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The Influence of Organizational Culture, Problem-Solving Ability, and Work Motivation on Labor Performance at Jambi University

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Abstract. *This study aims to describe and analyze the magnitude of the direct and indirect influence of the effectiveness of organizational culture, laboratory assistant problem-solving ability, and Motivation on laboratory assistant performance. The study used a quantitative approach with a survey design. The population of lecturers was 608 and laboratory assistants 15, while the sample of lecturers 132 and laboratory assistants 15 were taken by purposive sampling. Data was collected through a Likert scale questionnaire, which was then analyzed using path analysis. The study's results showed that: 1) organizational culture directly affects laboratory assistant performance. This can be seen from the significance value of 0.000 <0.05. In addition, the t_count value = 11.254 > t_table = 1.970; 2) laboratory assistant problem-solving ability directly affects laboratory assistant performance. This can be seen from the significance value of 0.045 <0.05. In addition, the t_count value = 2.224 > t_table = 1.970; 3) The laboratory assistant's Motivation directly affects the laboratory assistant's performance. This can be seen from the significance value of 0.034 <0.05. In addition, the t_count value = 2.366 > t_table = 1.970; 4) Organizational Culture and the laboratory assistant's problem-solving ability simultaneously affect the laboratory assistant's performance. This can be seen from the significance of 0.031 <0.05; 5) There is a simultaneous influence of Organizational Culture and Motivation on the performance of the laboratory assistant, this can be seen from the significance value of 0.023 <0.05; 6) There is no simultaneous influence of the problem-solving ability of the laboratory assistant and Motivation on the performance of the laboratory assistant, this can be seen from the significance value of 0.116 > 0.05; 7) the problem-solving ability of the laboratory assistant has a direct effect on the work motivation of the laboratory assistant, this can be seen from the significance value of 0.000 <0.05. In addition, the t_count value = 10.595 > t_table = 1.970; 8) Organizational Culture does not have a positive effect on Motivation. This can be seen from the significance value of 0.252 > 0.05. In addition, the t_count value = -1.199 < t_table = 1.970; 9) There is a simultaneous influence of Organizational Culture and the problem-solving ability of laboratory assistants on Motivation, this can be seen from the significance of 0.00 < 0.05; 10) There is a simultaneous influence of Organizational Culture, problem-solving ability of laboratory assistants and Motivation on Laboratory Assistant Performance. This can be seen from the significance of 0.050 = 0.05.These results provide the conclusion that organizational culture, laboratory assistant problem-solving ability and Motivation have a direct and simultaneous effect on laboratory assistant performance...*

Keywords: *Organizational Culture, Problem Solving Ability, Motivation, Performance, Laboratory Assistant*

1. INTRODUCTION

Education will be good quality if the primary factors supporting education are prepared & facilitated well. The quality of education in Indonesia is currently still far behind other countries, where Indonesia is ranked 10th out of 14 developing countries & the quality of teachers in Indonesia is ranked 14th out of developing countries in the world (Tyagita, B.P.A & Iriani A, 2018). Quality education is influenced by a good learning process. The learning process depends on the active role of students in learning activities, educators only become facilitators & motivators. (Sujarwata, 2009) Students are expected to be able to understand the material by connecting learning based on the context of

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everyday life so as to create increasingly meaningful learning activities. The learning process can be said to be meaningful if it is carried out using scientific methods & is innovative (Wilhelm Thacker, 2007) In the field of education, innovation is defined as a change that is new and qualitative, which is not the same as before and aims to improve human resources with the aim of achieving exclusive educational goals.(Sujarwata,2009) The reality today is that science learning is a subject that not all students like like physics, chemistry and biology, because it is considered a boring, confusing and full of theory. In addition, there are still students who think that science lessons can only be understood by those who have more abilities or smart. Whereas science lessons are the key to understanding the phenomena that affect natural life. That is why study programs that affect science are not the main priority for students to take majors in college. The laboratory is a place for students to work on experiments or investigations in scientific fields such as physics, chemistry, biology and so on (Kertiasa, 2006) In other words, a laboratory is a place where experiments and research are carried out, this place can be a closed room, a room or an open room. In laboratory management, several requirements such as laboratory design and technical management refer to the Technical Guidelines for Laboratory Management and in accordance with the Guidelines for the Utilization of Laboratory and Science Education Equipment. The management of this laboratory includes aspects of planning, organization, application and assessment and several requirements for layout, completeness of facilities and administration that must be met.

