

The Influence Of Work Motivation And Innovative Work Behavior On Cadet Satisfaction At The Banten Sailing Polytechnic During The Covid-19 Pandemic

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ABSTRACT

The influence of work motivation and innovative work behavior on cadet satisfaction at the Banten Shipping Polytechnic is a quantitative study which aims to see whether motivation and innovative work behavior have an influence on cadet satisfaction. Minister of Education and Culture (Mendikbud) Nadiem Makarim requires that educational institutions implement online learning. The Banten Shipping Polytechnic must innovate in learning in line with the Minister who requires online learning, so that the Banten Shipping Polytechnic also innovates in the online learning process. This research measures whether work motivation and online learning innovation have an influence on student satisfaction/cadet.

Keywords: Work Motivation, Innovative Work Behavior, Satisfaction of Cadets of the Banten Shipping Polytechnic

INTRODUCTION

The pandemic has devastated the world order in various sectors. All economic projections before the pandemic corrected themselves. In fact, projections of economic growth in several countries must be replaced by the reality of a recession. This is a painful and disappointing condition, but we must accept it gracefully, we accept it as part of the reality of life (Hasan Chabibie, 2021). The pandemic situation is very much felt in our world of education, not only in Indonesia but also across countries. In various parts of the world, this global pandemic has had an impact on many dimensions, including the economy, health, politics and international relations. In fact, the world of education also experienced a significant impact (Hasan Chabibie, 2020).

The Covid 19 pandemic has haunted the whole world, especially the State of Indonesia since early 2020. What is COVID-19?, COVID-19 stands for coronavirus disease and is even referred to as the novel coronavirus 2019 or 2019-nCoV (U. Unicef, personal communication, 2020). The COVID-19 virus is related to Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV) which can also be fatal (Meng et al., 2019). The new virus can be transmitted in just a few minutes through droplets or even touching metal surfaces or other infected materials from people who have respiratory problems. Although the elderly and very young children are easily infected, no one is immune to this new infectious disease once it invades the body, so all immune people are vulnerable to its devastating effects.

Due to the vulnerability even within the school environment, thousands of school closures were implemented worldwide due to COVID-19. As of 06 April 2020, UNESCO (2020) reported that there were 1,576,021,818 students affected from 91.3 % of students enrolled in 188 countries for all levels. This is the impact of the closure of schools and universities that occurred during the covid 19 pandemic. A number of schools and tertiary institutions stopped teaching and learning activities (KBM) in class to prevent the spread of the Corona virus (COVID-19). Minister of Education and Culture (Mendikbud) Nadiem Makarim requires that educational institutions implement online learning. Implementing online learning from home for students (Makarim, 2020). In the process there are several online applications that can be accessed by teachers and cadets to carry out learning from home.

Education in the shipping sector is no exception, which incidentally has used a face-to-face learning system in general, coupled with deepening of the material through laboratory practice. Through education, one way to improve the quality of Indonesian citizens. Education is closely related to the quality of teaching staff (Barber, Mourshed, Company, Barber, & Mourshed, 2007), this is supported by the results of research conducted by Hattie which says that the competence of teaching staff (lecturers) is an important factor in determining the quality of education (Hattie , 2018), To continue to

improve the competence of educators (lecturers) in several training programs implemented by the government through teaching programs (Barber et al., 2007) that are prepared to face future challenges that are closely related to the development of information technology.

Learning is something that is very important for children in order to prepare themselves for the future (Nilayani, 2020). Learning is a change in behavior as a result of the interaction between stimulus and response. Sooner or later every child will be required to become an independent person in the future by changing their behavior for the better. Online learning has become a mainstream learning interaction model during the Covid-19 pandemic. Online distance learning is effective for dealing with learning that allows teachers and cadets to interact in virtual classes that can be accessed anywhere and at any time (Sadikin & Hamidah, 2020). One of the popular learning alternatives currently used is virtual classes using Microsoft Teams and YouTube videos. Learning using Microsoft Teams is very good for increasing cadets' interest in learning (Situmorang, 2020)

Banten Shipping Polytechnic as one of the Vocational schools that concentrates on producing graduates who are experts in the field of Shipping. Taruna satisfaction and academic performance have become the main focus of scholars and policy makers in a competitive learning environment (Weerasinghe & Fernando, 2018). The Taruna perception survey is also considered as the most common approach to check and improve campus quality. Thus, the vital role of factors such as educational programs, quality of academic personnel, service accessibility, training environment and university facilities in shaping cadet satisfaction and their academic performance is interested and recognized in educational literature (Lee et al., 2020). However, there is a limited data set of available primary data to explore the influence of these factors on academic satisfaction and achievement among Cadets.

Higher education has changed over the last few years. The teacher is not the center of the learning process or the only one with knowledge. Currently, Taruna is in the middle, and lecturers are using new methodologies to

stimulate their creativity, teamwork, skills, and so on. Therefore, in the classroom, cadets analyze, research and make all the activities and practices that the lecturer has prepared beforehand, using active learning strategies. This new approach requires students to think, act or reflect on what they are learning (Martínez-Jiménez & Ruiz-Jiménez, 2020).

On average, current cadets are part of Generation Z (Gen Z) who were born between 1995 and 2015 and first entered higher education in 2013 (Seemiller & Grace, 2017). There is an emerging body of literature about Gen Z cadets, indicating that they have different needs and expectations than previous generations. Primarily, these Cadets rely heavily on information technology and prefer to learn and work independently at their own pace (Seemiller & Grace, 2017). There is good news so far as the newest generation to enter nursing greatly enjoys app-based learning, wants to address the root causes of social problems, and aspires to change the world. There are also challenges ahead. If Gen Z are loyal to their generational cohort, they will prefer entrepreneurial career opportunities over commitment to an organization and place their own happiness and work enjoyment in other considerations. Furthermore, anxiety is an important issue for Cadets.

