

THE IMPACT OF EXTRINSIC AND INTRINSIC MOTIVATIONAL FACTORS TO STUDENT PERFORMANCE*PENGARUH FAKTOR MOTIVASI EXTRINSIK DAN INTRINSIK PADA PERFORMA SISWA*

By:

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Abstract: Human resources as one of the resources that exist in an organization plays an important role in the success of achieving the goals of the organization. A good quality of human resources can be seen from their development while studying. Motivation as a driver to meet aspects in producing good quality human resources by increasing student performance. Motivation have two factors which are external motivation that driven from outside such as peer acceptance, power motivation, fear of failure and authority expectations and internal motivation that driven within such as the need for achievement and to mastery goals. The purpose of this research is to determine the impact of Extrinsic and Intrinsic Motivational Factors To Student Performance. This research was classified as a quantitative research using Multiple Linear Regression method to testing the hypothesis of this research. The sampling techniques of this research was simple random sampling and use questionnaire to get the data with the sample size of 100 respondents. This research shows that partially and simultaneously Extrinsic and Intrinsic Motivational Factors have an impact to Student Performance with the result of fcount 24.550 larger than ftable and tcount of all variable larger than ttable.

Keywords: Student Performance, Extrinsic Motivation, Intrinsic Motivation

Abstrak: Sumber Daya Manusia adalah salah satu sumber daya yang memiliki peran penting dalam kesuksesan sebuah organisasi. Kualitas dari Sumber Daya Manusia dapat dilihat dari perkembangan selama proses belajar. Motivasi memiliki dua factor yaitu motivasi eksternal yang dipengaruhi dari luar seperti penerimaan teman sebaya, motivasi kekuasaan, Takut akan kegagalan, dan harapan otoritas sedangkan motivasi intrinsik yang mendorong dari dalam diri seperti kebutuhan akan prestasi dan penguasaan tujuan. Tujuan dari penelitian ini adalah untuk menentukan pengaruh factor motivasi ekstrinsik dan intrinsik terhadap performa siswa. Penelitian ini merupakan penelitian kuantitatif yang menggunakan analisis regresi berganda untuk menguji hipotesa dari penelitian ini. Teknik pengambilan data yang digunakan dalam penelitian ini adalah sampel acak sederhana dengan menggunakan kuesioner untuk memperoleh data sebanyak 100 responden. Penelitian ini menunjukkan bahwa secara parsial dan simultan factor motivasi ekstrinsik dan intrinsik berpengaruh terhadap performa siswa dengan hasil fhitung 24.550 lebih besar dari ftable dan thitung dari semua variable lebih besar dari table.

Kata kunci: Performa Siswa, Motivasi Ekstrinsik, Motivasi Intrinsik

INTRODUCTION

Research Background

A developing nation through national development seeks to improve its results in all areas including human resources. Human resources as one of the resources that exist in an organization plays an important role in the success of achieving the goals of the organization. If human resources are not qualified, even high-tech machines will have no meaning. That is the reason why an organization, company and government institution in recruitment of workers provide several requirements that must be met by the applicant. To meet these criteria, educational institutions have an important role.

The development of students in their learning is very important in producing human resources that have good quality. Students are required to have several aspects that become a reference to assess the progress of the student's development. These aspects are cognitive aspects, affective aspects and psychomotor aspects. Motivation is needed to push students to meet the criteria of every aspect that exists. Winardi (2016: 6) stated that motivation is a potential strength that exists in a human being, which can be developed by itself or developed by outside forces which can affect the performance results positively or negative. Motivation have two factors that must be considered which are extrinsic and intrinsic.

Every year, many people follow the selection to be able to enter the university in Manado. But the number of students enrolled when they first entered university is not proportional to the number of students who graduate. It means that the motivation of students is getting low not like when they first entered university. According to Pajares (2007) Motivation appears to decrease gradually throughout academic careers. This extrinsic and intrinsic motivation are needed to increase student motivation and to help student be more interested in learning and can increase their performance.

