

# **MEDIATING ROLE OF ENTREPRENEURIAL SELF EFFICACY IN DEVELOPING ENTREPRENEURIAL BEHAVIOR OF ENTREPRENEUR STUDENTS**

**Susetyo Darmanto, University of 17 Agustus 1945 Semarang  
Giyah Yuliari, University of 17 Agustus 1945 Semarang**

## **ABSTRACT**

*Entrepreneur student are students who own for-profit businesses while attending college. They are not only creating new ventures, but they are in the end of TEA (Totally Early stage entrepreneurial Activity) phase in entrepreneur process which finally they have to decide to continue their business or to stop it (discontinued). The purpose of this study is to analyse the influence of personality traits, entrepreneurial learning, environmental accessibility toward entrepreneurial intention and behaviour of entrepreneur students with mediating role of Entrepreneurial self-efficacy which suggested as the main factor that has the biggest effect toward entrepreneurial intention and behaviour. Research sample consisted of 162 entrepreneurial students from various universities in Semarang. The data carried out in 2017 and analysed with a Structural Equation Modelling (SEM) using AMOS v.21. The significant mediating role of entrepreneurial self-efficacy of entrepreneur student in developing entrepreneurial intention and behaviour showed the significant contribution of Social Cognitive Theory, Theory of Planned Behaviour and Entrepreneurship career development theory to realize entrepreneurship graduated career development.*

**Keywords:** Personality Traits, Entrepreneurial Learning, Entrepreneurial Self-Efficacy, Entrepreneurial Intention, Entrepreneurial Behaviour.

## **INTRODUCTION**

Based on the education level, unemployment from university graduate showed a high number and the percentage is getting higher compared to lower the education stage. In line with the effect of entrepreneurship education, there is a requirement to build an understanding of how to develop and support the emergence of young entrepreneurs whilst they are still learning at schools (Indarti, Rostiani & Nastiti, 2010). (Boyd & Vozikis, 1994) developed Social Cognitive Career Theory by discussing background factors and the important of self-efficacy in enhancing entrepreneurial intention. (Ajzen, 2005) developed Theory of Planned Behaviour by adding individual background factors such as; demography, personality, social, environment and information which effect and individual behaviour, also known as modified theory of planned behaviour.

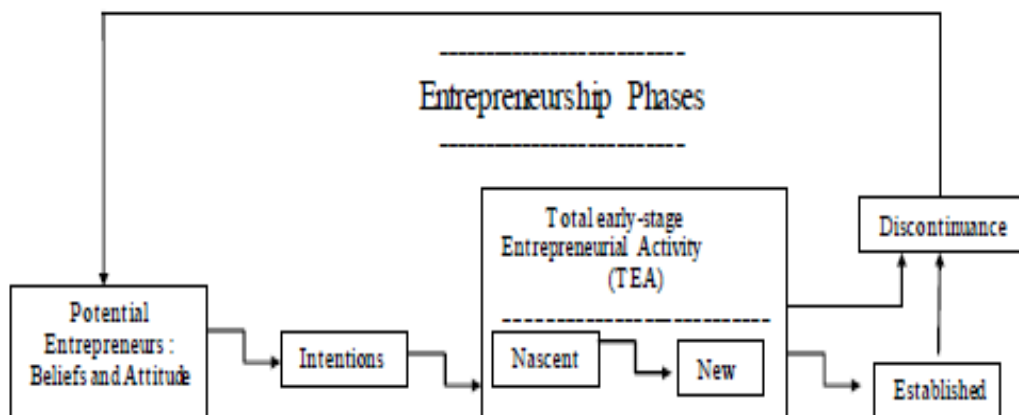
Based on that development, some researchers suggested that the background factors role which basically consisted of personality aspects (personality traits), entrepreneurial learning and environment support in creating intention and entrepreneurial behaviour development. Research conducted by (Lüthje & Franke, 2003) personality traits as antecedent of entrepreneurial behaviour, which has indirect role towards entrepreneurial intention and does not develop self-efficacy construction effect. Kristiansen & Indarti (2004); Ayodele (2013); Karabulut (2016),

conducted background factors, i.e., need for achievement, locus of control (personality) and instrumental readiness (environment) as direct antecedent toward entrepreneurial intention. (Zhao, Seibert & Hills, 2005), is focusing on the role of self-efficacy as mediating between propensity and entrepreneurial learning toward entrepreneurial intention.

Most commonly acquired personality traits in entrepreneurial research are risk propensity and locus of control. Instrumental readiness, entrepreneurial knowledge and entrepreneurial experience are most commonly acquired in environment support and entrepreneurial learning needed for new entrepreneurs. Some researchers showed that there was a positive role of risk propensity, internal locus of control, entrepreneurial knowledge and experience in entrepreneurial practice, instrumental readiness, in explaining entrepreneurial intention and behaviour (Fini, Grimaldi & Sobrero, 2009; Hmieleski & Corbett, 2006; Kristiansen & Indarti, 2004; Liñán & Santos, 2007; Ramayah & Harun, 2005; Zhao, Seibert & Hills, 2005; Sreih, Assaker & Hallak, 2016; Sajilan, Hadi & Tehseen, 2015).

Instead, in some researches, personality traits, entrepreneurial learning, accessibility towards environment were founded as weak predictor and did not give any positive effect on entrepreneurial intention, (Luca & Cazan, 2011) did not find any significant effect of willingness in risk propensity and internal locus of control as construction representing personality traits on entrepreneurial intention. (Lucky & Ibrahim, 2015) did not find significant effect of environmental factor on entrepreneurial intention.

