

Student's Learning Motivation and Learning Outcomes in Higher Education

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Abstract—Motivation is a key to school success. This study aimed to investigate student's motivation and how it may impact on their learning outcomes. A problem statement guided the study is of that "Does learning motivation of the students significant positively impact on their learning outcomes?" Data were collected by spreading questionnaires to 1166 students who have been incidentally established as respondents. Simple linier regression was used to analyzed the data. Research finding that the learning motivation of student significantly positively impact on their learning outcomes. The findings might be crucial for the lecturers and the parents as well to make paramount efforts of supporting students' motivation for success.

Keywords: *outcomes, learning, motivation, students*

I. INTRODUCTION

Learning motivation is an important factors to students' learning outcomes. Students are virtually motivated in one way or another [1]. We are really proud of the success of several students in publishing a short-story book collection entitled *Mentari Terbit di Hutan Misterius* (The Sunrise in the Mysterious Jungle). Still several students have vigorously stood in Mathematics and English competitions. In one occasion we had an opportunity to talk to several students who have been the contestants in national academic events. One of them posited, "I did it purely because I really want it. Motive to do the best made those things possible"; while another asserted, "My friends and I stood for the Triumph of Musamus University".

The study focuses on describing the impact of the learning motivation of student on the student's learning outcome. There are many studies that have been done about student's motivation and learning outcome, such as (e.g. Ayub [2]; Baranek [3]; Cordova & Lepper, [4]; Farmer [5]; Broussard & Garisson [6]; Gupta & Mili, [7]; Mustafa et al., [8]; Mutua, [9]; Nguyen, [10]; Peklaj & Levpušček, n/d [11].; Ryan & Deci, r[12]; Singh, [13]; Tella, [14]; Saeed & Zyngier, [15]), but we were still put much attracted to deepen more this topic with the intention of address Werang et al.'s [16] research findings that many students of Musamus University were not capable enough in reading, writing, and arithmetic (3 Rs) and Werang's [17] research finding that student of students at the Faculty of Teacher Training and Education, Musamus University of Merauke, Papua, was categorized low on learning motivation.

The term motivation itself has been viewed differently by scholars. Guay et al. [18] defined motivation as 'the fundamental reasons of behavior'. While Hurst (n/d.) [19], Greenberg [20] and Ormrod [1] similiarly defined motivation as a state that energizes, directs, and sustain behavior; it gets someone moving, points in a certain direction, and maintains him/her put mach effort.

There are two types of motivation, intrinsicy and extrinsicy. The Intrinsic motivation has play a role of accomplishing an activities for enjoyment of doing the activities itself [3]. Intrinsic motivation indicate to motivation in personal enjoyment, concern, feel excited of the task [21]. Deci et al. [12] asserts as follows, "Intrinsic motivation energizes and sustains activities through the spontaneous satisfactions inherent in impactive volitional action. It is manifest in behaviors such as play, exploration, and challenge seeking that people often do for external rewards."

Intrinsically motivated employees learn as they want to know about the substance and felt exited by the organizational activities [11]. Many researchers (e.g. Adelman & Taylor [22]; Amabile & Gitomer [23]; Spaulding s [24]) argued that the existence of intrinsic motivation may produce various behaviors that lead to school achievement like hold up interest in task, conquering risks and the new challenges.

Extrinsic motivation, oppositely indicated to motivation that appears from outside of the individual. Extrinsic motivation play a role of accomplishing an activities in order to obtain various type of rewards such as money, trophies, and rank; or pressure and threat of punishment from another source (Baranek, [3]; Singh [13]). Singh [13] further asserts as follows, "Social psychological research has indicated that extrinsic rewards can lead to over justification and a subsequent reducation in intrinsic motivation. [...] Children who expected to be (and were) rewarded with a ribbon and a gold star for drawing pictures spent less time playing with the drawing materials in subsequent observations than children who were assigned to unexpected reward condition.

Extrinsically motivated employees involved in organizational activities would think that doing well in a given charge will lead to desirable achievement such as financial rewards, superiors' approval, promotions, and avoidance of punishment [11]. In arrangement of the

classroom, the term ‘motivation’ indicated directly to students’ learning motivation that often regarded as the degree to a student who puts more effort on learning to obtained successful learning outcome [15]. Meanwhile Gottfried [25] views students’ academic motivation as student’s satisfaction of learning characteristic of school by conquer the orientation, curiosity, determination and excited, difficulties, and unusual tasks”. Whereas Karim [26] regards learning motivation of students as the essential beliefs that lead students learning target, tempt the learning behavior to put up continuous effort, strengthen the cognition and improve the learning achievement.

