



Lecturer Performance Measurement Based on Organizational Culture and Leadership Behavior Analysis Using Pearson Correlation

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Abstract: The academic institution generally has management quality to measure lecturer performance. Two variables, leadership behavior and organizational culture, are often used and must be analyzed to determine the relationship between their parameters and forms as correlations for identifying the lecturer's performance. This paper proposed a new approach to measure a correlation between leadership and organizational culture variables. The leadership variable used seven parameters: consultation, democratic management, decentralization, delegation, responsibility, intelligence, and routine evaluation. Besides, the seven parameters of the organizational culture variables are beliefs, behaviour, norms, social control system, organizational trust, work culture, and division of work. Then, correlation is calculated by measuring the relationship between parameters in different variables by adopting the Pearson Correlation concept. The goal is to define the correlation strength between two parameters to show the quality of lecturer performance. The experiment resulted in five pairs of parameters with a high correlation: routine evaluation behavior, consultation division of work, delegation behavior, decentralization-work culture, and decentralization behavior. The highest positive correlation strength is obtained at 0.321 in routine evaluation with behavior parameters, and the threshold value was successfully traced with a value of $r = 0.1605$. These approaches can be used to determine the lecturer's reward.

Keywords: lecturer performance, correlation, data analytical, organizational culture, leadership

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INTRODUCTION

Lecturers as educators in higher education have obligations that must be fulfilled as the Tridharma of Higher Education (Sumarsih et al., 2022). The lecturers' responsibilities are called Teaching, Research, and Community Service Activities. Teaching and education are defined as a conscious and planned effort to create a learning atmosphere and learning process. Thus, students actively develop their potential to have religious and spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation, and Country. So, focusing on education and teaching in higher education is vital in creating superior seeds. Research is discovering concepts, theories, and information in science, technology, and art. In community service, lecturers can use knowledge to empower the community so there is a contribution from the scientific field to the social environment of society. Examples of community service activities are social service, village community outreach, tutoring for children, etc.

According to Indonesian Law Number 12 of 2012 Concerning Higher Education, higher education institutions as providers of higher education function in developing the abilities of the academic community to be innovative, responsive, creative, skilled, competitive, and cooperative. The actual implementation that can be carried out by higher education is developing the quality of lecturers. For example, implementing the Independent Learning Campus Merdeka (MBKM) program allows university lecturers to carry out activities outside the campus to develop insight, knowledge, learning, and personal competence (De Vega & Nur, 2022; Kasih et al., 2022; Purwanti, 2021; Susanti et al., 2023; Werdiningsih et al., 2022). It can be estimated by measuring lecturer performance. Measuring lecturer quality is a complex process that involves assessing multiple dimensions of performance, effectiveness, and impact on student learning. Previous studies have commonly introduced several methodologies and tools to measure lecturer quality comprehensively, such as by determining assessment parameters or variables.

Measuring the quality of lecturer performance can be determined based on several assessment parameters, including organizational culture (Bakare & Ojeleye, 2020), leadership behavior (Bakare & Ojeleye, 2020; Bhatti et al., 2019; Saġnak, 2016; Sinani, 2016), training (Kasmiaty et al., 2021), work environment (Bakare & Ojeleye, 2020), satisfaction (Gress, 1974), motivation (Al-Rahbi et al., 2017), and commitment organization (Saġnak, 2016). In its implementation, sometimes parameter assessments cannot be measured in

a complex manner, which is caused by the conditions of the educational institution. The tendency is that the evaluation can only be assessed on organizational culture (Fitria, 2018; Tahniah et al., 2021), leadership (Elpishah & Hartini, 2019; Kasmiaty et al., 2021), and work motivation (Faris, 2020; Kasmiaty et al., 2021). Three parameters are often assessed to get a more realistic result.

Leadership is essential in openly providing direction or motivation to all sections of an educational institution sincerely (Sağnak, 2016). The leadership needed is the characteristic of being responsible, empowering members to the fullest without ignoring the rules that apply in society and all the agreements that have been agreed upon from the start. In addition to leadership, organizational culture is also an essential part of higher education institutions which acts as a collective effect from behavior, subjective values, or characteristics of academic actors in the organization to generally accepted beliefs that can improve organizational quality (Ferguson & Fakelmann, 2005). Organizational culture tends to depend on work motivation. Work motivation in an educational setting is a reference for institutional development and a benchmark for achieving vision and mission (Zlate & Cucui, 2015). In several places, motivation and organizational culture in the educational environment are integral in measuring the achievement of formal quality of academic staff and lecturer performance (Rowley, 1996).

