COMPETING EXTENDED TPB MODELS IN PREDICTING ENTREPRENEURIAL INTENTIONS: WHAT IS THE ROLE OF MOTIVATION?

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ABSTRACT

This study extends the theory of planned behavior by adding motivation variable in an entrepreneurial context. In this current study are two different roles of motivation in two different research models tested: motivation as a predictor and motivation as a predicted variable. Therefore, this study aims to investigate the role of motivation in those models. This study involves 273 final year undergraduate university students in Indonesia who were selected conveniently. Data were measured using exploratory factor analysis and structural equation model. This current study found how motivation performs well in the models examined. The authors discuss recommendations for practitioners and future research.

Keyword: Entrepreneurial Motivation, Entrepreneurial Intention, The Theory of Planned Behavior.

INTRODUCTION

Entrepreneurship as a field of study is still relatively young and has developed over time. Although the term entrepreneurship has been used since the12th century (Croci, 2016) and the contribution of entrepreneurship on economic development was introduced in 1942 (Schumpeter, 1942), the focus on entrepreneurial activity and entrepreneurial research had just been exposed in 1980es (Carlsson, et al., 2009). However, studies about entrepreneurship have increased in recent years.

By far the entrepreneurship studies focus on exploring entrepreneurial intention, considering the idea that intention is the best predictor to predict the behavior of entrepreneurship (Bird, 1988; Krueger et al., 2000). Numerous studies of entrepreneurship intentions have used Ajzen's Theory of Planned Behavior (TPB) and its variants as the theoretical framework (Gird & Bagraim, 2008; Kautonen et al., 2013; Yang, 2013). According to TPB, the intention is affected by attitude, subjective norms and, perceived behavioral control.

Another crucial factor which affects behavior can be motivation. Ryan & Deci (2000) conclude both motivation and intention have a role in predicting human behavior and that a connection between intentions, motivations, and behavior exists. Similar suggestion pointed out by Elfving et al. (2009) stated that investigating entrepreneurial intention will not complete without involving motivation. However, while motivation is recognized as a factor affect behavior, yet it is not a well research area of entrepreneurship (Carsrud & Brännback, 2011; Kuratko et al., 1997).

Regardless of the importance of motivation in influencing behavior, TPB does not explicitly describe the role of entrepreneurship motivation (Bagozzi, 1992). The argument for not taking into account explicitly the role of motivation is because "*Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior*" (Ajzen, 1991).

Recognizing the limitation of TPB in predicting behavior, scholars have attempted to extend the model by adding motivation into the model. Our analysis concludes there are two approaches to explaining the relationship between entrepreneurial motivation and entrepreneurial intention. The first approach claims that motivation is the mediator between the intention and the entrepreneurial behavior. Considering that intention often failed to transform into an entrepreneurial behavior, it is believed that motivation plays a crucial role to mediate the relationship between intention and behavior (Carsrud & Brännback, 2011). Hence, motivation is the outcome of intention. The second approach suggests that the motivation is a factor that affects the determinants of intention (Solesvik, 2013). This suggestion comes from the thinking that attitude, perceived behavioral control, and subjective norms are influenced by individual belief, and belief is closely related to motivation.

Regards to these differences, there is a paucity of study comparing both models in a single paper comparing both models. The existence of this comparative study will provide a significant academic contribution in capturing the understanding of the relationship between motivation and intention. Furthermore, a practical contribution will also be obtained regarding choosing the most appropriate model to increase entrepreneurial behavior in a country.

This study aims to compare the two models in the context of Indonesia. As one of the emerging countries with the fourth largest population in the worlds, Indonesia gives particular attention to the development of entrepreneurship, based on the consciousness that increasing the number of entrepreneurs will contribute positive effect towards economic growth and the reduction of the unemployment rate (Frazier, 2012; Tambunan, 2011).

THEORY OF PLANNED BEHAVIOUR

Since entrepreneurial behavior has been accepted as a planned behavior (Lortie & Castogiovanni, 2015b), TPB has been tested to be a robust framework to predict entrepreneurial intentions (Krueger et al., 2000; Ozaralli & Rivenburgh, 2016; Van Gelderen et al., 2015). Ajzen's theory of planned behavior was a remodeling of reasoned action theory by Fishbein & Ajzen (1975), which identifies that human behavior is a result of intention. The application of TPB covers a wide array of studies, includes entrepreneurship. Previous studies have proven the effectiveness of TPB to analyze entrepreneurial (Hessels et al., 2008; Moriano et al., 2012; Shook & Bratianu, 2010).

