

## CHARACTERISTICS OF INDIVIDUAL AND ENTREPRENEURIAL BEHAVIOR OF OYSTER MUSHROOM FARMERS IN PAYAKUMBUH CITY

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### Abstract

*This study aims to analyze individual factors and entrepreneurial behavior of oyster mushroom farmers in Payakumbuh. The entrepreneurial behavior characteristics of oyster mushroom farmers were analyzed descriptively from 60 selected farmers using a non-probability sampling technique, namely purposive sampling. The results showed that individual factors consisting of experience, self-confidence, motivation to try farming, skills, perceptions of effort, and desire to try were classified into the high category. Individual factor variables that have a high level of perception for farmers are high desire to try. Entrepreneurial behavior consisting of persistence in trying, responsiveness to opportunities, being innovative, daring to take risks, and being independent. Entrepreneurial behavior variables that have a high level of perception for farmers are diligent in trying, namely the farmer's persistence in pursuing farming and his patience in facing difficulties.*

**Keywords: Entrepreneurial Behavior, Individual Factors, Oyster Mushroom Farmers**

### 1. INTRODUCTION

Mushrooms are a horticultural commodity that has the potential to be developed, this is because mushrooms are easy to care for and have a high selling price (Kusriani et. At. 2019). According to the Directorate General of Horticulture (2021), Mushrooms are one of the horticultural crops that have high economic value, so the community and farmers can use them as a source of income.

West Sumatra is one of the provinces that has experienced an increase in mushroom productivity, namely 0.065 tons/ha in 2019, increasing to 0.104 tons/ha in 2020 (BPS, 2021). Mushroom production centers are in the City of Payakumbuh. Based on BPS data from Payakumbuh City 2021, Payakumbuh City is a mushroom center that has also experienced an increase in productivity, namely 0.156 tons/ha in 2019, increasing to 0.372 tons/ha in 2020. Increasing mushroom productivity is one form of success for farmers in carrying out farming.

One of the determinants of the success of farming is human resources. According to Burhanuddin (2014), human resources with a strong entrepreneurial spirit are needed in order to develop various sectors, especially the natural resource-based agricultural sector. Entrepreneurship is a person's ability to manage the resources they have. A farmer can be called an entrepreneur because he manages the resources he has.

Payakumbuh city has a mushroom village as a center for oyster mushroom production. Farmers have the ability to manage oyster mushrooms well, and the products produced are of good quality and quality, as seen from the marketing of oyster mushrooms that have reached outside the region and even abroad. Farmers' ability to manage to farm is strongly influenced by individual farmer factors, namely farmers who have skills in farming. So it is necessary to see how the individual characteristics of farmers in managing to farm.

One of the important things in farming is the existence of entrepreneurial behavior that must be owned by farmers. According to Bird et al (2012), entrepreneurial behavior is an important part of the entrepreneurial process, where entrepreneurial behavior is human behavior in identifying and exploiting opportunities through establishing and developing businesses. According to

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Krisnamurthi (2001), the development of entrepreneurial behavior will foster a positive attitude in entrepreneurship in the form of the ability to control circumstances and focus attention on the activities or results to be achieved. This is because farmers who behave entrepreneurially will be more active in taking advantage of opportunities, being innovative, and being willing to take risks. Based on the explanation above, it is necessary to conduct research to see how individual characteristics and entrepreneurial behavior of oyster mushroom farmers in Payakumbuh City manage oyster mushroom farming.

**2. IMPLEMENTATION METHOD**

The research location was carried out in Payakumbuh City which was chosen deliberately because there is a mushroom village that is the center of oyster mushrooms in Payakumbuh city. Determination of the sample was carried out using a purposive sampling technique, namely sampling which was carried out by formulating the criteria first. There are 60 oyster mushroom farmers as selected samples. The criteria for oyster mushroom farmers who were used as respondents were farmers as managers and owners of oyster mushroom farming, still producing continuously, and willing to be interviewed in order to obtain information and developments in these business activities.