Laboratories at colleges or universities are a place where practical learning and research activities take place support learning activities and scientific development as well as community service (Dikti, 2015) At the tertiary level, laboratories are educational and teaching laboratories that focus on supporting learning for students. There are 13 factors that drive laboratory performance, namely organizational culture, organizational structure, leadership style and attitude, leadership influence, team processes, team characteristics, cultural and personal values, ability, level of trust, pressure, Motivation, and attitude in making decisions (Setiawan.et.al, 2016) Of the 13 factors in this study, the researcher tried to dig deeper into organizational culture, laboratory assistant work motivation and laboratory assistant problem-solving abilities. in influencing the performance of laboratory assistants. The selection of the three variables is based on the results of analysis of previous studies related to organizational culture, Motivation and problem-solving abilities of laboratory assistants.

2. METHODS

The method used in this study is descriptive and quantitative. Descriptive research is a statistic that functions to describe or provide an overview of the object being studied through sample data or population as it is, without conducting analysis and making conclusions that apply to the public. The population in this study were Lecturers, Laboratory Users (Students) and Laboratory Assistants at the University of Jambi.

3. RESULTS

Sub-structure 1 (Does organizational culture (X1) have a direct influence on laboratory assistant performance (X4)?)

Tabel 1 Results of analysis with SPSS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.224	9.074		.025	.980
	Budaya_Organisasi	.711	.063	.702	11.254	.000

From the individual trials, it can be seen in the coefficient table that the organizational culture variable has a significance value of 0.000 <0.05. In addition, it can be concluded that there is an influence of organizational culture (X1) on the performance of laboratory assistants (X4).

Tabel 2 Author correspondence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702[a]	.493	.490	9.40316

The value of R Square in the Model Summary Table is 0.493. This shows that the magnitude of the influence of the organizational culture variable (X1) on the performance of laboratory assistants is 49.3% while the rest is the contribution of other variables.

Sub-structure 2 (Does the problem-solving ability of laboratory assistants (X2) have a direct influence on the performance of laboratory assistants (X4)?)

Tabel 3 Results of analysis with SPSS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	82.133	8.460		9.708	.000
	Motivasi	.128	.058	.525	2.224	.045

From the individual trials, it can be seen in the coefficient table that the variable Problem-solving ability has a significance value of 0.045 <0.05. It can be concluded that there is an influence of the laboratory assistant's problem-solving ability (X2) on the laboratory assistant's performance (X4).

Tabel 4. Author correspondence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525[a]	.276	.220	4.91181

The value of R Square in the Model Summary Table is 0.276. This shows that the magnitude of the influence of the laboratory assistant problem-solving ability variable (X2) on the Laboratory Assistant Performance is 27% while the rest is the contribution of other variables.

Sub-structure 3 (Does work motivation (X3) have a direct effect on laboratory assistant performance (X4)?)

Tabel 5 Author correspondence

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	76.149	10.467		7.275	.000
	Motivasi	.152	.064	.549	2.366	.034

From the individual trials, it can be seen in the coefficient table that the organizational culture variable has a significance value of 0.034 <0.05. It can be concluded that there is an influence of Motivation (X3) on the performance of laboratory assistants (X4).

Tabel 6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.549[a]	.301	.247	4.82509

The value of R Square in the Model Summary Table is 0.301. This shows that the magnitude of the influence of the motivation variable (X3) on the Laboratory Assistant's Performance is 30.1% while the rest is the contribution of other variables.

Sub-structure 4 Do organizational culture (X1) and laboratory assistant problem-solving abilities (X2) simultaneously have a direct influence on laboratory assistant performance (X4)?)

