Factors affect agricultural entrepreneurial intention of agribusiness students

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Abstract. The low intention of the younger generation in entrepreneurship in the agricultural sector is an important issue for Indonesia. Youth prefers to work in the non-agricultural sector than in the agricultural sector. The formation of agricultural entrepreneurs must be carried out since the university education period. Especially agribusiness students who have a concentration in agricultural business. So as to evaluate student intentions, a study of entrepreneurial intentions is needed. This study aims to analyse the factors that influence the entrepreneurial intentions in the agricultural sector for students who have been studying agribusiness entrepreneurship. Research respondents are agribusiness students of Bengkulu University who have received entrepreneurship courses. The number of respondents as many as 129 people. Research data is primary data, and primary data are made using questionnaire and literature study. The type of data used is quantitative and processed using partial least square (PLS) analysis tools. The result is Attitude toward behaviour has no significant effect on student intention to be agripreneur with value of P-value, Subjective norm very significant effect on intention with P value is 0.329 and Perceive behaviour control has a significant effect on entrepreneurship intention in the agricultural sector with P-value is 0.046.

1. Introduction

The agricultural sector is carried out by elderly human resources who have low productivity. The dominance of older workers in the agricultural sector could have negative effects on the agricultural sector. The age of the farmer is very influential with agricultural output [1], the ability to work the land will decrease as a person's age increases. These conditions indicate the instability of the agricultural sector when filled by old workers.

The low intention of the younger generation in entrepreneurship in the agricultural sector is an important issue for Indonesia. Youth prefers to work in the non-agricultural sector than in the agricultural sector. However, the lack of engagement of youth in agriculture, compounded with a declining interest among young professionals in pursuing agriculture-related careers, has resulted in an ageing agricultural system [2]. The level of wages in agriculture is a barrier to entry for young and quality workers. Significant the wage gap in the agricultural sector compared to non-agriculture. This is the most important barrier for youth to enter the agricultural sector.
The lack of young, highly qualified agricultural workers is not caused by insufficient capacities of agricultural universities or by insufficient interest in enrolment. Agricultural graduates do not work in the agricultural sector because of low wages. Agricultural graduates are more interested in working in the non-agricultural sector with the certainty of income and low risk.

Quality human resources and commit to building the agricultural sector is a factor in the success of sustainable agriculture [3]. The formation of agricultural entrepreneurs must be carried out since the university education period. Especially agribusiness students who have a concentration in agricultural business. Agribusiness graduates are expected to be able to build an agricultural business to increase the income of the agricultural sector. So entrepreneurship education is very important to be given to agribusiness students[3].

Entrepreneurship education is intended to increase knowledge about business and foster entrepreneurial intentions. So as to evaluate student intentions, a study of entrepreneurial intentions is needed. This study aims to analyse the factors that influence the entrepreneurial intentions in the agricultural sector for students who have been studying agribusiness entrepreneurship. Factors that influence intention will be analysed using planned theory of behaviour.

2. Methodology
The research was conducted in Bengkulu Province in May 2018 with the respondents chosen purposively. Research respondents are agribusiness students of Bengkulu University who have received entrepreneurship courses. The number of respondents as many as 129 people taken by census or the total number of students who follow the course of entrepreneurship. Research data is primary data, and primary data are made using questionnaire and literature study. The type of data used is quantitative and processed using partial least square (PLS) analysis tools.

PLS is an analytical tool that can work in calculating intervening variables. In this study, Intention is a variable that requires variable intervening. So PLS is needed. In this study to determine the factors that influence the most dominant. Analysis using PLS has several test stages:

2.1. Outer model analysis
Tests conducted to see the relationship between the indicator block with the latent variable is done by testing the Outer model. First, to check the validity of using the loading factor with the standard 0.7. If there is a loading factor below 0.7, then it should be removed from the model. Second, the analysis of the convergent validity value seen from the Average Variance Extracted (AVE) value with the threshold of 0.5. Third, Test discriminant validity. Tests by comparing the value of AVE root square root with correlation value between constructs. After finished outer model analysis then proceed with the inner model analysis.

2.2. Inner model analysis
The inner model analysis is an analysis that describes the relationship between latent variables with other latent variables. Inner model evaluation is done by calculating the value of Goodness of fit (GoF). Here's how to calculate Gof small: 0.1; medium: 0.25 and large: 0.38

2.3. Hypothesis testing
The last stage is testing the hypothesis that has been formulated. Hypothesis testing is a test performed to see the influence of exogenous latent variables on endogenous latent Hypothesis:

H1. Attitude toward the behaviour affects the intention of students to become agricultural entrepreneurs after receiving the entrepreneurial course
H2. Subjective norms affect the intention of students to become agricultural entrepreneurs after receiving the entrepreneurial course
H3. Perceive behaviour control influences student's intention to become agripreneur after receiving entrepreneurship course
2.4. Measurement model
Before continuing the measurement using PLS, it is necessary to formulate the measurement model. Figure 1 shows the measurement model for the intentions as for indicators in each latent variable (Figure I).

