work behavior among employees. Similarly, research by Wahyu and Nastiti (2022) concluded that ambidextrous leadership, reflected in a combination of differentiation and contextual integration, is key to creating an adaptive and innovative organizational culture.

Another study consistent with these findings is

that conducted by Raisch et al. (2018), which concluded that ambidextrous leadership, reflected in creative self-efficacy (employees' belief in their creative abilities) and an innovative organizational climate, mediate and moderate the influence of ambidextrous leadership on innovation outcomes in organizations. Schermerhorn et al. (2019) concluded that ambidextrous leadership, which combines structural differentiation and contextual integration, helps organizations balance innovation exploration and efficiency exploitation. This approach creates an adaptive work culture and supports organizational sustainability in a dynamic environment.

4.8.2 The Influence of Age on Organizational Culture

The results of the hypothesis test indicate that age significantly influences organizational culture at private universities in Medan. This research aligns with Ardana et al. (2023) who found that age differences significantly impact how individuals interact with organizational culture, particularly in the context of multinational companies. Older employees are more stable and adhere to organizational culture, while younger employees are more adaptable to more global cultural changes.

Organizational culture has a positive effect on employee productivity (Samuel et al., 2020). This influence may differ between younger and older employees, given the differences in how they respond to organizational culture. Similarly, Antari (2019) examined the relationship between organizational culture, job satisfaction, and age, as well as how age differences influence responses to organizational culture. Abdul and Abdul (2019) found that older employees tended to maintain traditional values, while younger employees were more open to cultural changes occurring within the company.

4.8.3 The Influence of Ambidextrous Leadership on Lecturer Performance

The results of the hypothesis test indicate that the variable Ambidextrous Leadership significantly influences lecturer performance at private universities in Medan. This is in line with the research findings of Hakimian et al. (2023), which stated that ambidextrous leadership has a significant relationship with lecturers' academic performance. Ambidextrous leaders are able to create an environment that supports innovation, which in turn improves lecturers' performance in academic and teaching aspects.

Arif (2018) concluded that ambidextrous leadership has a significant influence on lecturer performance, especially in the context of teaching and research. Leaders who are able to balance both aspects of leadership can encourage lecturers to be more innovative, which in turn improves the quality of their performance in

various aspects of academic work. Imron (2018) stated that ambidextrous leadership can improve organizational performance when balanced with a spirituality-based approach and innovation. This demonstrates the importance of strengthening organizational values to support sustainable innovation.

4.8.4 The Influence of Age on Lecturer Performance

The results of the hypothesis test indicate that age has no significant effect on lecturer performance at private universities in Medan. These findings align with research conducted by Azizah (2023), which concluded that age influences lecturer performance, but not directly. Other factors such as education level, length of service, and health also contribute to lecturer performance.

However, several studies have reached different conclusions. Yuniarsih (2021) stated that age influences lecturer performance. A more mature age allows lecturers to be more stable in carrying out teaching and research duties, although there is a decline in certain aspects such as the adoption of new technology. Furthermore, Sali (2021) found that younger lecturers tend to be more productive in terms of research publications and the application of new technology in the learning process. They adapt more quickly to the latest technology and tend to use more innovative approaches to teaching. This enhances lecturers' expertise in teaching, research, and mentoring students.

4.8.5 The Influence of Organizational Culture on Lecturer Performance

The results of the hypothesis test indicate that organizational culture significantly influences lecturer performance at private universities in Medan. This study aligns with Kessi and Yasir's (2024) statement that a positive organizational culture in higher education, particularly one that emphasizes collaboration, good communication, and support for professional development, significantly impacts lecturer performance. Lecturers who work in a supportive cultural environment are more productive in teaching and research.

Furthermore, Kurniawan (2024) states that a healthy organizational culture, such as supportive leadership and policies that prioritize lecturer welfare, can improve lecturer morale, which in turn contributes to better academic performance. Similarly, Sari (2022) states that a strong organizational culture that promotes work discipline and motivation among lecturers contributes to improved performance outcomes. An inclusive organizational culture based on positive values can improve lecturer performance, with a work environment that supports lecturer professional development (Yunita, 2020).

4.8.6 The Influence of Ambidextrous Leadership through Organizational Culture on Lecturer Performance

The results of the hypothesis test indicate that the variable Ambidextrous Leadership through Organizational Culture has a significant influence on lecturer performance at private universities in Medan. These results align with research conducted by Hidayat and Haryanto (2023), who concluded that ambidextrous leadership directly influences organizational culture, which in turn improves lecturer performance. Leaders who are able to balance exploring new opportunities with utilizing existing resources create an environment that supports lecturer productivity.

Sari and Dermawan (2021) concluded that ambidextrous leadership, which combines the exploration and exploitation of ideas, plays a significant role in improving lecturer performance, with organizational culture as a supporting factor strengthening this relationship. Wijaya (2020) concluded that ambidextrous leadership, which combines exploration and exploitation, has a significant positive impact on lecturer performance. Furthermore, an organizational culture that supports collaboration, innovation, and open communication plays a strengthening factor in this relationship.

4.8.7 The Influence of Age through Organizational Culture on Lecturer Performance

The results of the hypothesis test indicate that

age, through organizational culture, significantly influences lecturer performance at private universities in Medan. These findings align with research conducted by Dirwan (2023), which concluded that a positive organizational culture can improve lecturer performance. Senior lecturers tend to be more adaptable to established organizational cultures, while younger lecturers are more open to change and innovation. Age influences how lecturers respond to the work culture in educational institutions, with more experienced lecturers often demonstrating a stronger commitment to organizational culture.

Pratama and Yuliana (2022) stated that age influences the level of commitment to organizational culture. Younger lecturers are quicker to adopt new organizational cultures, while senior lecturers place greater emphasis on stability and tradition. However, both groups have a positive impact on lecturer performance, although their responses to changes in organizational culture can differ significantly. Age influences how lecturers respond to organizational culture, with younger lecturers more likely to respond enthusiastically to change, while older lecturers prefer stability in their work environment.

Conclusion

Based on the results of this study, the following conclusions can be drawn:

1. Ambidextrous leadership has a significant effect on organizational culture at private universities in Medan.
2. Age has a significant effect on organizational culture at private universities in Medan.
3. Ambidextrous leadership has a significant effect on lecturer performance at private universities in Medan.
4. Age has an insignificant effect on lecturer performance at private universities in Medan.
5. Organizational culture has a significant effect on lecturer performance at private universities in Medan.

6. Ambidextrous leadership, through organizational culture, has a significant effect on lecturer performance at private universities in Medan.

7. Age, through organizational culture, has a significant effect on lecturer performance at private universities in Medan.

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