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DETERMINATION OF COMPETENCY , SCHOOL CLIMATE, WORK DISCIPLINE WITH WORK MOTIVATION AS INTERVENING VARIABLES ON TEACHER PERFORMANCE BY USING SEM-PLS (TEACHER RESEARCH STUDY AT VOCATIONAL SCHOOL OF PERTIWI BATAM)

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ABSTRACT

In this study, researchers used respondent data, such as gender, age and length of work of respondents in order to provide information about relationships. Where from the questionnaires distributed as many as 30. The discussion in this chapter is the result of field studies to obtain questionnaire answer data that measures five main variables in this study, namely competence, school climate, work discipline, work motivation and performance. Data analysis with parametric and non-parametric statistics using SEM-PLS (Structural Equation Modeling-Partial Least Square) regarding research variables, instrument tests, normality tests, hypothesis testing, and discussion of the results of hypothesis testing and Path Analysis Path. This study uses path analysis (path analysis) to examine relationship patterns that reveal the effect of a variable or a set of other variables, both direct and indirect. The calculation of the path coefficient in this study was assisted by Smart PLS Ver 3.0. To have a direct and indirect effect between variables, the calculation results of the path coefficient and to see the significance.

The influence of the X3 variable on X4 has a P-Values value of 0.029 <0.05, so it can be stated that the effect of X3 on X4 is significant. The influence variable X3 on Y with a P-Values value of 0.002 <0.05, so it can be stated that the influence between X3 on Y is significant. The effect of the variable X4 on Y with a P-Values value of 0.002 <0.05, so it can be stated that the effect of X4 on Y is significant. The effect of variable X1 on X4 with a P-Values value of 0.027 <0.05, so it can be stated that the effect of X1 on X4 is significant. The effect of variable X1 on Y with a P-Values value of 0.012 <0.05, so it can be stated that the effect of X1 on Y is significant. The influence variable X2 on X4 has a P-Values value of 0.009 <0.05, so it can be stated that the effect between X2 and X4 is significant. The effect of the X2 variable on Y with a P-Values value of 0.017 <0.05, so it can be stated that the effect of X2 on Y is significant.
Keywords: Competence, School Climate, Work Discipline, Work Motivation Performance

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I. INTRODUCTION

SMK / MAK is a vocational education institution that aims to prepare students to become competent and independent workforce by prioritizing abilities and skills in certain fields according to their majors. Vocational education aims to produce productive humans, namely working people, not human burdens for the family, society, and nation. In the National Education System Law no. 20 of 2003 also states that vocational education is secondary education that prepares students especially to work in certain fields. In order to realize the vision and mission of the school, SMK Pertiwi Batam seeks to improve the quality of learning that effectively involves existing stakeholders. The development of an annual school program that is oriented towards the quality of learning through learning by doing. Learning with this approach will develop entrepreneurship. In order to achieve the vision and mission of SMK Pertiwi Batam, it must be supported by quality employee competencies. Every job has requirements and a special set of competencies to carry it out efficiently. Meanwhile, the people who will do the work need to be adjusted to the competencies related to their work. It can be said that competent employees are the main resource in every organization in order to gain an edge in business competition. A positive school climate can help solve problems at school. The criteria that define a positive school climate, an atmosphere or quality of the school to help each individual feel personally valuable, dignified and important simultaneously can help create a feeling of belonging to everything around the school environment.Work discipline possessed by employees is very important for a company in order to realize company goals. Without good employee work discipline, it is difficult for a company to achieve optimal results. Good discipline reflects the amount of responsibility a person has for the tasks assigned to him. This encourages work enthusiasm, work morale and the realization of company goals. Motivation is a desire or desire that arises in employees that generate enthusiasm or impetus to work optimally in order to achieve goals. Motivation comes from the root word motive, which means an incentive, desire and driving force for someone's willingness to work. Motivation develops with a person's level of awareness of the goals they want to achieve. Performance is the work produced by employees or real behavior that is displayed in accordance with their role in the organization. Performance is also called the quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities assigned to him.

Formulation of the problem

1. Does competency directly determine the work motivation ?
2. Does the school climate determine directly the work motivation ?
3. Does work discipline directly determine the work motivation ?
4. Does work motivation directly determine the performance ?
5. Does competency determine directly the performance ?
6. Does the school climate determine directly the performance ?
7. Does work discipline directly determine the performance ?

