

Internal locus of control and entrepreneurial intention: A study on vocational high school students

Fatwa Tentama, Fakhri Abdussalam

Faculty of Psychology, Ahmad Dahlan University, Indonesia

Article Info

Article history:

Received Aug 29, 2019
Revised Nov 06, 2019
Accepted Nov 12, 2019

Keywords:

Entrepreneurial intention
Internal locus of control
Vocational high school

ABSTRACT

Internal locus of control is one of the factors related to vocational high school students' entrepreneurial intention. This study aimed to empirically test the relationship between internal locus of control and entrepreneurial intention on vocational high school students. The population in this study was all students of class XII at Vocational High School 5 Yogyakarta as many as 392 students and research participants in total was 171 students. The sampling technique used was cluster random sampling. Data collection was conducted by using the scale of entrepreneurial intention and internal locus of control scale. Data analysis was done using product moment analysis technique. The results of data analysis showed a significant positive relationship between internal locus of control with entrepreneurial intention, with a significance level (p) of 0.030. Internal locus of control contributed 2.1 percent to entrepreneurial intention so that the remaining 97.9 percent was influenced by other variables. It could be concluded from this study that students' internal locus of control can predict student's entrepreneurship intention.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Fatwa Tentama,
Faculty of Psychology,
Ahmad Dahlan University,
Jl. Kapas No.9, Semaki, Umbulharjo, Yogyakarta.
Email: fatwa.tentama@psy.uad.ac.id

1. INTRODUCTION

Entrepreneurship has become very important in modern times, both for survival and sustainability of the society [1]. Entrepreneurship comes with the hope of becoming an economic competition in the global market and providing job opportunities. Entrepreneurship could generate higher profits and meaningful careers [2]. A study found that the development of entrepreneurship has succeeded in increasing the overall welfare of the nation [3]. The benefits resulting from entrepreneurship can contribute to economic development by increasing the quality of life, offering new jobs, promoting sector productivity, increasing economic growth, facilitating social mobility, and so on [4].

One of the first steps to start entrepreneurship is to have entrepreneurial intention. The entrepreneurial intention represents an individual's commitment to start a business [5]. Entrepreneurial intention can influence the emergence of entrepreneurial behavior in the future [6]. Individuals with entrepreneurial intention believe that they can successfully start new businesses [7]. Entrepreneurial intention is the intention of individuals to start their businesses [8]. Entrepreneurial intention is described as the awareness and belief that individuals use to start new businesses in the near future [9]. It is a conscious state of mind based on experience that directs attention to starting an independent business [10]. Commitment to start a new business and a tendency to act as the leading force allow individuals to create new businesses

[11]. Entrepreneurial intention can also be described as an individual's state of mind to start a new business or create innovations in an existing organization [12].

One factor that is believed to be able to increase individual intention and belief in entrepreneurship is the internal locus of control [13, 14]. More extensive research on entrepreneurship has explored the significant positive effects of internal locus of control on entrepreneurial intention [15, 16]. The results of several studies found that internal locus of control can act as a positive predictor of entrepreneurial intention. Additionally, the findings also show that internal locus of control is critical to building individual intention in entrepreneurship [17]. Personality traits such as locus of control play a decisive role in increasing entrepreneurial intention, as individuals with an internal locus of control believe that they will succeed in entrepreneurship [18]. Internal locus of control is the individual's perception that an event depends on the behavior or the characteristics inherent in the individual [19]. Every individual has full control over the results they obtained through ability, effort, or skills [20]. Individual behavior will determine the events of his/her life [21]. Each individual has their responsibility for success and failure in learning [22]. Individuals with an internal locus of control also think that extraordinary experiences are caused by stable behavior or characteristics of individuals [23, 24]. Individuals with an internal locus of control believe that they can make changes through their behavior [25].

This study aims to empirically test the relationship between internal locus of control and entrepreneurial intention in Vocational High School 5 Yogyakarta students.

2. RESEARCH METHOD

2.1. Population and sample

The population of this study is students of class XII at Vocational High School 5 Yogyakarta (392 students). A total of 171 students became sample of this study. The XII grade students are spread across seven majors: ceramics, visual communication design, carpentry, animation, metal, leather, and textiles. The selection of research participants was randomized using cluster random sampling techniques.