Researches of entrepreneurial intention and behaviour focused on MBA students and nascent entrepreneurs had limitation in applying for entrepreneur students. Entrepreneur students are not only creating new ventures but they are in the end of TEA (Totally Early stage of entrepreneurial Activity), a phase in entrepreneur process which finally they have to decide to continue their business or to stop it (discontinued), as can be seen in Figure 1.



Source: Gem (2012); Xavier (2012)

**FIGURE 1**  
**THE ENTREPRENEURSHIP PHASES**

In order to establish their business, they have to choose to stop (discontinuance) or to choose entrepreneur as their career. Entrepreneur students need specific cognitive factor as a mediating some background factors toward a career as entrepreneur. According to (Krueger, Reilly & Carsrud, 2000; Zhao, Seibert & Hills, 2005) entrepreneurial self-efficacy was suggested has the biggest effect toward entrepreneurial intention.

Previous researches showed that there is a positive and significant effect of risk propensity, entrepreneurial knowledge and entrepreneurial experience in developing entrepreneurial intention (Barbosa, Gerhardt & Kickul, 2007; Fini, Grimaldi & Sobrero, 2009; Kristiansen & Indarti, 2004; Liñán & Santos, 2007; Ramayah & Harun, 2005; Zhao, Seibert & Hills, 2005; Sreih, Assaker & Hallak, 2016; Sajilan, Hadi & Tehseen, 2015). However, in some researches, risk propensity and entrepreneurial learning were found as weak predictors and did not give any positive effect on entrepreneurial intention. (Luca & Cazan, 2011) did not find any significant effect of willingness in risk propensity as a construct representing personality traits on entrepreneurial intention.

Researches on entrepreneurial intention were mostly focusing on MBA students and nascent entrepreneurs by using the role of entrepreneurial self-efficacy as a mediating variable (Barbosa, Gerhardt & Kickul, 2007; Zhao, Seibert & Hills, 2005). It occurs a limitation towards research about university students who make entrepreneurs as their main potential to create the birth of entrepreneurs from university graduates. Research towards entrepreneur students or according to GEM (2012) is in the last phase of TEA (Totally Early stage entrepreneurial Activity) phase is needed to further understand factors which play a role in the forming of university graduates who likely to choose a career in entrepreneurship.

Entrepreneurial self-efficacy is valued as a key predictor from entrepreneurial interest or it can be uttered that the big effect of entrepreneurial efficacy on entrepreneurial intention determines one's decision to be an entrepreneur (Boyd & Vozikis, 1994; Pihie & Bagheri, 2011; Zhao, Seibert & Hills, 2005; Barbosa, Gerhardt & Kickul, 2007; Ayodele, 2013; Jiang, Xiong & Cao, 2017)

Entrepreneurial self-efficacy was named in entrepreneurial research for self-efficacy and (DeNoble, 1999). The indicators were completely by (Barbosa, Gerhardt & Kickul, 2007) and then used for MBA students and nascent entrepreneurs in entrepreneur researches. According to (Bandura, 1986), self-efficacy is determined by vicarious experience, enactive mastery, social persuasion, psychological state, which is comparatively valued with the development of Theory of Planned Behaviour (Ajzen, 2005), which its background factors have roles in encouraging entrepreneurial intention, through entrepreneurial self-efficacy, among others are personality, learning and environment factors. Based on the flow of theory and the concept of development, environment acceptability, entrepreneurial learning and risk propensity, instrumental readiness has a role in developing entrepreneurial intention through entrepreneurial self-efficacy.

In sum, although there have been prior researches on entrepreneur intention and behaviour, there is still a lack of understanding on entrepreneur students. Previous researches found different results of background factors (personality traits and environment accessibility) towards entrepreneurial intention. As such, this research attempts to address these gaps in this article. Specially this research will examine the role of entrepreneurial self-efficacy for entrepreneur student as a mediating factor between some background factors toward Entrepreneurial behaviour and intention of university students, because after becoming graduates, they will decide if they will continue or stop the business they have started.

## **MODEL DEVELOPMENT**

### **Risk Propensity and Intention of Entrepreneurship**

According to Sitkin & Pablo (1992), the tendency of risk (risk propensity) is defined as the tendency of a person to take or avoid risks. According to Zhao, Seibert & Hills (2005),

individuals who have a tendency to take risks have confidence in the face of business barriers that have the intention or developing the business. Individual who dare to take risks will tend to be self-employed because they feel confident and capable in running and developing the business and be able to face business failures (Zhao, Seibert & Hills, 2005). In some studies, risk propensity, either as part of the nature of personality as well as psychological factors (psychological state) has a positive effect to the intention of entrepreneurship, both directly and indirectly through self-efficacy for entrepreneurship (Zhao, Seibert & Hills, 2005).

*H<sub>1</sub>: Risk Propensity has positive effect on Entrepreneurial Intention.*

### **Risk Propensity and Entrepreneurship Self Efficacy**

According to (Zhao, Seibert & Hills, 2005; Barbosa, Gerhardt & Kickul, 2007) one of personality trait that is very important in the course of a study of entrepreneurship is the tendency of taking risks (Risk propensity). According to (Bandura, 1986; Boyd & Vozikis, 1994), self-efficacy is influenced by four factors, namely: Vicarious experience, enactive mastery, social perspiration, psychological state. According to Zhao, Seibert & Hills, (2005) physiological conditions that affect the decision-making self-efficacy and self-employed in the construct tendency manifested at risk (risk propensity) is in the background factors associated with characteristic values and personality factors. Risk propensity is an essential factor in entrepreneurship as an indicator in the decision process. Results of previous studies to prove risk propensity effect on self-efficacy. Individuals who have a risk propensity will have the self-efficacy in the control of the business situation. Individuals who have the courage to take risks optimistic to be able to control the situation (Zhao, Seibert & Hills, 2005; Barbosa, Gerhardt & Kickul, 2007).