Ajzen (1991) suggests that intention is directly affected by (i) attitude; (ii) subjective norms and; (iii) perceived behavioral control. Attitude toward the behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen, 1991). Positive attitude toward a behavior will result in an intention to engage in the behavior. (Elfving, 2008; Fini et al., 2012; Liñán, 2004; Liñán & Fayolle, 2015). Perceived behavioral control refers to the perceived ease or difficulty of performing the behavior (Ajzen, 1991). Perceived behavioral control which has similarity with bandura's self-efficacy concept, has been proven as a consistent and significant predictor of career-related intention (Ajzen, 1991; Bandura, 1986). People tend to choose a career based on their perceived behavioral control (Driver, 1988). In the context of

entrepreneurship, subjective norms refer to individual's perception of approval or disapproval opinion of reference group towards entrepreneurial career decision (Ozaralli & Rivenburgh, 2016). The opinions of important others (i.e., family members, close friends and other influential people such as teachers, successful entrepreneurs, enterprise advisors) are believed to shape the formation of many entrepreneurial intentions (Kolvereid, 1996).

ENTREPRENEURIAL MOTIVATIONS

Entrepreneurial motivations refer to "*The desire or tendency to organize, manipulate and master organizations, human beings or ideas as quickly and independently as possible*" (Johnson, 1990). Entrepreneurial motivation defined as "*Individual beliefs related to the attractiveness the idea of selecting an entrepreneurial career path in a specific country can be*" (Solesvik, 2013). Individuals with high-entrepreneurial motivation are to be more likely to become entrepreneurs (Shane et al., 2003). A meta-analysis by Collins et al. (2004) exposed that entrepreneurial motivation are significantly and positively related to the choice of entrepreneurial career paths.

Traditional motivation studies focus on three essential aspects: activation, that is what activates a person of doing a specific type of action, self-direction, that is the reasons of an individual in choosing a particular kind of behavior, and preparedness of response, that is the reasons of individual act differently given the same stimulus (Pervin, 2003). All of these motivation studies can be classified into two group of approaches, drive theories and incentive theories (Carsrud & Brännback, 2011). Drive theories reveal the existing of internal stimulus, called push motives, which stimulate a tension and drive an individual to behave particularly to reduce the tension. In contrast, incentive theories point out the existing of goals, called the pull motives, which direct an individual to behave particularly to achieve the goals (Carsrud & Brännback, 2011). The more recent theory called temporal motivation theory, attempts to combine motivation theories across disciplines.

In context of entrepreneurship, personality factors which dominantly influence entrepreneurial behavior is need for achievement and needs for power (Singh, 1997). Economic motive traditionally viewed as the primary external motive which drives an individual to be an entrepreneur. Recently, scholars have found other relevant motives, such as social gains and lifestyle (Carland et al., 2007). Employing the goal pursuit approach, studies have been investigated motivation utilize different tools, such as expectancy theory (Renko et al., 2012), self-determination theory (Ryan & Deci, 2000), and self-regulation theory (Bagozzi, 1992).

MOTIVATION AS ANTECEDENTS OF INTENTION

Solesvik (2013) argue that beliefs related to perceived high-entrepreneurial motivation. Since attitude, subjective norms, and perceived behavioral control are shaped by belief (Ajzen, 1991), then motivation is assumed affects those three determinants of entrepreneurial intention. Theory of Self-Regulation (TSR) proposed by Bagozzi (1992) also pointed out the existence of a factor which did not account for in TPB, namely desire, a motivation based variable.

The role of entrepreneurial motivation as an antecedent of intention has been proven by Leone et al. (1999), Purwana et al. (2015), and Solesvik (2013). Therefore, we suggest the first hypothetical model being tested as follows. Figure 1.