2.2. Data collection method

Data in this study was collected using research instruments. The scaling model used was Likert scale model. Entrepreneurial intention is expressed by the entrepreneurial intention scale constructed by researchers based on the dimensions of entrepreneurial intention according to Van Gelderen, Brand, Van Praag, Bodewes, Poutsma, and Van Gils [26], namely: desires, preferences, plans, and behavioral expectancy. Examples of items on the entrepreneurial intention scale are "I have a plan to start a business after graduation", "I will be an entrepreneur according to the expertise I have", "I hope that in the future I will have an entrepreneurial opportunity", and "I have aspirations to become an entrepreneur". The internal locus of control scale refers to the dimensions of the internal locus of control according to Lefcourt [27] namely: ability and effort. Examples of items in the internal locus of control scale include "My ability determines success", "I believe the ability that I have is able to complete all tasks", "I believe my effort will produce maximum results", and "I try to complete the assignments given by the teacher".

2.3. Instruments validity and reliability

The trial analysis of 74 subjects on the entrepreneurial intention scale obtained the results of the coefficient of reliability (α) of 0.883 with a range of corrected item-total correlation that moved from 0.325 to 0.723. Valid and reliable items used for research were 16 items. The trial analysis of 74 subjects on the internal locus of control scale obtained the results of the coefficient of reliability (α) of 0.907 with a range of corrected item-total correlation that moved from 0.401 to 0.688. Valid and reliable items used for research were 20 items.

2.4. Data analysis

Pearson product moment correlation analysis was the statistical analysis technique used to determine the relationship between internal locus of control with entrepreneurial intention. Before testing the hypothesis, an assumption test which included the normality and linearity tests was performed. Data analysis was performed using the IBM SPSS 19.0 for windows.

3. RESULTS AND ANALYSIS

3.1. Assumptions test

There are basic assumptions that must be met when want to use Pearson product moment correlation analysis to test the research hypothesis. The assumption test in this study is the normality test and linearity

test. Normality test is done to see the data obtained from samples with normal distribution or not. The normality test used is One-Sample Kolmogorov-Smirnov. Linearity test is performed to determine the relationship between the independent variable and the dependent variable is linear or not.

3.1.1. Normality test

Based on the results of the normality test analysis in Table 1, entrepreneurial intention had a Kolmogorov-Smirnov Z score of 1.090, $p = 0.185$ ($p > 0.05$) and the internal locus of control had a Kolmogorov-Smirnov score of $Z = 1.060$, ($p > 0.05$), meaning that each data was normally distributed so that it could be concluded that each variable had a normal data distribution.

Table 1. Normality test

Variable	K-SZ Score	Sig.	Annotation
Entrepreneurial Intention	1.090	0.185	Normal
Internal Locus of Control	1.060	0.211	Normal

3.1.2. Linearity test

The linearity test results shown in Table 2 obtained the value of F Linearity = 4.392, $p = 0.038$ ($p < 0.05$), indicating that there is a line that connects the internal locus of control with entrepreneurial intention. In other words, we can conclude that the data is linear.

Table 2. Linearity test

Variable	F Linearity	Sig.	Annotation
Entrepreneurial Intention * Internal Locus Of Control	4.392	0.038	$P < 0.05$ Linear

3.2. Hypothesis testing

Table 3 shows that the analysis results in the value of $r = 0.144$, $p = 0.030$ ($p < 0.05$), meaning that internal locus of control is positively and significantly related to student's entrepreneurship intention in Vocational High School 5 Yogyakarta. These results indicate that the proposed hypothesis is accepted, namely that an internal locus of control could predict entrepreneurial intention. This is in line with several previous studies which found that there is a positive relationship between internal locus of control and entrepreneurial intention [28-31]. Internal locus of control contributed 2.1% to entrepreneurial intention. Meanwhile, the remaining 97.9% is influenced by other variables. Factors influencing entrepreneurial intention include need for achievement [31-33], risk-taking behavior [29, 32, 34], creativity [28], social networking [33, 35] and tolerance for ambiguity [32].