Several analytical approaches to the parameters determining lecturer performance have been introduced in previous studies (Bakare & Ojeleye, 2020; Indrasari, 2017; Ratnasari et al., 2018). This research analyzes and gets the influence value between measurement parameters. Influence measurement is measured sequentially using SEM (Structural Equation Modeling). This study analyzed the relationship of each measurement parameter with optimal value results. However, the measurements only show a one-way effect based on the measured parameters. The effect of measurements can produce causality measures that can determine influence in both directions. Two-way causality of measurement parameters is needed to show parameter criteria in case studies with different characteristics.

This study proposes a new approach to measuring the correlation between organizational culture parameters and leadership behavior to analyze the quality of lecturer performance in higher education institutions. The research objective was to determine the correlation between the two parameters in measuring lecturer performance. The contribution of the proposed research is a new approach in the form of correlation analysis with an analysis of the quality of lecturer performance obtained from the parameters of organizational culture and leadership behavior. Previous studies have yet to do it (Hasim et al., 2023; Mesterjon et al., 2022; Milkhatun et al., 2020; Sumarsih et al., 2022). Measurement of unidirectional correlation and producing simultaneous correlation analysis was carried out (Atmawidjaja et al., 2023; Lusty & Ariyanto, 2023), but did not analyze two-way relationships in correlation analysis. Two-way correlation means that two variables can have a relationship of mutual influence or a causal relationship. Two parameters can be correlated in correlation measurements but have different correlation values from the opposite variable measurement angle. The two variables are strongly correlated when the two directions have a correlation value similar to or close to 1. However, if the correlation value is low and the two-way measurement values are not close, the two variables are said to have a weak correlation.

The research hypothesis suggests that the two parameters of organizational culture and leadership behavior have a robust and high correlation with perfectly positive results in both directions, with different correlation values in each measurement direction. The benefit of measurement can provide a more accurate basis for assessing lecturer performance in analyzing dynamic correlation threshold values. This model used actual data at an educational institution where seven parameters were used from leadership behavior and seven from organizational culture and was taken through interview techniques. The research results can be used as a reference for developing lecturer performance obtained from measuring parameters in each variable.

METHODS

This paper proposes an analysis of the relationship between organizational culture and leadership variables based on correlation measurements in each variable parameter. Organizational culture and leadership behavior are the main variables in measuring the quality of lecturer performance in organizational environments (Alsubaie, 2021; Bakare & Ojeleye, 2020; Kasmiaty et al., 2021; Tahniah et al., 2021), especially in educational institutions (Fitria, 2018; Ratnasari et al., 2018; Tahniah et al., 2021). The parameters related to organizational culture variables include beliefs, behavior, norms, social control systems, organizational trust, work culture, and division of work. Meanwhile, the leadership behavior perspective can be measured through consultation, democratic management, decentralization, delegation, responsibility, intelligence, and routine evaluation. Both variables can be measured for their relationship in the form of a correlation to measure the performance quality and used as the basis for determining policy. Correlation measurements can also be used to determine parameters that need to be considered in assessing the quality of lecturer performance. Based on this, this paper focuses on the correlation analysis between leadership behavior and organizational culture variables to obtain parameters that

have a strong correlation in determining the quality of lecturer performance in educational institutions. The correlation analysis used is the Pearson correlation, and the results show that the parameter has the strongest correlation in determining lecturer performance. In this paper, the research methodology is shown in Figure 1.

