

Effects of Positive, Negative, and Punishment Reinforcement on Motivation at College's Students in Indonesia

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Abstract---Motivation is a process carried out by someone in achieving their goals. Motivation in supporting the achievement of goals is caused by reinforcement (positive reinforcement, negative reinforcement, and or punishment reinforcement). This study used case study in Faculty of Business and Management, in one of university in Indonesia. The purpose of this study is to address how positive reinforcement, negative reinforcement, punishment reinforcement and motivation at college's students in Indonesia and also to show how the positive reinforcement, negative reinforcement, and or punishment reinforcement effects on motivation at college's students in Indonesia. This type of study is explanatory research to knowing the causal relationship between positive reinforcement, negative reinforcement, and punishment reinforcement on motivation at college's students in Indonesia. The research method used is multiple linear regression analysis. Finding of this study showed that positive reinforcement has a positive and significant effect at college's students in Indonesia, but negative reinforcement and punishment reinforcement have not significant effect.

Keywords---positive reinforcement, negative reinforcement, punishment reinforcement, motivation, college's students

I. Introduction

Every person who decides to continue their studies at a higher education level as college's student has goals to be achieved, passed with a good grade and gets a job in accordance with his goals. To achieve these goals, motivation is needed for each student.

Robbins (2013: 202) suggests that motivation is the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal. If each student has great motivation, the goals can be achieved.

The problem in Indonesia today is there is college's students who cannot complete their studies. According to data obtained from the Center of Data and Information in Science, Technology, and Higher Education (PD Dikti) in 2018, the ratio of college's students dropouts in Indonesia is still quite large as shown in the data below.

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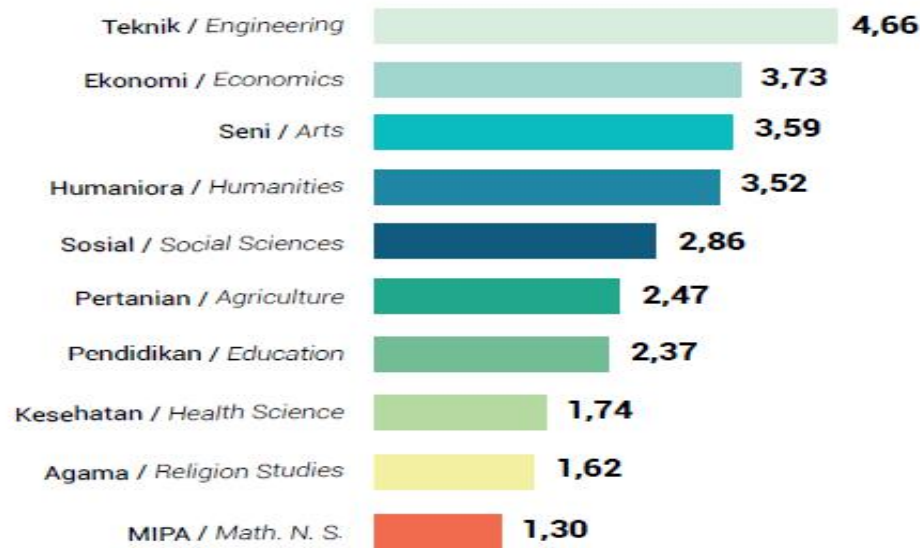


Figure 1. Ratio of Drop Out Students Based on Academic Fields. (PD DIKTI, 2018:19)

Therefore, to support goal's achievement of college's students with good grades and get jobs in accordance with their goals, high motivation is needed for students.

Rifa'i & Anni (2012: 137) revealed that what affects motivation in a person is attitude, needs, stimulation, affection, competences, and reinforcement. Motivation is caused by several things, including reinforcement. This reinforcements arises from various parties, one of which is reinforcement from lecturers in the learning process and activities in the classroom.

According to Skinner in Gordan (2014: 682-683) in the International Journal of Research in Education Technology, reinforcement theory shows how individuals show their behavior and how to act. There are four approaches in reinforcement theory, namely positive reinforcement, negative reinforcement, punishment reinforcement, and extinction reinforcement.