Katz et al. (as cited in [27]) indicated that the words learning outcome, academic achievement, and academic performance actually expressed the same idea, that are the learning outcome of students or determination on result beyond the learning history. There are various definition of learning outcome. Lesch (n/d.) [28] defined learning outcome as statements that illustrate the essential learning that student have been accomplished, and can consistency revealed at the end of a program. While Donnelly and Fitzmaurice [29] viewed learning outcome as a statement of what a student supposed to know, comprehend, and/or be capable to do at the end of a period of learning. Whereas Bloom (as cited in Christophel [30]) regarded learning outcome as the that is based on cognitive, affective and / or student behavior.

Based on the description above, the purpose of this study is to describe the impact of the learning motivation of student on the student’s learning outcome at the Faculty of Teacher Training and Education, Musamus University of Merauke, Papua, Indonesia.

II. RESEARCH METHODS

The nature of this study is a survey research design which is intend to observed the proportion the value of the independent variable (learning motivation of students) give impact positively or negatively on the dependent variable (students’ learning outcome). The strength of the impact of learning motivation of students on their learning outcome is explained by the values R2 that closer to 1, indicating a stronger impact among research variable. Conceptual models of the impacts of the learning motivation of students on their learning outcome are shown in Figure 1.

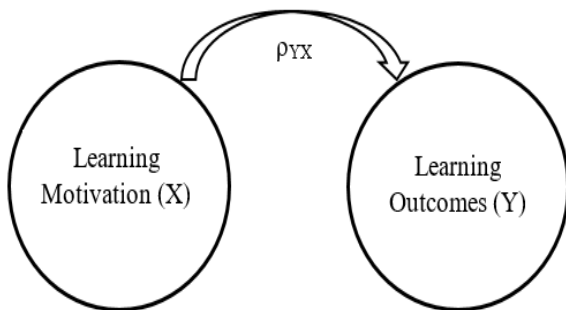


Fig. 1. Analytical Outline of the Study

We use survey design with the consideration that the results are representative and low cost, being comfortable, data collection will produce good and precise statistical significance [31]. Students’ perception on learning motivation and learning outcomes were explored and

measured based the questionnaires. The questionnaires were spread to 1166 students of the Faculty of Teacher Training and Education who has incidentally established as samples.

Students’ learning motivation was measured by developing McClelland’s descriptors into 15 positive statements which are spread over three needs, such as need for achievement (n-Ach), need for affiliation (n-Aff), and need for power (n-Pow). Response option for these items were on a four item of Likert’s scale, such as ‘Strongly Disagree’ (SD = 1); ‘Disagree’ (D = 2), ‘Agree’ (A = 3) and ‘Strongly Agree’ (SA = 4). Sample of the items included: “I regularly attend the class”, “I attend the class enthusiastically”, “I feel challenged when given a difficult assignment”, “My friends and I help each other”, “My friends and I enjoy working together in completing the assignments”, “My friends and I explore learning materials in group”, “My friends and I compete to be the best in their class/group”, “My friends and I are happy to be the winner in academic events”. The reability of instrument was examined by using the coefficient of Cronbach alpha. Then to estimate the consistency of students’ learning motivation instrument was considered adequate as the coefficient of Cronbach alpha was 0.807.

Students learning outcomes was measured by modifying Bloom’s taxonomy of learning outcomes domains into 15 positive items which are distributed over three domains (cognitive, affective, and psychomotor). Response option for these items were on a four point Likert’s scale, namely ‘Strongly Disagree’ (SD = 1); ‘Disagree’ (D = 2), ‘Agree’ (A = 3) and ‘Strongly Agree’ (SA = 4). The items included: “I am able to recall information I got from the lecturers”, “I am able to interpret information I got from the lecturers”, “I am able to breakdown information and show relationships”, “I am able to apply information in a new situation”, “I am able to use information I got to solve a problem”, “I have my emotions under control”, “I am able tolerate being upset”, “I am able to get into better mood quite easily”, “I am able to easily fake emotions”, “I am able to calm down very quickly”, “I am able to do homework independently”, “I am able to do experiment independently”, “I am able to take initiative as well as cooperating impactively in a team”, “I am able to focus in conducting experiment”, “I am able to demonstrate care and respect for educational equipment”. We employed the coefficient of Cronbach alpha to check the internal reliability of this instrument. The internal consistency estimate of the students’ learning motivation was considered adequate as the coefficient of Cronbach alpha was 0.810.