*H<sub>2</sub>: Risk propensity has positive effect on entrepreneurial self-efficacy.*

### **Internal Locus of Control and Entrepreneurial Intention**

Rotter (1966) was the firstly proposed locus of control concept. Locus of Control is an individual's control over their work and their confidence in the individual success. Internal LoC shows that a person believes his/her decisions can control his/her life whereas external LoC shows that a person's life is affected from external factors such as destiny, luck and other people beyond his/her decisions. It is expected that people who have internal LoC can determine their career paths, have entrepreneurial intentions and start their own businesses. (Karabulut, 2016), the entrepreneur is seen as having an internal locus of control is high. According (Ayodele, 2013), the higher the internal locus of control a person, the higher the entrepreneurial intention. Some researchers conclude that internal locus of control has positive influence on entrepreneurial intentions (Gupta & Muita, 2012; Sajilan, Hadi & Tehseen, 2015; Chavez, 2016).

*H<sub>3</sub>: Internal locus of control has positive effect on entrepreneurial intention.*

### **Entrepreneurial Knowledge and Entrepreneurial Self Efficacy**

Entrepreneurship learning embodied in entrepreneurship knowledge (Zhao, Seibert & Hills, 2005; Linan, 2005) and experience in practical entrepreneurship (Boyd & Vosikis, 1994; Zhao, Seibert & Hills, 2005). Definition of terms associated with a lot of knowledge of data,

information, intelligence, expertise, ideas, intuition or insight, that all depends on the context of the word knowledge is used (Ackoff, 1989). Entrepreneurial knowledge is a construct that represents the experience gained from others (vicarious experience) plays a role in fostering a person's cognitive abilities and will improve the efficacy oneself to entrepreneurship (Boyd & Visikis, 1994; Zhao, Seibert & Hills, 2005) Some researchers suggest that entrepreneurial knowledge in the form of education (education) has positive effect on entrepreneurial self-efficacy (Zhao, Seibert & Hills, 2005; Linan, 2005) or perceived behaviour control or perceive feasibility, which is by Krueger, Reilly & Carsrud (2000) assessed comparable to self-efficacy.

*H4: Entrepreneurial knowledge has positive effect on entrepreneurial self-efficacy.*

### **Entrepreneurial Experience and Entrepreneurial Self Efficacy**

According to Wood & Bandura (1989) one of the ways to strengthen self-efficacy is through direct experience. Experience is a way to translate knowledge into skills, with experience of people aware of the positive and negative consequences of his actions. Direct experience in question is the nature of flow experience; the experience is completely absorbed and is obtained when it first participated in the practice of entrepreneurship, experience in assisting the efforts of parents, as well as at the time of managing their own businesses (Novak, et al., 2000). Education and training affects one's perception on entrepreneurial intention and to choose a career in entrepreneurship (Rodrigues, Dinis, Paço, Ferreira & Raposo, 2012; Doğan, 2015; Njoroge & Gathungu, 2013). That is, entrepreneurship is not enough to just be held in the classroom in the form of lectures alone, but must be given the opportunity for students to feel directly how the difficulty in starting and running a business. Some researchers suggested that the entrepreneurial experience in the form of training, internship or practice of entrepreneurship has positive effect on entrepreneurial self-efficacy (Zhao, Seibert & Hills, 2005; Linan, 2005).

*H5: Entrepreneurial experience has positive effect on entrepreneurial self-efficacy.*

### **Instrumental Readiness and Entrepreneurial Self Efficacy**

Entrepreneurial intention may also be influenced by background factors, such as personality, values, beliefs and environment (contextual elements or contextual factors). Contextual element as environmental factors in this study realized in the construct instrumental readiness, which is believed to affect entrepreneurs in the early development of enterprises, namely their access to capital, information and quality of social networks owned what was then called the instrumental readiness (Indarti & Kristiansen, 2004; Ramayah & Haron, 2005). According to Fini, Grimaldi, Marzocchi & Sobrero (2012) contextual elements as background factors influence the entrepreneurial intention through attitudes to entrepreneurship (desirability) and self-efficacy (feasibility), so that contextual element in the form Instrumental readiness (Kristiansen & Indarti, 2004; Ramayah & Haron, 2005) will also affect the self-efficacy. This is consistent with the concept of Social Cognitive Theory is based on a model of reciprocity in three directions (triadic reciprocity), meaning that the interrelationships three factors are interrelated causes, namely: Behavioural, cognitive factors and personal and environmental influences human behaviour is the result of interaction between factors external and personal factors, such as self-efficacy. Previous research conducted by Bratkovic et al. (2011); Berg et al. (2011); Prajapati & Biswas (2011) concluded that the readiness of the instrument in the form of

business network, personal network, networking, social networks, positive effect on self-efficacy entrepreneurship.

*H<sub>6</sub>: Instrument readiness has positive effect on entrepreneurial self-efficacy.*

### **Instrumental Readiness and Entrepreneurial Intention**

Three environmental factors that are believed to affect entrepreneurs in the early development of enterprises, namely their access to capital, information and quality of social networks owned, which later referred to instrumental readiness (Ramayah & Haron, 2004). Previous research conducted by Ramayah & Haron (2005); Gelard & Saleh (2011); Kumar (2015) concluded that instrumental readiness positive effect on entrepreneurship intention.