In the era of education, the Era of the Industrial Revolution 4.0 to describe various ways of integrating cyber technology both physically and non-physically in learning. The online campus learning system can be used with technological means so as to create a Smart Campus in the Banten Shipping Polytechnic area. The pandemic has made distance learning (PJJ) activities accessible anywhere, teachers are asked to be more creative and innovative. E-learning is the basis and logical consequence of the development of information and communication technology (Yulianto, 2021). To innovate and stay on top of the competition, all organizations must make learning a priority. Understanding new industry developments, product innovations, changes in customer needs and competitive threats are some of the issues that should rank high among organizational learning requirements. Even in situations with minimal competition, continuous

learning is necessary for organizations to thrive and survive (Flanigan, 2016).

To overcome this problem, a transformational leader is needed in carrying out this task. Transformational thinking and leadership styles can have a major impact on all subordinates at work, and can help organizations continue to innovate to adapt to the times, clarifying that transformational leadership behavior influences the adoption of generative thinking and the pursuit of organizational innovation. A recurring theme in the literature is that other internal factors beyond CEO leadership, such as organizational culture and structure can also influence organizational innovation (Zuraik & Kelly, 2018).

In this research, it has been proven that transformational leadership can help influence organizations to continue to innovate, make organizational structures more effective, help motivate employees at work and help create the right organizational culture. In this way, the civilization of the Indonesian nation was formed which was able to actualize itself through the heart to grow and strengthen faith, piety and noble morals, including noble character and superior personality, as well as the exercise of taste to increase sensitivity and appreciation for the subtlety and beauty of art and culture, as well as the competence to express them.

In addition, the confidence of employees in work is important in work. Self-efficacy is the foundation of lecturer motivation at work (Cziraki et al., 2018), In addition, in order to realize the provision of access to education and culture based on information and communication technology, an Information and Communication Technology Development Plan (ICT Master Plan) is needed which is aligned with the Strategic Plan of the Ministry of Transportation of the Republic of Indonesia and bureaucratic reform policies in increasing effectiveness and efficiency through process integration. , share resources and use of ICT as determined by the Ministry of State Apparatus and Bureaucratic Reform.

The Covid-19 pandemic has become a cog that motivates all elements to make changes in the shortest possible

time in order to continue the rotation of the organization's wheels. Currently, competition between private universities is very high, so student satisfaction must be prioritized by universities. Attracting new students and retaining existing students has become an urgent and important goal for many existing higher education institutions (Angell et al., 2008) Therefore, universities that aim to gain a competitive advantage in the future need to find effective and creative ways to attract, maintain and foster closer relationships with students. (Hasan et al., 2009)

Methods

This research uses a quantitative approach, survey methods and path analysis techniques. Variables in path analysis consist of exogenous variables and endogenous variables. This research was conducted at the Banten Shipping Polytechnic. The time of the research was carried out from January 2021 to May 2021. The population in this study were cadets at the Banten Shipping Polytechnic, totaling 89 cadets, the sample in the study was part of the population. The sampling technique used is random sampling, namely a simple random sampling method. In this research, data collection was used using an instrument in the form of a questionnaire. Instruments are tested first before being used in research. Testing the instrument includes a validity test and a reliability test. From the test results, valid and invalid instrument items were obtained. Invalid instruments are discarded. Questionnaires were distributed to respondents to obtain research data about all the variables studied. These variables include cadet satisfaction, work motivation, innovative work behavior. The data analysis used for this research is descriptive analysis and inferential analysis. Descriptive analysis is used in terms of data presentation, central size, and spread size. Descriptive data analysis can be presented in the form of distribution tables and histograms. The central measures are the mean, median and mode. Measures of spread are variance and standard deviation. Inferential analysis is used to test hypotheses using path analysis which is preceded by a normality test, estimated error and regression analysis.

RESULTS AND DISCUSSION

The description of the data in this section includes data on variable Y (Satisfaction) as an endogenous variable, variable X1 (Work Motivation) as an exogenous variable and variable X2 (Innovative Work Behavior) as an intermediate endogenous variable. The description of each variable is presented sequentially starting from variables Y, X1, and X2.

Satisfaction (Y)

From the data obtained in the field which was then processed statistically into a frequency distribution list, the number of classes was calculated according to Sturges' rules, seven classes were obtained with a maximum score of 75 and a minimum score of 50, so that the score range was 25. The results of the data calculation obtained an average of 67.89; standard deviation of 5.407; variance of 29.237; the median is 69.00; and the mode is 75. The grouping of satisfaction data can be seen in the frequency distribution table as follows.

Table 1. Satisfaction Frequency Distribution (Y)

		Interval Y			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50-53	1	1,1	1,1	1,1
	54-57	2	2,2	2,2	3,4
	58-61	8	9,0	9,0	12,4
	62-65	14	15,7	15,7	28,1
	66-69	28	31,5	31,5	59,6
	70-73	19	21,3	21,3	80,9
	74-77	17	19,1	19,1	100,0
	Total	89	100,0	100,0	

Based on the table above, a histogram will be created next. There are two axes needed to create a histogram, namely the vertical axis as the absolute frequency axis, and the horizontal axis as the satisfaction score axis. In this case, on the horizontal axis, the interval class boundaries are written, namely from 50 to 77. The histogram graph of the data distribution is shown in the following figure.

