The influence of theory of planned behavior and entrepreneurship education towards entrepreneurial intention

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ABSTRACT

This present study tries to raise the issue regarding the factors that influence the entrepreneurial spirit of the students of Graduate School. Regarding the finding on the indirect effect of Theory of Planned Behavior on the entrepreneurship through entrepreneurship education, it can be explained that the indirect influence on two variables is as follows: attitude toward entrepreneurship and perceived behavioral control indicates that by stimulating students' motivation to join entrepreneurship education as outlined previously, students are expected to have entrepreneurial intentions. In addition, entrepreneurship education should be able to prepare students to become entrepreneurs, provide support facilities to start a business, and lecturers must be able to guide the students to become entrepreneurs.

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ABSTRAK

Penelitian ini mencoba untuk mengangkat isu mengenai faktor-faktor yang mempengaruhi semangat kewirausahaan mahasiswa Sekolah Pascasarjana. Mengenai temuan tentang efek tidak langsung dari Teori Planned Behavior pada kewirausahaan melalui pendidikan kewirausahaan, dapat dijelaskan bahwa pengaruh langsung pada dua variabel adalah sebagai berikut. Pertama, sikap terhadap kewirausahaan dan perceived behavior control menunjukkan bahwa dengan merangsang motivasi mahasiswa untuk bergabung pendidikan kewirausahaan seperti diuraikan sebelumnya, siswa diharapkan memiliki niat kewirausahaan. Kedua, pendidikan kewirausahaan harus mampu mempersiapkan mahasiswa untuk menjadi wirausahawan, dengan menyediakan fasilitas dukungan untuk memulai bisnis, dan dosen harus mampu membimbing mahasiswa untuk menjadi pengusaha.

1. INTRODUCTION

There is no developed country without the presence and contribution of the entrepreneurs. In reference to the developed countries, Indonesia needs a large number of entrepreneurs in order to become a country with strong economy. An entrepreneurial expert from the United States, David Mc Clelland, says that a state can be said to be prosperous by being entrepreneurs at least 2 percent of the total population (Ade 2013). However, the current number of entrepreneurs in Indonesia is totaled only 1.56 percent (3.7 million) of the total population (Agus 2012). This number is still far less than the number of entrepreneurs in developed countries, such as the United States that has more than 12%, 10% in China, 8% in Japan, 7.2% in Singapore, and 4% in Malaysia.

One of the factors that can encourage the growth of entrepreneurship in a country is the role of the university through entrepreneurship education provision (Zimmerer 2002: 12). Entrepreneurship education is intentionally effort to improve and apply knowledge, intentions and competence of learners to develop their own potentials manifested in creative and innovative behavior, and dare to manage risk (Ade 2013: 3). With the entrepreneurship education, it is expected to provide motivation to dare choosing entrepreneurship as their career. Thus, a problem arises in which the lecturer must have an understanding of how to motivate entrepreneurship and the factors influencing the entrepreneurial motivation or intention.

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either as a full or part-time job.

There have been many studies focusing on factors that can foster students’ intentions on entrepreneurship. Most research has focused on the personal, situational or psychological factors, such as gender, family background, risk-taking attitudes, need for achievement, self-confidence and innovation (Li Wei 2006). Moreover, a lot of the current literature has highlighted the activities of entrepreneurial interests through situational modeling or personal factors solely. The results have not provided sufficient clarity and the prediction of truth is still low. Researchers propose a model that significantly improves the understanding and prediction of entrepreneurial activities, and use the Theory of Planned Behavior (TPB) in dealing with students’ entrepreneurial interests in Business University (Krueger et al. as cited in Li Wei 2006).

This present study attempts to raise the issue regarding the factors inducing the entrepreneurial spirit of the students of Graduate School of Economics and Business (FEB), Brawijaya University (UB). Samples were selected on the consideration that they have known the employment world, and have ever joined an entrepreneurship seminar/training. It is expected that the results of this study can be used as an input for the development of entrepreneurship education learning framework in UB postgraduate programs, in order to encourage students to have a career as an entrepreneur, whether it is used as his full-or part-time job.

