

COMMUNITY-BASED ENTREPRENEURSHIP: A COMMUNITY DEVELOPMENT MODEL TO BOOST ENTREPRENEURIAL COMMITMENT IN RURAL MICRO ENTERPRISES

Ambara Purusottama, Teddy Trilaksono dan Agus W. Soehadi

School of Business and Economics Universitas Prasetya Mulya

ambara.purusottama@pmbs.ac.id, teddy.trilaksono@pmbs.ac.id, and aws@pmbs.ac.id

Abstract. Micro enterprises (MEs) have been proven to be significant contributors to the national economy, particularly for marginal communities. However, only a few programs are aimed to encourage ME improvement, especially in rural areas. The community-based entrepreneurship (CBE) program led by higher education institutions has been recognized as an effective instrument to accelerate capacity building for marginal communities. This research aims to determine the effectiveness of this program in boosting entrepreneurial commitment of rural MEs to help them develop their business. Applying the theory of planned behavior (TPB) framework, this research applies a direct survey to respondents from rural MEs. Then to analyze both data and output, this study applies PLS-SEM tool with SmartPLS software. Results reveal that social factors (social pressure and environmental influence) do not incline rural ME entrepreneurs to develop their business. Attitude factors (entrepreneurial benefit and willingness to take a risk) become the most dominant variables, and consistently have an impact on rural ME entrepreneurs in developing their business. To implement the business development of rural ME, perceived behavioral control becomes a main determinant. Demographic profiles (age, gender, and education) is also heavily as influential factors.

Keywords: community-based entrepreneurship, entrepreneurial commitment, theory of planned behavior, micro enterprises

Abstrak. Usaha Mikro (UM) menjadi kontributor yang signifikan terhadap pembangunan ekonomi nasional, khususnya pada komunitas marginal. Namun, sangat sedikit program yang ditujukan untuk mendorong perbaikan UM, terutama di daerah pedesaan. Program *Community-based Entrepreneurship* (CBE) yang diinisiasi oleh institusi pendidikan tinggi telah diakui sebagai media yang efektif untuk peningkatan kapasitas komunitas marjinal. Penelitian ini bertujuan untuk mengetahui efektivitas program CBE ini dalam meningkatkan komitmen UM di pedesaan dalam membantu mengembangkan bisnis mereka. Dengan menerapkan kerangka *Theory of Planned Behavior* (TPB), penelitian ini menggunakan survei yang ditujukan langsung kepada responden dari UM pedesaan. Kemudian, untuk menganalisis data dan output, penelitian ini mempergunakan PLS-SEM dengan aplikasi SmartPLS. Hasil penelitian ini mengungkapkan bahwa faktor sosial (tekanan sosial dan pengaruh lingkungan) tidak mendorong pengusaha UM pedesaan untuk mengembangkan bisnis mereka. Faktor sikap (manfaat kewirausahaan dan kemauan untuk mengambil risiko) menjadi variabel yang paling dominan dan secara konsisten berdampak pada wirausaha pedesaan UM dalam mengembangkan bisnis mereka. Untuk mewujudkan pengembangan bisnis UM,

kontrol perilaku juga dirasakan menjadi faktor penentu. Profil demografi seperti usia, jenis kelamin, dan pendidikan juga turut mempengaruhi.

Kata Kunci: *community-based entrepreneurship*, komitmen berwirausaha, *theory of planned behavior*, usaha mikro

INTRODUCTION

The growth of micro enterprises (MEs) serves as one solution to solve socio-economic problems in many countries. Indeed, several studies report that MEs' contribution to economic growth is significant (Gunasekaran *et al.*, 2011; Anton *et al.*, 2015). This finding is supported by Ayyagari *et al.*, (2011), who study whether MEs in various countries are able to absorb additional labor. According to Anton *et al.*, (2015), the labor contribution of micro businesses is more than 99 million workers, their contribution to gross domestic product (GDP) is 35.81%, and their total investment is more than Rp. 175 trillion.

