

ENTREPRENEURIAL INTENTION OF STUDENTS OF THE FACULTY OF INDUSTRIAL TECHNOLOGY, PETRA CHRISTIAN UNIVERSITY

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ABSTRACT

An entrepreneur is a person who carries out entrepreneurial activities characterized by being clever or gifted in recognizing new products, determining new production methods, arranging operations management for new product procurement, marketing them, and managing the capital of their operations. The data was collected by conducting interviews with students majoring in FTI class of 2014 & 2015. The total population was 543, then took a sample of 141. Data processing was carried out by validity testing, reliability testing, and relationship testing. The motivation variables consist of Need for Achievement, Locus of Control, Self-Efficacy, Sense of Autonomy. The results obtained were that 19 respondents wanted to become an employee, 34 respondents wanted to become entrepreneurs, and 88 respondents wanted to become an employee after graduation and gradually become entrepreneurs. The motivations of becoming an entrepreneur are Self-Efficacy and the Need for Achievement. The batch of 2014 students want to continue their parents' business, want to be free, have flexible time, and get more income, while the 2015 batch students prefer to be an employee as their career path.

Keywords: *Need for achievement, self-efficacy, locus of control, sense of autonomy.*

INTRODUCTION

Petra Christian University students, especially the Industrial Technology Faculty, have been provided with technopreneurship courses during their studies to learn about creating innovations and market and sales ideas. The Faculty of Industrial Technology, Petra Christian University, considers entrepreneurship a critical professional path, holding technopreneurship classes. The debriefing that Petra Christian University has carried out has supported students to become entrepreneurs. However, many students still do not understand the impact that will occur in the future because they tend to open a business based on trends or suggestions from their parents without knowing their motivation to do so. Research on entrepreneurial motivation has never been carried out before exploring entrepreneurship aspirations in prospective Petra Christian University graduates, so it is unknown what kind of planning needs to be made to support the growth of entrepreneurial graduates of Petra Christian University. This research will be conducted for students of the Faculty of Industrial Technology, in batches 2014 and 2015, Petra Christian University, to find out the desire of students to open a business after graduating from college.

The problem that arises from this background is students' doubt in choosing a job after graduating from college. This problem will be investigated further to determine the relationship between student characteristics and motivation in becoming entrepreneurs. The formulation of the problem in this study can be detailed: (a) How many students want to become employees, employees then gradually become entrepreneurs, or immediately become entrepreneurs after graduating from college? (b) Why do students want to become entrepreneurs? (c) How is the relationship between student profile/characteristics and motivation to become entrepreneurs?

The objective of this research is to find out:

1. How many students want to become employees, the employee then entrepreneurs, and immediately become entrepreneurs.
2. Know the motivation of students to become entrepreneurs.
3. Know the relationship between student characteristics and motivation to become entrepreneurs.

LITERATURE REVIEW

Entrepreneurship

An entrepreneur can combine resources, labor, raw materials, and other assets to produce a more excellent value than before and introduces change, innovation, and new challenges. Hisrich (2001) argues that entrepreneurship is defined as a dynamic process of creating additional wealth by individuals who bear the main risk in terms of time capital and career commitments or providing value for some products or services. Products or services may or may not appear unique, but by sharing the means, an entrepreneur will generate value by accepting and placing the required skills and resources.

Motivation

Motivation is the primary drive that drives a person to behave. This urge is in someone who moves him to do something in accordance with the impulses in him. The motivation that arises because of intrinsic and extrinsic factors has indicators, namely the desire to succeed, the encouragement and need for entrepreneurship, hopes and aspirations for the future, the appreciation in entrepreneurship, the existence of exciting activities in entrepreneurship (Uno, 2008). According to Handoko (2000), a situation in a person encourages individuals to carry out certain activities to achieve business goals. The person's efforts are made based on his capital and abilities in every effort, can take or face risks in doing business, and his efforts can be an example for others. According to some experts, the theory of entrepreneurial motivation is as follows:

Need for Achievement

McClelland (1953) states that individuals with a high Need for Achievement are more likely to carry out activities or tasks with a high enough level of responsibility, ability, effort, and risk to achieve the expected results, including feedback, clear on its performance. The indicators of the Need for Achievement variable consist of working hard, having the courage to take risks, never giving up, being responsible, and having fun trying new things. These indicators were obtained from the journal Afifah (2015), which was later revamped to make this questionnaire. All indicators are used to make questionnaire statements because these indicators can represent what the researcher expects.