Tabel. 7 Results of analysis with SPSS

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	190.302	2	95.151	4.706	.031[b]
	Residual	242.631	12	20.219		
	Total	432.933	14			

From the above trial, it can be seen in the ANOVA table that the variables of organizational culture and the problem-solving abilities of laboratory assistants have significance value of 0.031 < 0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture (X1) and Laboratory Assistant Problem Solving Ability (X2) on Laboratory Assistant Performance (X4).

Sub-structure 5 (Do organizational culture (X1) and work motivation (X3) simultaneously have a direct influence on laboratory assistant performance (X4)?)

Tabel 8 Results of analysis with SPSS

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	202.891	2	101.446	5.292	.023[b]
	Residual	230.042	12	19.170		
	Total	432.933	14			

From the above test, it can be seen in the ANOVA table that the variables of organizational culture and motivation have a significance value of 0.023 <0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture (X1) and Motivation (X3) on the performance of laboratory assistants (X4).

Tabel 9 Author correspondence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685[a]	.469	.380	4.37838

The value of R Square in the Model Summary Table is 0.465. This shows that the magnitude of the simultaneous influence of the variables Organizational Culture (X1) and motivation (X3) on Laboratory Assistant Performance is 46.5% while the rest is the contribution of other variables.

Sub-structure 6 (Do the problem-solving abilities of laboratory assistants (X2) and work motivation (X3) simultaneously have a direct influence on the performance of laboratory assistants (X4)?)

Tabel 10 Results of analysis with SPSS

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	130.406	2	65.203	2.586	.116[b]
	Residual	302.527	12	25.211		
	Total	432.933	14			

From the above test, it can be seen in the ANOVA table that the variables of organizational culture and problem-solving ability of laboratory assistants have a significance value of 0.11 > 0.05. Based on these results, it can be concluded that there is no simultaneous influence of problem-solving ability (X2) and motivation (X3) on laboratory assistant performance (X4).

Sub-structure 7 (Does the problem-solving ability of laboratory assistants (X2) have a direct influence on work motivation (X3)?)

Tabel 11 Results of analysis with SPSS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	40.667	11.551		3.521	.004
	Kemampuan	.834	.079	.947	10.595	.000

From the individual trials, it can be seen in the coefficient table that the ability variable has a significance value of 0.000 <0.05. It can be concluded that there is an influence of the problem-solving ability of laboratory assistants (X2) on motivation (X3).

Tabel 12 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947[a]	.896	.888	6.70656

The value of R Square in the Model Summary Table is 0.896. This shows that the magnitude of the simultaneous influence of the variable Problem-solving Ability (X2) on Motivation (X3) is 89.6% while the rest is the contribution of other variables.

Sub-structure 8 (Does organizational culture (X1) have a direct influence on laboratory assistant work motivation (X3)?)

Tabel 13 Results of analysis with SPSS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	219.409	43.855		5.003	.000
	Budaya_Organisasi	-.370	.309	-.315	-1.199	.252

From the individual trials, it can be seen in the coefficient table that the ability variable has a significance value of 0.252 > 0.05. It can be concluded that there is no influence of Organizational Culture (X1) on Motivation (X3).

Sub-structure 9 (Do organizational culture (X1) and laboratory assistant problem-solving abilities (X2) simultaneously have a direct influence on laboratory assistant work motivation (X3)?)

Tabel 14 Results of analysis with SPSS

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5049.611	2	2524.805	51.904	.000[b]
	Residual	583.723	12	48.644		
	Total	5633.333	14			

From the above test, it can be seen in the ANOVA table that the variables of organizational culture and problem-solving ability of laboratory assistants have a significance value of 0.00 <0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture (X1) and Problem-solving Ability of Laboratory Assistants (X2) on Motivation (X3).

Tabel 15 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947[a]	.896	.879	6.97449

The value of R Square in the Model Summary Table is 0.896. This shows that the magnitude of the influence of the variables Organizational Culture (X1) and the problem-solving ability of laboratory assistants (X2) on Motivation (X3) is 89.6% while the rest is the contribution of other variables.

Sub-structure 10 (Is there an influence between organizational culture (X1), problem solving ability (X2) and motivation (X3) on the work performance of laboratory assistants (X4)?)