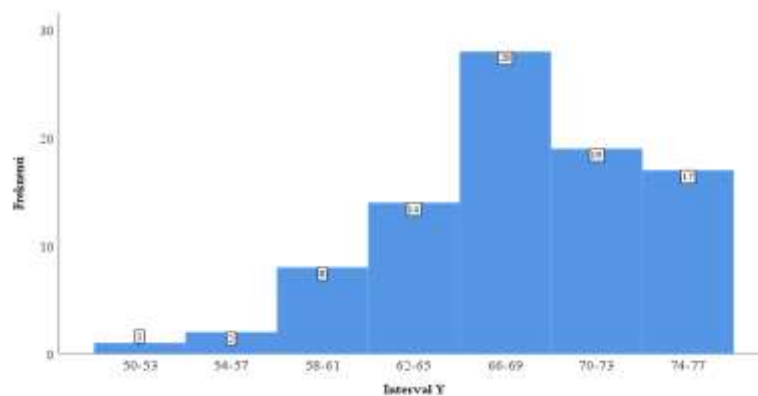


Figure 1. Histogram of satisfaction data (Y)

Work Motivation (X_1)

Work motivation data has an empirical score range between 34 to 60, so the score range is 26. The results of the data calculation were obtained on average of 50.72; standard deviation of 5.553; variance of 30.841; median of 51.00; and a mode of 50. The grouping of work motivation data can be seen in the frequency distribution table as follows.

Table 2. Frequency Distribution of Work Motivation (X_1)

		Interval X_1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34-37	2	2,2	2,2	2,2
	38-41	4	4,5	4,5	6,7
	42-45	8	9,0	9,0	15,7
	46-49	18	20,2	20,2	36,0
	50-53	29	32,6	32,6	68,5
	54-57	19	21,3	21,3	89,9
	58-61	9	10,1	10,1	100,0
Total		89	100,0	100,0	

Based on the table above, the histogram will be created. There are two axes needed in making a histogram, namely the vertical axis as the absolute frequency axis, and the horizontal axis as the axis of work motivation scores. In this case, on the horizontal axis are written the boundaries of the interval class, which is from 34 to 61. A histogram graph of the data spread is shown in the following figure.

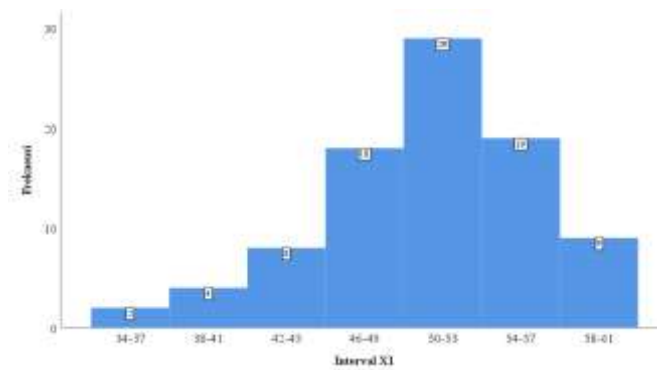


Figure 2. Work Motivation Data Histogram (X1)

Innovative Work Behavior (X2)

Innovative work behavior data has an empirical score range between 40 to 60, so the score range is 20. The results of the data calculation were obtained on average of 51.51; standard deviation of 5.369; variance of 28,821; median of 52.00; and a mode of 53. The grouping of innovative work behavior data can be seen in the frequency distribution table as follows.

Table 3. Frequency Distribution of Innovative Work Behavior (X2)

		Interval X2			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40-42	4	4,5	4,5	4,5
	43-45	10	11,2	11,2	15,7
	46-48	14	15,7	15,7	31,5
	49-51	15	16,9	16,9	48,3
	52-54	18	20,2	20,2	68,5
	55-57	15	16,9	16,9	85,4
	58-60	13	14,6	14,6	100,0
Total		89	100,0	100,0	

Based on the table above, the histogram will be created. There are two axes needed in making a histogram, namely the vertical axis as the absolute frequency axis, and the horizontal axis as the score axis of innovative work behavior. In this case, on the horizontal axis, the boundaries of the interval class are written, that is, from 40 to 60. A histogram graph of the data spread is shown in the following figure.

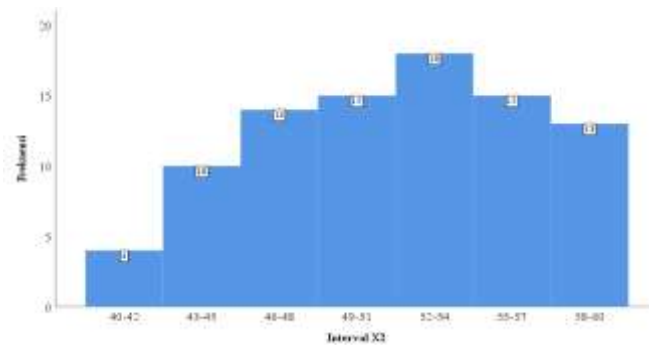


Figure 3. Innovative work behavior data histogram (X2)

A recapitulation of the results of descriptive statistical calculations can be summarized in the following table.