Methods of data collection in this study include: a questionnaire is a way of collecting data by making a list of questions and asking by researchers to respondents to obtain answers that match the desired data. Interviews are collecting data by holding direct behavioral questions to Entrepreneurs regarding their production process. Observation is capturing data, facts, and information directly by observing, looking at the research site, and systematically recording the object under study. The data analysis technique used is the scale range used to describe the individual characteristics of entrepreneurs, and the characteristics of entrepreneurial behavior. The Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena (Sugiyono, 2015)

**3. RESULTS AND DISCUSSION**

**3.1 Individual Factors of Oyster Mushroom Farmers**

The basic analysis of individual characteristics is based on six variables, namely experience, self-confidence, motivation to do farming, skills, perceptions of effort, and desire to try (Puspitasari, et al, 2018). The values of the six variables are used as a measure of grouping respondents who have high, medium, or low individual characteristics. The low category is the category in which the respondent is very unsure that experience, self-confidence, motivation for farming, skills, perceptions of effort, and desire to try to reflect personal traits and qualities with a score range of 1 to 2.33. The medium category is a category in which respondents are not sure that experience, self-confidence, motivation to do farming, skills, perceptions of effort, and desire to try to reflect personal traits and qualities with a score range of 2.34 to 3.66. The last category is the high category, namely the category in which the respondent is very sure that education, experience, and motivation reflect personal traits and qualities with a score range between 3.67 to 5.

Based on the results of the study, it is known that the perceptions of oyster mushroom farmers in Payakumbuh city on individual factors consisting of experience, self-confidence, motivation to do farming, skills, perceptions of effort, and desire to try are classified into the high category. None of the variables fall into the medium or low category. Respondents' answers spread with an average of 3.72 to 4.42 (Table 1). The highest mean value is the desire to try variable with an average score of 4.42 and the lowest average value with an average score of 3.72 is the skills variable.

**Table 1. Farmers' perceptions of individual factors**

Individual factors	Mean score	Remarks
Experience	3.78	High
Confident	4.16	High
Motivation	4.00	High
Skill	3.72	High
Perception of effort	4.14	High
Desire to do farming	4.42	High

Description: low (1-2.33), moderate (2.34-3.66), high (3.67-5)

Experience is important in running a business. Experience will be a reference in making a decision in every action. In general, experience is in the high category. This shows that in running oyster mushroom farming, farmers have sufficient experience so the chances of success in developing their farming business are quite large. The length of time farming has been carried out by farmers is included in the high or old category, so that the production process can be carried out by the farmers themselves. This shows that farmers are actually quite experienced in running oyster mushroom farming, both in terms of production to marketing. In running this farming, farmers are assisted by family members or a workforce of 1-4 people but come from their own families or neighbors. As many as 76.40 percent or most of the farmers consider farming experience to be very important and can influence farming activities. In line with Riyanti's research (2003) which states that entrepreneurs who have experience in running the same business before will be better able to see new business opportunities than someone who has a career in a different business. Through experience, a business actor has opportunities in developing his business because experience can determine the development of skills, abilities, and business success through how much information is received. Farming experience indirectly encourages entrepreneurial decisions through positive traits such as optimism and awareness of mutual assistance (Zhou and Li, 2022).

Farmers who have sufficient experience in running their businesses will have high self-confidence. Oyster mushroom farmers who have long experience in farming make them believe in their ability to carry out oyster mushroom farming. In general, self-confidence is in the high category. This shows that oyster mushroom farmers have high confidence in running oyster mushroom farming. Farmers are currently more focused on keeping their businesses growing, maintaining good relations with markets and consumers, and continuing to open up new market opportunities for their products. As much as 87.05 percent or most of the farmers consider confidence to be very important in running a farming business. Farmers feel confident with the business they are in and will be able to overcome difficulties in running oyster mushroom farming. The same thing was also conveyed by Mukti, et al (2022) who stated that farming experience made them believe in their abilities to run horticultural farming. Farmers who have sufficient experience in farming will raise their confidence of farmers (Watemin and Utami, 2019).

Motivation is the reason that underlies farmers or the desire of farmers to run their farming business. The majority of respondents answered the high category, namely 79.50 percent. This shows that farmers have high motivation to become successful entrepreneurs. According to Suryana and Kartib (2011), motivation is a fundamental psychological process and is one of the elements that can explain a person's behavior which is a determinant in achieving goals. According to Arga et al (2021), farmer motivation is a factor that encourages farmers to do farming. To achieve these goals entrepreneurs must have high enthusiasm and commitment. Perception of confidence and success in oyster mushroom farming shows high confidence. This can be seen from the average of all respondents who answered mostly in agreement, such as 87 percent of farmers thought that this oyster mushroom farming would be successful, and 91 percent thought that the increase in mushroom production would occur gradually. As many as 96 percent of farmers have the desire to continue farming oyster mushrooms. In general, internal factors, namely the individual

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characteristics of the average respondent, are quite good. The highest score from the respondents' answers is a value of 5. The same thing was stated by Sudarta (2016), that horticultural farmers have the desire to continue farming with encouragement from themselves.