Tabel 16 Results of analysis with SPSS

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	203.866	3	67.955	3.263	.050[b]
	Residual	229.067	11	20.824		
	Total	432.933	14			

From the above test, it can be seen in the ANOVA table that the variables Problem-solving Ability, Motivation, Organizational Culture have a significance value of 0.050 <0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture. (X1), Laboratory assistant problem solving ability (X2) and Motivation (X3) towards Laboratory assistant performance (X4).

4. DISCUSSION

Effectiveness of Organizational Culture (X1) on Laboratory Assistant Performance (X4)

The results of the first hypothesis test found that the effectiveness of organizational culture (X1) has a significant influence on the performance of laboratory assistants (X4). From the analysis it can be seen that the relationship between these two variables has a significance value of 0.000 <0.05. In addition, the t_count value = 11.254 > t_table = 1.97. Although the percentage of the influence of the organizational culture variable (X1) on the performance of laboratory assistants (X4) is not too large, which is 49.3% and this is quite positive for the performance of laboratory assistants. These results provide information that the first hypothesis is accepted. Organizational culture is a system adopted by members that distinguishes the organization from other organizations. (Hakim A, 2015) a leader shapes culture and is in turn shaped by the resulting culture. Culture as science acquired to interpret experiences and produce social behavior (Liliana,2011). Based on the results of data processing through the path analysis above, it is understood that organizational culture is an important thing that affects the performance of laboratory assistants. Although organizational culture is not too dominant in influencing the performance of laboratory assistants, it still has an influence. When the organizational culture in the laboratory assistants' work environment is good, it will have a positive influence on the performance of laboratory assistants. The statement above indicates that the effectiveness of culture in an organization will affect changes in the performance of laboratory assistants. The higher the effectiveness of the organizational culture of an institution, the better the performance of laboratory assistants in carrying out their duties and vice versa, the lower the effectiveness of the organizational culture of an institution, the weaker the performance of laboratory assistants in carrying out their duties.

Effectiveness of Laboratory Assistant Problem Solving Ability (X2) on Laboratory Assistant Performance (X4)

In an institution, the Human Resources (HR) factor has an important role compared to other factors. Humans have an important function in achieving performance, so HR requires quite reliable expertise. Performance is one of the most dominant factors in improving company performance. No matter how great and sophisticated the equipment and technology and large capital are, if the human element does not have the ability to work effectively and efficiently, the goals of the institution will not be achieved. High ability will

help in carrying out various tasks, making their work easier. While low ability causes employees to become passive (Kristiani, 2013).

The results of this study, which are the second hypothesis test, found that the effectiveness of the laboratory assistant's problem-solving ability (X2) has an influence on the laboratory assistant's performance (X4). From the analysis, it can be seen that the relationship between these two variables has a significance value of 0.045 <0.05. In addition, the t_count value = 2.224 <t_table = 1.976. These results indicate the conclusion that there is an influence of the laboratory assistant's problem-solving ability (X2) on the laboratory assistant's performance (X4). The results of this study are in accordance with previous theories and studies, for example in Sunardiyo's study it was stated that the ability of each individual in the form of educational background and experience in contributing to laboratory performance factors. In addition, other studies stated that there is a positive and significant influence of the ability variable on employee performance, the higher the employee's work ability, the higher the performance will be (Gilang, 2022)

Effectiveness of Motivation (X3) on Laboratory Assistant Performance (X4)

The concept of Motivation is a condition that drives employees/workers to achieve organizational or institutional goals (work goals). Motivation according to Berelson and Steiner is a condition related to the human psyche and mentality such as desires, hopes, needs, drives, and preferences that drive individuals to behave at work to achieve satisfaction or reduce imbalance. In addition, according to Rivai, Motivation is a series of attitudes and values that influence individuals to achieve specific things according to individual goals (Veitzal Rivai, 2009) The results of this study, which are the results of the third hypothesis, show that there is a significant influence of Motivation on the performance of laboratory assistants. From the analysis, it can be seen that the motivation variable has a value of 0.255 with a significance of 0.034 <0.05. In addition, the t_count value = 2.36 > t_table = 1.97 so it can be concluded that there is an influence of Motivation (X3) on laboratory assistant performance (X4). The results of this study are in accordance with the theory and results of previous researchers regarding the influence of Motivation on laboratory performance. For example, in the study of Darmawan et al., it was shown that work motivation has an effect on employee performance. In addition, in a study on a similar topic by Nareswara and Trianasari, it was shown that work motivation has a positive and significant effect on performance.

