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# The presence and persistence of entrepreneurship education in Indonesia: a cross sectional study

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## **ABSTRACT**

This study aims to improve an understanding of the contribution of entrepreneurship education (EE) in Indonesia's higher education. Even though the contribution of EE to global education is contested at the present time by many scholars, the evaluation of EE implementation in Indonesia is necessary in order to improve educated entrepreneurs. The study used a cross-sectional approach in the Universitas Prasetiya Mulya which is divided into the first, second, and third years. Valid questionnaire reached 924 respondents. The findings show that EE's contribution in Indonesia has more influence on attitudes and perceived behavioral control. However, other findings indicate that the contribution of EE is still not fully persistent due to a sharp decline in the regression coefficient, especially from subjective norm and perceived behavioral control in the students third year while attitude consistently contributes significant role and has an increasing contribution.

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71

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# 1. INTRODUCTION

Education contributes an important role in enhancing entrepreneurial activity and its competitiveness. Many scholars have shown that education levels are a necessary condition to promote competitiveness [1], [2]. The increase in human capital through education can help create innovation and adaptation to technologies that have implications for income generation [3]. Without improving the quality of education, it will be difficult for a country to improve its economic performance in the long term. The concrete attachment between some activities such as education, job creation, and entrepreneurial performance most certainly confirms the notion that education towards entrepreneurial activities is indeed a vital aspect [4].

## 1.1. Contention of entrepreneurship education (EE)

Given the importance of entrepreneurial contribution to the social and economic community, entrepreneurship education is a key instrument for improving the entrepreneurial attitudes of potential and nascent entrepreneurs [5]. Nevertheless, the presence of entrepreneurship education is still contested. The role of entrepreneurship education has a measurable impact on the intention of entrepreneurship [6]. Entrepreneurship education has a significant impact on student trends and intentionality [7]. On the other hand, other research results tend to assert otherwise that entrepreneurship education has a relatively small impact on entrepreneurial intentions [8], [9]. The difference of educational background does not always have a direct effect towards the student's entrepreneurial intentions [10].

Amid the conflicting arguments of the impact of entrepreneurship education, it is also necessary to study the persistence of the program. Higher the level of education will widen the chances of success of

72 ISSN: 2252-8822

entrepreneurs will be [11]. Individuals who have higher entrepreneurship education will have a higher entrepreneurship intention than those who do not [12]. In the meantime, individuals exposed to entrepreneurship education have no effect on entrepreneurial intentions and even tend to be negative [13]. Shortly, the high level of education does not strengthen the relationship with the success of entrepreneurship.

## 1.2. Purposes of study

This research seeks to determine how far the effectiveness of entrepreneurship education process in Indonesia extends towards the desire to engage in business as well as alternative career choice for students from the perspective of Theory of Planned Behavior (TPB). This research is conducted among those in higher education, because college students are seen as the most promising source of entrepreneurship and a place to consolidate the foundations of the organisation that is created [14]. In this study we also measure the persistence of the program by distinguishing the student's level of study. Meanwhile, some previous studies on entrepreneurship education are more prevalent in developed countries and are not widely found in developing countries. In Indonesia, entrepreneurship education research has focused on the concept of entrepreneurship education [15] and its implementation approach [16], [17]. Furthermore, we still have not found a study that evaluates the implementation of entrepreneurship education.

#### 2. LITERATURE REVIEW

#### 2.1. Theory of planned behavior (TPB)

TPB was developed by Icek Ajzen in 1985 initially to observe human and organizational behavior. In its development, TPB can transform into a theory that helps to predict behavior and is widely used in various disciplines [18]. TPB has been proven empirically to study various forms of behavior [19]. In its early development, TPB accommodates only the subjective attitudes and norms that shape intentions in behavior [20].