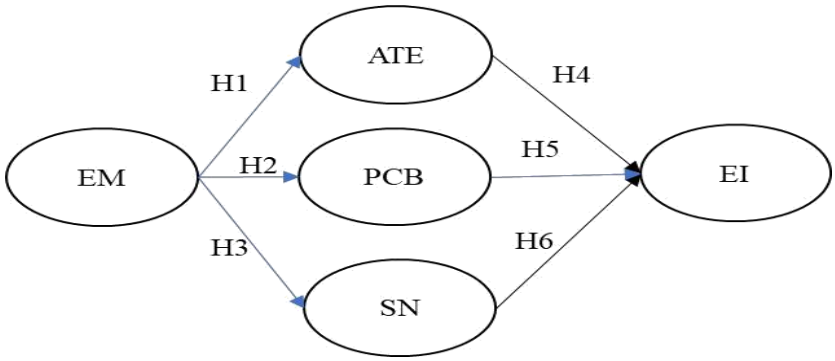

FIGURE 1
RESEARCH MODEL 1

MOTIVATION AS THE OUTCOME OF INTENTION

Despite the strong argument that intention is the best predictor of future action, scholars found there is still inadequately explanation of intention and action linkage (Bagozzi, 1992; Brännback et al., 2007; Carsrud & Brännback, 2011). Intentions do not lead to immediate action (Carsrud & Brännback, 2011). To fill in this gap, Carsrud & Brännback (2011) in their study proposed motivation as mediating factor between intention and behavior. Serving motivation as a mediator between intention and behavior relied on the consideration that an entrepreneurial intention does not always lead directly to action as there might be several obstacles along the way (Carsrud & Brännback, 2011; Gollwitzer & Brandstätter, 1997). In this sense, the motive will serve as the trigger to translate intention into action. Hence, motivations may be the trigger that converts intention into action and therefore, becomes the missing link between intentions and action (Carsrud & Brännback, 2011).

A theoretical separation between goal intention and implementation intention by Gollwitzer (1993) supports the idea of motivation as a mediating between intention and behavior of entrepreneurial. In his theory, Gollwitzer (1993) proposed that intention should classify into goal-oriented intentions ("*I intend to achieve* x") and implementation intentions ("*I intend to do y when I encounter situation* "). Problems of actualizing the goal intentions into an assortment of actions are various; among others involving the initial step to start. When people are immersed with their routine activities, experiencing an intense emotional experience, or being tired, they will not seize the opportunity available to transform their goal intention into action, because the opportunity is failed to attract attention. Attention is focused on other things that are not relevant to the intended goal.

Implementation intention refers to the strength of a person's implementation intentions. It dependents on person's effectiveness to specify anticipated situational contexts which are linked by an act. It can be functioned as "*if (situation), then I will (behavior)*". Because implementation intentions indicate the selection of a proper future situation (i.e., a good opportunity), it is believed that the mental representation of this situation becomes highly activated and thus more easily accessible.

An experiment by Gollwitzer & Brandstätter (1997) concluded that respondents who had goal intention without implementation intention tend to fail to achieve their intention. In contrast,

80% of respondents who had implementation intention succeed to translate their goal intention into action. Since implementation involves a specific context which serves as the trigger, we conclude that the conception of implementation intention is similar to motivation. In other words, we point out that intention affects behavior indirectly through motivation.

Research also has found support for different stages of intentions (Gollwitzer & Brandstätter, 1997; Gollwitzer & Schaal, 1998), which indicate that the entrepreneurial process may not be linear and suggests goal-directed behavior with different levels of goals that serve as external motivators (Lawson, 1997). Bay & Daniel (2003) conceptualized the hierarchy of goals, which implicitly argues for differences in motivational intensity, as a requirement for a goal to be enacted upon. Malebana (2014) reveals that entrepreneurial motivation is affected by entrepreneurial intention. Built on those arguments, we propose the second model as follows. Figure 2.

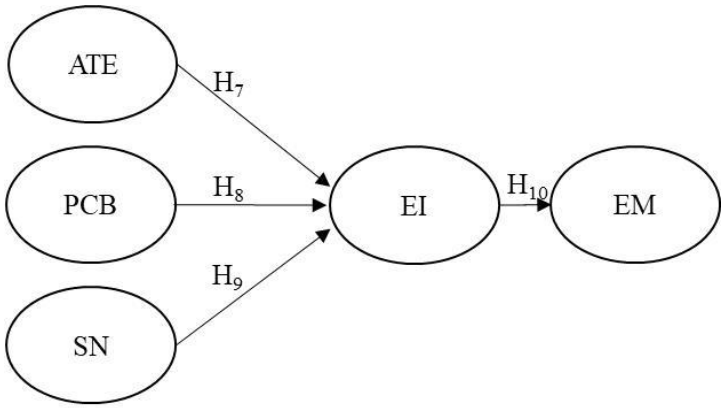

FIGURE 2
RESEARCH MODEL 2

METHODOLOGY

The research was carried among 273 undergraduate university students. Convenience sampling was applied to select the respondents. Ages of respondents ranging from 10 to 25 years old with average 21 years old. The proportion of male respondents slightly bigger (56.6%) compare to female respondents (43.4%). All of the respondents have taken entrepreneurship courses. However, there are only 32.8% of respondents participated in university entrepreneurship program. For those who participated in entrepreneurship program, their primary business is on culinary. Pulling students as respondents is reasonable since after their graduation most of them will enter the job market and face career choices. Data were collected by self-administered survey. Respondents were asked to return the questionnaire immediately after the completion.