Table 3. Pearson product moment correlation analysis

Variable	R	R Square	Sig.	r	Annotation
Internal Locus of Control and Entrepreneurial Intention	0.144	0.021	$P = 0.030$	0.144	$P < 0.01$ Significant relationship

Previous findings indicate that entrepreneurial characteristics significantly influence entrepreneurial intention [36]. Internal locus of control plays a role in building entrepreneurial intention and the decision to become an entrepreneur. Individuals with an internal locus of control believe that their decisions and actions can influence the success of their business [37]. A study found that individuals who have an internal locus of control tend to have a greater entrepreneurial intention [38]. Such individuals believe that they can turn their entrepreneurial intention into successful entrepreneurial behavior [15]. Successful entrepreneurs tend to focus more internally in managing their companies [39]. Internal locus of control is one of the characteristics of entrepreneurship.

Internal locus of control can direct individuals to develop entrepreneurial intention [40]. Some successful entrepreneurs claim that their success is due to the right decisions they have made (internal locus of control), not because of external factors such as destiny and luck [41]. Individuals with an internal locus of control tend to be bolder in taking the risk of building a business [42]. Individuals believe that they can control their environment because they have a clear vision of their new business [43]. Internal locus of control can help individuals build social networks to get information that supports their business. Individuals can actualize their business ideas in the future after collecting and managing all information obtained [36].

Entrepreneurship intention tended to increase when individuals are given entrepreneurship education that instills students' entrepreneurial characteristics such as internal locus of control. Individuals with an internal locus of control believe that hard work makes it possible to achieve success in business [36]. Internal locus of control is one of the essential characteristics of entrepreneurship [28]. Internal locus of control can increase the likelihood of individuals to become entrepreneurs [44]. Individuals who have an internal locus of control characteristics dare to take risks to start a business in the future [36, 45].

The implications of this study can provide insights, especially on vocational high school students regarding the ongoing use of current students' ability, both the knowledge and skills gained from school to foster entrepreneurial intention. The findings obtained indicated the ability and effort of individuals in the learning process at school tended to determine individual success in starting a business sooner than external factors. Individuals who believed in their abilities tended to have higher entrepreneurial intention. The results of this study were also beneficial for teachers. In addition to teaching vocational skills, teachers are also responsible for guiding students to maximize the potential of students' vocational skills. Thus, students can begin the process of entrepreneurship with maximum effort and results.

4. CONCLUSION

Internal locus of control could be a good predictor of student entrepreneurship intention in Vocational High School 5 Yogyakarta. There is a significant positive relationship between internal locus of control and entrepreneurial intention ($p= 0.030$). Internal locus of control contributes 2.1 percent in explaining about entrepreneurial intention. Thus, the remaining 97.9 percent is influenced by other variables outside the scope of this study.

ACKNOWLEDGEMENTS

The author would like to thank the Faculty of Psychology Ahmad Dahlan University Yogyakarta and Vocational High School 5 Yogyakarta for giving research permission and providing support in conducting this research so that it can be completed smoothly.

REFERENCES

- [1] Audretsch, D. B. *The entrepreneurial society*, New York: Oxford University Press, 2007.
- [2] Kuckertz, A., and Wagner, M. "The influence of sustainability orientation on entrepreneurial intentions investigating the role of business experience," *Journal of Business Venturing*, vol. 25, no. 5, pp. 524-539, 2010.
- [3] Kwon, S. W., and Arenius, P. "Nations of entrepreneurs: A social capital perspective," *Journal of Business Venturing*, vol. 25, no. 3, pp. 315-330, 2010.
- [4] Reynolds, P. D. *Entrepreneurship in the United States: The future is now*. New York: Springer, 2007.
- [5] Zapkau, F. B., Schwens, C., Steinmetz, H, Kabst, R., "Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention," *Journal of Business Research*, vol. 68, no. 3, pp. 639-653, 2015.
- [6] Krueger, N. F., Reilly, M. D., and Carsrud, A. L. "Competing models of entrepreneurial intentions," *Journal of Business Venturing*, vol. 15, no. 5-6, pp. 411-432, 2000.
- [7] Zhao, H., Seibert, S. E., and Hills, G. E. "The mediating role of self-efficacy in the development of entrepreneurial intentions," *Journal of Applied Psychology*, vol. 90, no. 6, pp. 1265-1272, 2005.
- [8] Yıldırım, N., Çakır, Ö., and Aşkun, O. B. "Ready to dare? A case study on the entrepreneurial intentions of business and engineering students in Turkey," *Procedia-Social and Behavioral Sciences*, vol. 229, pp. 277-288, 2016.
- [9] Thompson, E. R. "Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric," *Entrepreneurship Theory and Practice*, vol. 33, pp. 3, pp. 669-694, 2009.
- [10] Do Paco, A., Ferreira, J., Raposo, M., Rodrigues, R. G., & Dinis, A. "Entrepreneurial intention among secondary students: findings from Portugal," *International Journal of Entrepreneurship and Small Business*, vol. 13, no. 1, pp. 92-106, 2011.
- [11] Guerrero, M., Rialp, J., and Urbano, D. "The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model," *International Entrepreneurship and Management Journal*, vol. 4, no. 1, pp. 35-50, 2008.
- [12] Remeikiene, R., Dumciuviene, D., Startiene, G., "Explaining Entrepreneurial Intention of University Students: The Role of Entrepreneurial Education," *Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management, Knowledge and Learning International Conference*, pp. 299-307, 2013.
- [13] Zhao, H., and Seibert, S. E. "The Big Five personality dimensions and entrepreneurial status: A meta-analytical review," *Journal of Applied Psychology*, vol. 91, no. 2, pp. 259-271, 2006.
- [14] Zhao, H., Seibert, S. E., Lumpkin, G. T., "The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review," *Journal of Management*, vol. 36, no. 2, pp. 381-404, 2010.