Intention is determined by three main factors [19]. First, attitude toward behavior refers to an individual's judgment of the extent to which the behavior is exhibited and also its impact, favorable or not. Attitudes represent the overall evaluation of the behavior undertaken by individuals [18]. The hypothesized attitude component consists of effective (unpleasant/unpleasant) and instrumental evaluation (beneficial/unfavorable) of behavior [21]. Secondly, subjective norms consist of personal beliefs about another person who is considered important to assume that the individual must be involved in behavior or not. The figure in question is an individual whose preference is important. In addition, subjective norms are assumed to assess social pressures on individuals to perform or not through their actions. Measurement of the components of subjective norms can be hypothesized to be both injunctive and descriptive [22]. Finally, perceived behavioral control (PBC) is a perception of the ease or difficulty in performing behaviors and is assumed to reflect past experiences and anticipation of obstacles [19]. These factors include internal control factors (e.g., information, personal shortcomings, skills, abilities, emotions) and external control factors (e.g., opportunities, dependence on others, barriers) [23].

The popularity of TPB has been used in a wide variety of disciplines. TPB helps to predict a person's behavior in their everyday lives [19]. TPB is also widely used to predict consumers' intentions and behavior to buy a product, as in the research conducted by [24], [25]. A meta-analysis study was conducted find the influence of behavior was largely mediated by the strength of behavioral intentions [26].

## 2.2. TPB relevance with entrepreneurship and EE

The power of predicting intent is greater than predicting behavior, because in its course, behavior may change due to other influencing factors [27], [28] In other words, intention does not have to be the same as the action because of the cancellation if, within that period, there is a factor that encourages the cancellation. Intentions have earlier positions than actions. In the context of career choice as an entrepreneur, the TPB concept can also be applied [29].

A career as involving two alternatives: as an entrepreneur or as working in an organization [28]. In relation to the TPB, the intended career decision reflects a process of belief, attitude, and intention of the evolution of congruent capacities of our knowledge, beliefs, and experiences in order to infer the rationality of the use of TPB career choice as an entrepreneur [30]. TPB is a significant predictor of job search intent in addition to the several other variables that affect job seekers [31].

Several other studies have suggested that entrepreneurship education has a significant effect on entrepreneurship [32], [4]. Some cases widely explain the importance of entrepreneurship education in stimulating entrepreneurial intention [33]. Not all agree that EE have a significant impact on entrepreneurship. EE only has a significant impact on those who have never been exposed to the program,

while it has the opposite effect on those who have received education [6]. EE has no significant effect toward intention to become an entrepreneur. [13], [34].

Education is an important factor in improving the individuals' ability, including entrepreneurial activities. Thus, higher education is believed to provide more benefits. In the context of entrepreneurship, higher education can increase business opportunities compared with those with lower education [35]. Sufficient entrepreneurship education will improve business interest [36]. However, some studies have argued otherwise that the length of study period decreases the desire toward entrepreneurship and interest [34].

#### 2.3. EE in Indonesia

Although it has only become a concern in recent years, the application of entrepreneurship education in Indonesia has just started to show its teeth. Through the Indonesian National Education Standards (SNP), entrepreneurship education can be emphasized and given from an early age as stipulated in the Indonesian presidential decree (Perpres) 2005 No. 19 [37]. This effort is carried out in addition to strengthening the nation's economy but also being able to be a stimulus in creating competitiveness for individuals in facing globalization such as the ASEAN Economic Community [38]. In practice, SNP will be a reference for every educational institution in Indonesia to shape the pattern of education and its curriculum so that it can be understood and practiced in daily life [39]. Even though there are many universities that have implemented entrepreneurship education, only a few universities that have dedicated the program into intracurriculum. Those universities include Universitas Prasetiya Mulya, Universitas Ciputra, Universitas Bina Nusantara, Universitas Surya, Institut Teknologi Bandung and several others.

## 3. RESEARCH HYPOTHESIS

The research hypothesis was built using TPB instruments as shown in Figure 1. Attitude (ATT) is a factor in an educated person to get a positive or negative response to earned on entrepreneurial activity, including entrepreneurship [32]. If individuals assume that business is beneficial to him/her, then the individual will respond positively, and vice versa [6]. While in the context of career choice, describes the individual's desire to be self-employment or work within the organization [33]. By definition, attitude represents an evaluation of a psychological object that is captured in the contested attribute dimension, both positive and negative. The shift in confidence can shift because of the valence of beliefs that occur in him at a certain time [19].