Table 4. Descriptive Statistical Summary

		Statistics		
		Satisfaction (Y)	Work Motivation (X1)	Innovative Work Behavior (X2)
N	Valid	89	89	89
	Missing	0	0	0
Mean		67,89	50,72	51,51
Std. Error of Mean		,573	,589	,569
Median		69,00	51,00	52,00
Mode		75	50 ^a	53
Std. Deviation		5,407	5,553	5,369
Variance		29,237	30,841	28,821
Range		25	26	20
Minimum		50	34	40
Maximum		75	60	60
Sum		6042	4514	4584

a. Multiple modes exist. The smallest value is shown

Analysis Requirements Testing

The use of parametric statistics works by assuming that the data of each research variable to be analyzed forms a normal distribution. The process of testing analytical requirements in this study is a condition that must be met so that the use of regression techniques included in the parametric statistical group can be applied for hypothesis testing purposes.

The term path analysis is that the estimation between exogenous variables to endogenous variables is linear,

thus the requirements that apply to regression analysis by themselves also apply to the requirements of path analysis. The requirements that must be met in path analysis are that the study sample comes from a normally distributed population, the regression equation must be meaningful and linear, and the relationships between the variables in the model must be significant. In this regard, before testing the model, it is first tested on the requirements applicable in the path analysis.

Simple Regression Equation

Top Y X₁

From the calculation data for the preparation of the regression equation model between work motivation and satisfaction in annex 6, a regression constant $a = 35.871$ and a regression coefficient $b = 0.631$ were obtained. Thus the model relationship of a simple regression equation is $\hat{Y} = 35.871 + 0.631X_1$.

Y above X₂

From the calculation data for the preparation of the regression equation model between innovative work behavior and satisfaction in annex 6, a regression constant $a = 31.536$ and a regression coefficient $b = 0.706$ were obtained. Thus the model relationship of a simple regression equation is $\hat{Y} = 31.536 + 0.706X_2$.

X₂ over X₁

From the calculation data for the preparation of the regression equation model between work motivation and innovative work behavior in annex 6, a regression constant $a = 19.668$ and a regression coefficient $b = 0.628$ were obtained. Thus the model relationship of a simple regression equation is $\hat{X}_2 = 19.668 + 0.628X_1$.

Normality Test

The data used in constructing the regression model must satisfy the assumption that the data comes from a normally distributed population. The normality assumption basically states that in a model regression must be normally distributed. The assumption test in this study was carried out by testing the normality of the data from the three research regression estimation errors to be analyzed. The normality test uses the SPSS program

to find out whether the regression of Y Over X is normally distributed or not whose results can be seen in Kolmogorov Smirnov's column (Sig.).

Table 5. Regression Estimation Error Normality Test Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y Atas X1	,058	89	,200*	,988	89	,604
Y Atas X2	,069	89	,200*	,990	89	,729
X2 Atas X1	,073	89	,200*	,987	89	,511

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The table above shows that the probability value (Sig.) of all regression estimation errors is 0.200. A probability value greater than the significant level (α) of 0.05 then all estimated regression error data are normally distributed.

Regression Significance and Linearity Test

Before using regression equations in order to draw conclusions in hypothesis testing, the regression model obtained is tested for significance and linearity using the F test with SPSS. The criteria for testing the significance and linearity of regression models are established as follows:

Significant regression: $F_{\text{count}} > F_{\text{table}}$ on the Regression row

Linear regression: $F_{\text{calculate}} \leq F_{\text{table}}$ on the Deviation from Linearity line

Significance and Linearity Test of Satisfaction Regression on Work Motivation

Objection testing of the satisfaction regression equation for work motivation can be seen in the following table.

Table 6. Y Regression Meaningfulness Test over X1

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1081,447	1	1081,447	63,084	,000 ^b
	Residual	1491,429	87	17,143		
	Total	2572,876	88			

- a. Dependent Variable: Satisfaction (Y)
 b. Predictors: (Constant), Work Motivation (X1)

The distribution table F using numerator db = 1 and denominator db (n - 2) = 87 with a significant level of 0.05. Ftable is 3.95 and Fcalculate is 63.084. This shows that Fcalculate > Ftable and the probability value Sig. (0.000) < a significant level (0.05) then the regression equation Y over X1 is declared significant. The linearity test is carried out to test whether the two variables have a linear influence or not whose results can be seen in the following table.

Table 7. Y Regression Linearity Test over X1

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Satisfaction (Y) * Work Motivation (X1)	Between Groups	(Combined)	1569,877	23	68,256	4,423	,000
		Linearity	1081,447	1	1081,447	70,084	,000
		Deviation from Linearity	488,430	22	22,201	1,439	,131
	Within Groups		1003,000	65	15,431		
	Total		2572,876	88			

F distribution table using numerator db = 22 and denominator db = 65 with a significant level of 0.05. Ftable is 1.71 and Fcalculate is 1.439. This shows that Fcalculate < Ftable and the probability value Sig. deviation from linearity (0.131) > significant level (0.05) then the estimated spread of points forming a linear line is acceptable.

Significance and Linearity Test of Regression of Satisfaction with Innovative Work Behavior

Objection testing of satisfaction regression equations for innovative work behavior can be seen in the following table.

Table 8. Y Regression Meaningfulness Test over X2

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1263,403	1	1263,403	83,939	,000 ^b

Residual	1309,474	87	15,051		
Total	2572,876	88			

a. Dependent Variable: Satisfaction (Y)

b. Predictors: (Constant), Innovative Work Behavior (X2)

The distribution table F using numerator db = 1 and denominator db (n - 2) = 87 with a significant level of 0.05. Ftable is 3.95 and Fcalculate is 83.939. This shows that Fcalculate > Ftable and the probability value Sig. (0.000) < a significant level (0.05) then the regression equation Y over X2 is declared significant. The linearity test is carried out to test whether the two variables have a linear influence or not whose results can be seen in the following table.