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II. RESEARCH METHOD

In this study, researchers used respondent data, such as gender, age and length of work of respondents in order to provide information about relationships. Where from the questionnaires distributed as many as 30. The discussion in this chapter is the result of field studies to obtain questionnaire answer data that measures five main variables in this study, namely competence, school climate, work discipline, work motivation, and performance. Data analysis with parametric and non-parametric statistics using SEM-PLS (Structural Equation Modeling-Partial Least Square) regarding research variables, instrument tests, normality tests, hypothesis testing, and discussion of the results of hypothesis testing and Path Analysis Path. This study uses path analysis (path analysis) to examine relationship patterns that reveal the effect of a variable or a set of other variables, both direct and indirect. The calculation of the path coefficient in this study was assisted by Smart PLS Ver 3.0. For the effect of departing directly and indirectly between variables, the results of the calculation of the coordination coordinates are to see the significance.

Population and Sample

The population in this study was in vocational school of pertiwi batam, amounting to 30 people regardless of specific strata and field of duty. Arikunto (in Riduwan, 2012: 210) states that if the subject is less than 100, it is better to take all of them, so that the research is a population study. Because of population limitations, all members of the population were used as the research sample, so this study used a saturated sample, which was taken through the Census Technique using proportional random sampling.

III. RESULT AND DISCUSSION

Internal consistency analysis is a form of reliability used to assess the consistency of results across items on the same test. Internal consistency testing using a composite reliability value with the criteria of a variable is said to be reliable if the composite reliability value is> 0.600 (Hair, Hult, Ringle, & Sarstedt, 2014).

Internal Consistency Analysis

Tabel 1

Variabel	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0.730	0.854	0.798	0.382
X2	0.723	0.773	0.733	0.264
X3	0.745	0.836	0.718	0.341
X4	0.700	0.818	0.752	0.357
Y	0.771	0.925	0.821	0.497

Source: Data Processing (2020)

Based on the data of the internal consistency analysis in the table above, the results show that the variables X1, X2, X3, X4 and Y have a composite

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reliability value> 0.600, so all X1, X2, X3, X4 and Y variables are reliable.

Convergent Validity

Tabel 2

	X1	X2	X3	X4	Y
X1.1	0.306				
X1.10	0.579				
X1.2	0.484				
X1.3	0.479				
X1.4	0.763				
X1.5	0.508				
X1.6	0.727				
X1.7	0.785				
X1.8	0.823				
X1.9	0.805				
X2.1		0.415			
X2.2		0.511			
X2.3		0.426			
X2.4		0.779			
X2.5		0.608			
X2.6		0.641			
X2.7		0.407			
X2.8		0.677			
X3.1			0.464		
X3.10			0.534		
X3.2			0.521		
X3.3			0.422		
X3.4			0.815		
X3.5			0.645		
X3.6			0.727		
X3.7			0.722		
X3.8			0.769		
X3.9			0.667		
X4.1				0.411	
X4.2				0.428	
X4.3				0.511	
X4.4				0.701	
X4.5				0.654	
X4.6				0.831	
X4.7				0.881	
X4.8				0.601	

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Y1					**0.445**
Y2					**0.403**
Y3					**0.523**
Y4					**0.898**
Y5					**0.857**
Y6					**0.885**
Y7					**0.937**
Y8					**0.852**

Source: Data Processing (2020)

Based on the table above, it can be seen that the value of outer loading for variables X1, X2, X3, X4, Y where the value of all the items in the 5 variables tested is greater than 0.4, so all indicators in 5 variables are declared valid.

Disciplinary Validity

Discriminant validity aims to assess an indicator of a construct variable is valid or not, namely by looking at the Heterotrait Value - Monotrait Ratio Of Corelation (HTMT) <0.90, then the variable has good (valid) discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2014).

Tabel 3

Variabel	X1	X2	X3	X4	Y
X1					
X2	**0.725**				
X3	**0.663**	**0.617**			
X4	**0.719**	**0.768**	0.882		
Y	**0.710**	**0.647**	0.811	0.898	

Source: Data Processing (2020)

Based on the table above, the results of the correlation of variables X1 with X2, X1 with X3, X1 and X4, variables X1 and Y all variables have a correlation value <0.900, thus the correlation value of all variables is declared valid.

Structural Model Analysis (Inner Model)

The structural model analysis or (inner model) aims to test the research hypothesis. The part that needs to be analyzed in the structural model is the coefficient of determination (R Square) by testing the hypothesis. Collinearity test is to prove whether the correlation between latent variables / constructs is strong or not. If there is a strong correlation, it means that the model contains problems from a methodological point of view, because it has an impact on the estimation of its statistical significance. This problem is known as collinearity. The value used to analyze it is by looking at the Variance Inflation Factor (VIF) value. (Hair, Hult, Ringle, & Sarstedt, 2014; Garson, 2016). If the VIF value is greater than

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5.00, it means a collinearity problem occurs, and conversely there is no collinearity problem if the VIF value is <5.00 (Hair, Hult, Ringle, & Sarstedt, 2014).

