

# OVERVIEW OF PSYCHOLOGICAL CHARACTERISTICS OF ENTREPRENEURSHIP IN ADOLESCENTS

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**Abstract.** The psychological characteristics of adolescents consist of five aspects, namely the capacity aspect, the belief aspect, the consciousness aspect, the motivation aspect and the determination aspect. The aim of this study was to describe the psychological characteristics of entrepreneurship in adolescents. The population in this study were students of SMK Muhammadiyah 1 Pekanbaru with a total sample of 206 students. The research sampling technique used purposive sampling techniques. This study also used a scale of psychological characteristics of entrepreneurship which in total amounts to 31 items. Data were analyzed using CFA analysis test and descriptive analysis test. The results indicated that the aspects of belief and aspects of motivation were dominant in describing the entrepreneurial character of adolescents at SMK Muhammadiyah 1 Pekanbaru City, there was no significant difference between men and women in the desire to be entrepreneurial, and it can be seen that there was already a character of students at SMK Muhammadiyah 1 Pekanbaru City to become entrepreneurs, so it is necessary to be given training to improve the character of entrepreneurship.

**Keywords:** psychological; characteristics; of entrepreneurship.

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## INTRODUCTION

Millennial generation is required to create innovations, creative, innovative ideas, wisely to use social media as well as technology and information to create business opportunities in this current era. Dealing with case in China, sustainable economic development is supported by increasing national innovation and reducing the growing social pressures in the workplace, including entrepreneurship ([Zhang et al.](#), 2013). However, a different situation occurs in Indonesia, entrepreneur cannot be used as a career path. This is evidenced by the population who work as entrepreneurs only 1.65 percent. It is compared to other ASEAN countries such as Malaysia and Singapore, there has been an increase in the number of business actors from all fields, this has helped growth and the national economy such as increasing job opportunities ([Silalertruksa et al.](#), 2012). Currently, entrepreneurship among teenagers is in great demand and has even become a trend. Teenagers as entrepreneurs have a great desire to take advantage of opportunities as entrepreneurs, they do not need to open a shop or outlet but they merely utilize social media.

This is proven that 7.2 million Micro, Small and Medium Enterprises (MSMEs) have used the internet to promote their products. Around 36 percent have developed their business through the internet ([Dijkman et al.](#), 2015). The concept of entrepreneurial psychology creates individuals, especially teenagers who have an interest and desire to become an entrepreneur, in order to develop creative

ideas and ideas in their business. Researchers have developed entrepreneurial psychology as an object of study related to entrepreneurship in a psychological perspective ([Yang et al.](#), 2011).

According to experts, entrepreneurship activities among teenagers have started from the decision to become an entrepreneur. It is predicted that there are physical and psychological factors that influence it. Physical factors such as social support, sources of capital and psychological factors such as awareness, belief, knowledge, skills, ways of thinking and capacity ([Aben et al.](#), 2018). According to them, the psychological characteristics of entrepreneurship are controlled by the main factors, namely the way of thinking about entrepreneurship, awareness of their capacity as entrepreneurs, awareness of emotional management and the ability to understand the importance of social relationships ([Gao et al.](#), 2013).

In addition, especially among students, entrepreneurship has become part of the high school or vocational education curriculum, because schools can be the birthplace of young entrepreneurs. This is in connection with the Presidential Instruction of the Republic of Indonesia No. 4 of 1995 concerning the National Movement to Socialize and Cultivate Entrepreneurship, one of the activities that can be carried out is the insertion of messages in formal and informal education curricula. Schools become a place of learning to become entrepreneurs, therefore it is hoped that schools can make a change and transform creative ideas by encouraging students to foster

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entrepreneurial interest ([Olokundun et al., 2018](#)).