Subjective norm (SN) is a measurement instrument of the social pressure felt by individuals in carrying out entrepreneurial activities [5] and refers to the perception of "reference people" to approve decisions or not to become entrepreneurs. SN is a perception or opinion built from other individuals who are considered important when performing the desired action [40]. When acting as an entrepreneur, the individual will gain influence from another important individual. Career opinions as an entrepreneur or another career will lead individuals to follow particular social pressures [21]. Individual opinions that are considered important for entrepreneurship will influence as a form of social pressure.

Then, the Perception of Behavior Control (PBC) is defined as the perception of ease or difficulty of being an entrepreneur [5]. PBC is the perception of the ease or difficulty in performing the behavior and is assumed to reflect the past experience and anticipation of obstacles in the future [19]. In Ajzen's theory, it is explained that PBC is an individual perception that is built regarding the ease and difficulty in carrying out the individual's desires. This perception is built based on a reflection of past experience and also anticipation of future challenges. Confidence of self-efficacy determines how people feel, think, motivate him/her, and behave. In the context of entrepreneurship, these PBC variables relate to the availability of support and resources or obstacles to starting a business [41]. Figure 1 shows diagram of the research hypothesis.

The presence and persistence of entrepreneurship education... (Ambara Purusottama)

74 ISSN: 2252-8822

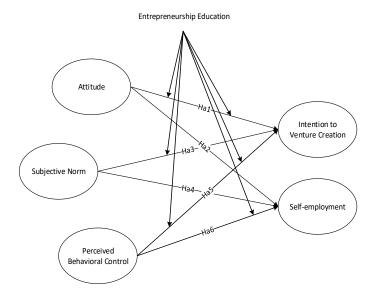


Figure 1. Research hypothesis diagram

## 4. RESEARCH METHOD

## 4.1. Sample and research design

Students are considered to be the most promising source of entrepreneurs [14], and the identification of university students' perceptions of new business intention and feasibilities is the first step to arouse and stimulate university students' interest in entrepreneurial careers. Furthermore, individuals with university education show a greater tendency towards entrepreneurship [42]. Therefore, this study used purposive sampling with cross-sectional method by distributing 956 questionnaires to students who majored entrepreneurship in Universitas Prasetiya Mulya, Indonesia, as shown in Table 1. From all valid questionnaires distributed, 924 were valid. A total of 3.34 percent of unqualified questionnaires were collected.

Table 1. Profile of respondent

		Frequency	Percent	Cumulative Percent
Total Participants		924	100%	100%
_	First year	368	39.8%	39.8%
Level of Study	Second year	305	33.0%	72.8%
	Third year	251	27.2%	100.0%

To measure ATT toward IVC, research using four items [32], [43], [40]. Students are required to assess whether entrepreneurship and an entrepreneurial career are considered attractive or desirable. Some statements are built to measure attitude.

For measurement of SN, researchers used three items regarding revelation to aid the research [32], [33], [43]. Students were asked to assess how important the people around them are, like family, friends, and other people who are considered important influences on their intention toward entrepreneurship and becoming an entrepreneur.

PBC uses six-item statements to support research [32], [43]. Within the PBC statement construction, the statement contains items that reflect the comfort or discomfort of students to pursue entrepreneurship and become entrepreneurs.

Measurement of entrepreneurial intention and entrepreneurial careen attractiveness uses five and four items of revelation, respectively. Focusing on students' intention to pursue new venture creation and develop interest in becoming entrepreneurs [32], [43], [40]. Table 2 shows the detail of research instrument.

