## International Proceeding

Universitas Tulungagung 2025

# DEVELOPMENT AND VALIDATION OF AN ENTREPRENEURIAL INTEREST INSTRUMENT FOR AGRO-INDUSTRY VOCATIONAL SCHOOL STUDENTS TO SUPPORT WORK READINESS

Edy Raharjo<sup>1</sup>, Ratna Suhartini<sup>2</sup>

12 Surabaya State University

edy.23005@mhs.unesa.ac.id

#### **Abstract**

This research aims to develop and validate an instrument of entrepreneurial interest for vocational high school (SMK) students in the agroindustry sector to support job readiness. This study was conducted on 27 students of SMK Negeri Bandar Pacitan using a Likert scale questionnaire. Data analysis was carried out descriptively with the help of the SPSS version 27 program. The results of the validity test using Pearson's product moment method showed that 20 question items, 18 were declared valid and 2 were invalid, indicating that most of the items had good construct suitability. The reliability test produced *a Cronbach's alpha value* of 0.903 which is included in the very reliable category, so that the instrument is considered consistent and stable in measuring entrepreneurial interest. The descriptive analysis showed an average between items of 2.96 to 3.78 which illustrates that students have a high to very high level of entrepreneurial interest. Overall, the instruments developed have proven to be valid, reliable, and effective in measuring the entrepreneurial interest of vocational school students in the agro-industry, and can be the basis for educators in designing learning strategies and entrepreneurship development programs to improve the work readiness of graduates.

**Keywords:** Entrepreneurship, entrepreneurial interest, validity, reliability, agroindustry, vocational school.

#### INTRODUCTION

Entrepreneurship (*Entrepreneurship*) is the ability to think creatively and act innovatively as the basis and strategy in facing life's challenges. Suryana, 2003 (in Bondan & Farikah, 2018) defines entrepreneurship as an ability (*Ability*) in creative thinking and innovative behavior which is used as the basis, resources, driving force, goals, strategies, tips and natural processes to face life's challenges. Literally, entrepreneurship can be interpreted as the courage of a person to carry out independent activities, both commercial and non-commercial, with an innovative and progress-oriented spirit.

Entrepreneurial interest does not arise instantly, but is influenced by internal factors such as willingness and interest, as well as external factors such as family support and the community environment. The results of the latest research show that entrepreneurial knowledge and individual attitudes contribute significantly to the entrepreneurial intention of

vocational school graduates (Maulida et al., 2024). In addition, learning motivation and creativity are also important factors in increasing the entrepreneurial interest of vocational students (Priyono P., 2024). The educational environment and family support have been shown to strengthen this interest through increased *self-efficacy* student (Rosniawati & Yunizar, 2025). Even industrial practice or real work experience can strengthen the influence of entrepreneurship education on entrepreneurial intentions (Aliyah, U., Suparno, S., & Pratama, 2025). On the other hand, the characteristics of an ideal entrepreneur include creativity, innovation, leadership skills, courage to take risks, and independence. These elements are not only an overview of the quality of the entrepreneurial self, but also an indicator that can be used to measure a person's entrepreneurial potential during the education period (Dalyanto et al., 2021).

In the context of vocational education, especially in the field of agroindustry, the growth of interest in entrepreneurship has high urgency. Vocational education is aimed at producing job-ready graduates, not only as industrial workers but also as creators of new business opportunities. Therefore, a valid, reliable, and appropriate instrument is needed to accurately measure entrepreneurial interests. A good instrument will help educators in designing learning strategies and more effective entrepreneurial development programs so that they can increase the work readiness of graduates.

Based on this urgency, this research aims to develop and validate instruments of entrepreneurial interest for vocational school students in the field of Agroindustry. The results of this research are expected to produce standardized, accurate, and useful measuring tools in supporting the increase in entrepreneurial interest and work readiness of SMK Negeri Bandar Pacitan students.

#### LITERATURE REVIEW

#### **Entrepreneurship and Vocational Education**

Entrepreneurship is the ability of individuals to create added value through innovation, creativity, and the courage to take risks in managing opportunities. (Kennard, 2021) states that at the heart of entrepreneurship is innovation, which is the ability to turn ideas into productive actions that generate economic value. In the context of education, entrepreneurship plays an important role in shaping human resources that are independent, competitive, and adaptive to changes in the work environment.