The main challenge for MEs is related to their sustainability in the context of their contribution to the national economy (Tambunan, 2008; Sallem *et al.*, 2017). Rostek (2012) explains the importance of competitiveness in environmental changes and increasingly stringent in business competition. Competition becomes the main focus of businesses to protect themselves from environmental change (Blackburn and Jarvis, 2010; Karaev *et al.*, 2007). Specifically, the problem for MEs in Indonesia is how they maintain their business continuity (Anton *et al.*, 2015).

In fact, many MEs have less basic competencies than larger businesses. Therefore, they are less competitive in the market (Addis, 2003). Basic skills are fundamental element of competitiveness related to the personal development, job skills, and information skills that are evolving today (Suci, 2009). The importance of education in enhancing competitiveness has become increasingly essential. People who have better education or skills also having superior competitiveness (Moser, 1999; Bynner and Parsons, 1997).

Community development programs have been advanced as a solution to solve poverty problems, and they have proven to reduce poverty (Bradshaw, 2007). However, particularly in rural areas, the problems of the poor and marginalized, both individually and collectively, are still need to be addressed (Yunus, 2008). Cali and Menon (2012) deliver an attention to the growing role of the rural economy in the national economy. Even so, in practice, a community development program in rural areas will encounter obstacles, especially based on the differing characteristics of the poor and marginalized. However, entrepreneurship can occur even in a socially and culturally diverse environment (Dana, 1995).

Higher education institutions seek to contribute to community development through community-based entrepreneurship (CBE) education programs. Fayolle *et al.*, (2006) state that education can stimulate potential entrepreneurs' intention to develop their business. The study is reinforced by several other studies, including Tkachev and Kolvereid (1999), Peterman and Kennedy (2003), and Soutaris *et al.*, (2007). Similar studies have been conducted in Indonesia and also show the important role of education in encouraging business (Purusottama and Soehadi, 2016). Education increases the

productivity and creativity of the community and encourages entrepreneurship advancement (Breton, 2013). The CBE programs offered by Prasetya Mulya University are incorporated directly into the core curriculum as the school acknowledges the importance of community development programs. Prasetya Mulya University has an existing entrepreneurial base due to its expertise and experience (resources-based) to lead this program. Rural areas are chosen, particularly areas that have ME communities, because of the high economic disparities between rural areas and urban areas (BPS, 2016).

Applying the theory of planned behavior (TPB), this research aims to test the effectiveness of the community-based entrepreneurship model toward MEs' commitment to develop their businesses in rural areas. In this study, the researchers measure MEs' individual profile to provide a more specific picture of their commitment to develop their business. The main research question is as follows:

RQ. Do community-based entrepreneurship education programs encourage MEs' commitment to develop their business?

LITERATURE REVIEW

Community-based Entrepreneurship in Higher Education Institutions. Community development in higher education, better known as the Student Study-Service (or in Bahasa, *Kuliah Kerja Nyata* (KKN)), is a form of higher education contribution to the community using a cross-scientific and sectoral approach (UGM, 2015). This program is required by the Ministry of Higher Education and Research and also regulated in article 20 of the Law of the Republic of Indonesia No. 20 2003 on the National Education System. The law states that higher education institutions are obliged to organize a KKN; doing so has become one of higher education's threefold responsibilities, the others being lecturing and doing research (Krisnawati, 2009), and the KKN has become a sub-system of higher education in Indonesia (Hardjosoemantri, 2007).

The KKN program implemented by each university varies depending on the related disciplines and the needs of the community in the area targeted for implementation of KKN, predominantly in rural areas (Effendi, 2018). The Prasetya Mulya University's KKN program is based on the CBE model (Figure 1). This program aims to provide support especially to MEs in rural areas to help them develop their business on the basis of entrepreneurship education. This CBE program pursues the development of three dimensions: institutional, economic, and capacity. The CBE is conducted by an individual or by a group with Prasetya Mulya University staff serving as facilitators. The program has been recognized as an instrument tool for upgrading capacity building in the marginalised groups (Rao, 2003).

The CBE concept of collaboration between rural MEs and higher education institutions is intended to identify and resolve any shortcomings in rural MEs. In practice, students are asked to spend time at a rural ME so as to have a sense of the business. Through the program, students able deepen the ME's characteristics and understand the ME's environment. Students are also expected to have an essential lesson in the form of social culture.