*H<sub>7</sub>: Instrument readiness has positive effect on entrepreneurial intention.*

### **Entrepreneurial Self Efficacy and Entrepreneurship Intention**

Bandura (1986) defined self-efficacy as a judgement of one's capability to accomplish a certain level of performance. The researchers next apply this definition in the field of entrepreneurship and named it as an entrepreneurial self-efficacy (Denoble et al., 1999) which is defined as the perception of a person's ability to achieve success in carrying out his duties as a role of an entrepreneur. The development of the concept of entrepreneurial self-efficacy that is mostly used for MBA students and nascent entrepreneurs (Barbosa, Gerhardt & Kickul, 2007; Zhao, Seibert & Hills, 2005) have limitations when used for entrepreneurial students (students who are self-employed) relating to the development of a career after graduating from college (graduated entrepreneurship career development) (Nabi et al., 2010). Self-efficacy is considered as a variable that gives the most impact on entrepreneurship intentions or someone decides to entrepreneurship based on the belief in his ability to entrepreneurship. Research conducted by Uygun and Kasimoglu (2013); Ayodele (2013); Shinnar et al. (2014), concluded that entrepreneurial self-efficacy has positive effect on entrepreneurship intention.

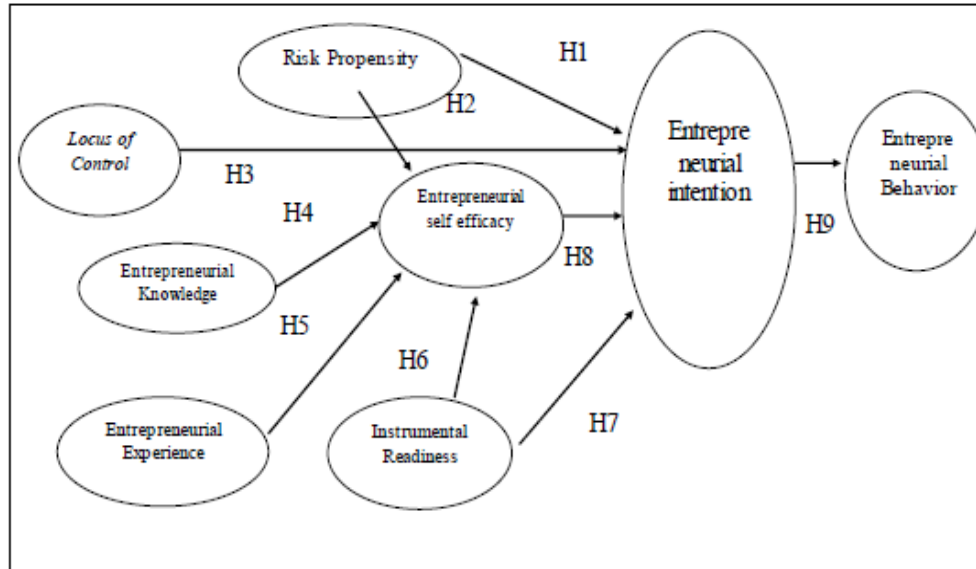
*H<sub>8</sub>: Entrepreneurial Self Efficacy has positive effect on entrepreneurial intention.*

### **Entrepreneurial Intention and Entrepreneurship Behavioural**

Ajzen (1985) in his theory of planned behaviour defined intentions as an individual's perception of the performance of a particular behaviour. Intention is a good predictor for behaviour (Ajzen, 2008). Entrepreneurship requires a strong individual character to embody entrepreneurship intentions into behaviour. Entrepreneurship action is a form of entrepreneurial behaviour as a realization of the intentions of entrepreneurship. Several previous studies conducted by Kim & Hunter (1993); Monsen et al. (2010); Renko et al. (2011); Chou et al. (2011) proves that the intention entrepreneurship positive effect on entrepreneurial behaviour.

*H<sub>9</sub>: Entrepreneurial intention has positive effect on entrepreneurial behaviour.*

Empirical Research Model on entrepreneurial intention and behaviour proposed in this research is as follows (Figure 2):



Source: Author's own work

**FIGURE 2**  
**EMPERICAL MODEL**

## METHOD

### Sample

Respondents of research consisted university students in Semarang who have conducted a business. The researcher himself visited each university for an early observation and its approach with the prospective respondent. Data collecting is using questionnaires and interview (if needed) to add required data collection.

### Data Collection

162 available data decided as research samples which consideration that number meets the number of sample adequacy for maximum likelihood estimation technique. Descriptive analysis based on gender shows that 53 % respondents are males, 47 % respondents are females. The age of research respondents varies from 19 to 27, which average is 22 years old. 90% respondents are 19 to 24 years old as the measurement of student's age. Based on parents' profession background, 33.4% are entrepreneurs, 44.2% are employees and 22.4% have other professions.

### Definition of Variables and Measures

Risk propensity is defined as an individual tendency to take or to avoid risks (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995). The measurement of risk propensity and the indicators adapted from (Fini, Grimaldi & Sobrero, 2009; Gaddam, 2008; Lüthje & Franke, 2003; Sitkin & Weingart, 1995).

Internal Locus of Control is the level of individual belief on success and failure through self-initiative on environment (Ramayah & Harun, 2005). The measurement of Internal Locus of Control and indicators adopted from (Gaddam, 2008; Kristiansen & Indarti, 2004).

The definition of knowledge is mostly related to the terminology of data, information, intelligence, skill, idea, intuition or insight, where all of them depend on the context of the knowledge word used (Ackoff, 1989). The indicator of entrepreneurial knowledge is related to how many students can absorb entrepreneurial knowledge based on data information, intelligence, skill, idea, intuition or insight, either sourced from inside or outside campus (Ackoff, 1989; Liñán et al., 2005; Lindsay et al., 2007; Zhao, Seibert & Hills, 2005).

The entrepreneurial experience is known as flow experience (Novak et al., 2000) which gained from acquiring training on entrepreneurship, helping a friend's business, managing his own business

Instrumental readiness is access capability of entrepreneurial supporting factors (Kristiansen & Indarti, 2004). The variable of Instrumental readiness is measured by using simplicity indicator in accessing capital, network and information.