Table 2. Research instrument

Variable Latent		Statements	Code
Attitude	a.	Being an entrepreneur implies more advantages than disadvantages for me.	ATT_1
	b.	Being an entrepreneur makes me proud.	ATT_2
	c.	It is desireable for me to become an entrepreneur.	ATT_3
	d.	It is interesting for me to become an entrepreneur.	ATT_4
Subjective Norm	a.	My closest family members think that I should pursue a career as an entrepreneur.	SN 1
	b.	My closest friends think that I should pursue a career as an entrepreneur.	SN_2
	c.	People who are important to me think that I should pursue a career as an entrepreneur.	SN_3
Perceived	a.	If I want, I can run my business right now.	PBC_1
Behavioral Control	b.	Others' opinions who claimed I should become an entrepreneur made me more passionate toward becoming an entrepreneur.	PBC_2
	c.	Despite the opinions of those who are against me being an entrepreneur, I will do it anyway.	PBC_3
	d.	It is entirely up to me whether or not I become an entrepreneur.	PBC 4
	e.	As an entrepreneur, I would have sufficient control over my business	PBC <sup>5</sup>
	f.	There are very few circumstances outside my control that may prevent me from becoming an entrepreneur	PBC_6
Intention to	a.	I am ready to do anything to become an entrepreneur.	IVC 1
Value Creation	b.	I will make every effort to start and run my business.	$IVC^{-}2$
	c.	I am determined to create my business.	$IVC_3$
	d.	I have very seriously thought of starting a business.	$IVC^{-}4$
	e.	I have confirmed intention to start a business.	$IVC_5$
Professional	a.	A career as entrepreneur is attractive to me.	PA 1
Attraction	b.	My career goal is to be an entrepreneur.	$PA^{-}2$
	c.	If I had the opportunity and resources, I'd like to be an entrepreneur.	$PA^{-}3$
	d.	Among various options, I'd rather be an entrepreneur	$PA^{-}4$

The statement using 7 Likert-scale points ranges from 1 "strongly disagree" to 7 "strongly agree." Researchers use the Structural Equation Modeling (SEM) as an analytical tool to study the relationship of the variables [44]. This equation uses a reciprocal relationship between the constructs involved in the analysis. The AMOS software is used to analyze the moment structure to estimate the model integrated directly with SPSS.

## 5. RESULTS AND DISCUSSION

# 5.1. Validity and reliability

Data testing is essential before performing data analysis to measure the research model as shown in Table 3. The study uses Kaiser-Meyer-Olkin (KMO) Statistics in data testing. KMO statistics vary from 0 to 1, indicating the extent to which each variable in a set is predicted without error by another variable [44].

Table 3. Data validity and reliability

	Before Adjustment							After Adjustment			
Code	KMO	Sig.	MSA	Factor Loading	Cronbach Alpha	KMO	Sig.	MSA	Factor Loading	Assessment	
ATT_1			0.778	0.805				0.778	0.805		
ATT_2	0.745	0.000	0.775 0	0.874	0.884	0.745	0.000	0.775	0.874	0.884	
ATT_3		0.000	0.709	0.89	0.004	0.743	0.000	0.709	0.890	0.884	
ATT 4			0.73	0.877				0.730	0.877		
SN_1			0.763	0.826				0.763	0.826		
SN 2	0.705	0.000	0.701	0.86	0.816	0.705	0.000	0.701	0.860	0.816	
SN_3			0.667	0.884				0.667	0.884		
PBC_1			0.81	0.852				0.813	0.853		
PBC_2			0.741	0.885				0.742	0.885		
PBC_3	0.744	0.000	0.741	0.897	0.660	0.745	0.000	0.740	0.897	0.774	
PBC_4	0.744	0.000	0.661	0.693				0.658	0.728		
PBC_5				0.668	0.696				0.668	0.719	
PBC_6			0.440*	0.338*							
IVC_1			0.809	0.802				0.809	0.802		
IVC_2			0.821	0.855				0.821	0.855		
IVC_3	0.839	0.000	0.892	0.888	0.916	0.839	0.000	0.892	0.888	0.916	
IVC_4			0.823	0.903				0.823	0.903		
IVC <sup>5</sup>			0.848	0.891				0.848	0.891		
PA_1			0.803	0.881				0.803	0.881		
PA_2	0.804	0.000	0.776	0.885	0.889	0.804	0.000	0.776	0.885	0.880	
PA_3	0.804	0.000	0.837	0.833	0.089	0.804	1 0.000	0.837	0.833	0.889	
PA_4			0.809	0.873				0.809	0.873		