Research Objectives

The research objectives are to identify the impact of:

1. To know the impact of extrinsic motivational factors to student performance partially.
2. To know the impact of intrinsic motivational factors to student performance partially.
3. To know the impact of Extrinsic and intrinsic motivational factors to student performance simultaneously.

THEORETICAL REVIEW

Human Resource Management

Human resources management is a knowledge or how to manage relationship and roles of employee to help their business gain the competitive advantage. Boxall and Purcell (2011) conceptualized workforce performance as a function of capabilities (skill and knowledge that employee need to do their work).

Motivation

Gredler, Broussard and Garrison (2004) broadly defined motivation as the attribute that moves us to do or not to do something. Motivation involves the biological, emotional, social, and cognitive forces that activate behavior.

Extrinsic Motivation

Extrinsic motivation refers to behavior that driven by external rewards such as money, grade and fame. Cherry (2017) gave examples of extrinsic motivation which include studying because, one wants to get good grade, cleaning the room to avoid being reprimanded by one's parents, participating in sports to win awards and competing in a contest to win scholarship.

Intrinsic Motivation

According to Gunarsa (2008) intrinsic motivation is a strong drive or will that comes from within a person. The stronger intrinsic motivation a person has, the more likely he is to show strong behavior to achieve goals

Student Performance

Waridin (2005) explained that performance is a comparison of work results achieved by employees with predetermined standards. Performance can also mean the results in quality and quantity achieved by a person in carrying out their tasks in accordance with the responsibilities given to him

Previous research

Afzal (2010) investigate A Study of University Students Motivation and Its Relationship with Their Academic Performance. The result of the study show that academic performance is positively influenced by intrinsic motivation and negatively affected by extrinsic motivation.

P.K. Gupta (2017) found that there is a significant difference in Academic Motivation between high and low achievers. But there is a significant sex difference within low achievers with respect to academic motivation.

Tokan M.K (2019) defined that Intrinsic motivation, extrinsic motivation and learning behavior jointly affect the learning achievement of students in the Biology Education Department.

Conceptual Framework

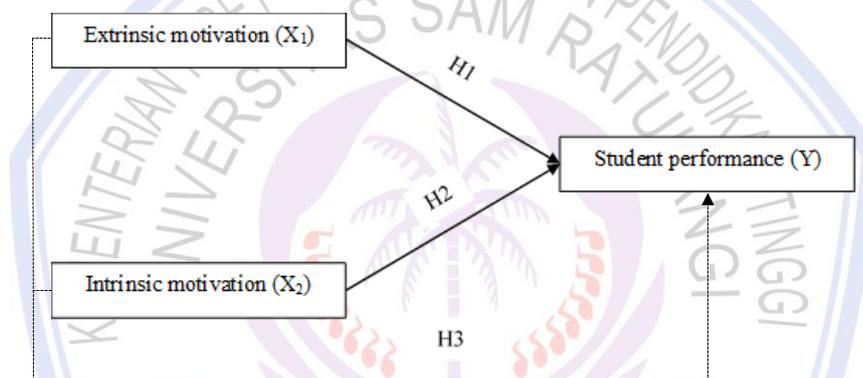


Figure 1. Conceptual Framework

Source: Data Processed, 2020

Research Hypothesis

H1: Extrinsic motivation factors has an impact to student performance partially.

H2: Intrinsic motivation factors has an impact to student performance partially.

H3: Extrinsic and intrinsic motivation factors have an impact to student performance simultaneously.

RESEARCH METHOD

Type of Research

This research uses causal approach in which the researcher would explain the relationship between variables by testing hypotheses based on a theory that had been formulated and calculated using a quantitative approach, which in the presentation of data in the form of numbers, and in analysis using a statistical test.

Place and Time of Research

The research will be conducted in Manado, North Sulawesi, Indonesia using google form. Google form was chosen because of covid-19. The study has conducted in September to October 2020.

Population and Sample

This research will be conducted with 100 respondents which are active university student in Manado.