Technically, three stages are involved in community development programs: preparation, live-in, and mentoring. The preparation stage held before the student enters the live-in stage; the main activity of this stage is to identify any problems encountered by rural ME and creating problem solving analysis. Thereafter, students enter the live-in period to implement the recommendation plans. Finally, a period of assistance is offered to maintain the sustainability of the business implementation.

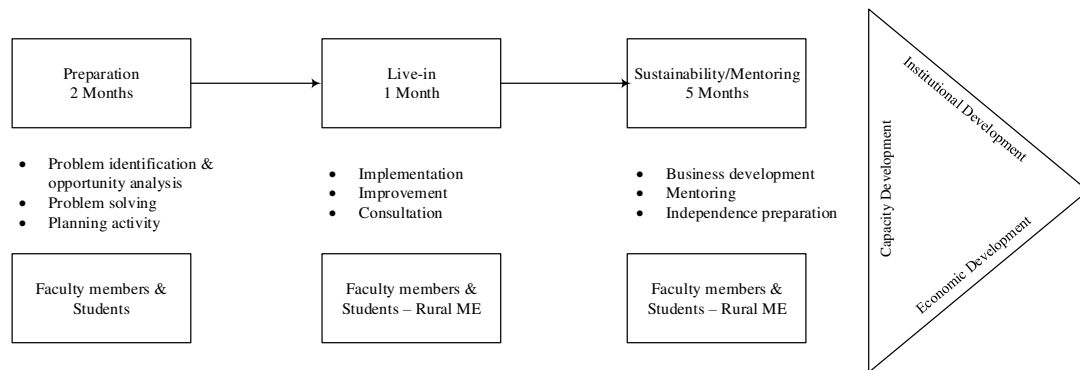


Figure 1. Community-based Entrepreneurship Framework

Source: Prasetya Mulya University Community-based Entrepreneurship Model

Theory of Planned Behavior. Initially, TPB was established to observe human and organizational behaviors. However, on its advancement, the theory functions to explain and predict the impacts of motivation outside the will of an individual. This theory can clarify almost all human behaviors affected by attitudes, subjective norms, and behavior control factors.

TPB, as shown in Figure 2, assumes that almost all human actions have purpose, are controlled, and are planned and affect the next action (Ajzen and Fishbein, 2000). Based on this assumption, TPB becomes relevant when used in measuring the behaviors of entrepreneur.

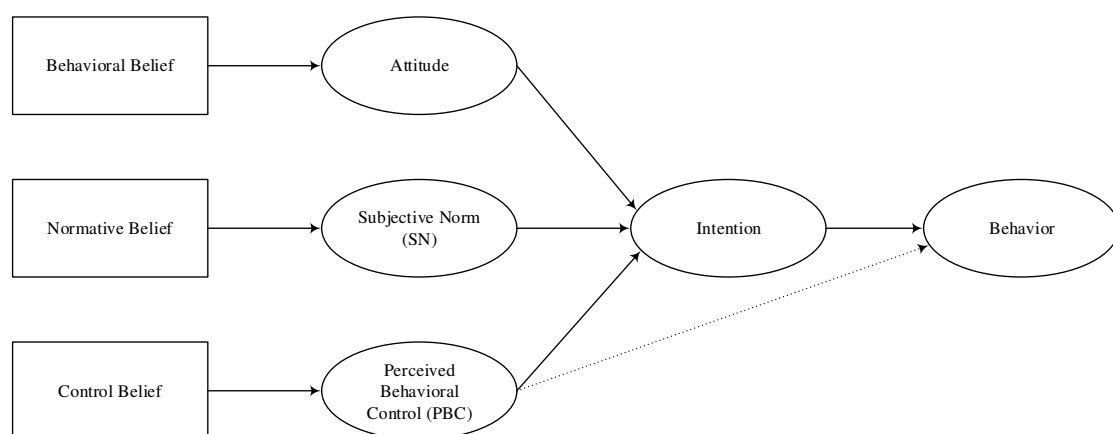


Figure 2. TPB Model

Source: Ajzen and Fishbein, 2000

According to Ajzen (2012), TPB argues that human behaviors are affected by three types of beliefs. First, the behavioral belief is the belief that consequences of actions exist. Second, the normative belief is the belief in hope coming from the surrounding environment. Last is the control belief, which is the belief that factors that encourage and discourage behaviors exist.