Based on the results of the analysis in Table 3, all KMO values fall within the eligible criteria and are considered good > 0.7. The Bartlett test is then used to test whether the sample k comes from a population with the same variance, as the adequacy indicator used is 0.05 or 0.001. The result of Bartlett-test has significant value (<0.001), so the factor analysis is considered appropriate. The value of Measure of Sampling Adequacy (MSA) signifies the correlation strength of an indicator against another. The feasibility of the factor-loading value should at least meet the required standards, which must have a value of > 0.5 [44]. It can be seen from Table 3 that in the latent variable of PBC, it can be seen that the factor loading value in the PBC\_6 variables is below 0.50. Therefore, the variable can be discarded, because it is considered less suitable for use in measuring the latent variables.

#### 5.2. Goodness-of-fit model index

Sample size exceeding 400 respondents makes the Chi-Square (CMIN) and CMIN / DF values unsuitable for measuring the suitability of models with the existing data [44] as shown in Table 4. Root Means Square Residual (RMR) measures the badness-of-fit of a model where the smaller the RMR value, the measured model is rated better and the RMR value has no maximum value. The model of this research has a value of RMR 0.09 which is relatively small and close to 0, thus the model is in accordance with the data representation. Goodness-of-Fit Index (GFI) indicates a good model in representing the data obtained if it has a value above 0.9. The model shows the results of GFI and Adjusted Goodness-of-Fit Index (AGFI) values close to 1, although slightly below 0.9. So it is concluded that the above model is quite good in representing the data obtained in this study.

Table /	Goodness-o	+ + + + +	Indicator

Chi-square (CMIN)	NPAR	CMIN	DF	P	CMIN/DF
Default model	51	1746.941	180	.000	9.705
Saturated model	231	.000	0		
Independence model	21	14990.477	210	.000	71.383
RMR	$RMR \le 0.08$	$GFI \ge 0.9$	AGFI	PGFI	
Default model	.090	.844	.800	.658	
Saturated model	.000	1.000			
Independence model	.537	.174	.091	.158	
NFI, RFI, CFI, TLI, IFI	$NFI \ge 0.9$	RFI	IFI $\geq 0.9$	$TLI \ge 0.9$	$CFI \ge 0.9$
Default model	.883	.864	.894	.876	.894
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
RMSEA	$RMSEA \leq 0.08$	LO 90	HI 90	PCLOSE	
Default model	.097	.093	.101	.000	
Independence model	.276	.272	.280	.000	

The third measurement uses the Normative Fit Index (NFI) indicator, Relative Fit Index (RFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Incremental Fit Index (IFI). These models show a good model if the value is close to 1. The result of the measurement in Table shows that the value of the indicator is close to 1, even though it is below the standard 0.9; this means that the above model is good enough to represent data and theory.

Root Mean Square Error of Approximation (RMSEA) attempts to fix the model mismatch. The RMSEA value between 0.05 and 0.08 indicates a good index for accepting the suitability of a model. However, if the RMSEA value of a model is below 0.1, then the model can be accepted as a good model [44]. As per Table 6, this model can be summarized as a good enough model to represent its data, because the value is close to 0, despite the number of samples and large data distribution.