Effectiveness of Organizational Culture (X1) and Laboratory Assistant Problem Solving Ability (X2) on Laboratory Assistant Performance (X4)

Organizational culture is a set of values, norms, and principles adopted by an organization. Organizational culture has a strong influence on the performance of laboratory workers in the laboratory. Organizational culture that strong will create a conducive work environment, which will help laboratory assistants to achieve optimal performance. A strong organizational culture will also improve the problem-solving abilities of laboratory assistants, because they will feel more comfortable and can work better. A strong organizational culture will also increase the motivation of laboratory assistants, so that they will be more enthusiastic about doing their jobs well. Thus, a strong organizational culture will help laboratory assistants to achieve optimal performance in the laboratory.The results of this study explain the fourth variable, where the results of the study provide information that there is a simultaneous influence of Organizational Culture (X1) and Laboratory Assistant Problem-Solving Ability (X2) on the performance of laboratory assistants (X4). From the results of the analysis, it can be seen that the variables of organizational culture and laboratory assistant problem-solving ability have an F count value of 4.70> F table of 1.28 with a significance of 0.031 <0.05.

These results are in accordance with the results of previous studies related to the relationship between Organizational Culture (X1) and Laboratory Assistant Problem-Solving Ability (X2) on the performance of laboratory assistants (X4). Literature studies on the relationship between organizational culture and laboratory assistant problem-solving ability on laboratory assistant performance have shown that there is a strong relationship between organizational culture and laboratory assistant performance. Several studies have shown that a strong organizational culture can improve laboratory assistant performance by increasing motivation, commitment, and sense of responsibility. A strong organizational culture can also help laboratory assistants to develop the skills and abilities needed to achieve higher performance. In addition, a strong organizational culture can also improve communication between laboratory assistants and management, which can improve laboratory assistant performance. Other studies also show that laboratory assistant problem-solving ability also has a significant effect on laboratory assistant performance. Laboratory assistant problem-solving ability can help laboratory assistants to achieve higher results by improving their skills and knowledge. Thus, literature studies show that there is a strong relationship between organizational culture and laboratory assistant problem-solving ability on laboratory assistant performance.

Effectiveness of Organizational Culture (X1) and Motivation (X3) on Laboratory Assistant Performance (X4).

The effectiveness of organizational culture and motivation on laboratory assistant performance is very important. A good organizational culture and high motivation can help laboratory assistants to do their jobs better. A good organizational culture will provide laboratory assistants with a safe and comfortable working environment, which will help them to work more efficiently. A good organizational culture will also provide laboratory assistants with opportunities to develop and improve their skills. A good organizational culture and high motivation will help laboratory assistants to achieve their goals faster and better. High motivation will also help laboratory assistants to face challenges and achieve better results. Thus, the effectiveness of organizational culture and motivation on laboratory assistant performance is very important.The explanation above is in accordance with the research results obtained. From the trial, it can be seen that the variables of organizational culture and motivation have an Fcount value of 5.29> Ftable of 1.28 with a significance of 0.023 <0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture (X1) and Motivation (X3) on laboratory assistant performance (X4). These two variables, namely Organizational Culture (X1) and Motivation (X3) from this study are not large enough to have an effect on laboratory assistant performance with a large percentage of 46.9% In the theory of organizational culture, it emphasizes the influence of organizational culture on the behavior and performance of individuals in the organization. This theory emphasizes that organizational culture has a significant influence on individual behavior and performance. This theory also emphasizes that organizational culture can influence the way individuals think, behave, and deal with situations.