TPB is widely used to support multidisciplinary research, especially in human behavior. For example, several studies using TPB have examined consumer behavior in consuming products and services (Ajzen, 2015; Vabo and Hansen, 2016). TPB is also used frequently to examine purchasing behavior associated with certain products (Haro, 2015; Alam and Sayuti, 2011). Yuzhanin and Fisher (2016) and Wang and Fu (2015) use TPB to evaluate its effectiveness in predicting visitor intentions in selecting a tourist destination. Buaphiban and Truong (2017) apply TPB in predicting prospective passengers' selection of a low-cost carrier (LCC) in Southeast Asia.

Relevance of Entrepreneurship for TPB. TPB can be used across disciplines. Initially, development of the theory only addressed individual behavior from a psychological point of view. Today, this theory is used in all areas. For illustration, Krueger and Carsrud (1993) argue that the creation of a business is a planned action. The linkage between the TPB component and the entrepreneurial intention has attracted many researchers (Kolvereid, 1996; Tkachev and Kolvereid, 1999; Solesvik *et al.*, 2012; Souitaris *et al.*, 2007), however those findings are not conclusive. In addition, some scholars have discovered a direct and strong connection between the three TPB factors and entrepreneurial intentions (Kolvereid, 1996; Tkachev and Kolvereid, 1999; Souitaris *et al.*, 2007). Also, the theory plays an essential part in the decision making about whether to begin or grow a business (Bird, 1988; Katz and Gartner, 1988).

In terms of entrepreneurship education, many studies suggest that entrepreneurship education plays a critical part in stimulating entrepreneurship. Tkachev and Kolvereid (1999), Peterman and Kennedy (2003), Fayolle *et al.*, (2006), and Soutaris *et al.*, (2007) also report that entrepreneurship education shows a major role in increasing the human intention to do business. In addition, the entrepreneurship learning model is the main driving factor of entrepreneurial motivation, which society needs to increase entrepreneurship capacity (Oganisjana *et al.*, 2014). Furthermore, entrepreneurship education positively affects future behavior and desire among its students.

Entrepreneurial activity and decisions are strongly influenced by the demographic profile of the community. Lévesque and Minniti (2011) summarize the important role of demographic information, especially age, in encouraging entrepreneurial activity and economic growth. The results of the study delineate the important relationship among demographic structure, aggregate entrepreneurship, and growth. Lamotte and Colovic (2013) emphasize the contribution of young people toward nascent entrepreneurship, while stating that the role of older people is often to suppress the existence of entrepreneurship. From the educational side, individuals with higher education can increase business opportunities more effectively than people with less education (Minitti *et al.*, 2005). Turker and Selcuk (2009) suggest that a sufficient level of education can stimulate entrepreneurship desire. From a gender perspective, many studies address the importance of gender in entrepreneurial activities. Wilson *et*

al., (2007) discover that self-efficacy in successful entrepreneurship of women is higher than men. Humbert (2010) examines the potential motivational factors between men and women where gender differences influence entrepreneurial activities.

Hypothesis

CBE Education Program. Attitude, according to Ajzen (2012), is a person's internal factors learned to receive positive or negative responses from a stimulant. The responses are determined by the person's belief regarding the consequences of his/her actions. Attitudes toward entrepreneurial behavior refer to the contrast between the concept of individual intention to become self-employed and the intention to perform an entrepreneurial profession (Souitaris *et al.*, 2007). In addition, Fayolle *et al.*, (2006) explains that if a person considers a certain activity in business development as beneficial for him or her, the person will give a positive response to that certain activity and vice versa. Thus, the first hypothesis is as follows:

Ha1. CBE education program contribute significant and positive relationship exists between attitude and intention to develop the business.