In more detail, the aims of this research can be described as follows: (1) to analyze the direct effect of the theory of planned behavior (TPB) on entrepreneurship education; (2) to analyze the direct effect of entrepreneurship educational factors on the entrepreneurial intentions of students; (3) to analyze the direct effect of the theory of planned behavior on the intention of entrepreneurship; (4) to analyze the indirect effect of the theory of planned behavior on the entrepreneurial intention through entrepreneurship education.

2. THEORETICAL FRAMEWORK, AND HYPOTHESIS

Entrepreneurial Intention
Entrepreneurial intention is a desire to start a new business (Readon et al. 2007). Entrepreneurial activities in general often occur due to deliberateness. Entrepreneurs intend to pursue opportunities, enter new markets and offer products/new and creative ideas that might become an interest in the community. Intentions (interest) capture the motivational factors that can affect one’s behavior. The motivational factor is an indication of how hard a person work in planning and implementing entrepreneurial behavior. Individuals have a strong intention to have their own business when they feel that the business is possible for them to do and there is a desire within them to have a business (Hisrich 1986: 58).

Theory of Planned Behavior
Theory of Planned Behavior helps us on how we can change and predict one’s behavior. This theory is the main factor in determining the interest of individuals, to perform a specific behavior. Interest is determined by three factors, namely; the degree to which an individual feels good or less good (attitudes); social influence that affects an individual to perform or not perform the behavior (subjective norms); and feeling easy or difficult to perform a behavior (perceived behavioral control) (Fishbein and Ajzen 1975).

Attitudes toward Entrepreneurship
It is the level of individual evaluation in assessing whether it is profitable (positive) or non-profitable (negative) to be an entrepreneur (Ajzen and Kolvareid, as cited in Linan and Chen 2006). In Ajzen’s theory of planned behavior, behavioral attitudes (attitudes toward) refer to the degree in which a person has a behavioral evaluation assessment whether it is good or not good.

Subjective Norms
It is the perception of social pressure to determine whether the entrepreneurial behavior needs to be done or not. The social pressure refers to the perception of a particular group (“reference people”) who approves or not a person’s decision to entrepreneurs and individuals usually seek to comply with the perception of the group (Ajzen and Krueger, as cited in Linan and Chen 2006). Subjective norms refer to perceptions of relationship where a group of people had a major influence on people's behavior, to learn that social networks affect individual behavior (Kruger et al. 2006). In Ajzen's theory of planned behavioral norms, subjective norms refer to the social pressure of feeling to perform or not to perform behavior.

Perceived Behavioral Control
It is the perception of one’s belief towards his ability (whether it is difficult or easy) to become an entrepreneur. For example, a person believes that he is capable of doing a particular task (Linan and
Chen 2009). In Ajzen's theory of planned behavior, perceived behavioral control refers to the feeling of finding it easy or difficult to perform the behavior and is assumed to reflect past experience and the anticipation of impediments and obstacles (Ajzen, as cited in Li Wei 2006).

**Entrepreneurship Education**

According to Wibowo (2011: 30), "entrepreneurship education is an effort of internalizing the entrepreneurial spirit and mental through educational institutions or other institutions such as training institutions, training sessions and so on". Meanwhile, Lo Choi Tung (2011: 36) states that entrepreneurship education is "the process of transmitting entrepreneurial knowledge and skills to students to help them exploit a business opportunity". Entrepreneurship education is expected to equip learners with a variety of entrepreneurial competencies that will bring great benefits for their lives. Entrepreneurship education is designed to instil the competence, skills and values necessary to recognize business opportunities, to organize and start a new business (Brown, as cited in Izedonmi and Okafor 2010).

**Previous Studies**

A research conducted by Basu and Virick (2008) entitled *Assessing Entrepreneurial Intentions amongst Students* examined entrepreneurial intentions. The study was conducted on 123 students at San Jose State University by using a model of Fishbein and Ajzen (1975). This study examined the entrepreneurship education, family background that have already ran a business and have had direct experience in the business, and ethnic backgrounds in entrepreneurial intentions which were influenced by attitudes toward entrepreneurship, subjective norms and perceived behavioral control, but was not associated with subjective norms. The results of this study indicated that the variable of family business background has positive effect on attitudes toward entrepreneurship, subjective norms, and perceived behavioral control.