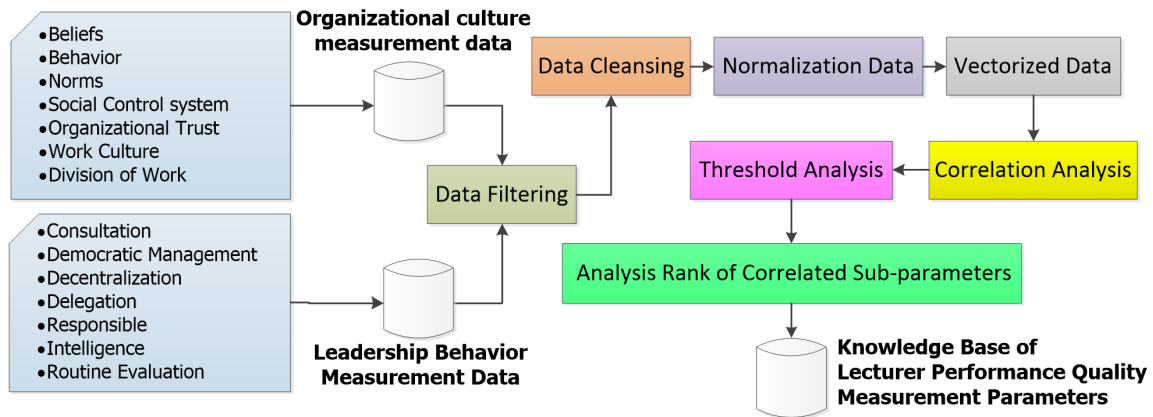


Figure 1. Research Model

In this paper, notation is used to describe the research model. The Organizational Culture, denoted as Φ , consists of 7 parameter values (ϕ), including beliefs (ϕ_1), behaviour (ϕ_2), norms (ϕ_3), social control system (ϕ_4), organizational trust (ϕ_5), work culture (ϕ_6) and division of work (ϕ_7). Thus, it is written as $\phi \in \Phi$, $\Phi = \{\phi_1, \phi_2, \phi_3, \phi_4, \phi_5, \phi_6, \phi_7\}$. The Leadership Behavior is denoted as Γ consists of 7 parameter values (γ), consultation (γ_1), democratic management (γ_2), decentralization (γ_3), delegation (γ_4), responsibility (γ_5), intelligence (γ_6), and routine evaluation (γ_7). So, it is written as $\gamma \in \Gamma$, $\Gamma = \{\gamma_1, \gamma_2, \gamma_3, \gamma_4, \gamma_5, \gamma_6, \gamma_7\}$. In this paper, the Data Records, denoted as ρ , is a collection of data records (P) for lecturer performance obtained in a questionnaire. Thus, it is written as $\rho \in P$, $P = \{\rho_1, \rho_2, \dots, \rho_n\}$. For each Φ and Γ has a data record, so the data set Φ is written as $\Phi \in P_\Phi$, $P_\Phi = \{\Phi_1, \Phi_2, \dots, \Phi_n\}$. While the data set Γ is $\Gamma \in P_\Gamma$, $P_\Gamma = \{\Gamma_1, \Gamma_2, \dots, \Gamma_n\}$. The Correlation ($corr$) is measured from the parameters between $P_{\Phi(i,j)}$ and $P_{\Gamma(i,j)}$, where i is the index of the first parameter in Φ and Γ . While j is the index of the last parameter of Φ and Γ . In this paper, the correlation measurement adopts the Pearson correlation (Hall, 2015) to find a correlation between Φ and Γ . The Pearson Correlation is used to compute the correlation coefficient ρ between two datasets, x and y . This correlation coefficient serves as a quantitative measure of the degree to which the two datasets vary linearly. The numerator of the formula calculates the covariance $cov(x, y)$, which assesses how the values of x and y change together; a positive covariance indicates that increases in one dataset tend to be associated with increases in the other, while a negative covariance indicates the opposite. The denominators $\sigma(x)$ and $\sigma(y)$ represent the datasets' x and y standard deviations, respectively. These standard deviations quantify the average deviation of data points from their respective means, providing a measure of the spread or dispersion of the data. By dividing the covariance by the product of the standard deviations, the correlation coefficient is normalized to a range between -1 and 1, where a value of 1 indicates a perfect positive linear relationship, -1 indicates a perfect negative linear relationship, and 0 indicates no linear relationship.

Lecturer performance data is input data in the model. There are two input data types: Organizational Culture and Leadership Behavior Data. The data was obtained from the assessment process of lecturers who have taught in the last year, and 53 lecturer assessment data were obtained from a total target of 55 lecturers a year. After getting the data, the data filtering process is carried out. Filtering data is the stage of filtering, which is when data is converted into numeric data. The change in form from categorical data to numerical is based on the need for modeling in measuring correlations. In this paper, there are empty values in several data columns. This empty data needs to be handled in the data cleansing process. Data cleansing is a technique to analyze each value from a column that has an empty value and analyze against two conditions. First, if the column has a degree of importance with an empty value, it will be calculated as 0. Besides, the data will be deleted if the feature is not of a degree of importance. The degree of importance can be seen based on the probability value in each column, assuming that if the probability is empty $< 50\%$, it has a low degree of importance, and the data is cleaned or deleted. On the other hand, an empty probability $> 50\%$ is considered to have a high degree of importance, and empty data will be filled with a value of 0.