Entrepreneurial self-efficacy is defined as a process of increasing students' entrepreneurial capability, so that they have belief and readiness to realize a career as an entrepreneur, which is based on self-capability in managing a business, capability in using business opportunity, capability in building an approach to business partner, mental maturity as an entrepreneur, capability to find the new things. (Zhao, Seibert & Hills, 2005; Barbosa, Gerhardt & Kickul, 2007).

Entrepreneurial intention is a tendency of individual desire to do entrepreneurship activity by creating new products through business opportunity and propensity taking (Kristiansen & Indarti, 2004; Ramayah & Harun, 2005; Taormina & Lao, 2007). The indicator on measuring variable of entrepreneurial intention includes the aspect of preference to choose a career as entrepreneur, recommendation to choose a career as entrepreneur to others, will realize business in next years.

Entrepreneurial behaviour is a series of activities and actions on individual practice, which autonomically produces and uses combination of innovative resources to identify and reach business opportunity, which is aimed in entrepreneurial action (Jung et al., 2001; Misra & Kumar, 2000; Monsen et al., 2010; Sequeira et al., 2007). Students' entrepreneurial behaviour is an action in producing a business which is then followed up to develop it after graduating. The measurement indicator on variable of entrepreneurial behaviour consists of possessing clear business vision and purpose and it will be achieved in the future, realizing a career as an entrepreneur.

## **DATA ANALYSIS**

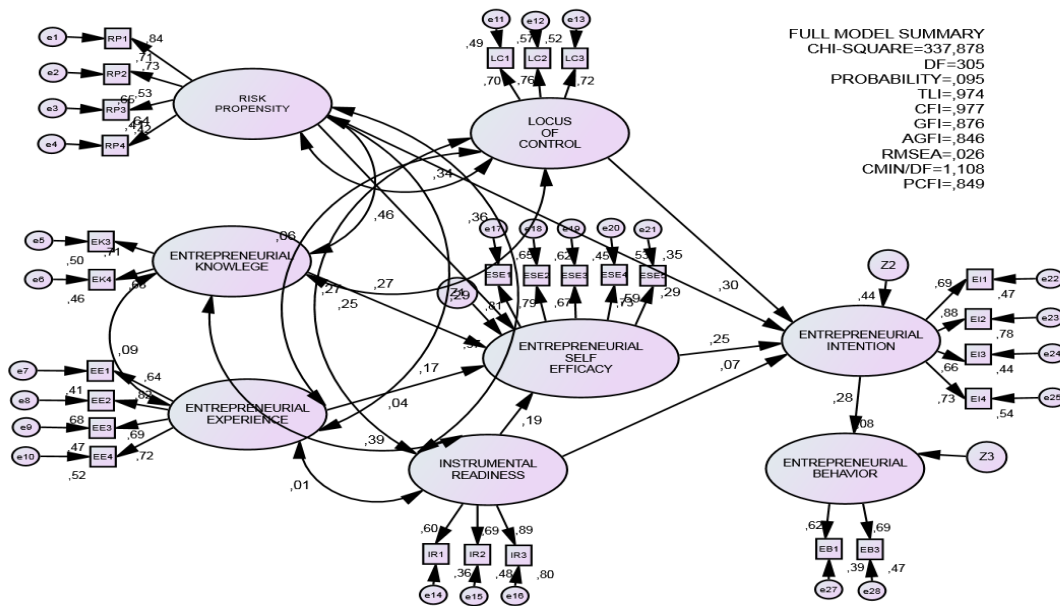
Testing on model and hypothesis in this research is using analysis of Structural Equation Modelling (SEM). This research is using data analysis of inferential and descriptive statistics. Descriptive statistics is used to describe respondents' characteristics, whereas inferential statistics is used to test model and hypothesis.

### **Structural Equation Model Analysis**

The next analyse is full mode Structural Equation Model (SEM) analysis which is meant test model and developed hypothesis in this research. Model testing in structural equation model



is conducted in two tests, model compatibility test and causality significance test through regression coefficient. The result of data processing for SEM analyse is shown in Figure 3 and Table 1, as follows:



Source: Author’s own work

**FIGURE 3**  
**THE RESULTS OF STRUCTURAL EQUATION MODEL**

No	Goodness of fit index	Cut of Value	Results	Evaluation
1	X <sup>2</sup> -Chi-Square	<346.729	337.878	Good
2	Significance Probability	≥ 0.05	0.095	Good
3	CMIN/DF	≤ 2.00	1.108	Good
4	GFI	≥ 0.90	0.876	Moderate
5	AGFI	≥ 0.90	0.846	Moderate
6	TLI	≥ 0.95	0.974	Good
7	CFI	≥ 0.95	0.977	Good
8	RMSEA	≤ 0.08	0.026	Good
9	Hoelter (5%)	≥ 162	175	Good

Source: Author’s own work

The model basically demonstrates good results since the goodness of fit indices meet all statistical requirements. Most of hypothesis is statistically accepted. Eight hypotheses were accepted while one hypothesis was rejected. Table 2 presented the results of research hypothesis.