- [15] Rauch, A., and Frese, M. "Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success," *European Journal of Work and Organizational Psychology*, pp. 16, no. 4, pp. 353-385, 2007.
- [16] Shane, S., and Nicolaou, N. "Creative personality, opportunity recognition and the tendency to start businesses: A study of their genetic predispositions," *Journal of Business Venturing*, vol. 30, no. 3, pp. 407-419, 2015.
- [17] Baldegger, U., Schroeder, S. H., and Furtner, M. R. "The self-loving entrepreneur: Dual narcissism and entrepreneurial intention," *International Journal of Entrepreneurial Venturing*, vol. 9, no. 4, pp. 373-391, 2017.
- [18] Brunel, O., Laviolette, E. M., and Radu-Lefebvre, M. "Role models and entrepreneurial intention: The moderating effects of experience, locus of control and self-esteem," *Journal of Enterprising Culture*, pp. 25, no. 02, pp. 149-177, 2017.
- [19] Rotter, J. B. "Internal versus external control of reinforcement: A case history of a variable," *American Psychologist*, vol. 45, no. 4, pp. 489-493, 1990.
- [20] Kaufmann, P. J., Welsh, D. H., and Bushmarin, N. V. "Locus of control and entrepreneurship in the Russian Republic," *Entrepreneurship Theory and Practice*, vol. 20, no. 1, pp. 43-56, 1995.
- [21] Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., and Kornazheva, B. P. "Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination," *Personality and Social Psychology Bulletin*, vol. 27, no. 8, pp. 930-942, 2001.
- [22] McInerney, D. M. *Educational psychology: Constructing learning*, New Jersey: Prentice Hall, 2013.
- [23] Mahboobi, M. R., and Sharifzadeh, A. "Entrepreneurship spirit among students of agricultural sciences, Gorgan University of agricultural sciences and natural resources, Iran," *Journal of Agricultural Education Administration Research*, vol. 25, pp. 39-52, 2013.
- [24] Sheikhan, N. "Promotion plans of women entrepreneurship in selected countries," *Social Welfare Journal*, vol. 40, no. 11, pp. 259-286, 2011.
- [25] Hwang, Y. H., Kim, S. I., and Jeng, J. M. "Examining the causal relationships among selected antecedents of responsible environmental behavior," *The Journal of Environmental Education*, vol. 31, no. 4, pp. 19-25, 2000.
- [26] Van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. "Explaining entrepreneurial intentions by means of the theory of planned behaviour," *Career Development International*, vol. 13, no. 6, pp. 538-559, 2008.
- [27] Lefcourt, H. M. *Locus of control: Current trends in theory and research*, Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, 1982.
- [28] Birdthistle, N. "An examination of tertiary students' desire to found an enterprise," *Education + Training*, vol. 50, no. 7, pp. 552-567, 2008.
- [29] Luthje, C., and Franke, N. "The making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT," *R&D Management*, vol. 33, no. 2, pp. 135-147, 2003.
- [30] Othman, H. N., and Ishak, S. B. "Attitude towards choosing a career in entrepreneurship amongst graduates," *European Journal of Social Sciences*, vol. 10, no. 3, pp. 419-434, 2009.
- [31] Rasheed, H. S. "Developing entrepreneurial characteristics in youth: The effects of education and enterprise experience," *International Journal of Entrepreneurship Education*, pp. 1-24, 2003.