In this research, the data used has a different data distribution range in each column. So, it is necessary to carry out a data normalization process. In this paper, data normalization standardizes the value scale in each column. Normalization is done using a normalization scale value range between 0 to 1. Then, the normalized data is vectorized as vector data from $P_{1,n}$ in each Φ_i and Γ_i . The vector formed between Φ_i and Γ_i will be calculated

to get the correlation value at the correlation analysis stage. Correlation measurement is done by calculating the vector between two different parameters. Measurements are made by forming a Matrix Correlation Map. The results obtained are then sorted based on the measurements between the sub-parameters. To state that two sub-parameters have a strong correlation, a threshold value is required. In this study, threshold value measurements were carried out using the median value approach, which is used for computing the average of the absolute minimum and maximum correlation coefficients between corresponding elements $\Phi_{i,j}$ and $\Gamma_{i,j}$ within matrices. This measure τ serves as an indicator of the overall association between these elements across the matrices. The correlation coefficients $corr(\Phi_{i,j}, \Gamma_{i,j})$ quantify the strength and direction of the linear relationship between the respective elements. Taking the absolute values of both the minimum and maximum correlation coefficients ensures that both positive and negative associations are considered. By averaging these absolute extreme values, we obtain τ , which provides a summary statistic capturing the magnitude of the most extreme correlations. This measure aids in understanding the overall degree of association between the elements of the matrices, disregarding the specific direction of the relationships. Consequently, τ facilitates comparisons and interpretations across different datasets or scenarios, offering valuable insights into the underlying patterns and associations present within the matrices. The pair results on the correlation measurement are compared with the threshold values obtained from the threshold value analysis process. When the correlation coefficient $corr(\Phi_{i,j}, \Gamma_{i,j})$ between specific elements surpasses τ , it is designated as a high correlation value, indicating a robust linear relationship between those elements. Conversely, if the correlation coefficient falls below τ , it is classified as a low correlation value, suggesting a weaker or negligible linear relationship between the elements. This approach enables the differentiation of correlation values based on their magnitude relative to the established threshold, facilitating the identification of noteworthy associations within the matrices. This method contributes to a deeper understanding of the underlying relationships within the organizational culture and leadership behavior data by delineating between high and low correlation values. Each vector with a high correlation is taken and ranked to determine the status of the sub-parameters in measuring lecturer performance. Then, the results of each pair of sub-parameters in determining lecture performance are stored in the knowledge base. The knowledge base is stored as a reference for learning models to define lecturer performance measurements.

RESULT AND DISCUSSION

In this study, data processing was carried out using a computer with an Intel Core i5 Processor specification, 8 GB RAM, and 500 GB storage capacity. The tools used are orange data mining (Demšar & Zupan, 2013; Vanthana, 2021), shown in Figure 2. The number of data records (ρ) used is 53, with seven features in each data Φ and Γ . Each feature has a different form of value, shown in Table 1.