Operational Definition and Measurement of Research Variables

1. Extrinsic Motivation (X1): Behavior that driven by external rewards such as money, grade and fame.
2. Intrinsic Motivation (X2): Behavior that is driven by internal rewards where behavior arises because of an inner desire to feel satisfied.
3. Student Performance (X3): Increase or decrease in student final score as measured by an assessment.

Data Analysis Method

Validity and Reliability Test

Validity test is an equation of data reported by researchers with data obtained directly that occur in the research subject (Sugiyono, 2018). According to Muhidin and Abdurahman (2017), an instrument of measurement is said to be reliable if the measurements are consistent and accurate.

Normality Test

According to Priyastama (2017), normality test is used to test whether the residual value generated from the regression is normally distributed or not

Multicollinearity Test

This multicollinearity test is used because in the regression analysis there are assumptions that indicate that the independent variable must be free of multicollinearity symptoms or there is no correlation between the independent variables

Heteroscedasticity Test

According to Priyastama (2017: 125) heteroscedasticity is a condition where in the regression model there is an inequality of variance from residuals on one observation to another.

Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the error of the disturber in the t period and the error of the disturber in the t-1 period (previous).

Multiple Linear Regression

Linear regression is statistical method used to analyze the relationship between two variables or more, especially to explore relationship patterns for which the model is unknown perfectly, or to find out how to vary some variables independently affect the dependent variable in a complex phenomenon.

The formula of multiple linear regressions as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where:

Y : Student performance

A : The Constant

X1: Extrinsic Motivation

X2: Intrinsic Motivation

E : Error

RESULT AND DISCUSSION

Result

Validity and Reliability Test

The Pearson Correlation value of every indicators (rcount) of variables Extrinsic Motivation (X1), Intrinsic Motivation (X2), and Performance (Y) have higher value than rtable value that is 0.165. It means that every indicator in questionnaire in this research is valid. Reliability is done by determining the value of Cronbach's Alpha. The result shows, the value of Cronbach's Alpha that is > 0.60 which is 0.824. it means the instrument used in this research is reliable or accurate and can be trusted.

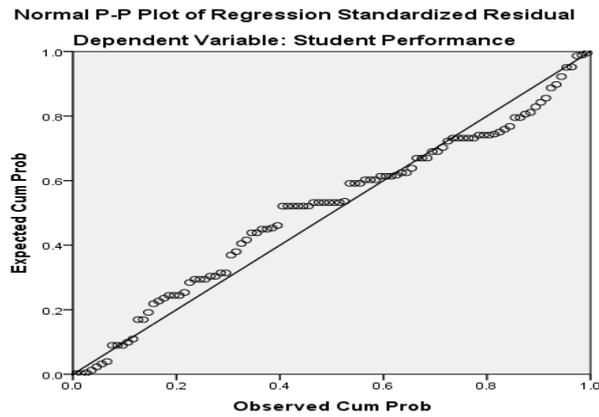


Figure 2. Normality Test
 Source: Data Processed, 2020

Figure 2 shows that the dots spread near the line and follow the diagonal line. It means that the data distributed normally.

Multicollinearity Test

Table 1. Collinearity Statistics

Model	Collinearity Statistics		Status
	Tolerance	VIF	
Extrinsic Motivation	0.685	1.460	No Multicollinearity
Intrinsic Motivation	0.685	1.460	No Multicollinearity

Source: Data Processed, 2020

Based on the result above the VIF value of Extrinsic Motivation (X_1) and Intrinsic Motivation (X_2) are 1.460 and the tolerance value of Extrinsic Motivation (X_2) and Intrinsic Motivation (X_2) are 0.685. The value of $VIF < 10$ and the tolerance > 0.10 . This means that there is no connection between the independent variables and free from multicollinearity.

