Perceived Behavioral Control Builds Students' Entrepreneurial Intentions

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ABSTRACT

The aim of this study is to determine the effect of handcraft and entrepreneurship subject to entrepreneurial intentions through perceived behavior control. The methodology used in this research is a quantitative descriptive using survey method to 319 vocational school students with 175 samples from sampling technique of proportionate stratified random sampling. Data collection techniques through questionnaires where respondents fill out questions or statements using a Likerts scale model with alternative choices of 1-4. The analytical technique used in this research is the structural equation model (SEM). Hypothesis testing with a 5% significance level obtained a specific indirect effects is 0.258. The value of t_count obtained is 5.535 and the value of t_table is 1.96 then t_count > t_table (5.535 > 1.96). The coefficient of determination (r-square) for the variable perceived behaviour control is 29.2% can be explained by the variable handcraft and entrepreneurship subject. The coefficient of determination (r-square) for entrepreneurial intentions is 43.1% can be explained by the variable perceived behaviour control. The implication of the research shows that the mediating effect of perceived behavior control on handcraft and entrepreneurship subjects has a positive influence such as increasing and changing students' entrepreneurial intentions. In essence, perceived behavior control is an individual's easy or difficult response to an activity. The research implications can also be used as considerations for students, teachers and educational institutions in teaching and learning activities.

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1. INTRODUCTION

The president of the Republic of Indonesia, Widodo, stated that the biggest concern of the education field right now is on how to prepare the young generation with working skills (Effendy, 2019). This is actually an effort to be prepared on the demographic bonus of Indonesia in the future and the more competitive multi-nation competition. Thus, vocational education and training or vocational school should be strengthened as the focus of development has shifted from infrastructural development to human development. The minister of education and Culture of the Republic of Indonesia, Effendy, argued that it is important to support the vocational school to be the institution that “makes” entrepreneurs. He also argued that it is important to develop the business incubation program to create new entrepreneurs through creativity supervision and innovative new ideas either independently or through systemic cooperation with the business and industry world. The revitalization of vocational education as one of the ways the Indonesian government has taken to improve productivity, innovation, and national competitiveness is based on Presidential Instruction (Inpres) Number 9 of 2016 about vocational school revitalization in attempt to improve Indonesian humans quality and competitiveness. One of the attempts that has been taken to in this revitalization program is the curriculum coordination and updates of handcraft and entrepreneurship subject, where students are directed to have the courage to use creativity, productivity, and independent to start their own business or entrepreneurship. This will train students to be more precise to see their potential and opportunity around them (Werdhaningsih, Haryudanti, Jamrianti, & Wirmas, 2015). Entrepreneurship subject has become a factor that can grow and develop entrepreneurship intentions, spirit, and behavior among young generations (Fatoki, 2014). The research result shows that entrepreneurship education program (EEP) affects the perceived behavior control (Riani, Sawitri, & Rahmawati: 2012); (Karimi, Biemans, Lans, Chizari, & Mulder, 2016). The conclusion that can be drawn is that the importance of handcraft and entrepreneurship subject in schools is a place to hone students’ hard skills and soft skills while in school. The expected output is to prepare students to become entrepreneurs so that they can open jobs in the future. The concept of perceived behavioral control is the same as self-efficacy because it refers to one’s beliefs about one’s ability to control activities that affect the individual. If the individual perceives many supporting factors and few inhibiting factors to perform a behavior, then the individual will tend to find it easy to perform the behavior. However, if the individual perceives few supporting factors and many inhibiting factors to perform a behavior, the individual will tend to find it difficult to perform the behavior. According to Ajzen (1991) perceived behavior control is individual perception about the ease and difficulty in doing something. Then, Bandura (1991) explained that self-efficacy can be formed by interpreting the information from four sources which are emotional arousal, personal accomplishment, verbal persuasion, and vicarious learning experience. Moreover, self-efficacy can also lead to the individual belief of his/her ability to succeed. Self-efficacy is the perception towards someone’s capability in manifesting success of his/her role in entrepreneurship (Chen, Grine, & Crick 1998). The conclusion that can be drawn from self-efficacy is that individual optimistic perception towards his/her potential in dealing with any circumstances to produce something beneficial. This theory is proved by Fayolle, Gailly, & Lassas-Clerc (2006) that perceived behavior control can determine the impact of the entrepreneurship learning program. Kolvereid (1996); Guido, Marcati, & Peluso, (2011); Gerba (2012) show the research result that entrepreneurial education affects the perceived behavior control that will also affect the entrepreneurial intentions. The result of research done by Mustofa, Murtini, & Sawiji (2018) is in line with this result, that handcraft and entrepreneurship subject has a positive influence on entrepreneurship intention. Lee and Wong (2004) argue that entrepreneurial intentions means a first step in the developing process of a business that will run in a long term period. Bandura (1991) argued that intention or willingness is the determination to conduct a certain activity or to create a certain situation in the future. Thus, this research is expected to enrich and improve the knowledge about students’ perceived behavior control and students’ intention to start their own business by implementing handcraft and entrepreneurship subject at vocational schools.
Handcraft and entrepreneurship subject consists of four (4) strands which are crafting, engineering, growing, and processing. This subject was started by the concept of creative concept and entrepreneurship opportunity from the handicraft which is going to be made. It is started from understanding the facts that Indonesian chance in developing crafting, engineering, growing, and processing related to project theme. Knowledge, skill, and behavior will be delivered in the learning activity. Most of the tasks and projects are conducted in groups to allow the characteristics education of collective intelligence in entrepreneurship practice, either in crafting, engineering, growing, or processing. The objectives of the handcrafts and entrepreneurship courses are explained by Werdaningsih et al. (2015) as follows:

1. Facilitating students to express their creativity through technical skill with creativity value which are ergonomic, technological, and economical.
2. Training students with the skill to create works that are based on astatically, ecosystemic, and technological value.
3. Training the students to use the media and material by utilizing the principles of creativity, ergonomic, hygienic, efficient, and environmentally friendly.
4. Producing works that are ready to be used for daily lives, which are knowledgeable based on local wisdom and sustainable technology.
5. Growing the entrepreneurship ideas by training and managing the producing of works (production) to create, package, and market the products with the principles of economic, ergonomic, and environmental friendly.
6. Training students to think critically (critical thinking) in understanding the cause-effect correlation; analyzing the similarities and differences, and thinking abstractly to solve problems (problem-solving).

Intention is a desire in the heart to do something. Intention can also be said to be an individual’s desire to take action as well as entrepreneurial intentions. Entrepreneurial intention reflects one’s commitment to starting a new business and is a central issue that needs to be considered in understanding the entrepreneurial process. The intention is a significant factor to encourage someone to do a certain activity (Krueger, 2000). Fishbein and Ajzen (2005) stated that entrepreneurial intention is a component someone has in himself/herself that leads to the willingness to act on certain behavior like entrepreneurship. Entrepreneurial intention projects individual commitment to start a new business and it is a central issue that needs to be the concern in understanding the entrepreneurship process. (Suharti & Sirine, 2012). Based on the previous elaboration, entrepreneurial intention means one’s determination to start a business or entrepreneurship. Entrepreneurial intentions have recently begun to receive attention for research because it is believed that an intention related to behavior proves to be a reflection of actual behavior. So, entrepreneurial intention is an important factor to foster entrepreneurial behavior. The purpose of this study will be to see the effect of handcraft and entrepreneurship subject on entrepreneurial intention through perceived behavior control. The benefit of the research will be to find evidence about the role of the handcraft and entrepreneurship subject that has been applied in schools. The specialty of this research is that there is a focus on learning at school about handcraft, where previous research was only limited to entrepreneurial theory.

