

EFFECTS OF STUDENT SELF-DETERMINATION MOTIVATION ON STUDENT ACADEMIC PERFORMANCE

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Abstract

The purpose of the study was to find the effect of Self-Determination Motivation and academic achievement of the students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya and to reveal the motivation of self-determination in the lectures of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya. This study uses correlational quantitative methods with the research subjects of Tarbiyah students and Teachers at UIN Sunan Ampel. Sampling was done using a stratified random sampling technique from 676. The sample was taken randomly from 127 students from 8 study programs. Data was collected through self-determination motivation questionnaires and documentation of student academic scores, as well as with a statistical regression analysis technique using SPSS Version 23 simple linear and descriptive analysis. The t-count value is 7.721, with a significance value of 0.000. The t-table value obtained from the statistical table is 1.979. If a comparison is made, then t count > t table or the significance is < 5% significance level so that the self-determination motivation has a significant effect on academic ability at the significant level (5%). The results of the statistical analysis found intrinsic and extrinsic motivation and no amotivation was found in students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya, and the variety of self-determination motivation was the intrinsic and extrinsic variety.

Keywords

Academic achievement, extrinsic motivation, intrinsic motivation, self-determination motivation.



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INTRODUCTION

Motivation is one of the important factors that influence students' academic success. Self-determination motivation theory (SDT), developed by Deci and Ryan (1985), states that a person's motivation can be categorized into intrinsic motivation and extrinsic motivation. Intrinsic motivation arises from within the individual, such as interest and desire to learn, while extrinsic motivation arises from external factors, such as rewards and social pressure. SDT emphasizes the importance of three basic psychological needs: autonomy, competence, and relatedness to foster intrinsic motivation and improve academic performance. (Brenner, 2022; Forner et al., 2020; Guay, 2022; Jenő et al., 2017).

Students in the early years of college have characteristics that are full of enthusiasm for learning. The spirit of learning can be shown by attending lectures, participating in discussions, participating actively, completing assignments on time, and having other positive enthusiasm. However, high enthusiasm in lectures, apart from being driven by a new environment after high school, is not always accompanied by adequate self-management skills, proportional use of time for main academic tasks, emotional management skills, and thoughts to divide activities into a priority scale. This results in students delaying academic work and lacking competence in mastering the material, so discussions are carried out carelessly, and the learning moment in students here loses momentum. This, in turn, affects students' academic abilities. The research shows that students' internal motivation, which includes self-determination motivation, plays an important role in supporting students' academic abilities, especially in building an attitude of responsibility and the ability to manage time well. (Jeno et al., 2023a). Other research has found that learners with high intrinsic motivation tend to perform better academically than learners who rely more on extrinsic motivation. (Akhtar et al., 2018; Anderson et al., 2018; Ardeńska et al., 2016; Azizollah et al., 2016; Cenberci & Beyhan, 2016; Müller et al., 2021; Nurafifah et al., 2021; Rashid, 2014; Wang et al., 2022). Similarly, Park's research (Park, 2022) found that students with strong intrinsic motivation can successfully cope with high academic loads and achieve optimal learning outcomes.

The early years of college are an environment where students transition from instructional learning in high school to independent learning in college. This often provides additional pressure, especially for individuals who are not accustomed to high academic demands. In situations like this, self-determination motivation determines a person's ability to face these challenges. Deci's research shows that strong self-determination motivation is proven to be able to encourage students to stay

focused on their academic goals despite being faced with many challenges and difficulties. Without strong self-determination motivation, students at the beginning of the semester tend to experience academic stagnation, which results in a low-grade point average (GPA). (Núñez & León, 2015)

In addition to supporting academic performance, self-determination is also an important life skill, as well as good emotional management and effective decision-making. Students who have good self-determination are able to determine good learning strategies and have persistence in facing difficulties and challenges in academics. However, higher education institutions have not been able to take an approach that integrates this self-determination motivation into the curriculum. This is a challenge for the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya in preparing prospective educators who have excellent capacities.