Another previous study was conducted by Gelderen et al. (2007) entitled *Explaining Entrepreneurial Intentions by means of the Theory of Planned Behavior*. This study examined the relationship between these variables: attitudes toward entrepreneurship, subjective norms, and perceived behavioral control and entrepreneurial intentions. The samples used were 200 students of Business Administration in Amsterdam. This study showed that there is an indicator variable that is considered to strengthen the Theory of Planned Behavior. Independence, insights, challenges, and work load avoidance are indicators of attitudes toward entrepreneurship variable. Family and close friends are indicators of subjective norms variable, while creativity and self-efficacy are indicators of perceived behavioral control variable. The results of this study indicated that Theory of Planned Behavior has a positive and significant impact on entrepreneurial intentions which is particularly shown by attitudes and perceived behavioral variables, while the subjective norms variable have lower relationship.

A study conducted by Alsos, Isaksen, and Softing (2006) which was carried out on 252 students in Nordland, Norway found that work experience and entrepreneurial intentions will give more positive effect if the variables of attitudes toward entrepreneurship, perceived behavioral control and subjective norms are influencing. If the working experience and entrepreneurial intention is directly correlated, the effect will be less.

Meanwhile, Wu Sizong and Linffei (2008) conducted a research about the educational factors on students in China that are influenced by Theory of Planned Behavior models in predicting entrepreneurial intentions. The results of this study indicated that educational factors influenced by attitudes toward entrepreneurship and perceived behavioral control positively influence students’ entrepreneurial intentions. Yet, subjective norms have no significant effect in predicting entrepreneurial intentions.

A study entitled *Do Entrepreneurship Programs Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources* was conducted by Soutaris, Zerbinati, and Al-Laham (2007) based on the Theory of Planned Behavior to examine the effects of entrepreneurship education programs on attitudes and entrepreneurial intentions of 250 students in Engineering and Science (124 of them joined entrepreneurship program and 126 are the control group) to start a business at two universities, which are in London and Grenoble. This study used a pretest-post-test quasi-experimental design, in which the data were collected before and after the entrepreneurship education programs. The results showed that entrepreneurship education programs can lead to inspiration (create willingness for entrepreneurship and change the perspective to entrepreneurship), in which this inspiration can lead the students to improve the entrepreneurial attitudes and intention. Figure 1 is the research model.
3. RESEARCH METHOD
This is an explanatory study since it aims at examining the characteristics of the variables and relationships between existing variables. This study also aims at explaining the cause and effect relationship. From the type of investigation, this study is a causality study that analyses cause an effect relationship between variables of determining factors of students’ entrepreneurial intentions.

Population and Sampling Techniques
The population of this study was postgraduate students at the Faculty of Economics and Business Brawijaya University who have or are taking entrepreneurship courses on a regular basis or as an elective extracurricular activity. Respondents in this study were selected using accidental sampling technique. In this case, the sample criteria were those who have or are attending a seminar/training in entrepreneurship and have worked as employees. The number of respondents was 165 students.

Measurement of Variables
In this study, primary data was obtained using a structured online research questionnaire. Measurement of the variables: attitude toward entrepreneurship, subjective norms, and perceived behavioral control was adapted from Kolvaireid (1996). These instruments amounted 17. Entrepreneurship education variable that accounts for 7 was adapted from Leon, et al. (2007). Entrepreneurial intention variable was adapted from Kolvaireid (1996). Overall, the statement was measured by using a 5-point Likert scale, where respondents were asked to answer with a choice of a number from 1-5 (1 = strongly disagree (1 = strongly and 5 = strongly agree).

