

Achievement Motivation of Civil Engineering Students of Universitas Islam Riau

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Keywords: Achievement Motivation, Motivating Factors, Inhibitor Factors, Training.

Abstract: Achievement motivation is an encouragement to overcome obstacles, strength training and trying to do a difficult job in a good way. In other terms, achievement motivation is one's attempt to find and exceed the standard of excellence. There is no enough information about achievement motivation and motivating factors of students of Civil Engineering Department Universitas Islam Riau. This information is important for the arrangement of teaching strategies and the maintaining program. This paper is intended to describe the student's achievement motivation according to motivating factors as well as inhibitors of achievement motivation of research subjects. The sample of this research is a student of Civil Engineering Department Universitas Islam Riau. The method to be used is qualitative descriptive research in which the data is analyzed by the description of regular sentences in order to be easily understood the meaning contained therein. Results show that the current students of Civil Engineering Department of Universitas Islam Riau have high achievement motivation.

1 INTRODUCTION

One of the basic needs that must be fulfilled by every individual is education. Through the educational process that, every individual is able to learn and develop all their potential and characteristics. The learning process in higher education requires motivation for every student. Motivation means generating motives, generating mobility, or moving a person or self to do something in order to reach a decision or goal. Biogenetic motives such as hunger, thirst, the need for rest and the driving of human activities that are innate to him and that of him from birth can distinguish one's nature (Wahyuni, 2011).

Motivation is one of the aspects that need to be considered to keep students achieving. Motivation plays an important role in achieving one's goals. Achievement motivation is needed in the learning process because if everything is forced it will affect the results obtained. This is a sign that if something is done not according to his needs, will make a person unmotivated. Achievement motivation gives a great influence on the achievement of the students. Students with high achievement motivation will always be passionate and ambitious, perform the tasks assigned to them as well as possible, learn faster, and

have achievements in their skills (Santrock, 2008).

The Ministry of National Education of the Republic of Indonesia generally provides criteria for outstanding students, i.e students who achieve high achievement in academic and non-academic, able to communicate with Indonesian and English, positive attitude, and spirit of Pancasila view of life (Tinggi, 2010). (Akpan and Umobong, 2013) stated that motivating students to succeed in school is one of the greatest challenges of the century. Getting students to learn and retaining their interest in what they learn is one of the main goals of teachers in the classroom.

A student is a call for a person who is currently studying at a university or college (<http://id.wikipedia.org/wiki/Mahasiswa>). The task of students in the campus is (1) to deepen and apply the lecture material presented by the lecturer; (2) learning to explore the potential within oneself through organizational training, (3) The main task of the students is the obligation to study and finish college. A student who is capable of accepting oneself will have a high appreciation against him and have an elastic view of his limitations, will be better able to establish relationships with the Creator (Wahyuni, 2011).

Civil engineering is the science that studies about

building construction in all areas of development. All related to development must involve the civil engineering sciences. Some students claim that the civil engineering department is a difficult department in terms of building drawings, counting courses, lecturers difficult, and many big tasks to be completed. However, the civil engineering department is in great demand by young people who have an interest in the challenge. The civilian scholar is not only expected to be a planner, but also an executive in the field.

Civil engineering students have more time for field activities. They are faced with practical concrete and steel structures, drawings of building techniques, etc. In addition, they also often practice surveying and measurement by using theodolite in the field with hot or rainy conditions. This affair is no less extreme than duty and overtime. Because most students have eye bags like pandas. After graduating many become successful with various projects that they did (<https://www.anakteknik.co.id/a/bhrearka/Ciri-Ciri-Mahasiswa-Teknik-Berdasarkan-Jurusannya>).

There is no enough information about achievement motivation and motivating factors of students of Civil Engineering Department Universitas Islam Riau. Information about achievement motivation and motivating factors of students is important for arrangement of teaching strategies and the maintaining program. Based on the above description, this research problem can be formulated that is (1) how civil engineering student achievement motivation; and (2) what is the motivating factors and inhibitors of student achievement motivation? The purpose of this research was conducted to determine the motivation of student achievement as well as the factors driving and inhibiting student achievement motivation.

2 MOTIVATION ACHIEVEMENT

(Winkel, 1996) asserts that achievement motivation is the driving force in the individual to achieve the highest level of academic achievement for self-esteem. In achieving the highest possible achievement, every individual must have a strong desire to achieve his goal. It really depends on the effort, ability, and willingness of the individual itself. Achievement motivation has a big effect on learning achievement (Achmad et al., 2018) (Lutan, 1988) revealed that someone who has high achievement motivation level shows a tendency of a positive approach in performing their duties and always oriented to achievement.