## 5.3. Hypothesis testing

# 5.3.1. The presence of EE hypothesis

Based on the hypothesis test, the results vary as shown in Table 5. ATT and PBC variables show a positive and significant relationship to its endogenous variables. Hence, Hypotheses Ha1, Ha2, Ha5, and Ha6 are accepted, because the variable meets the minimum required standard at the 99.9% confidence level (P < 0.001). The SN variable indicates the situation as opposed to its endogenous variables. In relation to IVC, SN is capable of showing the opposite relationship but with a certain significance. SN can contribute significantly to IVC variables when using a 5% confidence window (P < 0.05). Ha3 is accepted with a certain

degree of confidence. However, the relationship between SN and PA shows the correlation relationship and is not significant because it cannot meet the level of trust at which the value is 0.332. Hypothesis testing on SN's relation to PA is unacceptable, or Ha4 is rejected.

Table 5. The presence of ee hypothesis testing result

Hypothesis	Relationship	Estimate	S.E.	C.R.	P	Decision
Hal	ATT> IVC	.825	.069	15.626	***	S***
Ha2	ATT> PA	.836	.063	18.216	***	S***
Ha3	SN> IVC	119	.046	-2.393	.017	S*
Ha4	SN> PA	045	.044	971	.332	NS
Ha5	PBC> IVC	.190	.035	4.323	***	S***
Ha6	PBC> PA	.177	.034	4.334	***	S***

(S) Supported; (NS) Not Supported

The result of structural equation test also shows that the ATT variable plays a dominant role in relation to both its endogenous variables. Based on the data, the value of regression coefficient on this equation ATT to IVC is 0.825 and ATT to PA is 0.836. The PBC variable plays a positive and significant role, but the coefficient value appears smaller than ATT; that is, PBC to IVC (0.151) and PBC to PA (0.147). SN and the exogenous variables have a negative relationship in which the SN is against IVC (-0.119) and (-0.45). This situation illustrates the relationship between SN with both endogenous variables, IVC and PA.

## **5.3.2.** The persistence of EE hypothesis

Based on the student's level of study, the results of the hypothesis test tend to vary, as shown in Table 6 when using classification with the control variables of the study level. IVC and PA have a positive and significant correlation, because they meet the established feasibility standard (P < 0.001). Within the relationship between SN and both endogenous variables there are variations between levels of study. In SN to IVC, positive and significant relationships only occur in first-degree students only. At level two and three, despite the positive relationship, they might not be a significant relationship.

The SN variable has a positive relationship at each level of study, but it does not have a significant relationship because it is unable to meet the required criteria (P < 0.05, P < 0.01, and P < 0.001). In the last exogenous variable, PBC, against both exogenous variables, has varied relationships at various levels. PBC's relationship with IVC is only significant in first-year students with P < 0.001, while others have no significant relationship. The relationship between PBC and PA is consistently positive and significant at each level of study with P < 0.05.