Approaches in reinforcement theory can lead to motivation in college's students. As revealed by research conducted by Bibi & Abid (2016) in the Asian Journal of Multidisciplinary Studies, that reinforcement has a great influence and long-term motivation for student.

Based on the background of the study, the identification of problems are positive reinforcement, negative reinforcement and punishment reinforcement, was not good, so that the motivation of college's students in Indonesian was not good either.

Based on the background of this study, the formulation of problems includes:

- a. How positive reinforcement, negative reinforcement, punishment reinforcement, and motivation at college's students in Indonesia.

- b. How does effects of positive reinforcement, negative reinforcement, punishment reinforcement on motivation at college's students in Indonesia.

II. Literature review

Individual behavior will appear repeatedly or even become a habit caused by something, that is what is called reinforcement. As revealed by Daft (2008: 234), reinforcement is anything that causes a certain behavior to be repeated or inhabited. According to Skinner in Gordan (2014: 682) suggested that in reinforcement theory consists of four approaches, namely positive reinforcement, negative reinforcement, punishment reinforcement, and extinction reinforcement. But in this study only three approaches will be examined.

Positive Reinforcement

According to Daft (2008: 234), positive reinforcement is the administration of pleasant and rewarding concealing following a behavior. Positive reinforcement is able to help improve performance.

According to Skinner in Gordan (2014: 682), positive reinforcement means if someone gives a positive response to do something or something positive, he/she will be given something or reward.

Nugraheni (2011) revealed that positive reinforcement is giving awards or praise. Awards can be given such as numbers/points, prizes, verbal and non verbal.

Negative Reinforcement

Daft (2018: 234) suggests that negative reinforcement is the withdrawal of an unpleasant consequence once a behavior is improved.

According to Skinner in Gordan (2014: 683) that negative reinforcement is the removal of aversive stimuli in order to increase the probability of being an behavior repeated.

Nugraheni (2011) revealed that negative reinforcement is liberating from undesirable tasks or situations.

Punishment Reinforcement

Daft (2018: 235) suggests that punishment reinforcement is the imposition of unplanned outcome of an individual following undesirable behavior.

According to Skinner in Gordan (2014: 683), raged that punishment reinforcement occurs if an individual brings some harm to the class and the individual does something wrong, so this is the reason lecturers give punishment to the individual.

Omomia (2014: 175) in her research stated that punishment reinforcement provides respon that brings pain or unintended consequences.

Motivation

Motivation is needed by each individual to encourage the individual to do something in achieving his goals. According to Robbins (2013:202) he revealed that motivation is the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal. Three things that indicate motivation are intensity describes how hard

someone tries or shows the quality his efforts, direction is efforts direct toward and consistance with goals, and persistence is how long a person can mantain his efforts.

Some previous studies have pointed out that reinforcement has an impact on motivation. As research conducted by Maritim (2016: 16-19) in his research revealed that positive reinforcement has a significant effect on employee motivation at Naruku County Government.

Gill (2016: 145-151) in his research also suggested that reinforcement has a great and long-lasting impact on student motivation in Government Islamia Girls High School.

Diedrich (2010) in his research resulted that positive reinforcement succeeded in producing student motivation.

Based on the literature review and some previous research results related to the variables in this study, the following framework can be made:

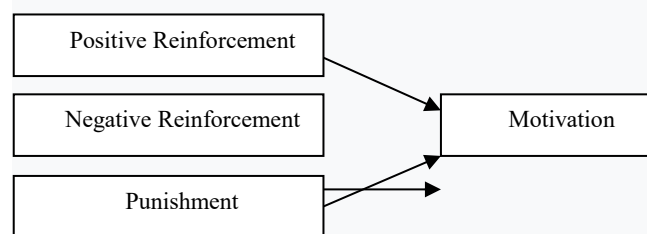


Figure 2. Research Paradigm

III. Methodology

Research method used in this study is adapted to the background of the research and identification and formulation of the problem, so the research method used is an explanatory method. According to Zulganef (2018) which is a research method in which the researcher aims to connect one variable with other variables.