Effectiveness of Problem Solving Ability (X2) and Motivation (X3) on Laboratory Assistant Performance (X4)

The In several previous studies, it is explained that motivation is a factor that affects a person's performance level. Laboratory assistant performance can be improved by increasing their motivation. Laboratory assistant problem-solving ability is also an important factor that affects laboratory assistant performance. The abilities possessed by laboratory assistants can affect their performance level. The abilities possessed by laboratory assistants can be in the form of technical abilities, problem solving, skills, knowledge, and interpersonal skills. By increasing the laboratory assistant's abilities, it can improve the laboratory assistant's performance. From this, motivation and ability should be

important factors that affect laboratory assistant performance. By increasing the laboratory assistant's motivation and abilities, it can improve their performance.In this study, the variables of laboratory assistant motivation and problem-solving ability have an F count value of 2.58> F table of 1.28 with a significance of 0.116> 0.05. Based on these results, it can be concluded that there is no simultaneous influence of Problem-solving Ability (X2) and Motivation (X3) on laboratory assistant performance (X4). This result is different from previous studies related to the simultaneous influence of Problem-solving Ability (X2) and Motivation (X3) on laboratory assistant performance (X4).

The reason there is no simultaneous relationship between problem solving and motivation on the performance of laboratory assistants may be due to other factors that affect the performance of laboratory assistants. These other factors may include work environment factors, physical conditions, availability of tools, availability of resources, and many more. If any of these factors are not right, then the problem solving ability and motivation of laboratory assistants simultaneously may not produce the expected performance**.**

Effectiveness of Laboratory Assistant Problem Solving Ability (X2) on Motivation (X3)

The results of this study indicate that the ability variable has a significance value of 0.000 <0.05. In addition, the t_count value = 10.595 > t_table = 1.28 so that it can be concluded that there is an influence of the Laboratory Assistant's problem-solving ability (X2) on Motivation (X3). The magnitude of the influence of the Problem-solving Ability variable (X2) on Motivation (X3) is 90.5% while the rest is the contribution of other variables.These results show how important the influence of a person's ability is on work motivation. There are several types of laboratory assistant problem-solving abilities that affect laboratory assistant performance, including:Technical Ability: Technical ability is the most important ability for a laboratory assistant. This includes the ability to operate laboratory equipment, organize and supervise processes, analyze data, and solve technical problems.Communication Ability: Good communication skills are very important for laboratory assistants. They must be able to explain test results and explain technical problems to others.Organizational Ability: Laboratory assistants must be able to organize their tasks well and manage their time properly. This will help them complete their work efficiently and on time.Critical Thinking Skills: Critical thinking skills are very important for laboratory assistants. They must be able to analyze data and conclude the correct results.Role Playing Skills: Laboratory assistants must be able to adapt to various situations

and adjust to changes. They must be able to take initiative and take appropriate actions. • Role Playing Skills: Laboratory assistants must be able to work with others and work in a team. They must be able to build good relationships with coworkers and maintain good cooperation.

Effectiveness of organizational culture (X1) on laboratory assistant work motivation (X3)

From the research results, it can be seen that the ability variable has a significance value of 0.252 > 0.05. In addition, the t_count value = -1.199 < t_table = 1.28 so it can be concluded that there is an influence of Organizational Culture (X1) on Motivation (X3). These results are consistent with previous studies, such as Tonidandel's (2012) study, which showed that human skills are significantly more important than technical skills, while administrative skills are the most important overall. Gender is not a significant moderator of the influence of skill effectiveness, but organizational culture is Practical implications. Zain & Ismail (2015) found that a strong and positive organizational culture contributes to work motivation. Saha & Dutta (2016), investigated the differences in the relationship between organizational culture and work motivation between the public and private sectors in India. The results showed that a positive organizational culture has a greater influence on employee work motivation in the private sector than in the public sector

Effectiveness of Organizational Culture and Laboratory Assistant Problem Solving Ability on Laboratory Assistant Work Motivation

The results of this study indicate that the variables of organizational culture and problem-solving abilities of laboratory assistants have a significance value of 0.000 <0.05. Based on these results, it can be concluded that there is a simultaneous influence of Organizational Culture (X1) and the problem-solving abilities of laboratory assistants (X2) on Motivation (X3). The percentage of the influence of the variables of Organizational Culture (X1) and the problem-solving abilities of laboratory assistants (X2) on Motivation (X3) is 91.2% while the rest is the contribution of other variables. These results are in accordance with several previous studies that explain the simultaneous influence of organizational culture and the problem-solving abilities of laboratory assistants on Motivation. Titikasari & Astuti (2021) explain that organizational culture has a significant positive influence on motivation. Mutanu & Kipruto (2019), show that organizational culture has a significant influence on motivation. In addition, the research of Rahayu & Widjaja (2019) shows that organizational culture and ability have a positive influence.