Table 9. Y Regression Linearity Test over X2

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Satisfaction (Y) * Innovative Work Behavior (X2)	Between Groups	(Combined)	1688,451	20	84,423	6,491	,000
		Linearity	1263,403	1	1263,403	97,138	,000
		Deviation from Linearity	425,048	19	22,371	1,720	,054
	Within Groups		884,426	68	13,006		
	Total		2572,876	88			

F distribution table using numerator db = 19 and denominator db = 68 with a significant level of 0.05. Ftable is 1.74 and Fcalculate is 1.720. This shows that Fcalculate < Ftable and the probability value Sig. deviation from linearity (0.054) > significant degree (0.05) then the estimated spread of points forming a linear line is acceptable.

Test of Significance and Linearity of Regression of Innovative Work Behavior on Work Motivation

Objection testing of the regression equation of innovative work behavior on work motivation can be seen in the following table.

Table 10. Meaningfulness Test of Regression X2 over X1

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1069,423	1	1069,423	63,429	,000 ^b
	Residual	1466,824	87	16,860		
	Total	2536,247	88			

a. Dependent Variable: Innovative Work Behavior (X2)

b. Predictors: (Constant), Work Motivation (X1)

The distribution table F using numerator db = 1 and denominator db (n - 2) = 87 with a significant level of 0.05. Ftable is 3.95 and Fcalculate is 63.429. This shows that Fcalculate > Ftable and the probability value Sig. (0.000) < a significant level (0.05) then the regression equation X2 over X1 is declared significant. The linearity test is carried out to test whether the two variables have a linear influence or not whose results can be seen in the following table.

Table 11. Regression Linearity Test X2 over X1

ANOVA Table			Sum of Squares	df	Mean Square	F	Itself.
Innovative Work Behavior (X2) * Work Motivation (X1)	Between Groups	(Combined) Linearity	1439,401	23	62,583	3,709	,000
		Linearity	1069,423	1	1069,423	63,375	,000
		Deviation from Linearity	369,977	22	16,817	,997	,481
Motivation (X1)	Within Groups		1096,847	65	16,875		
	Total		2536,247	88			

F distribution table using numerator db = 22 and denominator db = 65 with a significant level of 0.05. Ftable is 1.71 and Fcalculate is 0.997. This shows that Fcalculate < Ftable and the probability value Sig. deviation from linearity (0.481) > significant level (0.05) then the estimated spread of points forming a linear line is acceptable.

The overall results of the regression significance and linearity tests are summarized in the following table.

Table 12. Results of Significance Test and Regression Linearity Test

Reg	Equation	Regression Test		Linearity Test		Conclusion
		Fhitung	Ftabel	Fhitung	Ftabel	

			a = 0,01		a = 0,05		
Top Y							
X1	$\hat{Y} = 35,781 + 0,631X1$	63,084	3,95	1,439	1,71		Significant regression and linear regression
And above X2	$\hat{Y} = 31,536 + 0,706X2$	83,939	3,95	1,720	1,74		Significant regression and linear regression
X2 above X1	$\hat{X}_2 = 19,668 + 0,628X1$	63,429	3,95	0,997	1,71		Significant regression and linear regression

Model Testing

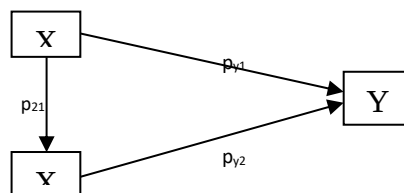


Figure 4. Model of structural relationships between variables

Based on figure 4.4 there is a division of two models, namely the first model substructure and the second model substructure, it can be explained that the value of the path coefficient in the first model substructure is a path that connects work motivation variables to satisfaction variables, and a path that connects innovative work behavior variables to satisfaction variables. The value of the path coefficient in the second model substructure is a path that connects work motivation variables to innovative work behavior variables.

Calculation of the correlation coefficient

Before calculations are carried out to test the causality model using the path analysis method, the research data is first tested and has met all the necessary requirements. One of the very important requirements that must be met is a significant correlation between related variables and related to one another. From the results of the analysis calculations in appendix 7, it can be summarized as follows:

Tabel 13. Rangkuman Hasil Pengujian Koefisien Korelasi

		Correlations		
		Satisfaction (Y)	Work Motivation (X1)	Innovative Work Behavior (X2)
Satisfaction (Y)	Pearson Correlation	1	,648**	,701**
	Sig. (2-tailed)		,000	,000
	N	89	89	89
Work Motivation (X1)	Pearson Correlation	,648**	1	,649**
	Sig. (2-tailed)	,000		,000
	N	89	89	89
Innovative Work Behavior (X2)	Pearson Correlation	,701**	,649**	1
	Sig. (2-tailed)	,000	,000	
	N	89	89	89

** . Correlation is significant at the 0.01 level (2-tailed).

Table 13 shows that the probability value of Sig. (2-tailed) of all correlation coefficients is smaller than the significant level (α) 0.05 then all correlation coefficients are declared significant.