2. METHODS

The methodology used in this research is a quantitative descriptive using survey method. According to Creswell (2014) quantitative research is research using statistical methods that measure the influence between two or more variables. The research design used is constellation research model to measure the effect of variable of handcraft and entrepreneurship subject, perceived behavior control and entrepreneurial intentions. The population in this research were students in a vocational school in Boyolali, Jawa Tengah Province, Indonesia. Through Issac and Michael formulation, the population of 319 students were then to be the research sample of 175. Of the 175 samples, there were 63 samples at SMKN 1 Banyudono, 39 samples at SMKN 1 Kemusu and 73 samples at SMKN 1 Boyolali. When
viewed from the class strata in the three schools, the sample for class X was 89 samples and class XI was 86 samples. The class XII is not the population in this study because they are preparing for the final school exam. Based on gender, 61 samples were male and 114 samples were female. The sampling used in this research was probability sampling with the sampling technique of proportionate stratified random sampling. The type of data was quantitative data with the source of primary and secondary data. The data were collected through observation, interview, library research, and questionnaire of 4-point Likert scale of very disagree (1) to very agree (4). The handcraft and entrepreneurship subject variable consists of 8 statement items with indicators according to Werdaningsih et al. (2015) are: can grow the desire for entrepreneurship, add knowledge and insight in the field of entrepreneurship and grow awareness of business opportunities. The perceived behavioral control variable consists of 10 statement items with indicators according to Linan and Chen (2009) are: confidence in business success opportunities, have entrepreneurial knowledge, have entrepreneurial skills, ability to manage a business, and ability to develop a business. The entrepreneurial intention variable consists of 8 statement items with indicators according to Schwarz, Wdowiak, Almer-Jarz, & Breitenecker, (2009) are: intention to prepare a business, intention to prepare a business in the next few years, and intention to prepare a business for five years next. The data analysis technique used is structural equation modeling (SEM).

3. FINDINGS AND DISCUSSION

The analysis of the structural model provides the decomposition of path coefficient which measures direct effect, indirect effect, and total effect between variables. The hypothesis testing was analyzed by looking into the correlation significant value between constructs showed by the t-statistic ≥ 1.96. The model is said to fit when it has p-value ≤ 0.05. The analysis result value becomes the research basis by observing how strong the correlation between each construct. The structural model was evaluated by observing the determination coefficient value (r-squares) for each endogen latent variable as prediction strength from the structural model. The result of the direct effect analysis can be seen in the following table 1.

| Variable | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|----------|---------------------|-----------------|----------------------------|------------------------|----------|
| A        | X₁ -> X₂ 0,541      | 0,550           | 0,055                      | 9,860                  | 0,000    |
| B        | X₁ -> X₃ 0,262      | 0,260           | 0,069                      | 3,791                  | 0,000    |
| C        | X₂ -> X₃ 0,477      | 0,485           | 0,066                      | 7,250                  | 0,000    |

Based on table 1, the direct effect between the variables can be seen as follow:

a. The direct effect of the handcraft and entrepreneurship subject to perceived behavior control is shown by the beta coefficient (original sample) -> of 0,541.

b. The direct effect of handcraft and entrepreneurship subject to the entrepreneurial intentions is shown by the beta coefficient (original sample) -> of 0,262.

c. The direct effect of perceived behavior control to the entrepreneurial intentions is shown by the beta coefficient (original sample) -> of 0,477.
Following is the schematic figure which is based on table 1:

![Schematic Figure]

**Figure 1. Result Of Calculation Analysis Based On Beta Coefficient Value**

Meanwhile, the analysis result of indirect effect and total influence can be seen at the following table 2.

| Variable                      | Indirect Effect | Total Effect |
|-------------------------------|-----------------|--------------|
| $X_1 \rightarrow X_2 \rightarrow X_3$ | 0.258           | 0.520        |

Based on table 2, it can be explained that the indirect effect of handcraft and entrepreneurship subject to entrepreneurial intentions when seen from the perceived behavior control can be shown by the multiplication (0.541 x 0.477) and the result of beta coefficient (original sample) is 0.258. The total effect is derived from adding the indirect effect of 0.258 to the direct effect of 0.262 which lead to the total effect of 0.520. Therefore, the handcraft and entrepreneurship subject has a positive and significant indirect effect on entrepreneurial intentions through perceived behavior control for students based on the examination result shows the t-statistic value of 5.535 ≥ 1.96.