Hypothesis
The hypotheses in this study are described as follows:

**Hypothesis 1:** Attitude Toward Entrepreneurship directly influences Entrepreneurship Education.

**Hypothesis 2:** Subjective Norms directly influence Entrepreneurship Education.

**Hypothesis 3:** Perceived Behavioral Control directly influences Entrepreneurship Education.

**Hypothesis 4:** Entrepreneurship Education directly influences Entrepreneurial Intention.

**Hypothesis 5:** Attitude Toward Entrepreneurship directly influences Entrepreneurial Intention.

**Hypothesis 6:** Subjective Norms directly influence Entrepreneurial Intention.

**Hypothesis 7:** Perceived Behavioral Control directly influences Entrepreneurial Intention.

The Indicators
As it is presented in Table 1, some variables are represented in some indicators. This research use indicators to measure the variable and it deliver in the questionnaire.

4. DATA ANALYSIS AND DISCUSSION
Overview of Respondents
There were 165 respondents, a general overview of the respondents that being surveyed, as follows: 78 students were male and the remaining 87 were female students. Most of the respondents were in 24-29 years of age, in which they took postgraduate studies after having work experience.

Analysis of Preliminary Data
For this data, it presents some variables and the results of analysis of the analysis of preliminary data. Here is as in Table 2 shows the analysis of preliminary data of the study.

The results of validity test results using the approach of corrected item-total correlation show that all the items used in this study are valid. This is indicated by the results of the value of counted $r$ for each item is equal to and higher than critical $r$ of 0.13. Thus, all items of empirical indicators can be
used in the subsequent data processing. Reliability test results are based on the value of Cronbach's Alpha (\(\alpha\)), showing that the variables being studied meet the elements of reliability with Cronbach alpha value (\(\alpha\)) greater than 0.60 (Sekaran 2000: 206).

**Hypothesis Testing**

In Table 3, it shows the results of hypothesis testing about the direct and indirect influence of the variables in this study by using path analysis in AMOS (Analysis of Moment Structure) 18:00 version.

The results of data analysis can be summarized as follows:

**Hypothesis 1:** Attitude Toward Entrepreneurship directly influences Entrepreneurship Education. The results of analysis show a significant estimated value (\(b = 0.25; p < 0.05\)). Thus, hypothesis 1 is proven.

**Hypothesis 2:** Subjective Norms have a direct effect on Entrepreneurship Education. The analysis shows that the estimated values are not significant (\(b = 0.07; p > 0.05\)). Thus, hypothesis 2 is not proven.

**Hypothesis 3:** Perceived Behavioral Control directly affects Entrepreneurship Education. The results of analysis show a significant estimated value (\(b = 0.40; p < 0.05\)). Thus, hypothesis 3 is proven.

**Hypothesis 4:** Entrepreneurship Education directly influences Entrepreneurial Intention. The results of analysis show a significant estimated value (\(b = 0.09; p < 0.05\)). Thus, hypothesis 6 is proven.

**Hypothesis 7:** Perceived Behavioral Control directly affects Entrepreneurial Intention. The analysis shows that the estimated values are not significant (\(b = 0.12, p < 0.05\)). Thus, hypothesis 7 is proven.

**Hypothesis 8:** Attitude Toward Entrepreneurship influences Entrepreneurial Intention through Entrepreneurship Education. From the calculation of Sobel test, it can be inferred that the p-value is 0.01 (p < 0.05). Thus, it can be concluded that hypothesis 8 is proven.

**Hypothesis 9:** Subjective Norms affects Entrepreneurial Intention through Entrepreneurship Education. From the calculation of Sobel test, it can be inferred that the p-value is 0.5 (p > 0.05). Thus, it can be concluded that hypothesis 9 is not proven.

**Hypothesis 10:** Perceived Behavioral Control influences Entrepreneurial Intention through Entrepreneurship Education. From the calculation of Sobel test, it can be inferred that the p-value is 0.00 (p < 0.05). Thus, it can be concluded that hypothesis 10 is proven.

**Discussion**

From the results of data analysis, it can be seen that the attitude toward entrepreneurship and perceived behavioral control have significant effect on entrepreneurship education. This may imply those students who think that being an entrepreneur is profitable and those who have a sense of confidence in their ability to establish their own business can motivate entrepreneurship education they do.