Tabel 4

Variabel	X1	X2	X3	X4	Y
X1				**2.981**	**1.926**
X2				**1.786**	**1.523**
X3				**2.356**	**1.508**
X4					**3.239**
Y					

Source: Data Processing (2020)

From the data above it can be described that the VIF value for the correlation X1 with Y, X2 with Y, X3 with Y, X4 with Y has a value <5.00 so there is no collinearity problem, thus from the data above, the structural model is in the case of it does not contain a collinearity problem.

Direct Influence Hypothesis

Testing the direct effect hypothesis aims to prove the hypotheses of the effect of a variable on other variables directly (without intermediaries). If the path coefficient value is positive it indicates that an increase in the value of one variable is followed by an increase in the value of other variables, if the path coefficient value is negative it indicates that an increase in one variable is followed by a decrease in the value of another variable. If the probability value (P-Value) <Alpha (0.05) then Ho is rejected (the effect of a variable with other variables is significant). If the probability value (P-Value)> Alpha (0.05) then Ho is rejected (the effect of one variable with other variables is not significant).

Tabel 5

Variabel	Real sample	Average sample	Standard Deviation	T Statistics	P Values
X1 -> X4	0.433	0.343	0.186	2.332	**0.027**
X1 -> Y	0.449	0.502	0.167	2.683	**0.012**
X2 -> X4	0.058	0.139	0.325	0.178	**0.009**
X2 -> Y	0.224	0.146	0.159	1.410	**0.017**
X3 -> X4	0.371	0.332	0.341	1.086	**0.029**
X3 -> Y	0.402	0.393	0.120	3.363	**0.002**
X4 -> Y	0.113	0.123	0.285	0.395	**0.007**

Source: Data Processing (2020)

1. The direct effect of variable X3 on variable X4 has a path coefficient of 1.086 (positive), so an increase in the value of variable X3 will be followed by an increase in variable X4. The influence of the X3 variable on X4 has a P-Values value of 0.029 <0.05, so it can be stated

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that the effect of X3 on X4 is significant.

2. The direct effect of variable X3 on variable Y has a path coefficient of 3.363 (positive), so an increase in the value of variable X3 will be followed by an increase in variable Y.The effect of variable X3 on Y has a P-Values value of 0.002 <0.05, so it can be stated that the influence between X3 on Y is significant.
3. The direct effect of variable X4 on variable Y has a path coefficient of 0.395 (positive), so an increase in the value of variable X4 will be followed by an increase in variable Y.The effect of variable X4 on Y has a P-Values value of 0.027 <0.05, so it can be stated that the influence between X4 on Y is significant.
4. The direct effect of variable X1 on variable X4 has a path coefficient of 2.332 (positive), so an increase in the value of variable X1 will be followed by an increase in variable X4. The effect of variable X1 on X4 has a P-Values value of 0.027 <0.05, so it can be stated that the effect of X1 on X4 is significant.
5. The direct effect of variable X1 on variable Y has a path coefficient of 2.683 (positive), then an increase in the value of variable X1 will be followed by an increase in variable Y. The effect of variable X1 on Y has a P-Values value of 0.012 <0.05, so it can be stated that the influence between X1 on Y is significant.
6. The direct effect of variable X2 on variable X4 has a path coefficient of 0.178 (positive), so an increase in the value of variable X2 will be followed by an increase in variable X4. The effect of the variable X2 on X4 has a P-Values value of 0.009 <0.05, so it can be stated that the effect of X2 on X4 is significant.
7. The direct effect of variable X2 on variable Y has a path coefficient of 1.410 (positive), so an increase in the value of variable X2 will be followed by an increase in variable X4. The influence of the X2 variable on Y has a P-Values value of 0.017 <0.05, so it can be stated that the effect of X2 on Y is significant.

Coefficient of Determination

The coefficient of determination (R Square) aims to evaluate the accuracy of the predictions of a variable. In other words, to evaluate how the variation in the value of the dependent variable is affected by the variation in the value of the independent variable in a path model.

Tabel 6

Variabel	R Square	Adjusted R Square
X4	0.722	0.678
Y	0.809	0.787

Source: Data Processing (2020)

IV. CONCLUSION

Employee training needs to be trained as a means to develop employee competence, increase collaboration between educators to stimulate positive behavior of students in order to build a responsive school climate, enforce employee work discipline towards obedience to working hours in carrying out tasks on time and correctly, the need to provide work motivation with running good relations between superiors and employees, improving the quality of performance by increasing the competence of educators, enforcing work discipline, and building a positive school climate.

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