Then, the structural model was evaluated by looking into the determination coefficient value (R2) of each endogenous latent variable as the prediction strength from the structural model. Determination coefficient can be seen at the following table 3.

| Variable                     | R Square | R Square Adjusted |
|------------------------------|----------|-------------------|
| Perceived Behavior Control   | 0.292    | 0.288             |
| Entrepreneurial Intentions   | 0.431    | 0.424             |

Based on table 3, it can be seen that the determination coefficient value for the variable of perceived behavior control is at 29.2% can be explained by looking into the variable of handcraft and entrepreneurship subject. The determination coefficient value for the variable of entrepreneurial intentions of 43.1% can be explained of the variable of perceived behavior control where the rest can be influenced by other variables that were not studied in this research.

Based on the test results, there is a beta coefficient (Original Sample) indirect effect of 0.258 indicating that handcraft and entrepreneurship subjects have positive predictive properties on entrepreneurial intention through perceived behavior control. When handcraft and entrepreneurship
increase, it will increase entrepreneurial intention through students' perceived behavior control. The t-statistics value of 5.535 1.96 shows that the entrepreneurial intention of students is significantly influenced by the handcraft and entrepreneurship subject through perceived behavior control. Another study conducted by Wibowo (2017) shows that the perception of entrepreneurship and self-efficacy has a positive effect on entrepreneurial intention. The results of Roxas, Cayoca-Panizales, Jesus (2008) research also show that the knowledge gained from formal entrepreneurship learning programs will have a positive impact on individual entrepreneurial intentions through the mediating influence of entrepreneurial behavior perceptions, namely believing in business success opportunities, having business knowledge and skills, and able to manage and develop the business.

The Handcraft and entrepreneurship learning program that was implemented at SMKN 1 Boyolali, SMKN 1 Kemusu and SMKN 1 Banyudono had a positive contribution to increase students' entrepreneurial intentions. The analysis of the mediating effect in the research model can be seen by looking at the results of the regression of exogenous variables on the intervening variables and the results of the regression of the intervening variables on endogenous variables. If the two regression results show an influence, then the conclusion is that the indirect effect is positive and significant between exogenous variables and endogenous variables through intervening variables (Shourt & Bolger, 2002). Conceptually, the researcher only limits the research variables to one independent variable, namely handcraft and entrepreneurship subject, one intervening variable namely perceived behavior control and one dependent variable namely entrepreneurial intention. Efforts to design a good research model have been carried out since the beginning of the study. The focus of the discussion is only to see how far the influence of the independent variable on the dependent variable with data obtained through research instruments that are limited to closed questionnaires.

4. CONCLUSION

Based on data analysis result, it can be concluded that handcraft and entrepreneurship subject has a positive indirect effect on the entrepreneurial intentions through perceived behavior control with the beta coefficient value of 0.258. The examined conclusion from this study has proved that there is a mediated effect of perceived behavior control to handcraft and entrepreneurship subject. The result of this research support the existing theory that and reinforce the previous research results. This result can be used by students, teachers, and education institution to consider the perceived behavior control that can determine the improvement and drop of people behavior on their intention to do something to be either easy or hard.

The suggestion from the researcher from this research to possible further research us that this research focuses on one variable from the theory of planned behavior (TPB) which is the perceived behavior control. There is another variable that can influence the entrepreneurial intentions which are the handcraft and entrepreneurship subject. The further studies are expected to elaborate more on the obstacles that may prevent anyone to start a business. Moreover, the researcher suggests conducting the research to a bigger research population that have the tendency to be entrepreneur to define the real effect of entrepreneurial intentions (for example, the students of business and management).

REFERENCES

Ajzen, I & Fishbein, M. (2005). Theory-Based Behavior Change Interventions: Comments On Hobbis And Sutton. Journal Of Health Psychology, 10(1), 27-31.

Ajzen, I. (1991). The Theory Of Planned Behavior. Organizational Of Behavior And Human Decision Processes, 50, 179-211.

Bandura. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50, 248-287.

Chen, Greene, & A. Crick. (1998). Does Entrepreneurial Self-efficacy Distinguish Entrepreneurs from Managers?. Journal of Business Venturing, 13, 295– 316.
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Creswell, J. W. (2014). *Research design pendekatan kualitatif, kuantitatif, dan mixed*. Yogyakarta: Pustaka Pelajar.