The questionnaire was developed based on previous studies (Krueger et al., 2000; Malebana, 2014; Solesvik, 2013). Attitude towards entrepreneur consisted of five items to measure: advantage, attractiveness, readiness when there is an opportunity, preference, satisfaction. Perceived behavioral control was indicated by six items to measure: control of creation process, control over the situation, preparation, knowledge, optimism of starting a new business, the optimism of being a success. Subjective norms were captured by six items to measure: approval and judgment from friends, family, colleagues. Entrepreneurial intention

consisted of four items to measure readiness, goal, effort, and persistence. Entrepreneurial motivation was indicated by nine items to measure work independence, challenge, creative talents, earn money, exciting job, imitating role model, market opportunity, prestige, need a job. All of the items were measured by five points Likert scale, from strongly agree to strongly disagree.

Factor analysis was employed to determine valid items. The reliability was tested using Cronbach Alpha reliability statistics. Structural Equation Models (SEM) with a statistical methodology able to establish a confirmatory approach was performed to test model fitness and hypotheses testing.

RESULTS AND DISCUSSION

Exploratory Factor Analysis

In the study, exploratory factor analysis was performed to determine the underlying factorial structure of the scale. The result of the Bartlett's indicated that process of factor analysis could be continued since KMO value of each variable is greater than 0.50, and the p-value of Bartlett's test for each variable is less than 0.05. For reliability test, the range of α Cronbach value is between 0.762 and 0.905.

Items of attitude toward entrepreneurship, perceived behavioral control, subjective norms, and entrepreneurial intention forms one factor while entrepreneurial motivation forms two factors. We name those two factors as the internal and external motive. All items of attitude towards entrepreneurship, perceived behavioral control, and entrepreneurial intention has loading factor>0.50; ranging from 0.520 to 0.891. For entrepreneurial motivation, items 5 and 7 were dropped since the factor loading below 0.50.

Confirmatory Factor Analysis

Based on the calculation of SEM for examining the theoretical framework, a fitted model was obtained with a probability score of 0.79, CMIN/DF score of 1.212, GFI score of 0.925, AGFI score 0.931 and RMSEA score of 0.028.

Hyphoteses Testing

The first model tested was motivation to TPB model (model 1). Results of the goodness of fit test of the model with a probability score of 0.57, RMSAE score 0.029, GFI score 0.946, AGFI score 0.925 and CMIN/DF 1.236. Since all of the results achieve the criterion, we can conclude that the model is fit.

For model 1 tested, we found motivation has significantly affected the three determinants of entrepreneurial intention, attitude toward entrepreneur, perceived behavioral control, and subjective norms. The link between motivation and attitude toward entrepreneur was significant (CR=9.606), supporting H_1. The relationship between motivation and perceived behavioral control was also significant (CR=9.250), which support H_2. H_3 which implies a link between motivation and subjective norms was accepted (CR=7.504).

However, not as we expected, not all of these determinants significantly affect entrepreneurial intention. A link between attitude towards entrepreneur and entrepreneurial intention was statistically proven (CR=4.391), so does relationship between perceived behavioral control and entrepreneurial intention (CR=1.967). However, a link between subjective norms and

entrepreneurial intention was unproven (CR=0.60). Then, *H4* and *H5* were accepted, while *H6* were rejected. Figure 3.