2.4.1. Attitude toward the behaviour. Refers to the extent to which individuals judge something profitable and unfavourable. This variable is composed of 10 indicators that value time (X1), risk-taking (X2), honesty (X3), self-confidence (X4), creative (X5), innovative (X6), independence (X7), leadership (X8), diligent (X9), discipline (X10).

2.4.2. Subjective norm. It is the perceived social pressure to engage in behaviour or not to engage in the behaviour. Subjective norms are the organization (X21), parent (X22), family (X23), lecturer (X24), and friend (X25).

2.4.3. Perceive behaviour control. It is perceived ease or difficulty that is shaped by the assumed behaviour based on experience and anticipates obstacles and obstacles. Perceive Behaviour Control variables are access to financial institutions (X31), fatigue/boredom (X32), entrepreneurial complexity (X33), agreement (X34).

![Figure 1. Initial measurement model](image)

3. Result and discussion
3.1. General description of respondents
Research respondents are students majoring in agribusiness who take entrepreneurship courses in the agriculture sector. The primary purpose of the course is to bring the intentions of entrepreneurship in the agricultural sector by the knowledge and competence they have. The educational background of agribusiness dramatically determines how much they will carry out activities in the agricultural business in the future. College environment and exposure to entrepreneurship in the classroom determine the intentions of student entrepreneurship. Entrepreneurship education is very influential on the intention of an entrepreneur[4].

The majority of respondents have aged 21 years to 22 years with a percentage of 63%. Age is an age in a group that is still young for entrepreneurship. It would be better if the entrepreneur has begun from the young age. The majority of respondents are women with a percentage of 93%. This shows that women have the potential to become bigger entrepreneurs than men. Majority of respondents are Batak tribe with the rate of 31%. Besides that, majority respondents have parents who work as farmer.
3.2. Partial Least Square (PLS)

3.2.1. Outer model evaluation. The external model evaluation consists of the convergent validity and discriminant validity analysis. First, an assessment of the loading factor values in the PLS model as an individual reflective measure.

![Figure 2. PLS model loading factor](image)

Standard loading factor value is 0.7 so that values below 0.7 should be removed from the model (Fig 2). Based on the results of PLS data processing, it was found that the indicators X11, X16, X17, X19, X21, and X24 are below 0.7. These indicators should be excluded from the model because they do not meet the PLS measurement standards. The results of processing after the indicator is removed from the model can be seen in Figure 3. So that testing can be continued next stages (Fig. 3).

![Figure 3. PLS final model](image)

Second, the construct validity test is measured by Average Variance Extracted (AVE). In this study the AVE value of each construct is above 0.5 of the overall variables. So there is no problem convergent validity on the model tested or the whole model is validated. Third, the test of construct reliability is evaluated based on Composite reliability to measure internal consistency and its value must be above 0.6. Based on Table 1, the overall Composite reliability measurement is above 0.6, or
the model has been reliable. This indicates that the data has been consistent and able to delve the model (Table 1).

### Table 1. Average variance extracted (AVE) and composite reliability (CR)

| Latent                  | AVE  | AVE status | CR status | Note   |
|-------------------------|------|------------|-----------|--------|
| Attitude toward the behaviour | 0.599 | Valid      | 0.899     | Reliable |
| Subjective norm         | 0.752 | Valid      | 0.859     | Reliable |
| Perceive behaviour control | 0.575 | Valid      | 0.844     | Reliable |

#### 3.2.2. Inner model evaluation

**Inner model evaluation**. Inner model evaluation is done by calculating the goodness of fit (Gof). The value of GoF obtained is 0.513. Gof's values fall into the significant category. This indicates that the model is fit and feasible to use.

#### 3.2.3. Hypothesis testing

The last stage is testing the hypothesis (Table 2). Based on the results of hypothesis testing in the resulting that. Attitude toward the behaviour does not affect the intention with the value of P-value of 0.355. Perceive behaviour control affects the intention with P value 0.000. Subjective norm significantly influences the intention with the value of P-value of 0.046.

### Table 2. Hypothesis testing

| Variable                          | Coefficient | T Statistics | P Values | Information   |
|-----------------------------------|-------------|--------------|----------|---------------|
| Attitude toward the behaviour -> Intention | 0.098       | 0.927        | 0.355    | Not significant |
| Perceive behaviour to control -> Intention | 0.199       | 4.329        | 0.000    | Significant   |
| Subjective norm -> Intention      | 0.423       | 1.998        | 0.046    | Significant   |

Note: P-value<0.05 = significant

#### 3.2.4. Factors that affect the intention

**Attitude toward the behaviour**. Attitude toward the behaviour is the extent to which individuals judge something that is profitable and unfavourable for their life in the future[5]. This means that the extent to which a student determines to be an agricultural entrepreneur is profitable or not in the future. Based on the result of research, the value of P value is 0.355, and the value of T statistics is 0.927. These results show that Attitude toward behaviour does not have a significant effect on student intention to become the agricultural entrepreneur. After receiving entrepreneurship lectures, the intention will not arise as a result of entrepreneurial attitudes that are risk-taking, honesty, confidence, creative, diligent, and disciplined. According to students, the attitude is considered less important to bring the intention of becoming an agricultural entrepreneur. The attitude indicator is the authority of the entrepreneur to want job work that has high economic level[6]. Educational background determines high economic level. Undergraduate candidates can basically determine the attitude of choosing to be the entrepreneur or not very lead to economic factors[7].