Independent Variable	Dependent Variable	Hypothesis	ESTIMATE	CR	P	Description
Risk Propensity	Entrepreneurial	H <sub>1</sub>	0.361	2.831	0.005	Accepted

	Intention					
Risk Propensity	Entrepreneurial Self-Efficacy Maturity	H <sub>2</sub>	0.221	2.806	0.005	Accepted
Internal Locus of Control	Entrepreneurial Intention	H <sub>3</sub>	0.424	3.221	0.001	Accepted
Entrepreneurial knowledge	Entrepreneurial Self-Efficacy	H <sub>4</sub>	0.220	2.022	0.043	Accepted
Entrepreneurial Experiences	Entrepreneurial Self-Efficacy	H <sub>5</sub>	0.154	2.061	0.039	Accepted
Instrumental Readiness	Entrepreneurial Self-Efficacy	H <sub>6</sub>	0.168	1.991	0.046	Accepted
Instrumental Readiness	Entrepreneurial Intention	H <sub>7</sub>	0.107	0.817	0.414	Unaccepted
Entrepreneurial Self-Efficacy	Entrepreneurial Intention	H <sub>8</sub>	0.412	2.539	0.011	Accepted
Entrepreneurial Intention	Entrepreneurial Behaviour	H <sub>9</sub>	0.159	2.077	0.038	Accepted

Source: Author's own work

## DISCUSSION

The result demonstrated is shown in Table 2, that (1) risk propensity, entrepreneurial knowledge, entrepreneurial experience were significantly and positively influenced on entrepreneurial self-efficacy (2) risk propensity and locus of control were significantly and positively influenced on entrepreneurial intention (3) entrepreneurial self-efficacy was significantly and positively influenced on entrepreneurial intention. Based on research findings we can conclude that the arise of risk propensity and entrepreneurial learning will arise entrepreneurial self-efficacy and finally will arise entrepreneurial intention.

Entrepreneurial students completed with entrepreneurial learning by following some courses and by business practical which is proven by self-capability in managing a business, capability in using business opportunity and building an approach to business partner, mental maturity as an entrepreneur and capability to find the new things, high Loyalty will believe of entrepreneurial success. According to Bandura (1986), in order to reach self-efficacy, someone has to undergo through development throughout cognitive and social processes as well as skills obtained from experience. Based on self-concept theory of career development, students in the exploration stage will decide his choice to make decision to choose job alternative he desires. Practical in business will bring them toward career maturity as a process to develop capability until taking a desired career decision (Borges et al., 2007). Entrepreneurial learning is undertaken through observation learning, formal learning, vicarious experience and enactive mastery (mastery practice) with a series of practices or training in order to improve the skills (Boyd & Vozikis, 1994). Prior experience of starting a business or trying to start a business is significantly linked with a positive attitude toward entrepreneurship and a greater degree of self-efficacy. This implies that students who have had direct experience of starting their own business have a more favourable attitude toward an entrepreneurial career and are more confident in their own ability to repeat that behaviour Rodrigues et al. (2012).

Risk propensity is a personality trait which has a direct significance influence on entrepreneurial intention and indirect significance influence through entrepreneurial self-efficacy. Someone with a high willingness to take risks that will have the confidence that he was able to realize the business to be conducted. Furthermore, a person's belief ability to

entrepreneurship will further enhance the strong desire to realize the business. Previous results of research showed that risk propensity positively effect on entrepreneurial self-efficacy Zhao, Seibert & Hills (2005); Liñán et al. (2005); Gaddam (2008). Risk propensity is a major variable from the personality trait most widely used in entrepreneurship research. By having the willingness to take risks, an entrepreneur will have the courage to take measures that will benefit the business while taking into account that is ready to face the risk of loss that may be happened. Some of the results of previous research conducted by Zhao, Seibert & Hills (2005); Barbosa, Gerhardt & Kickul (2007); Fini et al. (2012); Zhao, Seibert & Lumpkin (2010) showed that risk propensity positively effect to the intention of entrepreneurship.

Locus of control is another personality trait which has a positively effect on entrepreneurial intentions. The indicator that provides the greatest contribution is hard work determines success, meaning students who are self-employed emphasizes hard work for success in entrepreneurship, among others by trying to eliminate factors that hinder the hard work, such as laziness, health, lack of capital. Internal locus of control that has indicators such as: Like to work hard, never give up, do not believe the luck factor, have high initiative is in keeping with the character that must be owned by an entrepreneur, because in managing and developing a business will face challenges and difficulties. Previous results of research showed that the internal locus of control has positive influence on entrepreneurial intention. (Sajilan, Hadi & Tehseen, 2015; Chavez, 2016; Karabulut, 2016).

Entrepreneurial Self efficacy has a positively effect on entrepreneurial intention. The indicator that provides the greatest contribution is having the confidence to start a business, meaning that students who are self-employed have had confidence the ability of self-entrepreneurship, among others, expressed the ability to make decisions quickly and precisely, are able to market the product for knowing the advantages and disadvantages of the product, has access and financial network to support business development efforts. Individuals who have high entrepreneurial self-efficacy will encourage increasing entrepreneurial intentions and behaviour. Results of research conducted Ayodele (2013); Jiang, Xiong & Cao (2017) proved that entrepreneurial self-efficacy positively effects on entrepreneurial intention.

The research finds positive of Entrepreneurial intention effect on entrepreneurial behaviour. The indicator that provides the greatest contribution is more interested in being an entrepreneur, which means that students who are more interested in entrepreneurship will become entrepreneurs compared to other professions, such as by considerations do love the job of being an entrepreneur, can help others, feel comfortable entrepreneurship. Ways, in which to recommend entrepreneurship to other people, other pursued through approaches to communicate, make capital cooperation, create business cooperation plan, dissemination of pamphlets and brochures. Some of the results of research from previous researches showed that the entrepreneurial intention had a positively effect on entrepreneurial behaviour Kim & Hunter (1993); Monsen et al. (2010). Intention and behaviour of entrepreneurship in students as evidenced by the actions of entrepreneurship, they will be proven to be a decision to entrepreneurship after graduating from college. According to the Global Entrepreneurship Monitoring, in phase of Totally Early Stage Entrepreneurship Activity (TEA), someone will take a decision whether to continue, expand its business, a career as an entrepreneur or go out of business (discontinued).