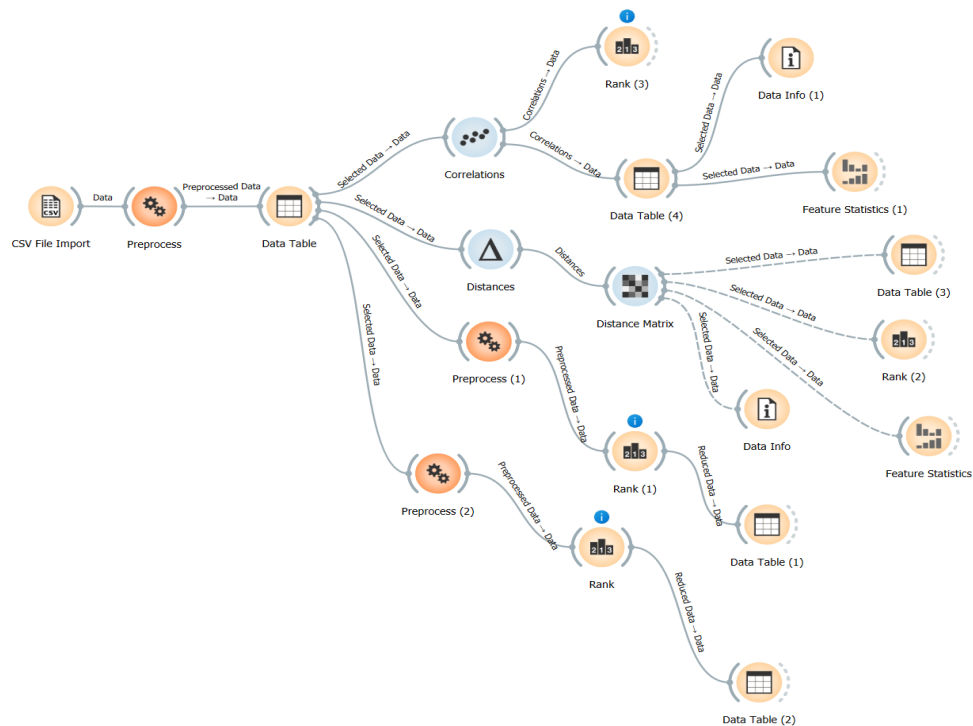


Figure 2. Data Processing using Orange Data Mining

Table 1. Data Description

Parameters Organizational Culture (Φ)	Data scale	Data Type	Parameters Leadership Behavior (Γ)	Data scale	Data Type
beliefs	0-100	percentage	consultation	0-100	percentage
behavior	0-100	integer	democratic management	0-100	percentage
norms	0-100	percentage	decentralization	0-100	percentage
social control system	0-100	percentage	delegation	0-100	percentage
organizational trust	0-10	integer	responsibility	0-100	integer
work culture	0-10	integer	intelligence	0-100	integer
division of work	0-100	integer	routine evaluation	0-100	integer

At the data filtering stage, the model did not find the categorical data and empty values for each parameter. In addition, all data values in each Φ_i and Γ_i are numeric. However, some data is a percentage, and the values must be standardized using a normalization data approach. Each percentage value is converted to a decimal value and normalized with a normalized scale between a value of 0 to a value of 1. An example of the results of normalizing data on data Φ are shown in Table 2, and the results of normalizing data on data Γ are shown in Table 3.

Table 2. Data Normalization in Φ

ρ_i	Beliefs	Behavior	Norms	Social Control System	Organizational Trust	Work Culture	Division Of Work
1	0.5357	0.7241	0.6897	0.7586	0.4828	0.6429	0.2414
2	0.6786	0.8621	0.0345	0.4483	1	0.3214	0.1724
3	1	0.7241	0.1034	0.1724	0.1724	0.4286	0.1034
4	0.7857	1.0000	0.5172	0.9655	0.2759	0.3571	0.6897
5	0.4286	0.6552	0.0345	0.6552	0.4138	0	1
6	1	1	0.4138	0.9310	1	0.0357	0.7586
7	0.4286	0.8276	0.2759	0.2414	0.8966	0.8214	0.5172
...	...	...	...	...	...	...	...

Table 3. Data Normalization in Γ

ρ_i	Consultation	Democratic Management	Decentralization	Delegation	Responsibility	Intelligence	Routine Evaluation
1	0.0357	0.3448	0.8621	0.4828	0.1429	0.5172	0.5862
2	0.7143	0.6897	0.4828	1	0.9286	0.4483	1
3	0.4286	0.4483	0.6897	0.3103	0.0714	0.4828	0.2759
4	0.3571	0.4483	0.0690	0.8276	0.7857	0.2069	0.2414
5	1.0000	0.9655	0.7931	0.9655	0.4643	0.5517	0.4138
6	0.1429	0.9655	1	0.2069	0.5714	0.6207	0.7931
7	0.9286	0.1724	0.9655	0.7241	0.1786	0.5862	0.7586
...	...	...	...	...	...	...	...

In the data vectorization stage, the normalized data is transposed from each value of ρ_i to the value of each parameter Φ and Γ . The transpose results are shown in Table 4 and Table 5. In the correlation measurement stage, each data vector in the Φ data is measured in each Γ data vector to obtain a correlation value. The results of correlation measurements form a correlation matrix map, shown in Table 6.