Self-Efficacy

According to Bandura (1977), self-efficacy is a belief in a person's ability to organize and take the actions needed to produce achievement. High self-efficacy in a person makes that person like things that are challenging and balanced with high endurance to achieve the desired goals. Therefore, individuals with a high level of self-efficacy will do their best to achieve the things they want. The indicators of the Self-Efficacy variable consist of self-confidence, courage, never giving up, having a way to achieve goals, being able to make decisions under any circumstances, requiring supervision in carrying out activities. This indicator comes from Janantin (2015) which then made changes to the questions on the questionnaire.

Locus of Control

Locus of control is a form of self-control, namely the extent to which a person believes that they control their destiny or the belief that someone can control themselves over events, events they are experiencing, or affect them. A person who has an internal locus of control has confidence in himself, can control what happens to them, manage, direct their life, and be responsible for any achievement that will be accepted. Whereas someone more dominant with an external locus of control will have confidence that controlling all aspects of his life and whatever he receives comes from outside forces, comes from a fate such as luck/luck and opportunity (Robbins, 2001). The indicator of the Locus of Control variable consists of the belief that success comes from oneself, beliefs in fate, believes that

success can be achieved by working hard. This indicator was also obtained from the journal Afifah (2015), which was then reorganized to make questions on this questionnaire. All indicators are used to make questionnaire statements because these indicators can represent what the researcher expects.

Sense of Autonomy

Sense of Autonomy is the individual's desire for freedom. Many researchers have made observations on the role of entrepreneurship which requires freedom. From the owner's point of view, many of them enjoy being bosses in their business because they want the freedom to do things their way (Kuratko & Hornsby, 2009). The indicators of the Sense of Autonomy variable consist of a sense of independence, high leadership, and individualism. This indicator comes from Sriati (2015) which then made changes to the questions on the questionnaire.

RESEARCH METHOD

Variable Determination

The following variables are thought to influence the desire to become an entrepreneur. The variables in this study are Need of Achievement, Locus of Control, Sense of Autonomy, and Self-Efficacy.

Population and Sample

The population of this research is students from the Faculty of Industrial Technology 2014 and 2015 batches which are divided into four majors, namely Electrical Engineering, Mechanical Engineering, Industrial Engineering, and Informatics Engineering. The total population of the 2014 batch is 543 people, with details in Table 1.

Table 1
Number of Population

Department	2014		2015	
	Male	Female	Male	Female
Electrical Engineering	16	1	23	1
Mechanical Engineering	55	1	52	1
Industrial Engineering	53	34	68	21
Informatics	78	21	109	17
Total	543			

The sampling technique is a systematic sampling method. The number of samples is determined by a quota system, i.e., a quarter of the number of male and female students from each department in the Faculty of Industrial Technology. They are 2014 and 2015 batches of 141 people, with details in Table 2.

Table 2
Number of Samples

Department	2014		2015	
	Male	Female	Male	Female
Electrical Engineering	4	1	6	1
Mechanical Engineering	14	1	13	1
Industrial Engineering	13	9	17	5
Informatics	20	5	27	4
Total	141			

Questionnaire Development and Distribution

Questionnaire questions are made into two parts: the respondent's profile and questions about variables that affect entrepreneurs' desire to be entrepreneurs. The indicator assessment will use a Likert scale of one to five (1 = strongly agree and 5 = strongly disagree). The questionnaire was tested first to identify

deficiencies in the questionnaire and revised if necessary. Then, the distribution of the questionnaires was carried out in the classroom and the laboratory of Petra Christian University.

Data Processing

Questionnaires that have been filled out will be sorted to determine whether the truth of filling out the questionnaires by the respondents is then recapitulated to get answers from the respondents. The answers were collected and processed using the SPSS tool. The tests carried out are the Validity test by comparing the R-count value with the R-table and the Reliability test by seeing whether the Cronbach's Alpha value is greater than 0.6 or not. Crosstab analysis is done by describing the relationship between the characteristics of respondents with entrepreneurial motivation.