Integrating learning approaches involving self-determination motivation in the curriculum is important in preparing prospective educators who are resilient in facing difficulties during their studies. This resilience or persistence of students is shown by achieving adequate academic performance and graduating on time. Often, student graduation takes longer than it should. This is expressed in Jeno et al.'s research, which states that the ability to manage time well and organize appropriate learning strategies is a characteristic of high self-determination motivation. (Jeno et al., 2023). Student failure in the context of not graduating on time or even dropping out, as researched by Tinto (Tinto, 2007) Due to the absence of resilience or persistence in learning. Persistence in learning in the context of self-determination motivation is a strong characteristic of a person's internal motivation. As stated in the SDT theory by Deci & Ryan (Edward L. Deci_Richard M. Ryan, 1985), The cause of externally oriented self-determination motivation, or extrinsic motivation rather than internal or intrinsic, is the existence of 3 elements of the student that are inadequate. The three elements are student competence, student relationship with the social environment, and autonomy, or the ability to determine their own actions.

Academic failures, such as a low grade point average or failure to graduate, can be anticipated by lecturer intervention in learning. Student competence is an element of self-determination motivation that needs to be improved by learning. Competence is the ability of individuals to feel effective in mastering certain skills and knowledge. When students are able to master academic tasks, they tend to have high motivation to engage in learning. The experience of success in task completion by students can increase students' confidence and further make their motivation intrinsic. Learning by lecturers that supports this intrinsic motivation is that lecturers in

learning can provide constructive feedback and provide task challenges that are above students' abilities but still achievable. However, there are some students who complain about the challenge of the task and are not motivated by a challenge that must be accomplished.

The second failure is the low academic ability of students who tend to be isolated and do not have good relationships with their social environment. In a new lecture environment that requires higher academic demands, lecturers are often perceived as less sympathetic and less understanding of student difficulties. The second element of self-determination motivation is involvement in the student's social environment. This needs to be improved by warm interactions between lecturers and students and between students themselves. The low academic performance of students is also due to coercion or lack of choice in participating in learning. Often, lecturers determine academic tasks, starting from planning and learning strategies to lecture outcomes. This, from the student's side, is a pressure that weakens learning motivation. The third element of this self-determination motivation element is autonomy, which gives control to students in learning. Choose lecture projects, learning strategies, and materials or materials obtained. (Núñez & León, 2015) It's just that there are sometimes students who are still carried away by the previous educational environment, namely high school, who are ready to be guided and given material. This is a challenge for the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya in planning policies that provide control in learning according to their proportions so that students tend to be more motivated to complete their academic assignments and increase their self-confidence and responsibility.

Although many studies show a positive relationship between self-determination motivation and academic achievement, there are still some academic concerns that have not been fully answered. Firstly, most studies focus on the correlation between motivation and learning outcomes, while empirical evidence suggests there is limited research on the range of self-determination motivation that moves along a continuum from amotivation to intrinsic motivation, especially those with Indonesian samples. Secondly, research studies on this impact are mediated by other factors, such as learning strategies or social support.

METHOD

This research is quantitative research. The quantitative research intended here is research on two variables, namely the self-determination motivation variable and the student academic ability variable. These variables use instruments that can be measured, and the results can be analyzed

statistically.(Wijayanti et al., 2021) This type of research, as Creswell mentions, is correlational quantitative research, which is nonexperimental research where researchers measure two variables and assess the statistical relationship (i.e., correlation) between them with little or no attempt to control extraneous variables. The self-determination motivation of students in lectures as an independent variable will be measured using a questionnaire instrument referred from the self-determination scale that has been developed by Shawn Fowler (Fowler, 2020.) about Motivational Self-Determination to learn online, which is adapted according to this study. This self-determination motivation will be correlated with the academic abilities of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya as the dependent variable whose indicators are obtained during lectures, which include knowledge, skills, and attitudes. The questionnaire scale used is a Likert scale for self-determination motivation. The results of this questionnaire were then analyzed using a statistical program.