Efendy, M. (2019). *Capaian Kinerja Kementerian Pendidikan dan Kebudayaan 2014 – 2019*. Jakarta: Pusat Analisis dan Sinkronisasi Kebijakan (PASKA) Kementerian Pendidikan dan Kebudayaan Republik Indonesia.

Fatoki, A. (2014). *The Entrepreneurial Intention Of Undergraduate Students In South Africa: The Influences Of Entrepreneurship Education And Previous Work Experience*. *Mediterranean Journal Of Social Sciences*, 5(7), 294-299.

Fayolle, et al. (2006). *Assesing The Impact Of Entrepreneurship Education Programmes: A New Methodology*. *Journal Of Europian Industrial Training*, 30 (9), 701 – 720.

Gerba, T. (2012). *Impact Of Entrepreneurship Education On Entrepreneurial Intentions Of Business And Engineering Students In Ethiopia*. *African Journal Of Economic And Management Studies*, 3(2), 258-277.

Guido, et al. (2011). *Nature And Antecedents Of A Marketing Approach According To Italian Sme Entrepreneurs, A Structural Equation Modeling Approach*. *International Journal Of Entrepreneurial Behaviour & Research*, 17 (4), 342-360.

Karimi, et al. (2016). *The Impact Of Entrepreneurship Education: A Study Of Iranian Students’ Entrepreneurial Intentions And Opportunity Identification*. *Journal Of Small Business Management*, 54 (1), 187-209.

Kolvereid. (1996). *Prediction of Employment Status Choice intentions*. *Entrepreneurship Theory and Practice*, (21), 47-5.

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). *Competing Models of Entrepreneurial Intentions*. *Journal of business venturing*, 15 (5), 411-432.

Lee, S.H. & Wong, P.K. (2004). *An Exploratory Study of Technopreneurial Intentions: A Career Anchor Perspective*. *Journal of Business Venturing*, 19(1): 7-28.

Linan, F., dan Chen, Y. (2009). *Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions*. *Entrepreneurship Theory and Practice*, 33(3), 593–617.

Mustofa, A., Murtini, W., & Sawiji, H. (2018). *Effect of Subjective Norms Mediation to Entrepreneurship Intention at Entrepreneurship Learning in School*. *International Journal of Multicultural and Multireligious Understanding*, 5 (4), 349-354.

Mustofa, A., Murtini, W., & Sawiji, H. (2019). *Learning of Craft and Entrepreneurship Towards Student’s Entrepreneurship Interest Referred from Planned Behavior*. *International Journal of Active Learning*, 4(1), 1-9.

Riani, A. L., Sawitri, H. S. R. & Rahmawati. (2012). *Peran Eep Pada Perilaku Entrepreneurial Dan Kepuasan Kinerja Perajin Batik Surakarta, Karanganyar Dan Sragen*. *Jurnal Siasat Bisnis*, 16 (2), 258-266.

Roxas et al, (2008). *Entrepreneurial Knowledge And Its Effects On Entrepreneurial Intentions: Development Of A Conceptual Framework*, *Asia-Pacific Social Science Review*, 8 (2), 61-77

Schwarz et al. (2009) *The effects on attitudes and perceived environment conditions on students’ entrepreneurial intent An Austrian perspective*. *Education + Training*, 51 (4), 272-291.

Shrout, P. E., & Bolger, N. (2002). *Mediation In Experimental And Nonexperimental Studies: New Procedures And Recommendations*. *Psychological Methods*, 7 (4), 422–445.

Suharti, L. & Sirine, H. (2012). *Faktor-Faktor yang Berpengaruh Terhadap Niat Kewirausahaan (Entrepreneurial Intention)*. *Jurnal Manajemen dan Kewirausahaan (journal of Management and Entrepreneurship)*, 13 (2), 124-134.

Werdhaningsih, et al. (2015). *Prakarya dan Kewirausahaan*. Jakarta: Pusat Kurikulum dan Perbukuan Kementerian Pendidikan dan Kebudayaan.

Wibowo, A. (2017). *Dampak Pendidikan Kewirausahaan Bagi Mahasiswa*. *Asian Journal Of Entrepreneurship And Family Business*, 1 (1).