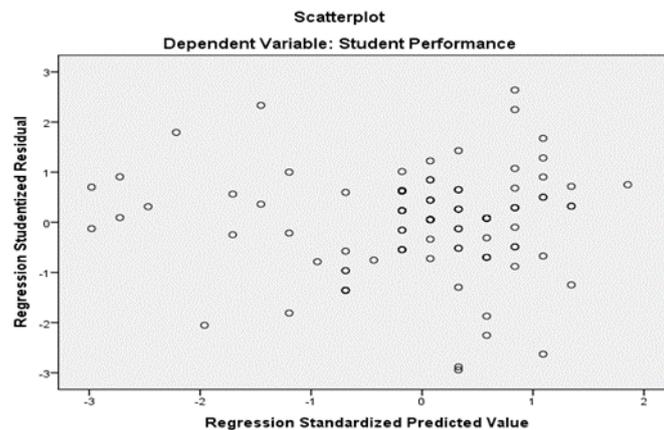


Figure 3. Heteroscedasticity Test
 Source: Data Processed, 2020

This result shows that there is no clear pattern, it means that the graph describing the plot spread above and below the number 0 (zero) and the Y-axis. This proves that the independent variable (Extrinsic Motivation and Intrinsic Motivation) are free from heteroscedasticity.

Autocorrelation Test

The result of Durbin Watson is 2.271. Based on the calculation found that D-W value between dU (1.7152) until 4-dU (2.2848) is free of auto correlation. It means that there is no autocorrelation in this research.

Table 2. Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.208	1.528		7.336	.000
	Extrinsic Motivation	.463	.118	.393	3.931	.000
	Intrinsic Motivation	.463	.179	.259	2.593	.011

a. Dependent Variable: Student Performance

Source: Data Processed, 2020

The result from this table above can be shown through the regression equation as follows:

$$Y = 11.208 + 0.463X_1 + 0.463X_2 + e$$

The interpretation of the equation as follow

1. The constant shows value of 11.208 means if there is no change in Extrinsic Motivation(X1), Intrinsic Motivation(X2) or all the variable are zero (0) so value of Student Performance is in 11.208.
2. Extrinsic Motivation (X1) is 0.463 means that if the Extrinsic Motivation (X1) increase one scale or one unit, then the Student Performance (Y) is increasing by 0.463 in the condition that the other variable is constant.
3. Intrinsic Motivation (X2) is 0.463 means that if the Intrinsic Motivation (X2) increase one scale or one unit, then the Student Performance (Y) is increasing by 0.463 in the condition that the other variables are constant.

Table 3. Multiple Correlation Coefficient and Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.580 ^a	.336	.322	2.587

a. Predictors: (Constant), Extrinsic Motivation, Intrinsic Motivation

b. Dependent Variable: Student Performance

Source: Data Processed, 2020

The coefficient correlation (r) is equal to 0.580. It means that the correlation between Extrinsic Motivation (X1) and Intrinsic Motivation (X2) to Student Performance (Y) indicating that there is a positive and strong relationship between independent variables and dependent variable. The coefficient determination (r²) is 0.336, in this study may imply that the extrinsic motivation (X1) and Intrinsic Motivation (X2) affect Student Performance 33,6% while the rest 66,4% is affected by other variables.

Table 4. F-test Result

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	328.581	2	164.290	24.550	.000 ^b
	Residual	649.129	97	6.692		
	Total	977.710	99			

a. Dependent Variable: Student Performance

b. Predictors: (Constant), Extrinsic Motivation, Intrinsic Motivation

Source: Data Processed, 2020

The result of F-test in ANOVA output using the level of significance of 5% ($\alpha=0.05$). Based on the table, Value of Fcount is 24.550 and the value of significant is 0.000. Because the sig. smaller than 0.05 means that the confidence of this prediction is above 95% and the probability of this prediction error is below 5% which is 0.000 and the Fcount (24.550) greater than the value of Ftable (3.09). Therefore, H_0 is rejected and accepting H_a or the hypothesis that Extrinsic and Intrinsic Motivational factors has a significant impact on Student Performance simultaneously, accepted.