This study measures the level of self-determination motivation by using statistical analysis to see the variety of self-determination motivation, whether it is extrinsic or intrinsic. In addition, this study also measures the level of motivation and academic ability of students, and then the resulting data is tested using the product moment formula to determine the magnitude of the correlation coefficient so that the significance of the two variables can be determined.

The population of this study is students who are actively conducting lectures, which include 4th-semester students at the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel. Consideration of 4th-semester students is based on stability in lectures. For 2nd-semester students, the author considers that students are still in the adaptation period to the campus academic climate, while 6th-semester students have several internship courses that cannot be equated with regular classes in the lecture process.

Table 1. Data on Active Students Attending Lectures at the Faculty of Tarbiyah and Teacher Training UIN Sunan Ampel Surabaya

No.	Name of Study Program	4 th -semester
1.	PIAUD	63
2.	PGMI	95
3.	PAI	111
4.	MPI	106
5.	PMT	71
6.	PIPA	32
7.	PBI	98
8.	PBA	100
	Total	676

The sampling technique was stratified random sampling of all 4th-semester students, namely 676 students. The author took a sample of 18% of the population, namely 127 students. One hundred twenty-seven students is a calculation of 18% of the 676 total population. Sampling is done by stratified random sampling because it is likely that respondents have the same opportunities to learn by using self-determination motivation.

The data collection tool (instrument) used is a non-test, which is a questionnaire. The questions or statements in the questionnaire were referred from the self-determination motivation questionnaire that was developed by Shawn Fowler about self-determination motivation for online learning, which was adapted according to this study. Questions or statements in the questionnaire are measured using a Likert scale, which is "a scale used to measure the attitudes, opinions, perceptions of a person or group of people about social phenomena." The answers to each instrument item have gradations from very positive to very negative in the form of words such as always, often, sometimes, rarely, never, very satisfying, satisfying, quite satisfying, unsatisfying, and very unsatisfying. This study uses a ten scale, with the aim of giving respondents the flexibility to further distinguish between one scale and another qualitatively, adjusted for the statement or question. The scale in the positive quadrant to the right shows an increasing trend. Conversely, the scale shows numbers to the left, indicating a tendency for quality to weaken. A scale of 8-10 indicates good, excellent, and perfect quality. Scale 6-7 is categorized as fair quality. 4-5 indicates poor quality. 1-3 shows non-existent or zero quality and is very lacking. Thus, in measuring research variables, respondents are asked to express their perceptions by choosing one of the alternative answers on a scale of one to ten.

This research type of data is about the variety of self-determination motivations of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya and the effect of self-determination motivation on student academic ability.

To get this type of data, data sources are needed, namely literary data sources that come from books, working papers, and student lecture results on the academic information system of UIN Sunan Ampel Surabaya, namely on the sinau.uinsa.ac.id web. Other data sources are empirical data sources, namely primary and secondary data sources. Primary data sources are data sources that are the results of the self-determination motivation questionnaire of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel. Secondary data sources are data sources that support the

motivation of self-determination of students of the Faculty of Tarbiyah and Teaching Training from information from lecturers who teach subjects.

The data analysis technique uses simple regression analysis in data processing to determine the effect of students' self-determination motivation on their academic abilities. Before regression analysis, it is necessary to test classical assumptions, namely the data normality test, to test the validity of the data. However, the data normality assumption test is not quite necessary because the consideration will not affect the significance of the data to be processed. This is as mentioned by Mudrajad Kuncoro in his book *Business and Economic Research Methods*. The assumption test carried out by the author is a linearity test, namely that there is a linear relationship between Self-Determination Motivation and academic performance.