Subjective norm refers to apparent social strain to perform monitored action (Solesvik *et al.*, 2012). The opinions of noteworthy others (i.e., relatives, close friends, other key person) about whether an individual should trail a profession as an entrepreneur seem to influence the arrangement of entrepreneurial activity (Ajzen, 2012; Solesvik *et al.*, 2012; Liñan and Chen, 2006). Such opinion can change the view and provide motivation for the individual. Thus, the second hypothesis is as follows:

Ha2. CBE education program contribute significant and positive relationship exists between subjective norm and intention to develop the business.

Perceived behavioral control (PBC) is a sense of easiness or difficulty in performing certain behaviors; it reflects a past experience and anticipates future challenges (Ajzen and Fishbein, 2000). PBC reveals the degree to which an individual controls beliefs linked to entrepreneurial activity (Solesvik *et al.*, 2012). In an entrepreneurship context, this behavior is related to the availability of support and resources to start or develop a business (Tung, 2011; Liñan and Chen, 2006). Therefore, we offer the third hypothesis:

Ha3. CBE education program contribute significant and positive relationship exists between perceived behavior control and intention to develop the business.

Ajzen (2012) argues that the relationship of intention and behavior is influenced by many factors so that a potential difference between intention and behavior can exist. More precisely, the relationship of intent toward a behavior is influenced by PBC in which PBC is a function of control behavior regarding the factors that affect the action to be taken. In business, the difficulties and ease of developing a business drive an intention to be realized into behavior. Thus, the following hypothesis is offered:

Ha4. CBE education program contribute significant and positive relationship exists between intention and behavior to develop the business.

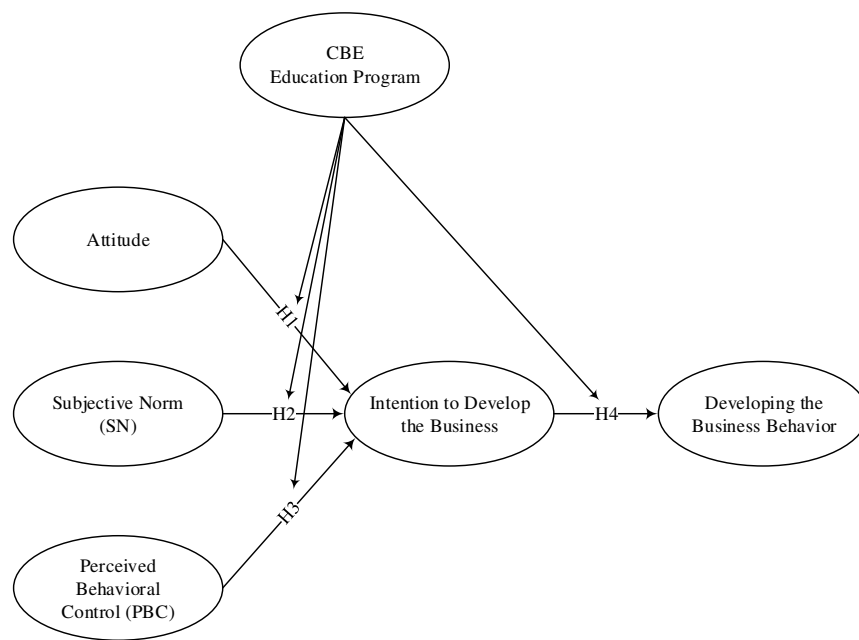


Figure 3. Diagram of the Research Hypotheses

Demographic Profile. Several previous studies have revealed that demographic background contributes an essential part in entrepreneurial activity. Afrin *et al.*, (2010) examine the role of women in business development and financial management of their business. Bönte *et al.*, (2007) state that this demographic factor is extremely important in the advance of entrepreneurship. The role of women, who in the past mostly played a role as housewives, turns out to have a very strong influence in entrepreneurial activity. Minitti *et al.*, (2005), in terms of educational level, argue the importance of higher levels of education, stating that such education will encourage and influence individuals to improve their business. Broader knowledge can increase the desire and motivation of entrepreneurs to develop their business. Last, the young people in entrepreneurship have a role to perform in positively influencing nascent entrepreneurship (Lamotte and Colovic, 2013).