Path Coefficients in the Substructure of the First Model

The structural equation formed in the first substructure model consists of 2 path coefficients from variables X1 to Y and X2 to Y in the form of: $Y = \beta_{Y1}X_1 + \beta_{Y2}X_2 + \beta_{Y\epsilon}$. Double correlation coefficient $R_{Y.12} = 0.745$ with probability value Sig. (0.000) < significant level (0.05) then the double correlation coefficient is declared significant. The coefficient of determination of $(R_{Y.12})^2 = 0.556$ and the remaining ($\beta_{Y\epsilon}$) of 0.444 is influenced by other factors that are not studied such as leadership, reward, punishment, and others. So form the structural equation in the first substructure model: $Y = 0.334X_1 + 0.484X_2 + 0.444$. The description of the estimation of the path coefficient of the first model is described in table 4.14 and visualized through the following figure 5:

Table 14. First Model SPSS Results

Model	Coefficientsa			
	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
				Itself.

1	(Constant)	26,289	4,032		6,520	,000
	Work Motivation (X1)	,325	,092	,334	3,536	,001
	Innovative Work Behavior (X2)	,487	,095	,484	5,118	,000

a. Dependent Variable: Satisfaction (Y)

The results of the estimation of the first structural model are then shown in the following figure:

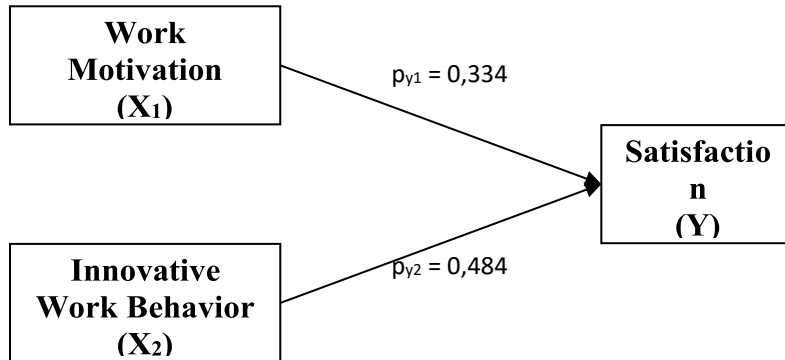


Figure 5. Empirical Path Diagram of Structural Model 1

Path Coefficients in the Second Model Substructure

The structural equation formed in the second substructure model formed by the path coefficients of the variable X1 to X2 is: $X_2 = p_{21}X_1 + p_2\varepsilon_2$. The correlation coefficient $r_{12} = 0.649$ with the probability value Sig. (0.000) < a significant level (0.05) then the correlation coefficient is declared significant. The coefficient of determination of $(r_{12})^2 = 0.422$ and the remaining ($p_2\varepsilon_2$) of 0.578 is influenced by other factors that are not studied such as work environment, organizational climate, and others. So form the structural equation in the second substructure model: $X_2 = 0.649X_1 + 0.578$. The description of the estimation of the path coefficients of the second model is described in table 4.15 and visualized through the following figure 4.6 display:

Table 15. Second Model SPSS Results

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Itself
Model		B	Std. Error	Beta		
2	(Constant)	19,668	4,021		4,891	,000

Work Motivation (X1)	,628	,079	,649	7,964	,000
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a. Dependent Variable: Innovative Work Behavior (X2)

The estimation results of the second structural model are then shown in the following figure:

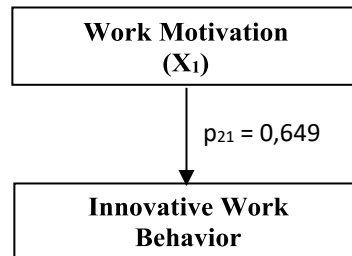


Figure 6. Empirical Path Diagram of Structural Model 2

Hypothesis Testing

After the calculation of the path coefficient is carried out, the next hypothesis conclusion is drawn. Drawing hypothetical conclusions is carried out based on the results of the calculation of path coefficients and significance through the -t test for each path studied.

First hypothesis

Work motivation has a direct positive effect on satisfaction.

$H_0 : \beta_1 < 0$

$H_1 : \beta_1 > 0$

H_0 is rejected, if $t_{count} > t_{table}$.

From the calculation of the path analysis, the direct influence of work motivation on satisfaction, the value of the path coefficient is 0.334 and the calculated value is 3.536. Because the value of the calculated coefficient is greater than the value of t_{table} at $dk = 86$ for $\alpha = 0.05$ of 1.99 and the probability value of Sig. (0.001) < a significant level (0.05), H_0 is rejected and H_1 is accepted, thus work motivation has a directly positive effect on acceptable satisfaction.

The results of the first hypothesis analysis provide findings that work motivation has a directly positive effect on satisfaction. Thus it can be concluded that satisfaction is directly positively influenced by work

motivation. Increased work motivation results in increased satisfaction.

Second hypothesis

Innovative work behavior has a direct positive effect on satisfaction.

$$H_0 : \beta_{y2} \leq 0$$

$$H_1 : \beta_{y2} > 0$$

H_0 is rejected, if $t_{count} > t_{table}$.

From the calculation results of path analysis, the direct influence of innovative work behavior on satisfaction, the value of the path coefficient is 0.484 and the calculated value is 5.118. Because the value of the calculated coefficient is greater than the value of t_{table} at $dk = 86$ for $\alpha = 0.05$ of 1.99 and the probability value of Sig. (0.000) < a significant level (0.05), H_0 is rejected and H_1 is accepted, thus innovative work behavior has a directly positive effect on acceptable satisfaction.

The results of the second hypothesis analysis resulted in findings that innovative work behavior has a directly positive effect on satisfaction. Based on these findings, it can be concluded that satisfaction is directly positively influenced by innovative work behavior. Increased innovative work behavior results in increased satisfaction.