Farmers' perceptions of confidence in the success of oyster mushroom farming, show high confidence, this is shown by the number of respondents who chose the answer to agree 96.4 percent. Based on field data, 67 percent of oyster mushroom farmers consider this business profitable and have bright prospects. This perception will be able to increase the confidence of farmers to continue to pursue oyster mushroom farming. This of course needs to be supported by the local government by creating a conducive climate for the sustainability of oyster mushroom farming, as well as providing attractive incentives for oyster mushroom farming actors. For example by providing information on consumer preferences and market opportunities, providing capital assistance, facilities, and infrastructure for business development. Mulyani (2019) in her research said that farmers have a good perception of organic rice farming, the factor that forms a good perception of organic farming is the complete information received by farmers about organic rice farming.

The desire to do oyster mushroom farming is measured by the level of the farmer's desire to carry out and maintain oyster mushroom farming. From the results of the study, it is known that the desire of farmers in farming oyster mushrooms is high, this can be seen from the number of respondents who chose the answer that agreed, namely as much as 89.5 percent. This shows that oyster mushroom farming is the main source of family income for some oyster mushroom farmers. According to some farmers, oyster mushroom farming has good prospects. The same thing was conveyed by Putri (2015), that a high commitment to the work that is involved is needed by farmers to achieve success so as to produce something of good value for themselves and others.

**3.2 Characteristics of Entrepreneurial Behavior of Oyster Mushroom Farmers**

Entrepreneurial behavior is the actions taken by an entrepreneur in running his business, which is based on entrepreneurial characteristics. Entrepreneurial behavior in this study is a latent variable consisting of several indicators, namely diligent effort, responsiveness to opportunities, innovation, willingness to take risks, and independence. The results of field research show the distribution of scores categorized into high, medium, and low categories. The low category is the category in which respondents are very unsure that an entrepreneur must have these five indicators with a score range of 1 to 2.33. The moderate category identifies that respondents are not so sure that an entrepreneur must have these five indicators with a score range of 2.34 to 3.66. The last category, namely the high category, states that respondents strongly believe that an entrepreneur must have these five indicators with a score range between 3.67 to 5. Aspects of diligent effort, responsiveness to opportunities, and independence are included in the high category while being innovative and daring to take risks is included. into the medium category. Respondents' answers spread with an average of 3.29 to 4.13. The highest mean value is the aspect of diligent effort 4.13 and the lowest average value is 3.29, namely innovative (Table 2).

**Table 2. Farmers' Perceptions of Entrepreneurial Behavior**

Entrepreneurial behavior	Score average	Information
Try hard	4.13	High
Responsiveness to opportunities	4.01	High
Innovative	3.29	Moderate
Dare to take risks	3.38	Moderate
Be independent	3.96	High

Description: low (1-2.33), moderate (2.34-3.66), high (3.67-5)



An entrepreneur, if he wants his business to be successful, must have honesty and perseverance, including oyster mushroom farming. Running an oyster mushroom farm requires persistence, in cultivation, processing, and marketing. Diligent trying is the level of persistence of farmers in pursuing farming. The results showed that the farmer's perception of diligent behavior was very good. This is shown by the majority of farmers choosing answers in the high category 85.71 percent. This diligent behavior is shown by persistence in pursuing oyster mushroom farming, as well as patience in carrying out and dealing with the difficulties encountered in farming. The same thing was conveyed by Zainura, et al (2016), that the variables of entrepreneurial behavior are most influenced by diligent effort and independence.