In addition, descriptive statistics are also used in order to find out and analyze how positive reinforcement, negative reinforcement, punishment reinforcement and motivation of college's students in Indonesia.

Inferential statistics is used in this study with the aim to determine the causal relationship (influence) between the independent variables with the dependent variable. In this study aims to determine the causal relationship between independent variables namely positive reinforcement, negative reinforcement, and punishment reinforcement to the dependent variable, namely the motivation of college's students in Indonesia.

The data used in this study consists of two types:

- a. Primary data, namely data obtained directly by researchers from data sources through interviews and surveys of respondents.
- b. Secondary data, i.e. data obtained from literature and other written data, i.e. data from the Indonesian State's Center for Data, Information and Science, Technology and Higher Education (PD Dikti).

The data used in this study must be relevant and tested for their reliability and validity, so a reliability and validity test is performed.

The large population of college's students in Indonesia is not known certainty so according to Lemeshowb (1997) the formula used to find the number of samples is:

$$n = \frac{Z^2_{\alpha} p q}{d^2}$$

So the number of samples are,

$$n = \frac{(1,960)^2(0.25)}{(0,10)^2}$$

$$n = 96.04$$

The minimum number of samples in this study are 96 college's students, but this study used 125 college's students as samples according to the number of questionnaires returned, with the sampling technique used is quota sampling technique.

Descriptive statistic are used to analyze research variables qualitatively based on data collected from research respondents through questionnaires.

Inferential statistics are used to get conclusions about the causal relationship of the dependent variable, namely positive reinforcement, negative reinforcement, and punishment reinforcement to the dependent variable, namely motivation using multiple linear regression.

Based on the framework and research hypothesis can be formulated:

$$H_0: P_{ZXiY} = 0$$

$$H_a: P_{ZXiY} \neq 0, i=1,2,3$$

Hypothesis 1:

H_0 : There is no effect of positive reinforcement on motivation at College's Students in Indonesia.

H_a : There is the effect of positive reinforcement on motivation at College's Students in Indonesia.

Hypothesis 2:

H_0 : There is no effect of negative reinforcement on motivation at College's Students in Indonesia.

H_a : There is the effect of negative reinforcement on motivation at College's Students in Indonesia.

Hypothesis 3:

H_0 : There is no effect of punishment reinforcement on motivation at College's Students in Indonesia.

H_a : There is the effect of punishment reinforcement on motivation at College's Students in Indonesia.

IV. Result

Research Analysis with Descriptive Statistics

According to the datas from respondents regarding the quality criteria of positive reinforcement, negative reinforcement, punishment reinforcement, and motivation at college's students in Indonesia determined as follows:

0%-24,9% : Not Good

25%-49,4% : Poor

50%-74,9% : Moderate
75%-100% : Good

Table 1. Descriptive Statistics of Independent Variables
Positive Reinforcement

Variable	Percentage	Quality
Positive Reinforcement:	72,40%	Moderate
- Reward	72,47%	Moderate
- Verbal	71,13%	Moderate
- Non-Verbal	75,20%	Moderate
-Symbol	72,40%	Moderate

Source: **Data processing's results** (January, 2020)

According to the responses from respondents, show that the quality of positive reinforcement is moderate. It's mean students got moderate positive reinforcement from their lecturers. For positive reinforcement is showed by these dimention, the highest quality is given reward such as additional numbers / points and non-verbal reinforment suvh as smile and applause. For the lowest quality is given rewards (gifts) from lecturer to students.

Table 2. Descriptive Statistics of Independent Variables
Negative Reinforcement

Variable	Percentage	Quality
Negative Reinforcement	68,96%	Moderate

Source: **Data processing's results** (January, 2020)

The quality of negative reinforcement is moderate but less then positive reinforcement. It's mean students got moderate but less negative reinforcement from their lecturers. For Negative Reinforcement the highest quality is give an equal opportunities to keep learning in class for students who do not follow the rules. The lowest is the unwillingness of students to do assignments in front of the class if they did not do assignments or homework.