The psychological character of entrepreneurship according to Zhang (2013) which plays a role in the growth of entrepreneurial desire among students is divided into five. One of them is capacity, the entrepreneurial capacity proposed by ([Clarysse et al., 2011](#)) that capacity includes organization and management, interpersonal skills, innovation as well as physical and mental qualities. The second character discussed by [Eccles & Roeser 2011](#)) is belief, an individual's belief about his or her ability to carry out or do something to achieve a goal and belief is one aspect that affects adolescent development ([Steinbeis & Crone, 2016](#)).

Another part that plays a role in the psychological character of entrepreneurship according to ([Hu et al., 2018](#)) is consciousness. Consciousness aspect is difficult to understand, difficult to explain, and difficult to know why consciousness develops, consciousness includes sensitivity to oneself and thoughts about various experiences. Further, the psychological character of entrepreneurship that is related according to ([Steinbrink et al., 2020](#)) is motivation. Motivation according to ([Wong, 2015](#)) is a psychological process of internal encouragement or invitation that drives an individual to behave, as a force to achieve a goal. Furthermore, according to ([Altinay et al., 2012](#)), the last psychological characteristic of entrepreneurship is a provision or determination, which is usually called determination. According to ([Yihong et al., 2007](#)) also revealed that there are significant differences in certain factors in

different types of students at universities in China. The differences related to gender, in his research indicated that male students were significantly higher than female students, the entrepreneurial motivation character of male students was also higher than female students. However, character of entrepreneurial consciousness, female students were significantly higher than male students.

Pekanbaru is one of the cities in Indonesia that many societies interested in in business development. Various small-capital to large-capital businesses contribute to the development of the community's economy. This is inseparable from the participation of the society, especially teenagers, in developing and realizing entrepreneurial character. Every year the number of MSMEs in Riau increases by around 5-10 percent, Pekanbaru City is the area with the highest number of MSMEs, namely 68,728 MSMEs, which are engaged in trade, services, production, and industry ([MSMEs, 2016](#)). Therefore, it is necessary to conduct research to describe the psychological character

istics of entrepreneurship in adolescents based on gender. This study discussed about how the description of the psychological characteristics of entrepreneurship in male and female students at SMK Muhammadiyah 1 Pekanbaru City.

## METHODS

This study examined on the five aspects of the entrepreneurial psychology characteristics. They are the capacity

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aspect, the belief aspect, the consciousness aspect, the motivation aspect and the determination aspect. Further, this study was undertaken for a week starting from March 6, 2019 to March 12, 2019 with a total sample of 206 vocational high school students. This research was conducted by distributing research scales or questionnaires to students and distributed via google form to students who were doing internships or were not at the research location. After a week of distribution, the research scale collected were 206 students consisting of 3 classes at SMK Muhammadiyah 1 Pekanbaru. Data processing used a computer program through the SPSS 20.00 application for Windows.

Basically, in this study, the population was students at SMK Muhammadiyah 1 Pekanbaru, which amounted to 960 students. They were chosen because vocational education is built with the aim of forming a skilled, competitive and competent workforce from an early age. The sampling technique used in this study was purposive sampling, which is a technique to determine the number of research samples with certain considerations with the aim that the data obtained can be more representative.

The number of female respondents was 130 students or 63.1 percent, while for male respondents there were only 76 students or around 36.9 percent. It can be concluded that female respondents were more dominant than male respondents in terms of gender. While the most respondents were at the age of 16 years by 78 students or 37.9 percent, then the age of 17 years became the second largest age, namely 76

students or 36.9 percent, followed by the age of 18 years around 28 students or 13.5 percent and the age of 15 years around 22 people or 10.7 percent, then 19 years of age became the least number of respondents, namely 2 students with a percentage of 1.

Then, it is viewed from the class background of students of SMK Muhammadiyah 1, it can be seen that the most respondents were in the background of grade 10 students with a frequency of 92 people or 44.7 percent, while the second largest respondent was in class 12 students with a frequency of 65 people or 31.6 percent, and the last one had the least respondents came from the background of grade 11 students with a frequency of 49 people or about 23.8 percent. Thus, it can be concluded that there are more respondents with 10th grade background compared to 11th and 12th grade students.