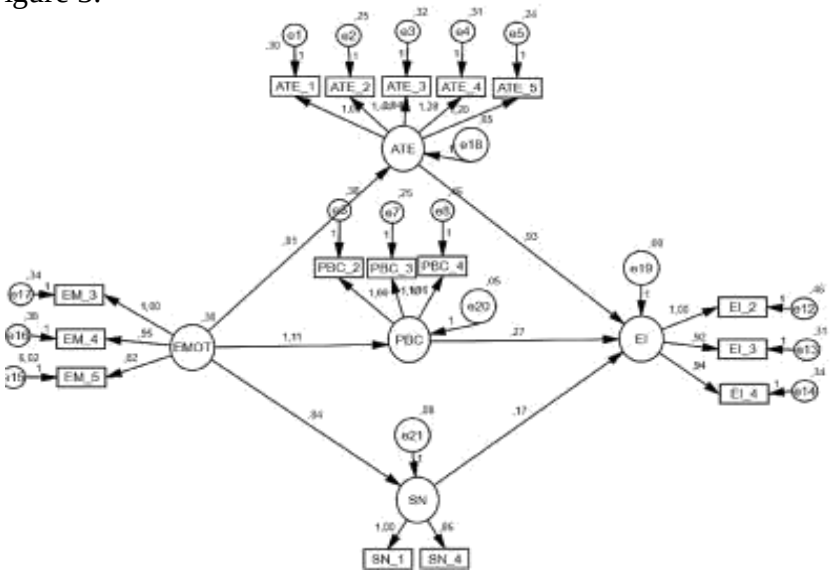

FIGURE 3
STRUCTURAL MODEL OF MODEL 1 TESTING

The Result of Hypotheses Testing Model 2

The model 2 also fit, refers to chi-square, RMESEA, GFI, AGFI, and CMIN/DF criterion. The second model also fitted with a chi-square score of 1.03, RMSEA score of 0.026, GFI score of 0.950, AGFI score of 0.929, and CMIN/DF score of 1.185.

Hypotheses Testing

Similar with the results of the first model tested, we also found that attitude toward entrepreneur, perceived behavioral control, were significantly affected entrepreneurial intention. However, there was no evidence found of link between attitude subjective norms and entrepreneurial intention. In addition, the effect of entrepreneurial intention on motivation was found. Then, *H7*, *H8*, and *H10* were accepted. However, *H9* were rejected. Figure 4.

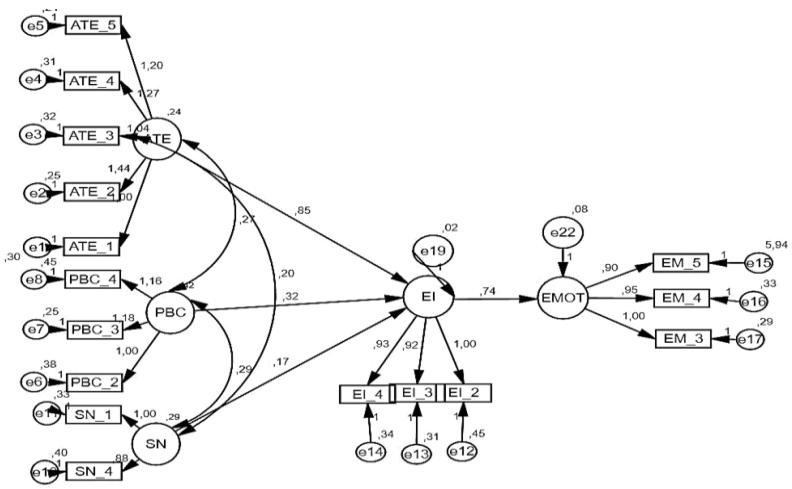

FIGURE 4
STRUCTURAL MODEL OF MODEL 2 TESTING

Competing the Models

All the two models fitted after some modification. However, model 2 seems slightly superior for predicting the role of motivation regards to the value of fit model criterion. As seen in Table 1, the chi-square, GFI, and AGFI scores of model 2 (1.03, 0.950, 0.929) were slightly higher compared to model 1 (0.057, 0.946, 0.925). Comparing the CR values for the original TPB model, as seen in Table 2 model 1 was slightly superior in determining the relationship between attitude to intention (5.574 for model 1 and 5.421 for model 2) while model 2 was slightly superior in perceived behavioral control to intention (2.073 for model 1 and 2.262) for model 2). Comparing the role of motivation in the extended model, model 2 was slightly superior since the CR value of intention to motivation is more prominent than each CR value of motivation to attitude, perceived behavioral control, and subjective norms.

Table 1
THE GOODNESS OF FIT COMPARISON

Parameters	Criterion		Results
		Model 1	Model 2
Chi Square Significant Probability	≥ 0.05	0.057	1.03
RMSEA	≤ 0.08	0.029	0.026
GFI	≥ 0.90	0.946	0.950
AGFI	≥ 0.90	0.925	0.929
CMIN/DF	≤ 2.00	1.236	1.185

Table 2
CR VALUE COMPARISON

Variables	Model 1	Model 2
ATE→EI	5.574	5.421
PBC→EI	2.073	2.262
SN→EI	1.151	1.101
EI→EMOT	n/a	10.311
EMOT→ATE	9.337	n/a
EMOT→PBC	10.075	n/a
EMOT→SN	8.741	n/a

However, regards to CR scores as seen in Table 2, both model 1 and model 2 found no evidence of a link between subjective norms and entrepreneurial intention (1.151 for model 1 and 1.101 for model 2).