FINDINGS AND DISCUSSION

Findings

Description of Student Self-Determination Motivation

The instrument of Self-Determination Motivation in student lectures at the Faculty of Tarbiyah and Teaching Training UINSA was compiled based on the theory of self-determination motivation from Deci and Ryan, which was then compiled by Shawn Fawler and was distributed to respondents through a Google form online questionnaire. Google forms were distributed to students in 8 study programs at the Faculty of Tarbiyah and Teacher Training UINSA. The author collaborated with course lecturers to distribute questionnaires to students. The questionnaire consists of 26 items consisting of 3 important elements in the theory of Self-Determination Motivation, namely Competence, Autonomy, and Relatedness. This questionnaire was distributed to examine the self-determination motivation of lectures in the Even Semester 2022/2023.

Motivational self-determination consists of indicators of autonomy, competence, self-efficacy, learning control beliefs, and involvement in the classroom, namely the relatedness element. These indicators are detailed in a questionnaire that students can answer on a scale of 1-10. The data that has been obtained from the research that has been carried out will then be presented in the form of descriptive statistics as follows:

Table. 2 Statistical Descriptive Data of Self-Determination Motivation

		Self-Motivation Determination	Academic Performance
N	Valid	127	127
	Missing	0	0
Mean		346.6220	87.5984
Median		353.0000	88.0000
Mode		345.00	90.00
Std. Deviation		33.24582	3.99456
Variance		1105.285	15.957
Skewness		-.951	-.771
Std Error of Skewnees		.215	.215
Kurtosis		1.158	-.055
Std.Error of Kurtosis		.427	.427
Range		173.00	19.00
Minimum		225.00	76.00
Maximum		398.00	95.00
Sum		44021.00	11125.00

a. Multiple modes exist. The smallest value is shown

Based on Table 2, the Self-Determination Motivation variable obtained an average value of 346.62 with a standard deviation of 33.25. The minimum value of this variable is 225, with the maximum value reaching 398. In the academic ability variable taken from the sample test scores, the average is 87.60, with a standard deviation of 3.99. The lowest academic ability value is 76, with the highest value reaching 95. Table 2 shows that the academic ability of students is in the range of moderate to high predicates. The motivation for self-determination in students is, on average, highly motivated or intrinsic.

Effects of Student Self-Determination Motivation on Academic Performance

Before hypothesis testing is carried out, research assumptions are first tested. Research assumptions are carried out to see if the data fulfill the requirements for the linear regression analysis test that the author does. The author uses simple regression analysis in data processing. Before regression analysis, it is necessary to test classical assumptions, namely the data normality test, to test the validity of the data. However, the data normality assumption test is not quite necessary because the consideration will not affect the significance of the data to be processed. This is as mentioned by Mudrajad Kuncoro in his book *Business and Economic Research Methods*. The assumption test carried out by the author is a linearity test, namely that there is a linear relationship between Self-Determination Motivation and academic performance.

Linearity Test

A linearity test is carried out to determine the relationship between the independent variable and the dependent variable. The following are the results of the linearity test.

Table 3. Table of Linearity Assumption Test Results

		Sum of Squares	df	Mean Square	F	Sig.
Academic Performance Self-Determination Motivation	Between Groups	Combined Linearity Deviation from Linearity	72	23.827	4.361	.000
		1715.520	1	649.232	118.842	.000
		1066.288	71	15.018	2.749	.000
	Within Groups	295.000	54	5.463		
	Total	2010.520	126			

Based on Table 3, the results of the analysis obtained a linearity significance value of 0.006. Because this value is smaller than the real level of alpha 0.05, it is concluded that the relationship between the independent variable, namely Self self-determination motivation and the dependent variable, Academic Performance, is linear.

The results of hypothesis testing presented in this study are the results of testing Self-Determination Motivation and its effect on student academic ability. In accordance with the research design, the alternative hypothesis of this study is that self-determination motivation has an effect on the academic ability of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya. The hypothesis was tested using the Simple Linear Regression parametric statistical test analysis technique. Data analysis was carried out with the help of the SPSS for Windows version 25 program. The results of the analysis are presented in Table 4.