The data collection method is part of the data collection instrument that determines the success or failure of a study (Bungin, 2005). To obtain data, the researcher distributed questionnaires about psychological characteristics to the respondents. Each response to the attitude statement can then provide conclusions about the direction of the characteristics of entrepreneurial psychology. Respondents who were given a questionnaire were deemed to be in accordance with the criteria that the researcher needed. To obtain relevant and accurate data in this study, a scale method was used on the variables of entrepreneurial psychology characteristics. The scale items in this study were compiled using a Likert scale model, consisting of five commonly used

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categories: S Strongly Agree (SS), Agree (S), Neutral (N), Disagree (TS), and Strongly Disagree (STS).

Then, the analysis in this study was carried out by using the CFA test using the Mplus software (Muthen & Muthen, 2003) and descriptive analysis in this study was carried out using the SPSS program. The program is able to perform both linear and nonlinear analysis, making it easier to adjust to the research analysis design that will be carried out in this study (Muthen & Muthen, 2015).

## RESULTS AND DISCUSSION

### A. Research Field Orientation

In this study, the researcher chose SMK Muhammadiyah 1 Pekanbaru City, it is located on Street Senapelan No. 10A Pekanbaru, Riau. In this study, the authors took the subject of research, namely the vocational high school students who have the potential to do entrepreneurship. Based on known history, in 1969 a man named Khairuddin Abbas and several of his colleagues at STM Negeri in Pekanbaru wanted to establish STM

Muhammadiyah and then conveyed their wishes to the leaders of the Regional Muhammadiyah of Pekanbaru City, then their wishes were welcomed by the regional Muhammadiyah leaders in October 1969. On October 1969, Khairuddin Abbas was appointed as the principal and one of his colleagues was appointed as the deputy principal. It was formed into two departments, namely the Department of Building and the Department of Machinery. Then on January 14, 1970, Khairuddin Abbas was re-appointed as the principal of STM Muhammadiyah Pekanbaru, as well as the start of the teaching and learning process and the date and year of the establishment of STM Muhammadiyah Pekanbaru. Where the location is riding in the former SGTK Aisyiah building which was occupied by Diniyah Putri in the morning and in the afternoon by STM Muhammadiyah Pekanbaru. Along with technological advances and the development of education in Indonesia, in 1997 STM Muhammadiyah Pekanbaru changed its name to SMK Muhammadiyah 1 Pekanbaru until now.

**Table 1.** Research Score Range

Research variable	Possible X scores (hypothetical)				The assumed X scores (hypothetical)			
	Male				Female			
	X Min	X Max	Average	SD	X Min	X Max	Average	SD
Capacity	22.27	71.34	20	8.18	25.86	71.34	20	7.58
Belief	7.06	62.17	12	9.19	24.30	62.17	12	6.31
Consciousness	.94	58.37	10	9.57	22.30	58.37	10	6.01
Motivation	22.90	65.40	10	7.08	20.02	65.40	10	7.56
Determination	30.06	63.02	8	5.49	32.98	63.02	8	5.01

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Dealing with the description of the hypothetical data above, for the hypothetical gender data, it can be seen that the average value for the capacity aspect variable is 20 for both sexes with a standard deviation of 8.18 for male students and 7.58 for female students. In the aspect of belief, the average value for male and female students is 12 with a standard deviation of 9.19 for male students and 6.31 for female students. In the aspect of consciousness, the average value for male and female students is 10 with a standard deviation of 9.57 for male students and 6.01 for female students. In the aspect of motivation, the average value for male and female students is 10 with a standard deviation of 7.08 for male students and 7.56 for female students. In terms of determination, the average score for male and female students is 8 with a standard deviation of 5.49 for male students and 7.01 for female students. It is known that the demographic data on male and female students have a balanced hypothetical mean score and the standard deviation score for the male gender is higher than that of the female gender. There are five categories that used in this study, namely very high, high, medium, low, and very low which were determined by the following norms:

### **1. Hypothetical Categorization of Capacity Aspects**

The results showed that the range of hypotheses values with male gender, obtained 97.4 percent of respondents who had a very high level of capacity. Respondents who

had a capacity level in the high categorization were 1.3 percent and the medium category had a capacity level of 1.3 percent, while the low and very low categories had 0 percent in the capacity categorization. Whereas, in the range of hypothetical values with female gender, there were 98.5 percent of respondents who had a very high level of capacity. Respondents who had a high level of 1.5 percent and at the level of the medium, low, very low category were 0 percent.

### **2. Hypothetical Categorization of Belief Aspects**

It indicated that the range of hypothetical values with male gender, 97.4 percent of respondents who had a very high level of confidence. Respondents who had a high level of confidence in the categorization were 1.3 percent. and the medium category had a confidence level of 1.3 percent, while the low and very low categories had a confidence level of 0 percent. While in the range of hypothetical values with female gender, there were 100 percent of respondents who had a very high level of confidence. Respondents who had high, medium, low, very low categories were 0 percent.

### **3. Hypothetical Categorization of Consciousness Aspects**

It indicated a range of hypothetical values with male gender, 96.1 percent of respondents who had a very high

level of awareness. Respondents who had a high level of awareness of categorization were 2.6 percent and the medium categorization had consciousness level of 1.3 percent, while the low and very low categories had 0 percent in the consciousness categorization. Whereas, in the range of hypothetical values with female gender, there were 96.9 percent of respondents who had a very high level of consciousness. Respondents who had a high level of 3.1 percent and at the level of the medium, low, very low category were 0 percent.

#### **4. Hypothetical Categorization of Motivation Aspects**

It showed the range of hypothetical values with male gender, there were 100 percent of respondents who had very high motivation characteristics. Respondents with the high, medium, low, very low categories were 0 percent in the categorization level. Whereas, in the range of hypothetical values with female gender, there were 99 percent of respondents who had a very high level of motivation. Respondents who had a high level of 1 percent and at the level of the medium, low, very low category were 0 percent.

#### **5. Hypothetical Categorization of Determination Aspects**

It found that the range of hypothetical values with male and female sexes in the aspect of determination, both of them were

100 percent of respondents who had very high character determination and at the level of high, medium, low, very low categories 0 percent. From gender demographic data, for statistical description data of research variables on male gender, it can be assessed that the average value for the capacity aspect is 49.86 with a standard deviation of 9.60. In the aspect of belief, the average value was 51.26 with a standard deviation of 9.93. In the aspect of consciousness, the average value was 49.87 with a standard deviation of 9.10.51. In the aspect of motivation, the average value was 50.44 with a standard deviation of 9.24. In terms of determination, the average value was 49.74 with a standard deviation of 7.38. while for statistical description data of research variables on the female sex has a balanced average, in the aspect of capacity the average value was 50.08 with a standard deviation of 8.75. In the aspect of belief, the average value was 49.27 with a standard deviation of 9.04. In the aspect of consciousness, the average value was 50.07 with a standard deviation of 8.72. In the aspect of motivation, the average value was 49.74 with a standard deviation of 8.79. In terms of determination, the average value was 50.15 with a standard deviation of 7.10. Thus, it can be concluded that there was no significant difference based on gender

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demographic data. However, in the male gender, it was found that there was one aspect whose value was dominant, namely the belief aspect which can be further improved by providing special training on this aspect, while the female gender had a balanced average score in each aspect.