In vocational education, especially in the field of agroindustry, entrepreneurship is an important part of skills-based and practice-based learning. Vocational education not only aims to prepare a skilled workforce, but also encourages students to be able to think creatively and create new job opportunities in the agricultural and food industry sectors. (Wu & Tian, 2022) explained that entrepreneurship learning in vocational schools has a significant influence on increasing entrepreneurial intentions through the formation of *Entrepreneurial Self-Efficacy* and a positive attitude towards risk. In line with that, (Gorostiaga et al., 2019) It was found that the entrepreneurial orientation of vocational training students was positively correlated with confidence, creativity, and personal initiative.

Therefore, in agro-industrial vocational education, entrepreneurial skills need to be developed along with technical skills. This is an important basis for efforts to develop instruments that are able to accurately measure the entrepreneurial interests of vocational students as part of a strategy to increase the work readiness and independence of graduates.

#### **Entrepreneurial Interests and Job Readiness**

Job readiness (*Work readiness*) is defined as the ability of individuals to adjust to the demands of the world of work, both in terms of technical, social, and psychological competence. According to (Jari & Satwika, 2025), the work readiness of vocational students is influenced by *Learning agility*, social support, and the ability to adapt to the work environment. Based on research from (Tahir et al., 2024) It shows that entrepreneurial knowledge, industry practice experience, and family support have a positive effect on entrepreneurial readiness is not only related to the intention to open a business, but also becomes one of the indicators of job readiness.

In the context of vocational school students in the agro-industry, job readiness includes the ability to manage the production process, innovate products, and understand business opportunities in the modern agricultural sector. Students who have a high interest in entrepreneurship tend to be better prepared to face the world of work because they have high confidence, responsibility, and the ability to take initiative. Therefore, the development of the validation of instruments of entrepreneurial interest is an important step to support educational and vocational goals in producing graduates who are not only ready to work, but also ready to be independent entrepreneurs. This instrument is expected to be a measuring tool that assesses the success of entrepreneurship education programs in vocational schools in the agro-industry sector and becomes the basis for curriculum development oriented towards the independence and competitiveness of graduates.

#### RESEARCH METHOD

#### Population and sample

Population is a collection of subjects, concepts, variables or phenomena (Morissan, 2012). Meanwhile, according to (Sugiyono, 2022), populations and samples are subjects/objects that have qualities and characteristics that are compiled by researchers to draw conclusions. This study involved students from SMK Negeri Bandar Pacitan with a total of 27 students.

#### **Measuring instruments**

The measuring tool used in this study is in the form of a scale questionnaire *Likert* developed to collect research-related data (Abubakar, 2021). This instrument is used to obtain quantitative data that describes the level, perception, and tendency of respondents to each of the research variables. This research instrument is in the form of a closed questionnaire using a scale *Likert* four levels, which allow respondents to give an assessment of each statement according to the respondent's level of approval shown in Table 1.

Table 1. Likert Scale Indicator Assessment

Value Scale	Interpretation		
4	Strongly agree		
3	Agree		
2	Dissent		
1	Strongly Disagree		

#### Data analysis

The selection of this data analysis technique is based on the purpose of the research, which is to determine the validity of the instruments of entrepreneurial interest of vocational school students in agroindustry in Pacitan City. Therefore, the data analysis technique used is descriptive analysis. The data analysis processing is carried out using *the international business machines* (IBM) Corporation SPSS 27 program for windows.

#### RESULT AND DISCUSSION

#### **Testing the Validity of Instruments of Entrepreneurial Interest**

In this study, this sample consisted of 27 students of SMK Negeri Bandar Pacitan who were given 20 questions related to their interest in entrepreneurship. The validity tester was carried out using the SPSS version 27 program through *Pearson's product moment method*, obtaining a *corrected item-total correlation* value between -0.089 to 0.789. Using the r-table value of 0.381 (n=27. $\alpha$ =0.05), it is known that as many as 18 statements have a correlation value above the r-table so that they are declared valid, while 2 statements have a correlation value below the r-table and are declared invalid. Therefore, it can be concluded that most of the items in this instrument have a good construct suitability and are suitable for research on the entrepreneurial interests of SMK Negeri Bandar Pacitan students in the field of agroindustry in supporting work readiness.