- [32] Yusof, M., Sandhu, M., and Jain, K. "Relationship between psychological characteristics and entrepreneurial inclination: A case study of student at University Tun Abdul Razak (UNITAR)," *Journal of Asia Entrepreneurship and Sustainability*, vol. 111, no. 2, pp. 23-41, 2007.
- [33] Taormina, R. J., and Lao, S. "Measuring Chinese entrepreneurial motivation: Personality and environmental influences," *International Journal of Entrepreneurial Behavior & Research*, vol. 13, no. 4, pp. 200-221, 2007.
- [34] Josien, L. "Entrepreneurial orientation: An empirical study of the risk-propensity dimension of entrepreneurs," *Academy of Entrepreneurship Journal*, vol. 18, no. 1, pp. 21-34, 2012.
- [35] Chen, W. Y., Weng, C. S., and Hsu, H. Y. "A study of the entrepreneurship of Taiwanese youth by the Chinese Entrepreneur Aptitude Scale," *Journal of Technology Management in China*, vol. 5, no. 1, pp. 26-39, 2010.
- [36] Kusmintarti, A., Thoyib, A., Maskie, G., and Ashar, K. "Entrepreneurial characteristics as a mediation of entrepreneurial education influence on entrepreneurial intention," *Journal of Entrepreneurship Education*, vol. 19, no. 1, pp. 24-37, 2016.
- [37] Karabulut, A. T. "Personality traits on entrepreneurial intention," *Procedia-Social and Behavioral Sciences*, vol. 229, pp. 12-21, 2016.
- [38] Kristiansen, S., and Indarti, N. "Entrepreneurial intention among Indonesian and Norwegian students," *Journal of Enterprising Culture*, vol. 12, no. 1, pp. 55-78, 2004.
- [39] Raab, G., Stedham, Y., and Neuner, M. "Entrepreneurial potential: An exploratory study of business students in the US and Germany," *Journal of Business & Management*, vol. 11, no. 2, pp. 71-88, 2005.
- [40] Frese, M. "Towards a psychology of entrepreneurship an action theory perspective," *Foundations and Trends® in Entrepreneurship*, vol. 5, no. 6, pp. 437-496, 2009.
- [41] Gaddam, S. "Identifying the relationship between behavioral motives and entrepreneurial intentions: An empirical study based on the perceptions of business management students," *The Icafaian Journal of Management Research*, vol. 7, no. 5, pp. 35-55, 2008.
- [42] Gürol, Y., and Atsan, N. "Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey," *Education+ Training*, vol. 48, no. 1, pp. 25-38, 2006.
- [43] Orman, S. "Factors affecting entrepreneurial intentions: An application for university students and university graduate employees," Dissertation. Marmara Üniversitesi. Istanbul, 2009.

- [44] Göksel, A., and Aydıntan, B. "Gender, business education, family background and personal traits; A multi dimensional analysis of their affects on entrepreneurial propensity: Findings from Turkey," *International Journal of Business and Social Science*, vol. 2, no. 13, pp. 35-48, 2011.
- [45] Phipps, S. "Contributors to an enterprising gender: Examining the influence of creativity on entrepreneurial intentions and the moderating role of political skill controlling for gender," *Academy of Entrepreneurship Journal*, vol. 18, no. 1, pp. 77-90, 2012.

BIOGRAPHIES OF AUTHORS



Fatwa Tentama was born on October 1, 1984 in Yogyakarta. Working as a lecturer at the Faculty of Psychology at Ahmad Dahlan University, Yogyakarta. Scientific focus and research on industrial psychology and educational psychology.



Fakhri Abdussalam is a psychology scientist who graduated from the Faculty of Psychology, Ahmad Dahlan University, Yogyakarta in 2019. His scientific focus is industrial and organizational psychology and educational psychology.