METHOD

Sample and Design. The quantitative research is embedded in the Prasetya Mulya University CBE education program covering three years from 2014-2016 and using primary data collection. The target respondents were rural ME entrepreneurs who were members of the Prasetya Mulya University CBE education program located in Cianjur regency, West Java, Indonesia. We distributed a total of 100 questionnaires but received only 87 questionnaires that were usable. Thirteen forms were disqualified from the sample due to unfinished answers.

Measurement. To measure attitudes toward behavior, five items were adopted from Solesvik *et al.*, (2012) and Liñan and Chen (2006). Rural ME entrepreneurs were requested to rate statements about the extent to which business development is

perceived as desirable and attractive. Examples of statements used are: "*I am sure that if I expand my business I will benefit*" and "*I want to expand my business.*" Subjective norms were measured with three items adopted from Solesvik *et al.*, (2012), Souitaris *et al.*, (2007), and Liñan and Chen (2006). For every statement, the rural ME actors reported the extent to which people who were important to them (i.e., relatives, close friends, key person) inspire their decision to develop the business. Examples of statements used are: "*I am influenced by others in deciding about developing my business*" and "*I always need the opinions of others to know the right steps when developing my business.*"

PBC was measured using four items adopted from Solesvik *et al.*, (2012), Souitaris *et al.*, (2007), and Liñan and Chen (2006). For this construction, the items reflect the convenience that rural ME entrepreneurs perceive to develop their business. Examples of statements used are: "*I am the one who fully decides whether I will develop the business or not*" and "*I have full control in developing my business.*" The variables of intention and behavior each use six items and five items in sequence adopted from Ajzen (2006). In this item, the statement used focuses on the desire and behavior of the ME entrepreneur in developing the business. Examples of statements used are: "*I have strong determination to start developing a business*" and "*I can see progress in my business.*"

All the questions used a 5-point Likert scale in which 1 indicated "strongly disagree," 2 indicated "disagree," 3 indicated "neutral," 4 indicated "agree," and 5 indicated "strongly agree." Regression analysis was used to investigate the data. This study used structural equation modeling-partial least squares (SEM-PLS), which is part of the statistical model that defines the relationship among multiple variables (Hair *et al.*, 2010). This equation uses the interrelationships between constructs involved in the analysis. This research uses SmartPLS to support the research because it has a limited number of samples. This application is highly recommended when researchers have a limited number of samples and composite model (Wong, 2013).

Table 1. Demographic Background of the Respondents

		Frequency	Percent	Cumulative Percent
Age	<20 tahun	4	4.6	4.6
	20-40 tahun	37	42.5	47.1
	>40 tahun	46	52.9	100.0
Occupation	Worker	23	26.4	26.4
	Entrepreneur	62	71.3	97.7
	Both	2	2.3	100.0
Educational Attainment	Elementary	32	36.8	36.8
	Junior High School	25	28.7	65.5
	High School	21	24.1	89.7
	> Bachelor Degree	7	8.0	97.7
	Uneducated	2	2.3	100.0

Table 1.1 (Lanjutan) Demographic Background of the Respondents

		Frequency	Percent	Cumulative Percent
Gender	Male	34	39.1	39.1
	Female	53	60.9	100.0
Marital Status	Married	81	93.1	93.1
	Single	6	6.9	100.0

Results

Descriptive Statistic. The data distribution of the questionnaire indicates the difference of each attribute as shown in Table 2. In some attributes the spread of data is narrowed (Intention, Attitude, and Behavior) as indicated by a relatively low standard deviation value compared to the other two attributes (Sn and Pbc). The greater the value of the standard deviation, the greater the average distance of each unit of data against the mean (Ho, 2006). It marks the spread of data and the tendency of each data to be different from one to another. The deviation standard values of attributes respectively, Intention (0.5609), Attitude (0.59499), Behavior (0.61986), PBC (0.75774), and SN (0.91413).