Tabel 5. T-Test Result

	Model	T	t_{table}	Sig.	Status
1	(Constant)	7.336		.000	
	Extrinsic Motivation	3.931	1.984	.000	Accepted
	Intrinsic Motivation	2.593	1.984	.011	Accepted

a. Dependent Variable: Student Performance

Source: Data Processed, 2020

The interpretation as follows:

1. tcount for Extrinsic Motivation 3.931 greater than the value of t_{table} 1.984 with sig. level smaller than 0.05 at 0.000. Means that H_a accepted and Extrinsic Motivation have a significance effect on Student Performance.
2. tcount for Intrinsic Motivation 2.593 greater than the value of t_{table} 1.984 with sig. level smaller than 0.05 at 0.011. Means that H_a accepted and Intrinsic Motivation have a significance effect on Student Performance

Discussion

Extrinsic motivation comes from outside or can be encouragement from others. The results showed that the majority of students experienced a fear of failure it is because if it fails, the student will feel embarrassed. Students believe that these consequences will occur when they fail are more likely to judge evaluative situations as threats. So students are more motivated and will try their best to understand and find out about the material provided so that their grades improve. Power motivation concluded as an efforts made to arouse students' willingness to learn to carry out activities for learning purposes. Students believe that when they are able to work on a project or exam, their other friends will automatically be motivated to work on the project. This makes students study even harder and always try their best to work on projects or exams quickly in a short period of time so the other student will feel motivated and try to learn and do the project that give to them. Students also feel more motivated when they study in a familiar environment. besides from giving him a feeling of comfort and not being afraid to ask questions, the student will not feel ashamed to express opinions and comment because the student knows that he is accepted and appreciated in the class. In the Extrinsic Motivation variable, Authority Expectation has the lowest average value on Extrinsic Motivation indicators. This shows that students in Manado tend to feel embarrassed if lecturers praise their work when students present their work in front of the class.

Need for Achievement has the highest average value of Intrinsic Motivation indicator. This is because students start thinking about what jobs they would take when they graduate. Based on this research, the respondent mostly came from 9 semesters. Student from 9 semesters emotionally have more awareness than the other semesters. This emotional awareness is very influential on decision making and self-awareness of the willingness to learn (Lammers & Smith, 2008). This awareness has an impact on Intrinsic Motivation that makes them want to learn. Because of these awareness, students apply the same to their mastery goals. Student in this case try to focus on learning and feel challenged to learn something more complex and try to explore their abilities through learning activities. Besides that, students' awareness of the importance of mastery of goals because it is very necessary to meet the classification in work and students know that in their work they will be required to have skills that they can learn from college. Students with intrinsic motivation tend to use a variety of intellectual tasks so they use logical decision-making strategies and information gathering.

CONCLUSION AND RECOMMENDATIONS

Conclusion

1. Extrinsic Motivational factors have a significant impact on Student Performance partially. The greater the Extrinsic Motivation that students receive, especially on the indicators of Fear or Failure, Power Motivation,

- Peer Acceptance, and Authority Expectations causing students to be very motivated to learn and improve Student Performance.
2. Intrinsic Motivational factors have a significant impact on Student Performance partially. The greater Intrinsic Motivation that arises from students, especially Need of Achievement and for Mastering their Goals, makes students very motivated to learn to achieve what they want and improve Student Performance.
 3. Extrinsic and Intrinsic Motivational factors have a significant impact on Student Performance simultaneously. The calculation results of the Multiple Linear Regression show that the Extrinsic and intrinsic Motivational factors simultaneously have a positive effect on Student Performance. Part of Student Performance is influenced by Extrinsic and Intrinsic Motivational Factors, while the rest is influenced by other factors

Recommendations

1. For students, to increase their motivation in learning, especially Intrinsic Motivation, by exploring their interest according to the subject that they take.
2. For lecturers, to appreciate more what students do and improve learning method.
3. For the government to collaborate with universities in Manado to pay attention to facilities that support the learning process at the university level so that students feel comfortable and more focused on learning.
4. For future researchers, they can pay more attention to doing research with other variables that can support Student Performance.

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