## B. Hypothesis Test

**Table 2.** *Independent Sample T-test*

Aspect	Gender	N	Mean dan SD	T
Capacity	Male	76	49.86 ± 9.6	t = -0.173
	Female	130	50.08 ± 8.75	t = -0.169
Belief	Male	76	51.26 ± 9.93	t = 1.469
	Female	130	49.27 ± 9.04	t = 1.434
Consciousness	Male	76	49.87 ± 10.51	t = -0.148
	Female	130	50.07 ± 8.72	t = -0.141
Motivation	Male	76	50.44 ± 9.24	t = 0.541
	Female	130	49.74 ± 8.79	t = 0.534
Determination	Male	76	49.74 ± 7.38	t = -0.399
	Female	130	50.15 ± 7.1	t = -0.395

Regarding to T value in Table above, it is known that there are not so significant differences between male students and female students. There are two aspects that significantly describe the psychological characteristics of entrepreneurship in male students and female students, namely the belief aspect and motivational aspect with the value of the belief aspect  $t = 1,469$  for male students and  $t = 1,434$  for female students, on the motivational aspect with a t value of  $= 0.541$  for male students and  $t = 0.534$  for female students. Therefore, it can be seen that the results of this hypothesis are in line

Homogeneity test was conducted to test the data in the t-test model was homogeneous or not. The results of the homogeneity test carried out on this research data are as follows:

### 1. Test the homogeneity of gender demographic data

Based on the results of the analysis of the data in the study, the following results were obtained:

with the results of descriptive analysis which explains that male and female students have balanced scores and there is no significant difference.

According to the results of data analysis that has been carried out on 206 samples, it was found that the average psychological characteristics of entrepreneurship in students based on gender in SMK Muhammadiyah 1 amounted to 76 male students and 130 female students were in the "very high" score range. The results of data analysis carried out in descriptive analysis showed that the average score range for male students was



51.26-49.74 while the average score for female students was 50.15-49.27. When it is viewed from the results of the hypothesis, it is known that there are not so significant differences between male students and female students. There are two aspects that significantly describe the psychological characteristics of entrepreneurship in male and female students, namely aspects of belief and aspects of motivation. This is in line with the research conducted that there is no relationship between gender and a person's desire to become an entrepreneur.

Although, women entrepreneurs and men entrepreneurs are generally the same, in some cases there are differences in the level of motivation in opening a business. According to Alma (2015) these differences include, among other things, female entrepreneurs are motivated to open a business because they want to excel and there is frustration in their previous job, while in men the motivation for entrepreneurship is higher than women because men are wiser in making decisions. In terms of business capital, male entrepreneurs are free to obtain sources of capital, while female entrepreneurs obtain sources of capital from savings, personal assets, and personal loans. It is rather difficult for women entrepreneurs to obtain bank loans

compared to men.

Regarding with the results of the CFA analysis carried out, a fit model was obtained for a set of psychological characteristic items with ( $z$ -value > 1.96) which meant that 30 of the 31 items were declared valid and able to be used as measurement references to determine that each aspect was able to describe psychological characteristics. on entrepreneurship in high school or vocational youth. This is in line with the results of Zhang's (2013) research which says that these five aspects can be used to measure the description of the psychological characteristics of entrepreneurship in students. This research raises new evidence that between male students and female students there is no significant difference, thus, this study refutes one of the statements put forward which asserts that there are significant differences between male and female students in overview of the psychological characteristics of entrepreneurship.

The weakness of this study is that there is no comparison data on demographic data other than gender. If comparative data or research results regarding it are available, a comparative analysis can be carried out between the demographic data to see further whether there is a more significant difference in describing the five aspects or not. In addition, psychological studies on

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entrepreneurship are still lacking, so that researchers still lack a theoretical review in examining research problems.

## CONCLUSIONS

Dealing with data obtained from the results of the study, it can be concluded that the psychological characteristics of entrepreneurial beliefs and dominant motivational aspects produced high scores for male and female students at SMK Muhammadiyah 1 Pekanbaru. Other findings also indicated that there was no significant difference between male and female students in the desire for entrepreneurship. The results of the psychological characteristics of entrepreneurship showed that the majority of students of SMK Muhammadiyah 1 Pekanbaru already had a desire to start being an entrepreneur, and from their psychology and it was known that male and female students played a similar role in becoming an entrepreneur.

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