However, despite their positive influences, the effects of instrument for readiness on entrepreneurial intention were insignificant. Instrumental readiness didn't positively effect on the entrepreneurial intentions. This result is contrast with the results of research conducted by

(Kristiansen & Indarti, 2004), (Ramayah & Harun, 2005), (Ali et al., 2011), which proved that the instrumental readiness has positively effect on entrepreneurial intention. This research has same results with research conducted by (Taormina & Lao, 2007) which showed that the instrumental readiness in the form of social networks has no effect to the intention. Likewise, the results of research (Sequeira et al., 2007) found instrumental readiness of information and knowledge does not affect the interests of entrepreneurial research. (Indarti, Rostiani & Nastiti, 2010) research results, about the comparison of student interest in entrepreneurship Indonesia and China concluded that the Instrumental readiness does not affect the student's interest in entrepreneurship in Indonesia. According to (Indarti, Rostiani & Nastiti, 2010), new businesses in Indonesia are mostly small businesses and in the informal sector, so that it can be an obstacle to the entry of capital, information and networking. Most of the businesses found in this study are small businesses with little capital obtained from the informal sector, such as siblings, parents and friends. Accessibility support the existing environment (access to capital, information and social networks) have not been quite able to encourage increased interest in entrepreneurship so that it requires a concerted effort to further enhance instrument readiness for the development of new business.

The significant mediating role of entrepreneurial self-efficacy shows the significant contribution of Social Cognitive Theory, Theory of Planned Behaviour and Entrepreneurship career development theory to realize entrepreneurship graduated career development. The findings concluded that the practical of business in universities will enlighten university students to realise entrepreneur career.

### **LIMITATION AND SUGGESTION FOR FUTURE RESEARCH**

In our model we do not account for all factors that have been identified as possible determinants of entrepreneurial intention. This research does not really thoroughly discuss about the role of demographic factors (age, ethnic and gender), environmental factors, other personality factors that have a role in increasing entrepreneurial intention. The use of a cross-sectional design limits one's ability to capture changes in traits and intention over time. A longitudinal study approach, which follows individuals over time, is the best for understanding the process of becoming entrepreneurs. The respondents were only consisted entrepreneur students in one city (Semarang), wider respondents in one Province (Central Java) are recommended for better result.

### **CONCLUSION**

This research is based on Social Cognitive Theory, Theory of Planned Behaviour and Theory of Career Development. Significant role finding of background factors show the role of Human Capital Theory, risk theory in individual approaching, theory of environment acceptability in building entrepreneurial intention through mediation role of entrepreneurial self-efficacy. This finding is expected to give theoretical implication on the development of management science, especially human resource management and entrepreneurship.

Entrepreneurial students must get bigger attention from all sides, especially the government, universities and private. Government, through its department, such as Department of Education, Department of labour force and transmigration, department of cooperation and UKM must increase entrepreneurial students programs through policies of funding, training, character education and monitoring. Universities must increase its attention and effort of entrepreneurship development in campuses through business practical's.

## REFERENCES

- Ackoff, R.L. (1989). From data to wisdom. *Journal of Applied Systems Analysis*, 16(1), 3-9.
- Ajzen, I. (2005). *Attitudes, personality and behaviour*: McGraw-Hill Education (UK).
- Ali, A., Topping, K., Tariq, R.H. & Wakefield, P. (2011). Entrepreneurial propen-sity in Pakistan and UK: A comparative study of Pakistani and UK prospective teachers. *Pakistan Journal of Commerce*, 5(2), 243-265.
- Ayodele, K.O. (2013). Demographics, entrepreneurial self-efficacy and locus of control as determinants of adolescents' entrepreneurial intention in Ogun State, Nigeria. *European Journal of Business and Social Sciences*, 1(12), 59-67.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Barbosa, S.D., Gerhardt, M.W. & Kickul, J.R. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 86-104.
- Borges, N.J., Richard, G.V. & Duffy, R.D. (2007). Career maturity of students in accelerated versus traditional programs. *The Career Development Quarterly*, 56(2), 171-176.
- Boyd, N.G. & Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18, 63-77.
- Chavez, J. (2016). *The personality characteristics of an entrepreneur and their effects on the performance of a new business venture*. Bachelor's Thesis, 1-37.
- DeNoble, A.D. & Ehrlich, S. (1999). *Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action*. Frontiers of Entrepreneurship Research. Boston: Babson College.
- Doğan, E. (2015). The effect of entrepreneurship education on entrepreneurial intentions of university students in Turkey. *Ekonometri ve İstatistik e-Dergisi*, 23, 79-93.
- Fini, R., Grimaldi, R., Marzocchi, G.L. & Sobrero, M. (2012). The determinants of corporate entrepreneurial intention within small and newly established firms. *Entrepreneurship Theory and Practice*, 36(2), 387-414.
- Fini, R., Grimaldi, R. & Sobrero, M. (2009). Factors fostering academics to start up new ventures: An assessment of Italian founders' incentives. *The Journal of Technology Transfer*, 34(4), 380-402.
- Gaddam, S. (2008). Identifying the relationship between behavioural motives and entrepreneurial intentions: An empirical study based participations of business management students. *The Icfaian Journal of Management Research*, 7(35), 5.
- Gupta, A. & Muita, S.R. (2012). Relationship between entrepreneurial personality, performance, job satisfaction and operations strategy: An empirical examination. *International Journal of Business and Management*, 8(2), 86.
- Hmieleski, K.M. & Corbett, A.C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 44(1), 45-63.
- Indarti, N., Rostiani, R. & Nastiti, T. (2010). Underlying factors of entrepreneurial intentions among Asian students. *The South East Asian Journal of Management*, 4(2), 143.
- Jiang, H., Xiong, W. & Cao, Y. (2017). Research on the mechanism of entrepreneurial education quality, entrepreneurial self-efficacy and entrepreneurial intention in social sciences, engineering and science education. *Eurasia Journal of Mathematics, Science & Technology Education*, 13(7), 3709-3721.
- Jung, D.I., Ehrlich, S.B., De Noble, A.F. & Baik, K.B. (2001). Entrepreneurial self-efficacy and its relationship to entrepreneurial action: A comparative study between the US and Korea. *Management International*, 6(1), 41.
- Karabulut, A.T. (2016). Personality traits on entrepreneurial intention. *Procedia-Social and Behavioural Sciences*, 229, 12-21.
- Kim, M.S. & Hunter, J.E. (1993). Relationships among attitudes, behavioural intentions and behaviour a meta-analysis of past research. *Communication Research*, 20(3), 331-364.
- Kristiansen, S. & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(1), 55-78.
- Krueger, N.F., Reilly, M.D. & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432.
- Kumar, A.A.J. & Aayush. (2015). *Factors affecting entrepreneurial intent among students: A case study of BITS Pilani*.
- Liñán, F., Rodríguez-Cohard, J.C. & Rueda-Cantuche, J.M. (2005). *Factors affecting entrepreneurial intention levels*.