Table 2. Test the Validity of the Entrepreneurial Expression of Interest Instrument

**Item-Total Statistics** 

#### Cronbach's Scale Variance Scale Mean if Corrected Item-Alpha if Item if Item Deleted **Total Correlation Item Deleted Deleted** 62.70 32.217 .899 Pernyataan 1 .504 .897 Pernyataan 2 62.56 31.718 .589 Pernyataan 3 62.93 32.148 .539 .898 31.362 .639 .895 Pernyataan 4 63.15 .899 Pernyataan 5 62.78 32.333 .507 .658 .895 Pernyataan 6 62.33 32.000 Pernyataan 7 62.67 34.154 .125 .910 33.641 .338 .902 Pernyataan 8 63.11 Pernyataan 9 62.89 32.564 .536 .898 .894 31.003 .669 Pernyataan 10 62.81

Pernyataan_11	63.04	31.191	.626	.895
Pernyataan_12	62.96	30.883	.612	.896
Pernyataan_13	62.96	30.729	.730	.892
Pernyataan_14	62.85	31.823	.657	.895
Pernyataan_15	62.63	30.627	.789	.891
Pernyataan_16	63.07	35.610	089	.917
Pernyataan_17	62.78	31.718	.626	.896
Pernyataan_18	62.41	32.174	.558	.897
Pernyataan_19	62.44	31.410	.686	.894
Pernyataan_20	63.04	31.729	.632	.896

#### **Testing the Reliability of Instruments of Entrepreneurial Interest**

The reliability test aims to find out the extent to which the research instrument provides consistent and stable results if used repeatedly under the same conditions. The reliability test in this study was carried out using the SPSS program version 27 with *the Cronbach's alpha model*, which is the most commonly used method to measure the internal consistency of instruments in the form of *a Likert scale*.

Based on the results of the test on 20 statements regarding the entrepreneurial interest of vocational school students in the agro-industry, *a Cronbach's alpha value* of 0.903 was obtained. This value shows a very reliable category, meaning that each statement item has a strong internal consistency and supports each other in measuring the same construct, namely the entrepreneurial interest of SMK Negeri Bandar Pacitan students in the field of agroindustry.

Table 3. Testing the Reliability of Instruments of Entrepreneurial Interest

### **Reliability Statistics**

Cronbach's Alpha	N of Items	
.903	20	

#### **Descriptive Analysis of Entrepreneurial Interest**

From the results of the descriptive analysis of 20 questions of entrepreneurship interest instruments filled out by 27 students, an average score from 2.96 to 3.78 with a standard deviation of 0.392-0.602 was obtained. The highest average values were statements 6 with a mean of 3.78 and a standard deviation of 0.424, statements of 18 mean of 3.70 and standard deviation of 0.465, and statements of 19 mean of 3.67 and standard deviation of 0.480 which showed that the aspect of entrepreneurial interest in the item was the most prominent. On the other hand, there are statements with a lower average value in the 4 mean statement of 2.96 and a standard deviation of 0.518.

Table 4. Descriptive Analysis of Entrepreneurial Interest

	$\mathbf{N}$	Mean	<b>Std. Deviation</b>
Pernyataan_1	27	3.41	.501
Pernyataan_2	27	3.56	.506
Pernyataan_3	27	3.19	.483
Pernyataan_4	27	2.96	.518
Pernyataan_5	27	3.33	.480
Pernyataan_6	27	3.78	.424
Pernyataan_7	27	3.44	.577
Pernyataan_8	27	3.00	.392
Pernyataan_9	27	3.22	.424
Pernyataan_10	27	3.30	.542
Pernyataan_11	27	3.07	.550
Pernyataan_12	27	3.15	.602
Pernyataan_13	27	3.15	.534
Pernyataan_14	27	3.26	.447
Pernyataan_15	27	3.48	.509
Pernyataan_16	27	3.04	.587
Pernyataan_17	27	3.33	.480
Pernyataan_18	27	3.70	.465
Pernyataan_19	27	3.67	.480
Pernyataan_20	27	3.07	.474
Valid N (listwise)	27		

Overall, these results show that students' entrepreneurial interest is at a high to very high level, with most answers tending to be systematic, but there are some statements that show variations in responses between students. From the results of these findings, it can be said that students have a positive interest in entrepreneurship, while some aspects can be further strengthened in learning.

#### LET'S DISCUSS

The results of the study show that the developed entrepreneurial interest instruments have met the criteria of validity and good reliability. Of the 20 statements, 18 were declared valid with a correlation value above 0.381 which indicates that most items are able to measure the construct of entrepreneurial interest consistently. Two invalid items indicate an inappropriate statement that needs to be corrected.

Value *Cronbach's Alpha* 0.903 indicates very high reliability, so the instrument has a strong internal consistency and reliable measurement results. This result is in line with the opinion (Abubakar, 2021) that the instrument is said to be reliable if the alpha value exceeds 0.70. The descriptive analysis showed an average score of 2.96 to 3.78 which showed that students' entrepreneurial interest was in the high to very high category. Some aspects such as

entrepreneurial interest seem dominant, while the aspect of courage to take risks still needs to be improved.