Effectiveness of organizational culture (X1), problem solving ability (X2) and motivation (X3) on laboratory assistant performance (X4)

The results of this study indicate that the variables of organizational culture, problem-solving ability of laboratory assistants and motivation have a simultaneous influence on the performance of laboratory assistants with an Fcount value of 3.263> Ftable of 1.26 with a significance of 0.050 <0.05. Based on these results, it is concluded that there is a simultaneous influence of Organizational Culture (X1), Problem-solving ability of laboratory assistants (X2) and Motivation (X3) on Laboratory Assistant Performance ().From the results above, it can be explained that organizational culture, problem-solving ability, and motivation are important factors that can affect the work performance of laboratory assistants in an organization. A detailed explanation of the influence of each of these factors on the performance of laboratory assistants is:Organizational culture refers to the values, norms, and beliefs held by an organization. A positive and supportive organizational culture can motivate laboratory assistants to work harder and produce better work performance. For example, an organizational culture in a laboratory that focuses on teamwork, innovation, and achieving common goals can help laboratory assistants feel motivated and contribute more to their work.The problem-solving ability of laboratory assistants in carrying out their duties is very important in determining performance. The higher the ability of the laboratory assistant, the better the work performance that can be produced. Therefore, training and skills development can improve the ability of laboratory assistants and ultimately improve work performance. Motivation refers to a person's internal drive or desire to take action or achieve a goal. High motivation can improve the work performance of laboratory assistants, while low motivation can affect work performance to be bad. Factors that can increase the motivation of laboratory assistants include incentives, recognition for good work results, and opportunities to develop within the organization. From the results of the study above, in order to improve the performance of laboratory assistants, organizations must pay serious attention to these three factors. A positive organizational culture, good skills, and high motivation can help laboratory assistants work more effectively and produce better work performance.

5. LIMITATION

Based on the results of the research data analysis and discussion that have been carried out, this study produces the following conclusions:Organizational culture has a direct positive effect on the performance of laboratory assistants, this can be seen from the

significance value of 0.000 <0.05. In addition, the t_count value = 11.254 > t_table = 1.970. The problem-solving ability of laboratory assistants has a direct effect on the performance of laboratory assistants, this can be seen from the significance value of 0.045 <0.05. In addition, the t_count value = 2.224 > t_table = 1.970The motivation of laboratory assistants has a direct effect on the performance of laboratory assistants, this can be seen from the significance value of 0.034 <0.05. In addition, the t_count value = 2.366 > t_table = 1.970.Organizational Culture and problem-solving ability of laboratory assistants simultaneously affect the performance of laboratory assistants, this can be seen from the significance of 0.031 <0.05.

10. There is a simultaneous influence of Organizational Culture and Motivation on the performance of laboratory assistants, this can be seen from the significance value of 0.023 <0.05.There is no simultaneous influence of problem-solving ability of laboratory assistants and Motivation on the performance of laboratory assistants, this can be seen from the significance value of 0.116 > 0.05;Problem-solving ability of laboratory assistants has a direct influence on the work motivation of laboratory assistants, this can be seen from the significance value of 0.000 <0.05. In addition, the value of t_count = 10.595 > t_table = 1.970;Organizational Culture does not have a positive influence on Motivation. This can be seen from the significance value of 0.252 > 0.05. In addition, the t_count value = -1.199 < t_table = 1.970;There is a simultaneous influence of Organizational Culture and the problem-solving ability of laboratory assistants on Motivation, this can be seen from the significance of 0.00 < 0.05;There is a simultaneous influence of Organizational Culture, problem-solving ability of laboratory assistants and Motivation on Laboratory Assistant Performance. This can be seen from the significance of 0.050 = 0.05.

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