The absence of subjective norms in entrepreneurship education can be interpreted as a fact that
The pressure from family or loved ones can not affect the motivation of entrepreneurship education they do. Therefore, FEB-UB is expected to bring young entrepreneurs who have been successful and if possible, they are students/alumni of FEB-UB, staffs or lecturers who have a business as a part-time job, or local entrepreneurs (who are around campus). This is done with the expectation that students can have good assessment of the profession as an entrepreneur and also have a picture that setting up/having own business is easy and can also be used as a side job.

Another finding is the direct effect of subjective norms on entrepreneurial intentions. Family and the loved ones influence entrepreneurial intentions to postgraduate students of FEB-UB. This becomes an interesting finding; since subjective norms do not significantly influence their motivation in entrepreneurship education. Subjective norms would have a significant effect on entrepreneurial intentions of students. It might indicate that compared to joining in FEB-UB’s entrepreneurship education, students tend to choose to know entrepreneurship knowledge from their family or their closest friends. This is possible because students find it easier to have their own business if they learn it from family or loved ones. In addition, they can have the freedom to learn, ask, and ask the opinion of their community.

Another finding is a significant influence on the variable of Perceived Behavioral Control on Entrepreneurial intentions. As previously mentioned by Ajzen (as cited in Li Wei 2006), Perceived Behavioral Control reflects on experiences and anticipate obstacles and constraints. Students, who have entrepreneurial experience in the past and know the anticipation of obstacles and constraints, have proven to possess more entrepreneurial intentions. Experience is one of the good learning methods. Therefore, it is recommended that FEB-UB provide entrepreneurship courses on a regular basis so that students can improve their entrepreneurial intentions.

When related to the finding on the indirect ef-
fect of Theory of Planned Behavior on the entrepreneurship through entrepreneurship education, it can be explained as follows: the indirect influence on two variables: attitude toward entrepreneurship and perceived behavioral control indicates that by stimulating students’ motivation to join entrepreneurship education as outlined previously, students are expected to have entrepreneurial intentions. In addition, entrepreneurship education should be able to prepare students to become entrepreneurs, provide support facilities to start a business, and lecturers must be able to guide the students to become entrepreneurs.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATION
It can be concluded as the following. First of all, the absence of subjective norms becomes the fact that the pressure from family or loved ones can not affect the motivation of entrepreneurship education as has been done. For that reason, FEB-UB should bring young entrepreneurs who have been successful, if possible for those who are the students/alumni of FEB-UB, staffs or lecturers who have a business as a part-time job, or local entrepreneurs (who are around campus).

It can also be said that the direct effect of subjective norms on entrepreneurial intentions that is Family and the loved ones seems to affect entrepreneurial intentions of postgraduate students of FEB-UB. In fact, the subjective norms are the significant factors for motivation in entrepreneurship education. Subjective norms would have a significant effect on entrepreneurial intentions of students. Besides that, Perceived Behavioral Control is important factor for affecting the entrepreneurial intentions. In addition, experience is one of the good learning methods. Therefore, it is advisable for FEB-UB provide entrepreneurship courses to be done on a regular basis so that students can improve their entrepreneurial intentions.

Furthermore, the indirect influence on two variables: attitude toward entrepreneurship and perceived behavioral control indicates that by stimulating students’ motivation to join entrepreneurship education as outlined previously, students are expected to have entrepreneurial intentions. It is suggested that entrepreneurship education should be able to prepare students to become entrepreneurs, provide support facilities to start a business, and lecturers must be able to guide the students to become entrepreneurs.

This research has natural limitation in qualitative and explorative approach. As the sample of business students, we recommend of other group, age or community to enrich the findings. Further research also should include culture studies, specific traits of country so the result become more applicable and suitable in specific country.

It would also helpful for academics to develop the education method in entrepreneurship studies.

REFERENCES

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Table 3
The Results of Hypothesis Testing

Table 4
Results of Indirect Effect Hypothesis Testing