Table 3. Descriptive Statistics of Independent Variables
Punishment Reinforcement

Variable	Percentage	Quality
Punishment Reinforcement	57,40%	Moderate

Source: **Data processing's results** (January, 2020)

The quality of punishment reinforcement is moderate but less than positive reinforcement and negative reinforcement. The percentage is even close to poor quality, it's mean students did not get much punishment reinforcement from their lecturers. For punishment reinforcement as a whole, that is, the quality is moderate to poor, which means that students do not want to get any punishment reinforcement for the provisions or assignments that are not done.

Table 4. Descriptive Statistics of Dependent Variable

Variable	Percentage	Quality
Motivation:	76,25%	Good
- Intensity	77,44%	Good
- Direction	75,64%	Good
- Persistence	75,68%	Good

Source: **Data processing's results** (January, 2020)

The quality of motivation is good. It's mean students have good motivation, indicated by intensity, direction, and persistence. Intensity, students make various efforts hardly such as paying attention to material in class and learning outside the classroom even though the atmosphere is not supportive or the material is difficult. Direction, students make various efforts consistence with goals. And persistence, students are willing to sacrifice a long time to studying, to understanding material and to preparing for exams, such as staying up late.

Research Analysis with Inferential Statistics

Inferential statistics analysis hypothesis test is to determine effects of Positive Reinforcement (X_1), Negative Reinforcement (X_2), and Punishment Reinforcement (X_3) on Motivation (Y) of College's Students in Indonesia.

Table 5. Summary of Multiple Linear Regression Analysis

Variable	Regression Coefficients	t	Sig.
Constant	15,234		0,000
Positive Reinforcement (X_1)	0,391	3,319	0,001
Negative Reinforcement (X_2)	0,394	1,557	0,122
Punishment Reinforcement (X_3)	0,168	1,007	0,316

F 12,544
R Square 0,237

As showed on table 3, R Square (coefficient of determination) is equal to 0.237. This shows that Positive Reinforcement, Negative Reinforcement, and Punishment Reinforcement have an effect of 23.7% on the Motivation of College's Students in Indonesia. While the remaining 76.3% is due to other variables outside this research model.

The t value of Positive Reinforcement is 3.319, which means it is bigger than the t table value of 1.980, so it was decided to reject H_0 . It can be concluded that Positive Reinforcement has a significant effect on Motivation of College's Students in Indonesia. This conclusion is also supported by the significance value of 0.001 which is smaller than the significance level of 0.05.

The t value of Negative Reinforcement is 1,557 and Punishment Reinforcement is 1,007, are smaller than t table of 1,980, so it was decided to accept H_0 . This decision is also supported by the significance value of Negative Reinforcement and Punishment Reinforcement of 0.122 and 0.316, which is bigger than the 0.05 significance level. It can be concluded that Negative Reinforcement and Punishment Reinforcement do not have significant effects on Motivation of College's Students in Indonesia.

V. .Discussion

For another studies or researchers are expected to be able to conduct research on other variables that affect college's student motivation, because when we see the contribution of other variables that are not present in this study is very large, this shows that there are other variables that have a greater effects on increasing motivation of college's student in Indonesia.

VI. Conclusion

Based on the results of data processing and analysis of research Effects of Positive Reinforcement, Negative Reinforcement, and Punishment Reinforcement on Motivation of College's Students in Indonesia, can be concluded:

- a. Positive Reinforcement, Negative Reinforcement, and Punishment Reinforcement have moderate quality. While the motivation of College's Students in Indonesia has good quality.
- b. Positive Reinforcement has a positive and significant effect on Motivation of College's Students in Indonesia.
- c. Negative Reinforcement does not have significant effects on Motivation of College's Students in Indonesia.
- d. Punishment Reinforcement does not have significant effects on Motivation of College's Students in Indonesia.

Recommendations that can be conveyed are better to give reinforcement with positive approach by giving various awards to college's students which can be additional of grades or points, prizes or gifts, verbal (words of praise), and non-verbal (smile, thumbs up, applause). And do not to give reinforcement with punishment approach by giving various punishment such as grades or points reductions and reduction of chances to join a class, because this is not expected by college's students and it could be cause college's students have low motivation than making then not willing or unable to continue their study.

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