Table 4. Results of Linear Regression Analysis

Model	B	Coefficients [®]		t	sig
		Unstandardized Coefficients Std.Error	Standardized Coefficients Beta		
1	(Constant)	63.932		20.763	.000
	Self-Determination Motivation	.068	.568	7.721	.000
a. Dependent Variable: Academic Performance					

Table 4 provides an explanation of the regression equation formed based on the results of the analysis:

$$Y = 63.932 + 0.068 X$$

The constant value of 63.932 indicates that if there is no self-determination motivation ($X = 0$), then the amount of academic ability is 63.932. The regression coefficient of the self-determination motivation variable is 0.068. This means that if there is an increase in the self-determination motivation variable, academic performance will increase by 0.068 times.

Table 4. also found the t-count value of 7.721 with a significance value of 0.000. The t-table value obtained from the statistical table is 1.979. When a comparison is made, the $t\text{-count} > t\text{-table}$ or the significance value is $< 5\%$ real level, so it is concluded that self-determination motivation has a significant effect on academic ability at the real level α (5%). The positive coefficient value indicates that the direction of the influence is unidirectional. This means that if self-determination motivation increases, academic ability will also tend to increase; otherwise, if self-determination motivation decreases, academic ability will also tend to decrease. In other words, these results prove that the hypothesis stating that there is a significant influence between self-determination motivation and academic performance has been proven.

The magnitude of the influence between Self-Determination Motivation and academic ability is indicated by the coefficient of determination (R-square). The following are the results of the analysis:

Table 5. Table of the Coefficient of Influence of Factor X on Y

Model	R	Model Summary b			Change Statistics			Sig. F Change	
		R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df 1		df 2
1	.568 (a)	.323	.318	3.30005	.323	59.616	1	125	.000

a. Predictors: (constant), Self-Determination Motivation
b. Dependent Variable: Academic Performance

Table 5 indicates that the coefficient of determination in the regression equation is 0.323 (32.3%). This means that the influence of self-determination motivation on academic ability is 32.3%. At the same time, the influence of other variables not examined in this study amounted to 67.7%.

This study uses the hypothesis that:

H_0 = There is no effect of Self Determination Motivation on the academic performance of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya.

H_a = There is an effect of Self-Determination Motivation on the academic performance of students of the Faculty of Tarbiyah and Teaching Training UIN Sunan Ampel Surabaya.

Based on the results of linear regression analysis, it can be concluded that the alternative hypothesis (H_a) is accepted and H_0 is rejected. This means that self-determination motivation has an effect on the student's academic performance at the Faculty Tarbiyah and Teacher Training UIN Sunan Ampel Surabaya. The effect of Self-Determination Motivation can significantly improve students' academic performance. The contribution of Self-Determination Motivation to the improvement of students' academic abilities is 32.3%. While other influences not examined in this study amounted to 67.7%.

This study answers the effect of self-determination motivation on students' academic performance. Some of the statistical analysis above explains that descriptive data about students' self-determination motivation is at a high level, namely intrinsic motivation, while academic performance moves from a sufficient level to a high level of ability. This is evidenced by student learning outcomes. The test of relationship analysis or linear analysis between self-determination motivation and student academic performance is also proven to be linear. That is, there is a relationship for further measurement. The linear regression test in data statistical processing shows that self-determination motivation has an effect on the academic performance of FTK UIN Sunan Ampel Surabaya students. The effects of this determination motivation amounted to 32.3%, which was examined in this study, while the remaining 67.7% had no effect, which was not the focus of this study.