FINDINGS AND DISCUSSION

Profile of Respondents

Table 3 shows the profiles of 141 respondents in some categories. The 88 of 141 students (62.4%) want to become employees after graduation and gradually become entrepreneurs later. The number of students who want to become entrepreneurs (34 students) is more than students who want to become employees (19 students). This phenomenon may be influenced by the parent's occupation, who mostly an entrepreneur. They are as many as 103 out of 141 students (73%).

Table 3
Respondent Profile

Category	Sub-category	Frequency	Percentage
Profession after graduation	Employee	19	13,5
	Entrepreneur	34	24,1
	Employee then entrepreneur	88	62,4
Batch	2014	67	47,5
	2015	74	52,5
Department	Electrical Engineering	12	8,5
	Mechanical Engineering	29	20,6
	Industrial Engineering	44	31,2
	Informatics	56	39,7
Sex	Male	113	80,1
	Female	28	19,9
Parent's occupation	Not Entrepreneur	38	27
	Entrepreneur	103	73

Table 4 is a table that shows the results of respondents who answered strongly agree and agree on the Need for Achievement statement. From the table, it is known that the statement "responsible" gets the highest percentage.

Table 4
Distribution of Need for Achievement Indicators

Indicators	Frequency	Percentage of total sample
Hardworking people	120	86.1
Dare to take risks	60	42.6
Criticism doesn't make you give up	122	86.5
Never give up realizing dreams	119	84.8
Responsible	129	91.5
Achieving success by trying new things	118	83.7

Table 5 shows the percentage of students on statements on Locus of Control. The table shows that the statement "desire is achieved with hard work" gets the highest percentage.

Table 5
Distribution of Locus of Control Indicators

Indicators	Frequency	Percentage of total sample
Success depends on yourself	122	86.5
Success does not depend on fate	101	71.6
Desire achieved with hard work	135	95.7
Not relying on other people's help	111	78.8
Desires are achieved not because someone set	71	50.4
Fate does not determine success	98	69.5

Table 6 shows the percentage of students on the statements on the Self Efficacy variable. The statement with a high percentage value is "able to solve the problem."

Table 6
Distribution of Self Efficacy Indicators

Indicators	Frequency	Percentage of total sample
Confident	104	73.8
Not afraid to try new things	104	73.8
Able to make decisions under pressure	98	69.5
Able to solve problems	128	90.8
Have a way to reach the goal	124	88.0
Thinking yourself better than others	67	47.5

Table 7 shows the percentage of students on the statements on the Sense of Autonomy variable. The table shows that the statement "likes flexible working hours" gets the highest percentage.

Table 7
Distribution of Sense of Autonomy Indicators

Indicators	Frequency	Percentage of total sample
Like flexible working hours	115	81.8
Happy to work without rules	85	60.2
Like to give commands	54	38.3
Prefer to act alone	104	73.8
Happy to decide for myself	69	49.1
Enjoy working alone compared to group	40	28.3

Table 4-7 then compared the averages to find out which motivational variables have the most influence on entrepreneurship. Successively, the percentage of the most influential variables in entrepreneurial motivation is Need for Achievement (79.20%), followed by Locus of Control (75.42%), Self-Efficacy (73.90%), and Sense of Autonomy (55,25%).

Validity and Reliability Tests

The validity test was carried out for four variables to determine whether each indicator was feasible to use by comparing the R-count with the R-table. The degree of freedom is $141-2=139$, and the R-table with an alpha of 5% is 0.1654. Therefore, the indicator of each variable will be said to be valid if it has an R-count > 0.1654 .

The R-count of the Need for Achievement variable shows a value between 0.359-0.716 so that all indicators are feasible to use. Likewise, the R-count of the Locus of Control variable shows a value between 0.426-0.627 so that all indicators are feasible to use. Similarly, the R-count of the Self-Efficacy variable ranges from 0.473-0.674, and the R-count of the Sense of Autonomy variable ranges from 0.498-0.607. Thus, all indicators are valid.

The reliability test aims to determine how the measurement results can be trusted because it has a high level of consistency. Reliable or not can be known by looking at the Cronbach Alpha value that is greater than 0.6. The Cronbach Alpha values of the four variables are 0.8 for Need for Achievement, 0.786 for Locus of control, 0.797 for Self-Efficacy, and 0.804 for Sense of Autonomy. All values are greater than 0.6, so it can be said that the measurement results are reliable.