Table 6. The persistance of hypothesis testing result

	C.R				P	Decision			
Relationship	1 <sup>st</sup>	$2^{nd}$	$3^{\rm rd}$	1 <sup>st</sup>	$2^{nd}$	$3^{rd}$	1 <sup>st</sup>	$2^{nd}$	$3^{\rm rd}$
Î	Year	Year	Year	Year	Year	Year	Year	Year	Year
ATT> IVC	10.763	7.738	8.548	***	***	***	S***	S***	S***
ATT> PA	12.077	9.630	9.800	***	***	***	S***	S***	S***
SN> IVC	-3.021	417	472	.003	.677	.637	S**	NS	NS
SN> PA	689	.045	780	.491	.964	.435	NS	NS	NS
PBC> IVC	4.187	1.550	1.532	***	.121	.125	S***	NS	NS
PBC> PA	2.476	2.400	1.989	.013	.016	.047	S*	S*	S*
	ATT> IVC ATT> PA SN> IVC SN> PA PBC> IVC	ATT> IVC 10.763 ATT> PA 12.077 SN> IVC -3.021 SN> PA689 PBC> IVC 4.187	Relationship         1st Year         2nd Year           ATT> IVC         10.763         7.738           ATT> PA         12.077         9.630           SN> IVC         -3.021        417           SN> PA        689         .045           PBC> IVC         4.187         1.550	Relationship         1st Year         2nd Year         3rd Year           ATT> IVC         10.763         7.738         8.548           ATT> PA         12.077         9.630         9.800           SN> IVC         -3.021        417        472           SN> PA        689         .045        780           PBC> IVC         4.187         1.550         1.532	Relationship         1st Year         2nd Year         3rd Year         1st Year           ATT>IVC         10.763         7.738         8.548         ***           ATT> PA         12.077         9.630         9.800         ***           SN> IVC         -3.021        417        472         .003           SN> PA        689         .045        780         .491           PBC> IVC         4.187         1.550         1.532         ***	Relationship         1st Year         2nd Year         3rd Year         1st Year         2nd Year         4 Year         Xex         SMO         Year         Year	Relationship         1st Year         2nd Year         3rd Year         1st Year         2nd Year         3rd Year         4 ***         ***         ***         ***           ATT> PA         12.077         9.630         9.800         ***         ***         ***         ***           SN> IVC         -3.021        417        472         .003         .677         .637           SN> PA        689         .045        780         .491         .964         .435           PBC> IVC         4.187         1.550         1.532         ***         .121         .125	Relationship         1st Year         2nd Year         3rd Year Year         1st Year Year Year         2nd Year Year Year Year Year         1st Year Year Year Year Year Year Year Year	Relationship         1st         2nd         3rd         1st         2nd         3rd         1st         2nd           ATT> IVC         10.763         7.738         8.548         ***         ***         ***         S***         S***           ATT> PA         12.077         9.630         9.800         ***         ***         ***         S***         S***           SN> IVC         -3.021         -417         -472         .003         .677         .637         S**         NS           SN> PA        689         .045        780         .491         .964         .435         NS         NS           PBC> IVC         4.187         1.550         1.532         ***         .121         .125         S***         NS

		Estimate			S.E			
Relationship	1 st	$2^{nd}$	$3^{\rm rd}$	1 <sup>st</sup>	$2^{nd}$	$3^{\rm rd}$		
	Year	Year	Year	Year	Year	Year		
ATT> IVC	.113	.113	.133	.113	.113	.133		
ATT> PA	.096	.112	.120	.096	.112	.120		
SN> IVC	.090	.074	.069	.090	.074	.069		
$SN \longrightarrow PA$	.072	.085	.071	.072	.085	.071		
PBC> IVC	.061	.063	.055	.061	.063	.055		
PBC> PA	.049	.072	.056	.049	.072	.056		

(S) Supported; (NS) Not Supported

The coefficient of the variables consistently demonstrates a positive relationship in all variables. The ATT toward both its endogenous variables, IVC and PA, consistently appears as the dominant coefficient with coefficient values of ATT to IVC (0.113) and ATT to PA (0.096) in the first year, ATT to IVC (0.113)

<sup>\*</sup>Significant at 0.05 (two-tailed) or 95% confidence level; \*\* significant at 0.01 (two-tailed) or 99% confidence level; \*\*\* significant at 0.001 (two-tailed) or 99.9% confidence levels

<sup>\*</sup>Significant at 0.05 (two-tailed) or 95% confidence level; \*\* significant at 0.01 (two-tailed) or 99% confidence level;

<sup>\*\*\*</sup> significant at 0.001 (two-tailed) or 99.9% confidence levels

78 ISSN: 2252-8822

and ATT to PA (0.112) in the second year, and ATT to IVC (0.133) and ATT to PA (0.120) in the third year. In the relationship between SN with IVC and PA, variables also consistently have a positive relationship with coefficient value, SN against IVC (0.090) and SN against PA (0.072) in the first year, SN against IVC (0.074) and SN against PA (0.085) in the second year, and SN to IVC (0.069) and SN to PA (0.071) in the third year.

Similar results were also found in the relationship between PBC with both endogenous variables, IVC and PA, which consistently had a positive relationship with coefficient values, PBC to IVC (0.061) and PBC to PA (0.049) in the first year, PBC to IVC (0.063) and PBC to PA (0.072) in the second year, and PBC to IVC (0.055) and PBC to PA (0.056) in the third year.