DISCUSSION

The impact of entrepreneurial motivation on attitude towards entrepreneurship, perceived behavioral control, and subjective norms confirmed the finding of (Solesvik, 2013). The relationship between attitude and perceived behavioral control on entrepreneurial intention also supported previous studies (Guzmán-Alfonso & Guzmán-Cuevas, 2012; Izquierdo & Buelens, 2011; Krueger et al., 2000; Ozaralli & Rivenburgh, 2016; Schlaegel & Koenig, 2014; Solesvik, 2013).

However, the role of subjective norms as the antecedent of entrepreneurial intention was not found. The result similar to Krueger et al. (2000) but contrast with Ozaralli & Rivenburgh (2016) and Schlaegel & Koenig (2014). This finding was not surprising since a systematic literature review by Lortie & Castogiovanni (2015) found that in 86% articles which were reviewed, subjective norms to intentions were less relevant compared to two other entrepreneurial intention's determinants in TPB model. In our case, we suspected this finding comes from the characteristics of the millennial generation represented by the students in our sample, which is more independent in making a decision (Monaco & Martin, 2007) compare to the older generations, even in countries which have a strong culture of social bounding like Indonesia. Thus, even their parents as representative of the older generation have a negative opinion about entrepreneur as a career choice; it does not affect students' intention.

The effect of entrepreneurial intention on motivation was proven and supported Carsrud & Brännback (2011); Gollwitzer & Brandstätter (1997); and Malebana (2014). This finding supported the argument which claimed to transform intention into action; motivation plays a significant role.

CONCLUSION

While TPB has been recognized for decades as a robust theoretical framework to predict entrepreneurial intention, scholars found the model is incomplete since it has not considered the role of entrepreneurial motivation. The study investigated the role of entrepreneurial motivation in the context of TPB by competing two models. The first model served motivation as the antecedent of entrepreneurial intention determinants: the attitude toward entrepreneur, perceived behavioral control, and subjective norms. In contrast, the second model put motivation as the consequences of entrepreneurial intention.

The data were collected from 273 final year's undergraduate university students in a public university. Convenience sampling was employed to select the respondents. Exploratory factor analysis and structural equation model was utilized to analyze the data. The finding confirmed that in both models, motivation had a relationship to variables in TPB. Then, the two models could be applied to investigate the link between entrepreneurial motivation and intention. However, model 2 which tested entrepreneurial motivation as the prediction variable of entrepreneurial intention slightly superior compared to model 1 in term of the goodness of fit.

For both models, the relationship between subjective norms and entrepreneurial intention was unproven. It is suspected as a result of the way of thinking of students that which is more

independent compared to the older generations. Thus, unfavorable opinion of being entrepreneur which might be exposed to them has no impact on their intention.

The result of study emphasized the need of involving entrepreneurial motivation to investigate entrepreneurial intention, besides of utilizing entrepreneurial intention as a single predictor. Regardless to the similarity of those two concepts, intention and motivation have a different nature of characteristics, thus it should be treated separately. The study contributed a valuable insight to the extension of TPB model, particularly in explaining the role of motivation in the model in predicting students' entrepreneurial intentional behavior.

RECOMMENDATION & LIMITATION

Universities particularly in Indonesia need to readdress their entrepreneurial curriculum, learning strategies, and learning environment to boost students' motivation to be an entrepreneur. Since opportunity is the important motive of being an entrepreneur, business opportunities should be introduced early and expose frequently. It will require such a holistic curriculum where entrepreneurship should be embedded in many courses instead of relying on a single entrepreneurship course. The learning strategies should able to raise the students' needs of becoming independent, so they no longer perceive jobs are synonymous with salary and pension. Providing business experience, we believe will amplify students' intention and motivate them to implement the intention as well.

The using of convenience sampling is the limitation of this study respects to the generalization of the result. Regarding to the importance of motivation and intention in predicting behavior, the study did not involve entrepreneurial behavior variable in the model. Thus, we suggest future research should build a more comprehensive model by adding the behavior variable in the model since it will contribute valuable insight into entrepreneurial behavior research. Another suggestion is related to the role of the entrepreneurial motivation. Since both roles as a predicted and prediction construct were found, identifying and differentiating types of motivation in each role will be worthwhile.

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