The Relationship between Respondents Characteristics and Motivation Variables

The subsequent comparison is made by making a table that compares the characteristics of the respondents with the four motivational variables, namely Need for Achievement, Locus of Control, Self-Efficacy, and Sense of Autonomy.

Students who choose to work as employees after graduation point out Need for Achievement motivation (32.26%), then Locus of Control (25.88%), Self-Efficacy (23.75%), and Sense of Autonomy (18.08%). On the other hand, students who want to become entrepreneurs have different motivations, namely Self Efficacy (28.21%), Need for Achievement (27.99%), Locus of Control (22.79%), and Sense of Autonomy (20.99%). Finally, students who want to become employees first and then become entrepreneurs have motivations, namely Need for Achievement (28.94%), Self-Efficacy (27.6%), Locus of Control (22.81%), and Sense of Autonomy (20.63%). Thus, the three characteristics of students have a different order, although they are similar between employees only and employees who became entrepreneurs later.

Male students in answering statements on the questionnaire were dominant on motivation for Need for Achievement (30.21%) and Self-Efficacy (26.40%), followed by Locus of Control (22.96%) and finally Sense of Autonomy (20.42%). On the other hand, female students were more dominant in the motivation of Self Efficacy (29.45%), Need for Achievement (28.26%), followed by Locus of Control (23.04%), and finally Sense of Autonomy (19.23%).

Industrial Engineering students have 29.7% and 29.55% for Self-Efficacy and Need for Achievement motivations, respectively. Students of Informatics, Mechanical Engineering, and Electrical Engineering have something in common, i.e., having a high percentage score on Need for Achievement in the first place and Self-Efficacy in the second place.

Comparisons were also made on the characteristics of the force on the motivation variable. The results obtained are that the 2014 and 2015 batches have the same motivational variables, namely Need for Achievement and Self Efficacy, which have a high percentage value. These values were 29.7% and 27.69% for the 2014 batch and 28.7% and 26.88% for the 2015 batch.

Both parent's backgrounds as entrepreneurs and non-entrepreneurs have the same relationship with the motivational variable, namely, Need for Achievement in the first rank and Self-Efficacy in the second rank. The values obtained are 28.79% (Need for Achievement) and 27.86% (Self-Efficacy) for entrepreneurs as parent's backgrounds and 29.31% (Need for Achievement) and 27% (Self-Efficacy) for non-entrepreneur backgrounds.

Given the large number of students interested in becoming entrepreneurs after graduating from college and students who become employees first and then become entrepreneurs, it is necessary to provide business courses to either managing an existing business or starting a new business.

CONCLUSION

The results showed that as many as 13.47% (19 people) wanted to become employees, 24.11% (34 people) wanted to become entrepreneurs, and 62.14% (88 people) wanted to become employees first and gradually become entrepreneurs.

The dominant entrepreneurial motivation variable is Need for Achievement in the first place, Self-Efficacy in the second, Locus of Control in the third, and Sense of Autonomy in the fourth and fourth.

Respondents who choose to become employees only and employees first then become entrepreneurs have the same significant motivation, i.e., Need for Achievement motivation, while respondents who want to become entrepreneurs have Self-Efficacy motivation.

The motivation for male students to work is the Need for Achievement, while the inspiration for female students is Self-Efficacy.

Students of Mechanical Engineering, Electrical Engineering, and Informatics have "Need for Achievement" motivation, while Industrial Engineering students have "Self-Efficacy" reason.

Characteristics of students interested in becoming entrepreneurs after graduate from college are those who want to be free, have flexible time, and earn more. They come from the 2014 batch and have Self-Efficacy and Need for Achievement motivations.

To develop respondents who choose to become entrepreneurs, the Faculty of Industrial Technology may hold some business classes about handling existing businesses and starting a new business from scratch.

Students interested in becoming employees try to pursue a career path and want to gain experience. Students from 2015 batch are more dominantly interested in becoming an employee.

Students interested in becoming employees first and then becoming entrepreneurs have a reason, namely wanting to find experience and capital. In addition, the motivation is the same as that of respondents who want to become employees, namely Need for Achievement and the second-highest Self-Efficacy.

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