Figure 2 reveals more about the contribution based on the value of regression coefficient shown in the ATT relationship with endogenous variables, namely IVC and PA. The data from the study level indicate an increasing trend, ATT toward IVC, in the first year (0.113), second year (0.113), and last year (0.133) and the relationship between ATT toward PA in the first year (0.096), second year 0.112, and last year (0.120).

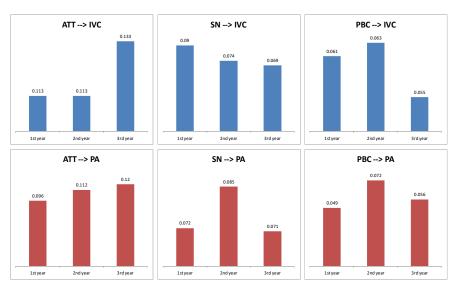


Figure 2. Regression coefficients based on study level

While the relationship of SN with endogenous variables, IVC toward PA, tends to decrease, SN toward IVC, first year (0.090), second year (0.074), and third year (0.069); SN toward PA in the first year (0.072), second year (0.085), and third year (0.071). Finally, the relationship between PBC and other variables tends to interpret relatively random results where PBC toward IVC, first year (0.061), second year (0.063), and third year (0.055); PBC toward PA, first year (0.049), second year (0.072), and third year (0.056).

# 5.4. Discussion

The study found the presence of EE in Indonesia had a positive influence on the intention toward entrepreneurship. The same effect was also felt by students' for a career as an entrepreneur. EE has a positive influence on individuals toward entrepreneurial intention [5], [7]. These findings also support previous research; students had more potential to continue their careers in the field of entrepreneurship [11]-[12]. EE provides an influence from perspective attitude and behavioral control. Entrepreneurship education was considered to provide a positive contribution to students and also considered capable of converting challenges into opportunities for students' entrepreneurship in the future.

Persistence perspective shows that EE consistently gives an increasing students' attitude on entrepreneurial intention. The longer the students are exposed toward entrepreneurship, the more confident and encouraging they are. This situation also applies to the profession of being an entrepreneur. Opposite with [6], entrepreneurship education only has an impact when individuals were exposed EE at the beginning of their education. While from subjective norms and behavioral control, the study found dynamics and tend to fluctuate. Strong influence only felt when the students were in their first year and the rest tend to weaken. Nevertheless, entrepreneurship education was able to provide a strong and persistent influence on behavioral control to become entrepreneurs.

#### 6. CONCLUSION

Although the presence of EE in Indonesia provides a good entrepreneurial influence, it is not yet persistent enough to encourage student's entrepreneurship. Currently, EE's contribution is still limited to attitudes, both the entrepreneurial intention and professional attraction. Student entrepreneurship is more driven by internal factors compared to external factors due to the inappropriate environmental influence and students-perceptions regarding entrepreneurship. EE persistence based on the duration of the study period tends to be questioned especially in the third year even though the influence from outside is quite a lot for students but this gap can be a lesson for curriculum development for the institution concerned.

## 6.1. Practical implication

This study provides many benefits for stakeholders related to EE. For Universitas Prasetiya Mulya, the findings can act as input to the development of academic institutions and related faculty, especially in the development of its learning models and curriculum. For similar educational institutions, proven positive results can be used as a reference in making the curriculum of EE and teaching methods. Furthermore, policy makers can serve as a basis for improvement and development to enhance the role of higher education in the development or formation of superior entrepreneurs, both in terms of quantity and quality [14]. For entrepreneurial activists, entrepreneurship-based education becomes the most promising means to form entrepreneur candidates.

#### 6.2. Research limitations

This study has several limitations. Firstly, this research is conducted in Universitas Prasetiya Mulya. Future research can be expected to expand the area of wider area. Second, the cross sectional method therefore the impact cannot provide an overview of the process of EE intervention on student development. Future research will possible to conduct a longitudinal study to give a more comprehensive perspective the role of EE in entrepreneurial process learning.

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