Third hypothesis

Work motivation has a direct positive effect on innovative work behavior.

$$H_0 : \beta_{21} \leq 0$$

$$H_1 : \beta_{21} > 0$$

H_0 is rejected, if $t_{count} > t_{table}$.

From the calculation of the path analysis, the direct influence of work motivation on innovative work behavior, the value of the path coefficient is 0.649 and the calculated value is 7.964. Because the value of the calculated coefficient is greater than the value of t_{table} at $dk = 87$ for $\alpha = 0.05$ of 1.99 and the probability value of Sig. (0.000) < a significant level (0.05), H_0 is rejected and H_1 is accepted, thus work motivation has a directly

positive effect on innovative work behavior can be accepted.

The results of the third hypothesis analysis provide findings that work motivation has a direct positive effect on innovative work behavior. Thus it can be concluded that innovative work behavior is positively influenced directly by work motivation. Increased work motivation results in increased innovative work behavior.

Discussion of Research Results

Based on the literature review that has been discussed and the empirical studies above, the following is a discussion of the results of the research as an attempt to synthesize theoretical studies with empirical findings. The detailed discussion of the results of the analysis and testing of the research hypothesis is described as follows:

Effect of Work Motivation on Satisfaction

From the results of testing the first hypothesis it can be concluded that there is a positive direct effect of work motivation on satisfaction with a path coefficient value of 0.334. This gives the meaning of work motivation has a direct positive effect on satisfaction.

The results of this study are in line with the opinions of several experts including Humphreys and Einstein explaining that a comprehensive model of work motivation must include elements of personality, aspects of effort, abilities, expectations, abilities, valence, goal-directed behavior, lecturer intrinsic and extrinsic rewards (Ulrich, 2008 :4). Lecturer work motivation in work is reflected in every activity in work which has an impact on cadet satisfaction as a customer. Work motivation represents a psychological process that creates a desire to build, direct and continuously maintain voluntary actions directed by leaders. Lecturer work motivation will be reflected in several things including; (1) Strength, in this case power is the ability of lecturers to carry out their daily activities in carrying out their duties on campus with all the abilities, competencies, skills they have to provide the best results in work by working optimally by teaching according to what is taught. has been determined by the Institution

or campus; (2) Initiative, in the era of the Covid-19 pandemic like this, lecturers are required to have extra initiative and innovative work behavior, restrictions for face-to-face and very limited physical contact make lecturers have to be more creative and have initiative in carrying out their duties; (3) Intensity, lecturer work motivation can be reflected in how often lecturers carry out certain activities which have become their obligations as lecturers which have been regulated in the TriDharma of Higher Education; (4) Perseverance, is a continuous effort by lecturers to achieve certain goals without giving up easily until they achieve success. This must be continuously improved to achieve what has been set by both the Ministry of Education and Culture and the Ministry of Transportation through the Ministry of Transportation's BPSDM.

Student satisfaction as a customer of lecturers can be directly influenced by the work motivation of lecturers at the Banten Shipping Polytechnic, this is based on students as customers who have the right to get excellent service, therefore it is hoped that lecturers can provide excellent service, one of which is felt by students from the work motivation of lecturers at work.

Work motivation is needed by every lecturer in carrying out their duties, this is very closely related to the performance they will produce. Work motivation was proposed by Humphreys and Einstein in 2004. For this reason, Higher Education as an academic institution must continue to innovate, diversify its structure and look for new ways to provide its services more effectively to its customers (Jain et al., 2011). The occurrence of this phenomenon is a challenge for universities to provide the best service to their students in order to win the competition.

The Influence of Innovative Work Behavior on Satisfaction

From the results of testing the second hypothesis, it can be concluded that there is a positive direct influence of innovative work behavior on satisfaction with a path coefficient value of 0.484. This gives the meaning that innovative work behavior has a direct positive effect on satisfaction.

The results of this research are in line with the opinions of several experts, including Asurakkody and Kim, who said that lecturers' innovative work behavior in carrying out their work can influence the level of satisfaction of students as customers. Innovative work behavior generally refers to the process of creating, using new tools or applications in carrying out their work, both directly and indirectly, can improve the quality of the results of the learning process carried out by lecturers in class (Asurakkody & Kim, 2020).

A professional lecturer is required to meet various requirements including formal educational qualifications, profession, scientific competence, ability to communicate, have a creative and productive spirit, have a high work ethic and commitment to his profession and always carry out continuous self-development along with developments in science. and technology.

In practice, every lecturer or institution or campus has various kinds of obstacles and limitations, therefore innovative work behavior is needed by lecturers in carrying out all their work to cover all limitations. In the context of organizational behavior, this problem is often faced by lecturers because of the demands of their profession. In times like the Covid-19 pandemic, all lecturers are required to give their best with all their limitations. In the context of organizational behavior, the problem revealed above is that a lecturer is faced with the demands of his professional role, and on the other hand, the limitations of the lecturer himself and the limitations of what he hopes to obtain from his profession are closely related to the important role of a lecturer. in school organizations, especially innovative work behavior. Still some lecturers in teaching do not show innovative work behavior, including the teaching methods of some lecturers are still conventional, there is no sharing of knowledge about appropriate learning methods.