Table 2. Descriptive Statistics of the Questionnaire Results

Attribute	Latent Variable	1 strongly disagree	2 disagree	3 neutral	4 Agree	5 strongly agree	Mean	Std. Deviation
Attitude	Att_1	0	0	0	44	43	4.4943	.50287
	Att_2	0	10	10	53	14	3.8161	.84260
	Att_3	0	3	3	66	15	4.0690	.58654
	Att_4	0	0	0	37	50	4.5747	.49725
	Att_5	0	0	2	43	42	4.4598	.54569
Subjective Norm	Sn_1	18	42	8	15	4	2.3678	1.13214
	Sn_2	0	11	8	46	22	3.9080	.92299
	Sn_3	0	3	2	47	35	4.3103	.68727
Perceived Behavioral Control	Pbc_1	0	8	13	55	11	3.7931	.77965
	Pbc_2	0	7	2	56	22	4.0690	.77449
	Pbc_3	0	2	3	57	25	4.2069	.61262
	Pbc_4	0	15	9	56	7	3.6322	.86421
Intention	Int_1	0	0	0	36	51	4.5862	.49537
	Int_2	0	1	0	36	50	4.5517	.56566
	Int_3	0	3	1	57	26	4.2184	.63658
	Int_4	0	0	4	42	41	4.4253	.58334
	Int_5	0	0	2	44	41	4.4483	.54471
	Int_6	0	0	2	47	38	4.4138	.54028
Behavior	Bhv_1	0	0	1	49	37	4.4138	.51831
	Bhv_2	0	0	16	60	11	3.9425	.55733
	Bhv_3	1	14	19	47	6	3.4943	.88756
	Bhv_4	0	1	4	55	27	4.2414	.58995
	Bhv_5	0	0	3	24	60	4.6552	.54618

Factor Analysis Testing. The factor analysis revealed that certain items variables had to be removed because they had a loading factor value <0.5 (i.e., Sn_3 (0.388), Pbc_4

(0.314), and Bhv_1 (0.307)). The general standard used in factor analysis is that a weight factor of 0.50 or greater is considered to have strong validation to explain latent constructs (Hair *et al.*, 2010). Other references suggest that 0.4 is considered feasible (Sharma, 1996). Therefore, if the loading factor appeared under some references, then the item was removed.

Factor analysis after elimination, as exhibited in Table 3, shows that with the Kaiser-Meyer-Olkin (KMO) indicator all variables meet the data adequacy standard. The data adequacy standard has a value > 0.5 with a sample count of 50 to 300 (Field, 2005). Furthermore, the research shows a relation between multivariate variables with a significance value of 0.000. The value meets the specified standard for values less than .012. Specifically, the KMO value of the SN variable is 0.5, which is considered inconsistent with the data adequacy standard. However, according to Child (2006), the value of 0.5 is still feasible.

Table 3. Factor Analysis Between Variables

Variable	Symbol	Loading factor	KMO
Attitude	Att_1	.648	0.599
	Att_2	.557	
	Att_3	.584	
	Att_4	.590	
	Att_5	.517	
Subjective Norm	Sn_1	.500	0.500
	Sn_2	.500	
Perceived Behavioral Control	Pbc_1	.746	0.557
	Pbc_2	.539	
	Pbc_3	.540	
Intention	Int_1	.739	0.726
	Int_2	.578	
	Int_3	.753	
	Int_4	.687	
	Int_5	.790	
	Int_6	.736	
Behavior	Bhv_2	.672	0.691
	Bhv_3	.647	
	Bhv_4	.738	
	Bhv_5	.759	

Hypothesis Testing. For purposes of this study, t-statistics using 5% (1.96) and 1% (2.576) are required as a measurement tool to determine relationships among variables (Ho, 2006). The result shows that the attitude variable tends to have a strong influence on its endogenous variable (intention) with a value of 6.567. The number meets the criteria specified for this research. Similar result is also found in perceived behavioral control variables with a value of 3.087. The intention variable has a significant relationship with its endogenous variable (behavior) with a value of 9.976. Conversely, subjective norm becomes the variable that does not affect its endogenous variable

(intention). Thus, the subjective norm does not meet the required standard of significance with a value of only 1.622.