Variety of Motivation of Self-Determination of Students of the Faculty of Teaching Training UIN Sunan Ampel Surabaya

Deci and Ryan's Self-Determination Motivation Theory suggests the theory of intrinsic and extrinsic motivation. Intrinsic motivation is motivation that moves learners to perform based on autonomy, competence, and connection to the environment. It can be seen that this motivation is based on the pleasure of doing it and fulfilling psychological needs. Meanwhile, extrinsic motivation is the motivation that there are factors outside the learners who move them that are less effective in fulfilling their psychological needs in terms of competence, autonomy in acting, and deciding and connection with the outside world. While amotivation, is a state of someone who has no interest at all in doing something based on these three basic psychological needs. So, the author divides this variety of motivation into extrinsic motivation and intrinsic motivation. Extrinsic motivation, according to the Self-Determination Motivation theory, has four continuums, or four levels. However, due to the author's limitations in developing research instruments, the instrument is

divided into two broad categories, namely extrinsic motivation and intrinsic motivation. In relation to the results of research on the variety of student motivation in lectures at the Faculty of Tarbiyah and Teaching Training UINSA, the following data are presented.

Table 6. Intrinsic Goal Orientation

No.	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low Valid	59	46,5	46,5	46,5
2.	High Valid	68	53,5	53,5	100,0
3.	Total	127	100,0	100,0	

Based on Table 6, it can be concluded that in the intrinsic goal orientation aspect of 127 samples, 68 samples are in the high category, and the other 59 samples are in the low category.

Table 7. Extrinsic Goal Orientation

No.	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low Valid	53	41,7	41,7	41,7
2.	High Valid	74	58,3	58,3	100,0
3.	Total	127	100,0	100,0	

Table 7 shows that in the aspect of extrinsic goal orientation as one aspect of self-determination motivation, out of 127 samples, 74 samples were found to be in the high category, and the other 53 samples were in the low category.

Table 8. Control of Learning Beliefs

No.	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low Valid	61	48,0	48,0	48,0
2.	High Valid	66	52,0	52,0	100,0
3.	Total	127	100,0	100,0	

Table 8 shows that self-determination motivation in the control of learning beliefs aspect, out of 127 samples, 66 samples were found to be in the high category, and 61 other samples were in the low category.

Table 9. Self Efficacy

No.	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low Valid	57	44,9	44,9	44,9
2.	High Valid	70	55,1	55,1	100,0
3.	Total	127	100,0	100,0	

Table 9 shows that on the Self-Efficacy aspect, out of 127 samples, 70 samples were found to be in the high category, and the other 57 samples were in the low category.

Table 10. Social Engagement

No.	Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1.	Low Valid	60	42,7	42,7	42,7
2.	High Valid	67	52,8	52,8	100,0
3.	Total	127	100,0	100,0	

Based on Table 10, Social Engagement is one of the five aspects of self-determination motivation; out of 127 samples, 67 samples fell into the high category, and the other 60 samples fell into the low category. Regarding the Self-Determination Motivation variable, out of 127 samples studied, in general, 63 samples were in the low category, and the other 64 samples were in the high category. In the academic ability variable, of the 127 samples studied, 76 samples fell into the high category, and 51 other samples fell into the low category.

Furthermore, categorization can also be done on each aspect of the Self-Determination Motivation variable. There are five aspects: intrinsic goal orientation, extrinsic goal orientation, control of learning beliefs, self-efficacy, and social engagement. Each aspect is categorized into two, namely high and low. This categorization also uses the median value as the boundary between the two category levels.

Based on the table of self-determination motivation aspects above, it can be seen that most of the samples fall into the high category in each aspect of self-determination motivation. In the intrinsic goal orientation aspect, out of 127 samples, 68 samples fell into the high category, and the other 59 samples fell into the low category. In the extrinsic goal orientation aspect, out of 127 samples, 74 samples were found to be in the high category, and 53 other samples were in the low category. In the control of learning beliefs aspect, out of 127 samples, 66 samples were found to be in the high category, and 61 other samples were in the low category. In the aspect of Self-Efficacy, out of 127 samples, 70 samples fall into the high category, and the other 57 samples fall into the low category. In the social engagement aspect, out of 127 samples, 67 were found to be in the high category, and the other 60 samples were in the low category.