Table 4. Data Vectorized in Φ

Φ	ρ_1	ρ_2	ρ_3	ρ_4	ρ_5	ρ_6	ρ_7	ρ_8	ρ_9	ρ_{10}	ρ_{12}	...	ρ_{53}
ϕ_1	0.5357	0.6786	0.2500	0.7857	0.4286	1.0000	0.4286	0.1429	0.5714	0.3929	0.9643	...	0.1071
ϕ_2	0.7241	0.8621	0.7241	0.0000	0.6552	0.0000	0.8276	0.0690	0.3103	0.7586	0.0345	...	0.6897
ϕ_3	0.6897	0.0345	0.1034	0.5172	0.0345	0.4138	0.2759	0.5172	0.3448	0.0690	0.0000	...	0.7241
ϕ_4	0.7586	0.4483	0.1724	0.9655	0.6552	0.9310	0.2414	1.0000	1.0000	0.6897	0.3793	...	0.3103
ϕ_5	0.4828	0.0000	0.1724	0.2759	0.4138	1.0000	0.8966	0.4138	0.8276	0.7931	0.3793	...	0.0690
ϕ_6	0.6429	0.3214	0.4286	0.3571	0.0000	0.0357	0.8214	0.7143	0.8214	0.4286	0.3214	...	0.6071
ϕ_7	0.2414	0.1724	0.1034	0.6897	1.0000	0.7586	0.5172	0.4138	0.7586	0.2759	0.1379	...	0.7586

Table 5. Data Vectorized in Γ

Γ	ρ_1	ρ_2	ρ_3	ρ_4	ρ_5	ρ_6	ρ_7	ρ_8	ρ_9	ρ_{10}	ρ_{12}	...	ρ_{53}
γ_1	0.0357	0.7143	0.4286	0.3571	0.0000	0.1429	0.9286	0.6071	0.2857	0.2857	0.3571	...	1.0000
γ_2	0.3448	0.6897	0.4483	0.4483	0.9655	0.9655	0.1724	0.7241	0.7931	0.6897	0.8966	...	0.9310
γ_3	0.8621	0.4828	0.6897	0.0690	0.7931	0.0000	0.9655	0.1034	0.8621	0.9655	0.5862	...	0.4828
γ_4	0.4828	0.0000	0.3103	0.8276	0.9655	0.2069	0.7241	0.2069	0.5862	0.5862	0.1724	...	1.0000
γ_5	0.1429	0.9286	0.0714	0.7857	0.4643	0.5714	0.1786	0.4643	0.3214	0.1429	0.3571	...	0.1071
γ_6	0.5172	0.4483	0.4828	0.2069	0.5517	0.6207	0.5862	0.2759	0.2414	0.7586	0.2414	...	0.6897
γ_7	0.5862	1.0000	0.2759	0.2414	0.4138	0.7931	0.7586	0.6897	0.1724	0.0345	0.4828	...	0.8966

The correlation measurements found that organizational culture variables and leadership behavior had positive and negative correlations. A positive correlation indicates a positive relationship between parameters in two different variables. When it is found that an increase in one parameter measurement in one of the variables causes an increase in the parameter measurement results in the other variables, meanwhile a negative correlation indicates that there is an inverse relationship, where when there is an increase in one variable, the second variable will show a decrease and vice versa. Positive and negative correlations to parameter measurements between the two variables of organizational culture and leadership behavior are shown in Figure 3 and Figure 4. Correlation measurement produces the highest correlation value of 0.321, while the lowest is -0.334.

Table 6. Matrix Correlation Map

...	γ_1	γ_2	γ_3	γ_4	γ_5	γ_6	γ_7
ϕ_1	0,064	-0.088	-0.022	-0.254	-0.047	-0.028	-0.095
ϕ_2	0.008	-0.156	0.167	0.229	0.472	0.506	0.321
ϕ_3	0.005	-0.133	-0.142	-0.097	0.105	-0.001	-0.096
ϕ_4	-0.332	0.092	0.137	-0.275	-0.039	-0.334	0.084
ϕ_5	-0.068	-0.311	0.054	-0.087	-0.178	-0.137	-0.053
ϕ_6	0.079	-0.321	0.219	-0.170	-0.166	0.013	-0.187
ϕ_7	0.245	0.038	0.016	0.048	-0.158	0.110	-0.084