Overall, this instrument has proven to be effective in measuring the entrepreneurial interest of vocational school students in the agro-industry field and can be used by educators as a basis for designing learning and entrepreneurship development programs to improve students' job readiness.

#### **CONCLUSION**

This research has succeeded in developing and validating an instrument of entrepreneurial interest aimed at vocational school students in the agroindustry sector to support job readiness. Based on the results of the validity test of the 20 statements prepared, there are 18 valid items and 2 invalid items, so in general this instrument has a good construction and is suitable for use.

The results of the reliability test showed a *Cronbach's alpha* value of 0.903 which was included in the very reliable category, indicating that the statement item has high internal consistency in measuring the construct of entrepreneurial interest. Descriptive analysis of the responses of 27 students showed an average score between items with a score of 2.96 to 3.78, which indicates that in general students have a high to very high interest in entrepreneurship. Some of the highest-scoring items indicate that students tend to have a strong interest in entrepreneurial activities and a readiness to innovate.

Overall, the results of this study confirm that the instruments developed are valid, reliable and effective to measure the entrepreneurial interest of agroindustrial vocational school students. From this research, it can be used as a basis for educators in designing learning strategies and entrepreneurship development programs to strengthen the work readiness and independence of vocational school graduates.

#### REFERENCES

- Abubakar, R. (2021). Introduction to Research Methodology. In *SUKA-Press UIN Sunan Kalijaga* (Vol. 1, September Number).
- Aliyah, U., Suparno, S., & Pratama, A. (2025). The Influence of Entrepreneurship Education on Entrepreneurial Intention with Industrial Work Practice as a Mediating Variable among Vocational School Students in Jakarta. *TOFEDU: The Future of Education Journal*, 4 (7), 2791–2803.
- A., Morissan M., et al. (2012). Survey Research Methods. Jakarta: Kencana
- Bondan, S., & Farikah. (2018). *Lay out INTRODUCTION TO ENTREPRENEURSHIP THEORY-Print(1)*. *August*, 17–18.
- Dalyanto, A., Sajidan, Siswandari, & Sukarmin. (2021). Developing instrument to measure entrepreneur skills of vocational school students based on sustainable development. *Journal of Physics: Conference Series*, 1842(1). https://doi.org/10.1088/1742-6596/1842/1/012025
- Gorostiaga, A., Aliri, J., Ulacia, I., Soroa, G., & Balluerka, N. (2019). Assessment of Entrepreneurial Orientation in Vocational Training Students: Development of a New Scale and Relationships with Self-Efficacy and Personal Initiative. 10(May), 1–10. https://doi.org/10.3389/fpsyg.2019.01125

- Jari, Z. A., & Satwika, P. A. (2025). Work readiness among vocational high school students: Learning agility and perceived social support. 22(August), 115–126. https://journal1.uad.ac.id/index.php/Humanitas/article/view/1327/834
- Kennard, M. (2021). *Innovation and Entrepreneurship* (1st Edition). Routledge. https://doi.org/https://doi.org/10.4324/9781003052258
- Maulida, F. H., Noviani, L., & Sudarno, S. (2024). Exploring Entrepreneurial Intentions among Vocational High School Graduates: The Impact of Entrepreneurial Knowledge and Attitude. *Indonesian Journal of Social Research (IJSR)*, 6(2), 77–91. https://doi.org/10.30997/ijsr.v6i2.449
- Priyono, P. (2024). The Influence of High School Students' Learning Motivation on Learning Burnout. *Journal of Education, Humanities and Social Sciences*, 26(1), 827–831. https://doi.org/10.54097/x37xzd61
- Rosniawati, D., & Yunizar, Y. (2025). Enhancing entrepreneurial intentions among vocational high school students. *JPPI (Indonesian Journal of Education Research)*, 11(1), 66–76. https://doi.org/10.29210/020255012
- Sugiyono. (2022). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alphabet.
- Suryana, 2003. Entrepreneurship, Practical Guidelines, Tips and Processes to Success, Jakarta: PT. Salemba Four.
- Tahir, S., Tahir, T., Aziz, M., & Gani, H. A. (2024). The Effect of Entrepreneurship Learning , Entrepreneurial Knowledge , Industrial Work Practice Experience , and Family Environment on Entrepreneurial Interest with Self-Efficacy as an Intervening Variable for State Vocational Students in Makassar City. *International Journal of Education, Vocational and Social Science*, 03(01), 21–38.
- Wu, X., & Tian, Y. (2022). Predictors of Entrepreneurship Intention Among Students in Vocational Colleges: A Structural Equation Modeling Approach. 12(January). https://doi.org/10.3389/fpsyg.2021.797790