Discussion

The Effect of Self-Determination Motivation on Student Academic Performance

The results of the simple linear regression hypothesis test show that self-determination motivation has a significant effect on student ability. This is in accordance with Shu-Shen Shih's research (Shu-Shen Shih, 2008) that Self-Determination Motivation can improve the achievement of learning goals, in particular the achievement of social and emotional performance caused in the form of involvement in learning. The achievement of social and emotional performance in self-determination motivation is an element of basic psychological needs, namely relatedness, which provides a lot of progress for students in other aspects of psychological needs, namely competence and autonomy. By achieving goals related to social and emotional performance in learning, learners or students are increasingly able to control themselves to achieve their competence or be recognized for their competence in their social environment.

The results of hypothesis testing also state that Self-Determination Motivation has a positive and significant effect on academic ability. The positive effect in question is that Self Determination Motivation can significantly improve academic ability with an increase of 32.3%. Meanwhile, 67.7% of the increase in academic ability is influenced by other factors. One of the other factors that affect academic ability is the interaction between teachers and students. The interaction of teachers or lecturers with students or students who can improve academic ability is an interaction that provides psychological freedom both verbally and nonverbally in the learning process. This is in line with the findings of Assor and Kaplan (Assor et al., 2002) (Sideridis & Kaplan, 2011) that the interaction of lecturers or teachers with learners or students is an interaction that supports autonomy. Interactions that support autonomy are learning interactions that appear in the form of asking questions and listening to detailed perspectives. There are 10 (Reeve & Jang, 2006), namely: Perceived autonomy, Time listening, Asking what students want; Time allowing students to work in their own way, Seating arrangement, Providing rationale; Praise as informational feedback, Offering encouragement; Offering hints; Being responsive to student-generated questions; and Communicating perspective-taking statements.

Another finding is that increasing intrinsic motivation is always helpful for learning, regardless of whether extrinsic incentives are also used or not. This means that teachers or instructors should try to get learners interested in the material they are presenting and then present it in an engaging way that satisfies or increases students' curiosity about the material itself. The same

thing is also stated by Deci and Ryan in Schunk (Schunk, 2012): extrinsic motivation in the next process will increase its level of intrinsic motivation. Learners, when doing their learning tasks, are driven by external factors, namely in order to get awards and good grades, along with increasing competence, then their autonomy will increase to a pleasure in deciding to do school or college assignments, or driven by internal factors within students. Thus, it is the task of teachers or lecturers to manage learning, which can increase the autonomy, competence, and social skills of learners.

Academic performance is an ability that goes hand in hand with non-academic abilities or life skills. Academic ability as the dependent variable in the results of this study, which can be positively influenced by the independent variable, namely Self-Determination Motivation, is in accordance with the research findings of Vivien W. Forner et al. (Forner et al., 2020) in the *Organization Management Journal* entitled *Motivating workers: how leaders apply self-determination theory in organizations* published in December 2020, which states the importance of Self-Determination Motivation as a support for increasing work culture. Self-determination Motivation is operationalized by leaders to support basic psychological needs for autonomy, competence, and relatedness in the workplace. Self-Determination Motivation-informed management strategies are discussed in relation to the literature and alongside case scenarios to illustrate approaches to integrating Self-Determination Motivation elements into daily management activities. In line with the findings of this study are the findings of Eadaoin K. P. Hui et al. (Hui & Tsang, 2012) in the 2012 online issue of the *Scientific World Journal* with the title *Self-Determination as a Psychological and Positive Youth Development Construct*, which is a theoretical study of self-determination as a positive youth development construct.