Research conducted by (Kavousipour et al., 2015) revealed that the achievement motivation level in SUMS students was higher than average and did not decrease during the school year. The six most influential factors in academic motivation are family attitudes, getting good jobs in the future, respecting themselves, the ability to learn, believing in their role in victory and defeat and optimism about themselves. The results of the study also show that personal, social and educational factors influence the motivation of more than economic and environmental factors.

According to (McClelland, 1987), there are several factors of high achievement motivation, namely:

- Responsibility. Individuals with high achievement motivation will have more responsibility for the results of their work because then the individual is satisfied when completing the task properly.
- Risk of task selection. Individuals who have high achievement motivation will consider in advance of the risks it faces before starting the job, in other words, the action will be done will be adjusted to the limits of ability it has.
- Requires feedback. Individuals with high achieving motivation prefer to work in situations where the individual gets concrete feedback about what he or she has done.
- Innovative. Individuals with high achievement motivation will be more active to seek information in order to find better ways or other new ways to accomplish a task and do not like routine matters.
- Time of completion of the task. Individuals with high achieving motivation can complete tasks quickly and do not like to postpone work.
- The desire to be the best. Individuals will try their best to be the best of others. Individuals with high achievement motivation will not only be satisfied with being able to do a task but will strive to achieve certain performance standards in doing it.

(McClelland, 1987) also reveals that individuals with high achieving needs will prefer tasks with moderate difficulty levels because the task has a challenging element of ability and is still within the limits of a person's ability to work. Conversely, individuals who have lower *n-ach* choose tasks with high or very low difficulty. This happens because they do not like situations where there are challenges and threats to their abilities. This difference is also seen in problem-solving strategies. Individuals with high *n-ach* have problem-solving strategies that support their efforts in achieving desired outcomes.

In contrast, individuals with low *n-ach* do not have a problem-solving strategy and tend to be easily frustrated in the face of adversity. Factors that influence the achievement motivation that can be an extrinsic factor and intrinsic factor. Intrinsic factors that play a role are the possibilities for success, self-efficacy, value, and previous experience. While the extrinsic factors that play a role are the family, school, and friends (Haryani and Tairas, 2014). Achievement motivation is a crucial factor in achieving academic success and human resource excellence (Kuntjojo, 2015). A person with a success-oriented, high-motivated approach to success and fearful achieves a low failure, is very involved in various achievement activities and not anxious or worried about performing well (Schunk, 2012).

3.3 Type of Study

Data collection techniques used is a questionnaire technique conducted on April 2018. Instrumentations were designed based on McClelland [10]. This study uses an instrument of achievement motivation scale as shown in Table 1. There are three categorizations; high, medium, and low achievement motivation. The number of instruments composed is 26 items with score 1, 2, 3 and 4 on the achievement motivation scale.

Table 1: Nonlinear Model Results

Score	Categorization
$(\mu + 1, 0 \partial) \leq X$	$78 \leq X$ High
$(\mu + 1, 0 \partial) \leq X$	$52 \leq X < 78$ Medium
$X < (\mu - 1, 0 \partial)$	$X < 52$ Low

3 RESEARCH METHODS

3.1 Location and Sample

This research was conducted at the Civil Engineering Department of Universitas Islam Riau, a university located in the city of Pekanbaru, Riau Province in Sumatera Island, Indonesia. The university was founded in 1962. The engineering faculty was established in 1964. Currently, the Engineering Faculty has 6 courses of civil engineering, mechanical engineering, petroleum engineering, regional and municipal planning techniques, informatics engineering and geological engineering. Students came from different regions, among others from Pekanbaru and some districts around Riau. There are also those from outside of Riau. The sample of research is all students of the second semester of Civil Engineering Department, Faculty of Engineering Universitas Islam Riau, amounting to 85 people.

3.2 Type of Study

In accordance with the purpose of research, then this research is qualitative research. This study using a descriptive study method. The purpose of descriptive research in this research is to explain and describe (descriptive) the results of research in a systematic, factual and accurate about the facts and the properties of a population. Descriptive method is not intended to test a hypothesis but aims to create a description of things to be studied (Suryabrata, 2000). In this study to be studied is the motivation for student achievement.

4 RESULTS AND DISCUSSION

The sample of this research is all students of the second semester of the Department of Civil Engineering Faculty of Engineering Universitas Islam Riau which amounted to 85 students. They consisted of 71 (84%) male and 14 (16%) female.