Data that have been done collected will analyzed quantitatively with the research hypothesis to be tested that is students’ learning outcomes will be significantly positive predicted by their learning motivation. Simple regression data analysis was conducted by calculating coefficient value of R2 to describe students’ perception of their learning motivation and of their learning outcomes. In order to better results of data analysis, we employed the software SPSS 21.

III. RESULT AND DISCUSSION

The data that have been collected were analysed inferentially using SPSS 21 for Windows and obtained the result outcomes as Table 1.

Data in Table 1 revealed that learning motivation of students significantly positive on their learning outcomes, as the R2 value of .299 is significant at the level of $\alpha = 0.05$. Based on the results that presented above, the empiric model of relationship among research variabel could be shown in Figure 2.

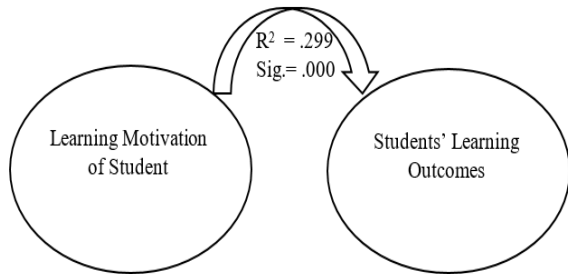


Fig. 2. Empirical Framework of the Study

Based on Table 1, the R² coefficient value of this study was significant positively at the level of significance $\alpha = 0.05$, then the hypothesis that learning motivation of students will significant positively impact on their learning outcomes in the Faculty of Teacher Training and Education, Musamus University of Merauke, was confirmed. It revealed that any kind of increasing in learning motivation of student caused the increase of students' learning outcomes, the lower of learning motivation of student, lower will be the students' learning outcomes.

It meant that students will grow more success academically when they are motivated and, in reverse, will grow more academically unsuccessful when they are unmotivated.

Based on Table 1 and Fig. 2 obtained value of R2 is 0,299, it means that at the level of $\alpha = 0.05$, 29.9 % of students' learning outcomes is able to be explained by students' learning motivation while 70.1 % is explained by another variable which is not inspected in the study.

The above finding is in consonant with the earlier findings by [7] and [32] where the research findings that academic motivation and academic achievement's are provided positify impact to each other. When the students have high motivation on leraning, they will be more concentrate and persistent in the classroom and as a result they would perform better in the test.

TABLE I. SENSOR NETWORK EXPERIMENTAL RESULTS

R		0.546
R Square		0.299
Adjust R Square		0.298
Std. Error of the Estimate		4.04623
Change Statistics	R Square Change	0.299
	F Change	495.455
	df1	1

	df2	1164
	Sig. F Change	0

Motivation contains a constellation of confidences, perceptions, rate, curiosity, and actions that were associated [33]. Despite the differences, motivation has been seen by scholars (e.g. Cordova and Lepper, [4]; Corpus et al. [34]; Deci & Ryan [12]; Elliot & Dweck [35]; Harackiewicz & Hidi [36]; Law et al. [37]; Lee et al., [38]; Lepper et al. as an exceptionally factor that significantly impact student's academic learning and achievement and closely related to the other learning's outcomes.

IV. CONCLUSION

The result of study display a deeper look on the impact of learning motivation of student on the student's learning outcome at the Faculty of Teacher Training and Education, Musamus University of Merauke, Papua. The conclusion depicted from the result of data analysis is that students' learning motivation impact significant positively on their learning outcomes and was indicated by the R2 coefficient value of .299 and the ρ value of .000. It means that at the level of $\alpha = 0.05$, 29.9 % of students' learning outcomes is able to be described by students' learning motivation and the remaining 70.1 % are described by another variable which is not inspected.

Keeping students vested in their learning activities and motivated to achieve academically is of crucial to their success. Therefore, practical implication of this study is that educators (lecturers) should know what work best in engaging and motivating students to actively learn for attaining success academically and non-academically. Since the study on this topic is still lack in Indonesian higher education institutions context, this study may provide a theoretical basis for the future researchers to multiply the research in a wider range of area and to explore more this topic with a large number of variables to identify the issue of learning outcomes and its predicting variables better.

ACKNOWLEDGMENT

We wish to express our dearest gratitude to our family for their constant support during the course of the study. We would also wish to express our gratitude to the students who have actively participated in the study. We do believe without their kind support and contribution, this paper would have never seen the light of the day.

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