Lecturers' innovative work behavior will encourage the achievement of learning goals in higher education. Lecturers who have innovative work behavior will always have new things to give to students, so that students always look forward to their presence. Students always eagerly await the next meeting with the lecturer

concerned. In such a position, innovative lecturers are used as central figures by students in terms of interest and enthusiasm for learning, especially in terms of the courses taught by the lecturer. For this reason, Banten Maritime Science Polytechnic lecturers must be empowered so that they have more value in the sense of being more capable, more skilled and more qualified so that they can be optimally efficient in national development and able to compete in the era of globalization. To improve the innovative work behavior of lecturers, the Banten Maritime Science Polytechnic must always explore factors that can influence the innovative work behavior of lecturers.

To improve lecturers' innovative work behavior, it is necessary to pay attention to the quality work life (QWL) factor. Quality of work life (QWL) refers to whether a person's work environment is pleasant or unpleasant. The main goal is the development of an excellent work environment. The main focus of Quality Of Work Life itself is that the work environment and all the work in it must be in accordance with people and technology. In educational institutions such as the Banten Shipping Science Polytechnic, one way to increase lecturers to have innovative work behavior is to improve the quality of work life (QWL), because in this way lecturers will feel comfortable and comfortable at work. All needs, both material and psychological, can be met.

What lecturers do has a big influence on student satisfaction as customers. Customer satisfaction is the difference between expectations and perceived performance. So, the definition of customer satisfaction means that the performance of a good or service is at least the same as what was expected. Satisfaction is the level of someone's feelings after comparing perceived performance or results with their expectations (Kotler & Armstrong, 2012).

The Effect of Work Motivation on Innovative Work Behavior

From the results of testing the third hypothesis, it can be concluded that there is a positive direct effect of work motivation on innovative work behavior with a path coefficient value of 0.649. This means that work

motivation has a direct positive effect on innovative work behavior.

Work motivation is encouragement from within the lecturer or stimulation from outside the lecturer that makes the lecturer willing to move to do an activity or work to the fullest with all that he has.

Two Factor Motivation Theory or Herzberg's Motivation theory or Hygienic factors. According to this theory, the ideal motivation that can stimulate business is the opportunity to carry out tasks that require more expertise and opportunities to develop abilities. Herzberg stated that people in carrying out their work are influenced by two factors which are needs, namely; (1) Maintenance Factors Maintenance factors related to human nature that wants to obtain physical peace. Needs that are ongoing, because these needs will return to zero after being met. These factors include matters of salary, physical working conditions, job security, pleasant supervision and various other benefits. The loss of these maintenance factors causes dissatisfaction. Maintenance factor is not a motivation for lecturers but is a must that must be given by the leadership; (2) Motivation Factors are motivating factors that involve psychological needs, namely the feeling of perfection in doing work. This motivational factor is related to personal appreciation which is directly related to work. The concept of hygiene is also called the two-factor theory, namely: a) Content (satisfiers) Work - Achievement - Recognition - The work itself - Responsibility - Development of individual potential (advancement)) This series describes a person's relationship with what he does (job content), namely the work content of his duties b) Hygienic Factors (demotivation = dissatisfiers) - Salary or wages (wages or salaries) - Working conditions (working conditions) - Company policy and administration (company policy and administration) - Interpersonal relations - Quality of supervision (quality supervisor) - Quality of supervision (quality supervisor)

Motivation has a role in the formation of employee innovative work behavior, this is because to innovate requires more encouragement than usual work. There are many ways that can be done by organizations to

improve the ability of their employees including holding workshops, training, seminars and some others (Ibrahim et al., 2017). There is one thing that is sometimes forgotten by leaders in order to increase innovative work behavior, namely encouraging employee motivation to work even better by loving their work, and continuously making improvements on an ongoing basis and will eventually be reflected in the work behavior of innovative lecturers at work.

Intrinsic encouragement that comes from within employees is proven to increase employee innovative work behavior (Ngan, 2015). This proves that to make a change or increase in innovative work behavior requires encouragement from within (work motivation). Innovative work behavior will arise from within a person when employees have encouragement or motivation to work better (Scott & Bruce, 1994), the same thing was expressed in the research of Bos-Nehles et.al which said that employee motivation can generate ideas that are innovative at work (Bos-Nehles & Veenendaal, 2017). Newstrom further explained that employee motivation has an influence on the formation of employee innovative work behavior, work motivation is an internal and external force that causes employees to be willing to do their job effectively and efficiently in faster ways and that behavior is reflected in employee work behavior. innovative (Newstrom, 2014).

Bateman and Snell also said that work motivation refers to employee strengths that arise either from within or outside the employee's self which encourages employees to complete their work and is reflected in innovative employee work behavior in completing their tasks (Bateman & Snell, 2013). This is supported by several researches which prove that motivation is one of the main elements in achieving output results. An important aspect of motivation is how people perceive that certain work behaviors will be rewarded and how fair or equitable the rewards are. Two well-known motivational theories that focus on trust are the theory of hope and the theory of justice (Gomez-Mejia & Balkin, 2012).

CONCLUSIONS & RECOMMENDATIONS

Based on the results of theoretical and empirical studies that researchers examined related to work motivation variables, innovative work behavior on cadet satisfaction can be concluded as follows; (1) Work motivation has a direct effect on cadet satisfaction, meaning that the strength, initiative and diligence of lecturers in carrying out the TriDharma of Higher Education has an effect of 38% on cadet satisfaction in learning; (2) Innovative work behavior has a direct effect on cadet satisfaction, meaning that the application of lecturer creativity during a pandemic by developing ideas and making breakthroughs in implementing new ideas at work has a very large influence on cadet satisfaction by 48%; (3) Work motivation has a direct effect on innovative work behavior. This means that strength, initiative and intensity have very dominant factors, namely 64% in the formation of lecturers' innovative work behavior attitudes.

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