- Liñán, F. & Santos, F.J. (2007). Does social capital affect entrepreneurial intentions? *International Advances in Economic Research*, 13(4), 443-453.
- Lindsay, N.J., Lindsay, W.A., Jordaan, A. & Mapunda, G. (2007). Indigenous nascent entrepreneur self-efficacy and perceived individual success. *International Journal of Entrepreneurship and Small Business*, 4(5), 605-619.
- Luca, M.R. & Cazan, A.M. (2011). Involvement in entrepreneurial training and personality. *Procedia-Social and Behavioural Sciences*, 30, 1251-1256.
- Lucky, E.O.I. & Ibrahim, N.A. (2015). Environmental factors and entrepreneurial intention among Nigerian students in UUM. *Sains Humanika*, 5(2).
- Lüthje, C. & Franke, N. (2003). The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), 135-147.
- Misra, S. & Kumar, E.S. (2000). Resourcefulness: A proximal conceptualisation of entrepreneurial behaviour. *Journal of Entrepreneurship*, 9(2), 135-154.
- Monsen, E.W., Urbig, D., Renko, M., El Tarabishy, A. & Schjoedt, L. (2010). Explaining entrepreneurial intent and behaviour: Moderating effects of efficacy and control beliefs. *Frontiers of Entrepreneurship Research*, 30(5), 13.
- Njoroje, C.W. & Gathungu, J.M. (2013). The effect of entrepreneurial education and training on development of small and medium size enterprises in Githunguri District-Kenya. *International Journal of Education and Research*, 1(8), 1-22.
- Novak, T.P., Hoffman, D.L. & Yung, Y.F. (2000). Measuring the customer experience in online environments: A structural modelling approach. *Marketing Science*, 19(1), 22-42.
- Pihie, Z.L. & Bagheri, A. (2011). Malay secondary school students' entrepreneurial attitude orientation and entrepreneurial self-efficacy: A descriptive study. *Journal of Applied Sciences*, 11(2), 316-322.
- Ramayah, T. & Harun, Z. (2005). Entrepreneurial intention among the student of Universiti Sains Malaysia. *International Journal of Management and Entrepreneurship*, 1(1), 8-20.
- Rodrigues, R.G., Dinis, A., Paço, A., Ferreira, J. & Raposo, M. (2012). The effect of an entrepreneurial training programme on entrepreneurial traits and intention of secondary students. *Entrepreneurship-Born, made and Educated: InTech*.
- Sajilan, S., Hadi, N.U. & Tehseen, S. (2015). Impact of entrepreneur's demographic characteristics and personal characteristics on firm's performance under the mediating role of entrepreneur orientation. *Review of Integrative Business and Economics Research*, 4(2), 36.
- Sequeira, J., Mueller, S.L. & McGee, J.E. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behaviour. *Journal of Developmental Entrepreneurship*, 12(3), 275-293.
- Shinnar, R.S., Hsu, D.K. & Powell, B.C. (2014). Self-efficacy, entrepreneurial intentions and gender: Assessing the impact of entrepreneurship education longitudinally. *The International Journal of Management Education*, 12(3), 561-570.
- Sitkin, S.B. & Pablo, A.L. (1992). Reconceptualizing the determinants of risk behaviour. *Academy of Management Review*, 17(1), 9-38.
- Sitkin, S.B. & Weingart, L.R. (1995). Determinants of risky decision-making behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, 38(6), 1573-1592.
- Sreih, J.F., Assaker, G. & Hallak, R. (2016). Entrepreneurial experience, support for community and family firm performance: A cross-study of product and service-based family businesses. *Contemporary Management Research*, 12(4), 467.
- Taormina, R.J. & Lao, S.K. (2007). Measuring chinese entrepreneurial motivation: Personality and environmental influences. *International Journal of Entrepreneurial Behaviour & Research*, 13, 200-211.
- Xavier, S., Kelley, D., Kew, J., Herrington, M. & Vorderwulbecke, A. (2012). *Global Entrepreneurship Monitor 2012 global report (GEM)*. Babson College, Universidad del Desarrollo, Universiti Tun Abdul razak, London Business School.
- Zhao, H., Seibert, S.E. & Hills, G.E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265.
- Zhao, H., Seibert, S.E. & Lumpkin, G.T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381-404.