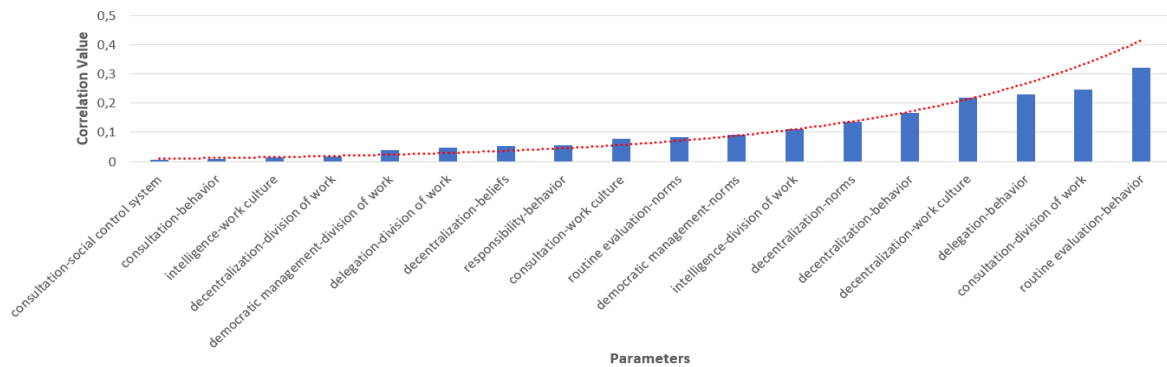


Figure 3. Correlation Measurement with Positive Value

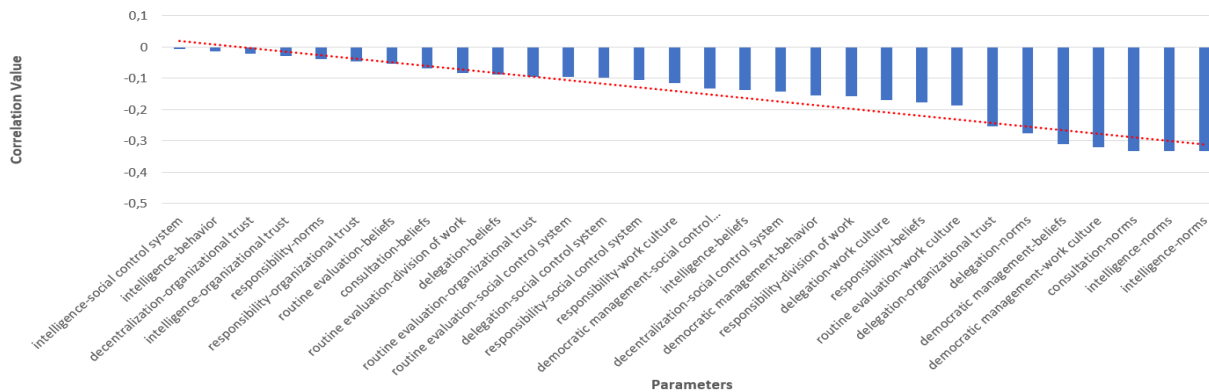


Figure 4. Correlation Measurement with Negative Value

In this study, the best correlation in measuring lecturer performance is the measurement of parameters with a positive and high correlation value. Based on the measurement of the strong correlation (6), the threshold value of the strong correlation is determined to be the correlation value. Parameters for determining the quality of lecturer performance are shown in Table 7. It shows that the variables of Organizational Culture (ϕ) parameters behavior (ϕ_2), division of work (ϕ_7), and work culture (ϕ_6) are parameters that can be prioritized in the analysis of the quality of lecturer performance. Whereas in the Leadership Behavior variable (γ), four parameters can be prioritized as parameters determining the quality of lecturer performance evaluation, namely routine evaluation (γ_7), consultation (γ_1), delegation (γ_4), and decentralization (γ_3). Besides, the pair of measurements for two variables can be prioritized to evaluate the quality of lecturer performance from the parameters obtained in pairwise parameters of routine evaluation-behavior, consultation-division of work, delegation-behavior, decentralization-work culture, and decentralization-behavior. The threshold value of 0.1605 obtained is used in the rank parameter analysis to determine the best parameter in determining the quality of lecturer performance, which is sorted based on the highest correlation value to the lowest.

Table 7. Parameter Rank and Correlation Analysis

Organizational Culture (Φ)	Leadership Behavior (Γ)	corr (Φ_{ij}, Γ_{ij})	Rank
behavior (ϕ_2)	routine evaluation (γ_7)	0.321	1
division of work (ϕ_7)	consultation (γ_1)	0.245	2
behavior (ϕ_2)	delegation (γ_4)	0.229	3
work culture (ϕ_6)	decentralization (γ_3)	0.219	4
behavior (ϕ_2)	decentralization (γ_3)	0.167	5

The accuracy of assessing the quality of lecturers based on assessment parameters can influence the quality of education, such as developing the quality of students in higher education and vocational higher education (Hasim et al., 2023). The institution can use the quality of lecturer performance variables with their sub-parameters to adapt for successful student development. For example, routine evaluation behavior, where a lecturer can evaluate work assignments to his staff and correlate it with the behavior used in giving assignments, can be demonstrated to students and adopted as organizational behavior or student activity communities. This pattern can also be developed in the workplace when students have a career. It also shows that several sub-parameters need to be classified and prioritized based on adjustments to the measurement results in each educational institution.