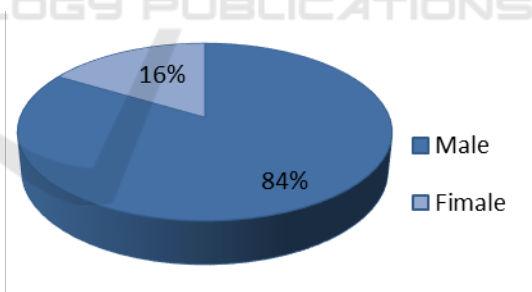


Figure 1: Most of the students were male.

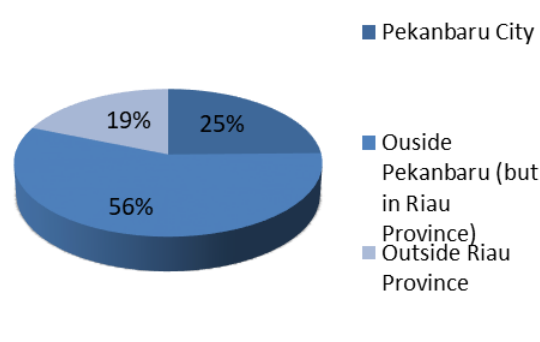


Figure 2: Number of students based on place of origin.

Students come from different regions (Fig.2), such as Pekanbaru City is 21 people (25%), outside Pekanbaru City (but still in Riau Province) is 48 people (56%), and from outside of Riau there are 16 people (19%). Most of the students come from Riau Province. Based on the calculation of the results of the data obtained the mean value of all subjects is 85.4. There was a maximum value of 102 and a minimum value of 68 with an aggregate total value of 7255.

Based on Fig. 3 is clearly visible about the categorization of student achievement motivation in stages in accordance with the results of research.

To know the categorization of stratified levels for respondents in placing individuals into groups that are separated in stages are done according to a continuum based on attributes measured. The continuum levels used consisted of high, medium and low categorization (Azwar, 2007).

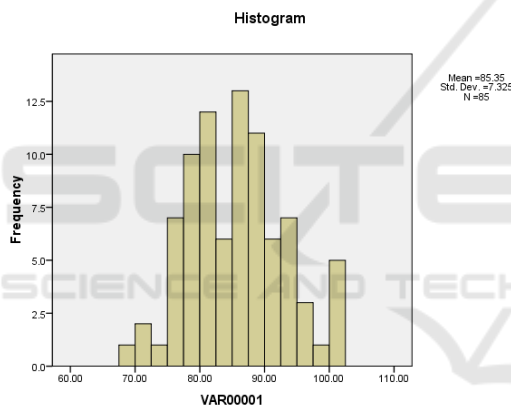


Figure 3: The motivation for Student Achievement.

This study revealed that the score 1, 2, 3 and 4 on the achievement motivation scale with the number of items as much as 26 items and the number of respondents 85 students have the minimum range is $1 \times 26 = 26$ and the maximum range $4 \times 26 = 104$. Thus, it can be seen that the maximum range of the minimum range is $104 - 26 = 78$, the standard unit of population deviation (σ) = $78 : 6 = 13$, while the mean is $\mu = (26 + 104) : 2 = 65$. Table 2 states that subjects had 69 subjects (81.2%) and 16 subjects (18.8%) for the high category and medium category respectively. And there were no subjects fulfilled in the low category. Thus, it can be concluded that the current students of civil engineering department have high achievement motivation.

The results revealed that the high achievement motivation shown by the civil engineering students stated that students have a great responsibility for

Table 2: Results of Categorization Norm Score

Score	Number of Subjects	Percentage	Categorization
$78 \leq X$	69	81.2	High
$52 \leq X < 78$	16	18.8	Medium
$X < 52$	0	0	Low
Total	85	100	

the tasks that have been given, dare to take risks in taking tasks by completing large tasks that must be gathered in a timely manner, requiring feedback on the big task that has been done, has a high innovation in completing a task and do not like things that are routines, and have a passion and a strong desire to be the best. Individuals with high achievement motivation will not only be satisfied with being able to do a task but will strive to achieve certain performance standards in doing it.

5 CONCLUSION

According to achievement motivation scale (high, medium, and low) it can be concluded that the current students of Civil Engineering Department of Universitas Islam Riau have high achievement motivation. This achievement motivation should be kept consistency to ensure students graduate their study well.

ACKNOWLEDGEMENTS

The authors give special thanks to the Head of Civil Engineering Department and The Research Institutes and Community Service (LPPM) of Universitas Islam Riau for supporting this research.

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