Several previous studies have also suggested that attitude toward the behaviour does not affect entrepreneurial intentions. Attitude toward the behaviour has no significant effect on the intention of the young generation to become agripreneur in Indonesia[5]. This factor is considered not to cause intention to become agricultural entrepreneurs. The attitude toward the behaviour does not give a positive influence on the intention of entrepreneurship in the field of agribusiness. Although respondents have an entrepreneurship education background, the attitude toward the behaviour still cannot determine their intentions.

**Subjective norm**. Ajzen states that subjective norm is a social pressure that is perceived to perform the behaviour or not to behave[8]. The social pressure arises from the expectations of the people closest to the respondents. In other words, the expectations of the closest people greatly affect the
intention of becoming an agripreneur. In this study, subjective norms are formulated as social pressure derived from people around the respondents is parents and family of respondents. Based on the result of research, T statistic and P value are 4.329 and 0.000, respectively. It shows that subjective norm is very influential on the intention. The subjective norm will significantly influence someone with entrepreneurial education background in starting a business[9]. This is in line with research conducted by[5][10][11] which states subjective norm is very influential on the intention of entrepreneurship.

The family is the most dominant factor explaining the subjective norm with the loading factor value of 0.918. The family has a positive relationship with the intention of becoming an agripreneur for students. Family expectations encourage them to become agripreneurs. Important family families in motivating respondents to become successful in the future. Successful agripreneurs can boast of families and assist family economics. The expectations of family members can influence a person in determining his career [12].

In addition to a family, the other dominant factor is the expectation of the parents. Based on the results of the study, parents have a loading factor value of 0.819. Every parent wants a successful child in the future. Being an agripreneur is one way to be successful. To make parents happy, respondents choose to be agripreneur. The background of the work of parents is a very dominant influence, based on the results of research the majority of the work of the parents of respondents is farmers and entrepreneurs. Therefore, respondents are more likely to be motivated to become agripreneur. Parents are very influential in determining and recommending their child careers[13].

**Perceive behaviour control.** Perceive behaviour control is a perceived amenity or difficulty formed from behaviour assumed based on experience and anticipated obstacles and obstacles [5]. The value of P-value and T statistic are 0.046 and 1.998 respectively. Similar to that of [12][14][15]; who found that Perceive behaviour control is significant to the intention.

Access to financial institutions is one of the dominant factors explaining perceive behaviour control. Based on the results of research, ease of access to financial institutions has a value factor of 0.787 higher factor than others. These conditions indicate that access to financial institutions is considered very important to start an agricultural business. Entrepreneurial complexity is the second factor that determines perceive behaviour control. Based on the results of the research, perceived behaviour control has a loading factor value of 0.777. The ability of entrepreneurs to overcome the complexity of their business becomes the primary factor that establishes behavioural control. The ease factor of negotiation. The ease of negotiation has a loading factor of 0.738. The ability to communicate and fulfill agreements affects PBC. However, negotiation variables are capable of reflecting perceive behaviour control. The last factor is the ease of overcoming fatigue/boredom which has a loading factor of 0.729. This factor can reflect perceive behaviour control for student respondents.

4. Conclusion
Attitude toward behaviour has no significant effect on student intention to be agripreneur with value of P-value is 0.355 and value of T statistics is 0.927. After receiving entrepreneurship lectures, the intention will not arise as a result of entrepreneurial attitudes that are risk-taking, honesty, confidence, creative, diligent, and disciplined. According to students, the Attitude is considered less essential to bring the intention of becoming an agricultural entrepreneur.

Subjective norm very significant effect on intention with a value of T statistic and P value is 4.329 and 0.000 respectively. It shows that subjective norm will very influence someone with entrepreneurship education background in starting the business. The family is the most dominant factor explaining subjective norm with loading factor value of 0.918. In addition to the family, the other dominant factor is the expectation of the parents. Based on the results of the study, parents have a loading factor value of 0.819.

Perceive behaviour control has a significant effect on entrepreneurship intention in the agricultural sector with P-value, and T statistic is 0.046 and 1.998 respectively. Access to financial institutions is one of the dominant factors explaining the PBC with the loading factor value of 0.787. Entrepreneurial
complexity is the second factor determining the PBC with a loading factor value of 0.777. The ease of negotiation is the third factor with a loading factor of 0.738. The last element is the ease of overcoming fatigue/boredom which has a loading factor of 0.7

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