In this research, behavioral sub-parameters are the main sub-parameters in measuring lecturer performance in higher education. However, educational institutions with particular fields of knowledge, such as information technology, have an advantage in developing learning techniques because technology facilitates it. An example is learning culture as an organizational behavior that utilizes artificial intelligence (AI)-based learning technology (Hasim et al., 2023). It is closely related to the evaluation mechanism that needs to be carried out by a lecturer as the leader of the learning process for students. So, using AI is a means of searching for knowledge and does not replace students' critical thinking and natural thinking in developing knowledge (Bali et al., 2022; Suwarma & Apriyani, 2022). Behavioral sub-parameters in organizational culture have the most significant correlation. This is due to the impact of the learning process that occurred during COVID-19 (Mesterjon et al., 2022) to post-COVID-19 (Sharma & Alvi, 2021). Besides being correlated with routine evaluation sub-parameters, behavior is also correlated with delegation and decentralization. Delegation means that a lecturer as a coordinator must be able to entrust some of his duties to another group of lecturers, or it could also be called dividing tasks to other lecturers who are considered capable and trusted to carry out specific tasks on behalf of that lecturer coordinator. Meanwhile, the decentralization parameter that correlates with behavior as an organizational culture is that a lecturer gives up some of his autonomy to other lecturers to make decisions independently (Bakare & Ojeleye, 2020).

In this paper, the results of correlation measurements on behavioral sub-parameters in the organizational culture variable and routine evaluation sub-parameters in the leadership variable have optimal values and are simultaneous. These results are in line with the results of research on correlation measurements by Atmawidjaja et al. (2023), which states that the correlation between work motivation, organizational culture, and leadership behavior is an integral part of assessing lecturer work performance and has the nature of a simultaneous correlation. In this case, a teacher's finishing style and evaluation techniques can be the key to success in producing quality lecturers. Upon their implementation, the task completion behavior and evaluated work results are balanced, and server space can be given for innovation and creativity. Measuring the quality of lecturer performance can also be adjusted to applicable regulations. For example, learning using the Independent Learning Campus Merdeka (MBKM) concept (Werdinginsih et al., 2022) broadens lecture insight and knowledge. This can be seen from the involvement of teachers and students in activities outside campus, which are recognized as a learning process. If the behavior of active activities outside campus becomes a sub-parameter of organizational culture and activities spread across several fields become a sub-parameter of decentralization in leadership variables, then lecturer performance will be more comprehensive. It can be measured as a result of quality activities. Of course, evaluation techniques are needed to determine lecturer activity standards. The correlation results obtained in this paper show the efficiency of the basic use of lecturer performance assessment studies. Each pair of parameters in different variables gives the meaning of a simultaneous connection and has a positive causal relationship. This supports learning optimization, which aims to improve each lecturer's learning, insight, and knowledge through efforts to improve the quality of lecturer performance. The MBKM approach influences the lecturer education process (Kasih et al., 2022; Werdinginsih et al., 2022), which can be divided into several variables, such as organizational culture and leadership factors.

CONCLUSION

This paper proposes a new approach to measuring the correlation between organizational culture parameters and leadership behavior in analyzing lecturer performance in higher education institutions. In

measuring the correlation, seven parameters were used for the organizational culture variable and seven for the leadership behavior variable. The research objective was to determine the correlation between the two parameters in measuring lecturer performance. The proposed research contribution or update is a new approach in correlation analysis for determining the quality of lecturer performance by adopting the Pearson correlation measurement. The analysis results show five pairs of parameters with a high correlation: routine evaluation-behavior, consultation-division of work, delegation-behavior, decentralization-work culture, and decentralization-behavior. The highest correlation value was identified by the routine evaluation correlation pair on the leadership behavior variable and behavior on the organizational culture variable, with a correlation value of 0.321. The correlated parameter pair was determined based on the threshold value successfully traced with a value of $\tau = 0.1605$. Parameters that have a high correlation can be used to determine the quality of lecturer performance to determine the reward. The model can be developed in future research by adding new variables such as work motivation. Besides, the optimization model can be developed with an analysis based on artificial intelligence to make predictions about new lecturers using performance quality assessment data.

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