Variety of Self-Determination Motivation

Deci and Ryan's Self-Determination Motivation Theory proposes a grand theory of intrinsic and extrinsic motivation. Intrinsic motivation is motivation that moves learners to perform based on autonomy, competence, and connection to the environment. It can be seen that this motivation is based on the pleasure of doing it and fulfilling psychological needs. Meanwhile, extrinsic motivation is the motivation that there are factors outside the learners who move them that are less effective in fulfilling their psychological needs in terms of competence, autonomy in acting, and deciding and connection with the outside world. Amotivation is a state of someone who has no interest at all in doing something based on these three basic psychological needs. So, the author divides this variety of motivation into extrinsic motivation and intrinsic motivation. Extrinsic motivation, according to

the Self-Determination Motivation theory, has four continuums, or four levels, namely external regulation, introjection regulation, identification regulation, and integration regulation. However, due to the author's limitations in developing research instruments, the instruments are divided into two broad categories, namely extrinsic motivation and intrinsic motivation. The absence of motivation, or what is mentioned in the theory of Self-Determination Motivation as amotivation, in this study was not found.

There is no amotivation found in this study, that is, unmotivated student behavior. This is evidenced by the selection of the scale on the Self Determination Motivation questionnaire, and no one chose the lowest number, namely 1-3. Numbers 1-3 indicate the tendency of students who have no intention of learning. Amotivation is described as individuals who feel incompetent (low self-efficacy, low capacity beliefs) and there is a public perception between behavior and results. Individuals at this level have a motivational pattern that their actions are not intentional. That is, their behavior is not based on intention or desire. It can also be called amotivation, being in students who go to school not because of their own intentions. He is not motivated to go to school because of value and self-efficacy and has low perceived control over school activities. Amotivated refers to having nothing to motivate them, nothing to interest them, not even a threat to them. The findings in this study state that in all indicators of Self Determination Motivation, students have a category that reaches high scores. Overall also, from the total number of indicators of Self Determination Motivation, students in lectures have more intrinsic Motivation than extrinsic. Although the motivation that drives students in lectures is extrinsic motivation, over time, students' abilities or competencies also increase along with an increase in the ability to decide for themselves in learning activities or autonomy and also their social involvement with the college environment, then this extrinsic motivation can internalize into intrinsic motivation. This is as stated by the initiators of the Self Determination Theory of Motivation, Deci and Ryan (Edward L. Deci_Richard M. Ryan, 1985). Therefore, in order to increase motivation, the instructor has an important role. Increased intrinsic motivation is helpful for learning, regardless of whether it is initially extrinsic motivation using extrinsic incentives. This indicates that teachers or lecturers should try to get learners interested in the material that they are learning and then present it in an appealing way that satisfies or increases students' curiosity about the material itself. Extrinsic motivation can be made effective by various techniques such as expressing clear expectations, providing clear feedback, providing immediate feedback, providing frequent feedback, and increasing the value and availability of extrinsic

motivation tools,

Learning by improving students' intrinsic motivation, including competence, relatedness, and autonomy, is by creating classroom conditions that encourage student autonomy. In the classroom, students have control over themselves for the desired activities, so the teacher's role is to encourage student activities to engage in learning. Relatedness can be improved by the relationship between students and teachers, between students established from learning activities that uphold human values, for example, mutual respect, dare to express opinions or questions, and others. This relatedness will create new life skills in relation to society. Motivation in competence is related to the ability to master the learning environment. Thus, the construction of classroom conditions is on the teacher.

CONCLUSION

The findings of this study found that self-determination motivation has an effect on students' academic ability. There are also two types of student self-determination motivation: extrinsic and intrinsic. The extrinsic variety of self-determination motivation is quantitatively different from that of students who have intrinsic self-determination motivation. The implications of these findings for teachers are to provide consideration for managing learners who are initially extrinsic to intrinsic with a number of methods, including expressing clear expectations, providing clear feedback, providing immediate feedback, providing frequent feedback, and increasing the value and availability of extrinsic motivation facilities.

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