Farmers' perception of responsiveness to opportunities is included in the high category. Responsiveness to opportunities is the ability of farmers to recognize opportunities or be oriented toward opportunities. The situation in the field shows that farmers are quite responsive to opportunities, but only a small number are able to take advantage of these opportunities to develop their businesses. In running a farming business, farmers have many opportunities such as processing processed products that can be produced from oyster mushrooms. If all farmers are responsive to opportunities, it will contribute more to the development of oyster mushroom farming. This must also be followed up with creative and innovative actions, as well as the courage to take business risks. The same thing was conveyed by Zainura, et al (2016), that farmers are able to look for opportunities that arise in farming Gayo Arabica coffee.

Innovative is the ability of farmers to create ideas, processed oyster mushroom products, or new processing processes. Based on the results of the study, the percentage of farmers towards innovative behavior was high, namely 40.49 percent. Some farmers create added value to the products they produce which can be seen from the many processed oyster mushroom products that have been produced. Theoretically, Suryana (2006) defines entrepreneurship as a creative and innovative ability that is used as a basis, tips, and resources to seek opportunities for success. Thus, the essence of entrepreneurship is the ability to create something new and different through creative and innovative thinking. Furthermore, Suryana (2006) states that entrepreneurship is an ability to create added value in the market through the process of managing resources in new and different ways through (1) the development of new technologies; (2) the discovery of new scientific knowledge; (3) improvement of existing products and services; and (4) the discovery of new ways to produce more goods with more efficient resources. Some farmers (48.21 percent) actively seek information on products and waste processing. For an entrepreneur, innovation is an important factor in making future plans, applying creativity in order to solve problems and seize opportunities, and the willingness to take risks to produce competitive products. Entrepreneurs are people who are willing to learn and practice innovation systematically, therefore all risks that may arise have been anticipated long beforehand so that these risks are in their control (Krisnamurthi, 2011). Innovative behavior does not always have to produce something new to create added value, but applying technology in accordance with business techniques can reflect innovative behavior in business actors. To implement innovations in the use of technology, farmers must be empowered through counseling and intensive assistance from the government or related agencies.

Basically, every business activity that is carried out must have risks and uncertainties, including business in the agricultural sector. Sartono et al (2021) state that an entrepreneur is an innovative and creative person who is able to seize opportunities and dare to take calculated risks and is able to organize a business in an effort to take advantage of opportunities and profits. Risk is related to uncertainty. Uncertainty occurs due to the lack or unavailability of information regarding what will happen. Risk is something that must be faced, with risks it is hoped that business actors will be able to develop strategies so that their businesses develop and can continue. Business risks, work accidents, natural disasters, robbery, theft, and bankruptcy are some examples of common risks in companies (Muslich 2007). Business in the industrial sector has a high risk because it is very dependent on the condition of raw materials and prices that often fluctuate and the expertise of human resources. The results showed that most of the respondents chose answers in the high

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category, 49.23 percent. In running oyster mushroom farming, farmers have taken into account the risks that may arise due to years of farming experience. Therefore, the experience of farmers can be used as knowledge in risk control. As many as 26.80 percent of respondents are willing to take the risk of continuing to produce even though raw material prices are expensive. This is done so that the business continues to run and can meet market demand. Fluctuating raw material prices will have an impact on production costs. According to farmers, the risks that have arisen so far can still be overcome and are still at a reasonable stage.

Likewise, the behavior of farmers in being independent is the attitude of farmers who do not depend on other farmers or government agencies, especially in making decisions on oyster mushroom farming. Judging from their knowledge, 83.93 percent of farmers are independent in running oyster mushroom farming. Farmers can be trusted and keep their commitment to keeping on farming oyster mushrooms.

In general, in the total score of entrepreneurial behavior for oyster mushroom farmers, many respondents considered that they had a fairly good level of entrepreneurial behavior because the highest score from the respondents' answers was a value of 4. This means that the average respondent agreed with the statement of entrepreneurial behavior experienced by oyster mushroom farmers in farming experienced an increase in income.

#### **4. CONCLUSION**

Based on the results of the study, it can be concluded that the perceptions of oyster mushroom farmers in Payakumbuh City on individual factors consisting of experience, self-confidence, motivation to try farming, skills, perceptions of effort and desire to try are classified into the high category, with the highest value found in the desire to try farmer's height. That matter. Characteristics of entrepreneurial behavior possessed by oyster mushroom farmers are aspects of diligent effort, responsiveness to opportunities, being independent, innovation, and willing to take risks, where the highest average value is found in aspects of diligent effort.

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