The results of hypothesis testing provide more details about the relationship between variables, as shown in Table 4. Another measurement tool that can be used to explain the relationship between variables is the p-values criteria. The four relationship variables in the test results indicate that *Ha1*, *Ha3*, and *Ha4* are supported. *Ha1* is also supported and has a fairly high coefficient value of 0.485 (O). *Ha3* appears dominant, with a coefficient higher than any other variable, 0.598 (O). Although *Ha4* has a significant relationship, its p-values are in the range $0.05 < x < 0.001$ as the lowest value compared to other variables. The subsequent impact from the lowest value of significance is a lower coefficient value when compared with other variables also having a significant relationship. The third situation of the hypotheses (*Ha1*, *Ha3*, *Ha4*) is not followed by *Ha2*, which describes the relationship between subjective norm and intention. *Ha2* does not meet the p-values, either 0.05 or 0.001.

Table 4. Analysis of PLS-SEM Outcome – Path Coefficient

Hypothesis Testing	Relationship	Coefficient Sample (O)	Coefficient Sample (M)	t-statistics (IO/STER RI)	p-values	Decision
<i>Ha1</i>	Att. --> Int.	0.485	0.486	6.567	0.000**	Supported
<i>Ha2</i>	SN --> Int.	0.300	0.235	1.622	0.105	Not Supported
<i>Ha3</i>	Int. --> Bhv.	0.598	0.621	9.976	0.000**	Supported
<i>Ha4</i>	PBC --> Int.	0.274	0.291	3.087	0.002*	Supported

Note: significant level * $p < 0.05$, ** $p < 0.001$

The total effect of the relationship between the exogenous variables and their endogenous variables in a one-way research model is illustrated in Table 5. The attitude variable toward behavior has a p-value of 0.000. Its value is in accordance with the requirements for significance level despite the decrease in the sample coefficient. The situation may indicate an indirect connection between attitudes and behavior. The intention variable moderates a positive connection between attitude and behavior. The PBC variable can also accommodate the criteria of significance level even though the p-values increase. This indicates a decrease in impact due to an indirect relationship between attitude and behavior. On the other hand, even though the subjective norms variable is consistent toward the behavior variable, it is not significant.

Table 5. Analysis of PLS-SEM Outcome – Total Effect

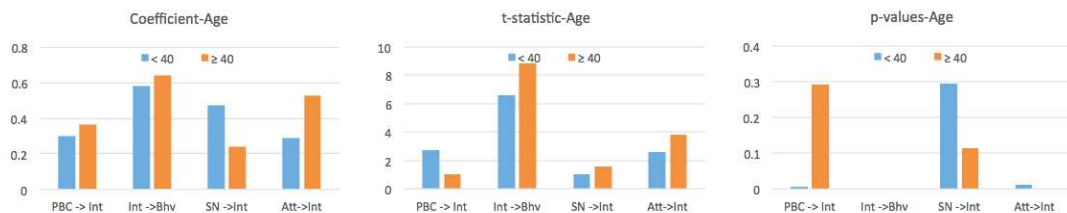
Relationship	Coefficient Sample (O)	Coefficient Sample (M)	t-statistics (IO/STERR I)	p-values	Decision
Att. --> Bhv.	0.290	0.057	5.056	0.000**	Supported
Att. --> Int.	0.485	0.074	6.567	0.000**	Supported
SN --> Bhv.	0.180	0.117	1.538	0.125	Not Supported
SN --> Int.	0.300	0.185	1.622	0.105	Not Supported
Int. --> Bhv.	0.598	0.060	9.976	0.000**	Supported
PBC--> Bhv.	0.164	0.056	2.909	0.004*	Supported
PBC --> Int.	0.274	0.089	3.087	0.002*	Supported

Note: significant level * $p < 0.05$, ** $p < 0.001$

Demographic Analysis. Demographic study using age criteria produces distinctive findings as shown in Table 6. Consistently, the CBE program has a strong and positive effect on the relationship between intention towards behavior and does not deliver effect on the relationship between subjective norm toward intention in developing their business. Meanwhile, on the relationship between other variables there are some differences. The relationship between PBC toward intention at age < 40 has a strong and positive relationship. In the opposite, age ≥ 40 does not have a strong relationship. In other case, the relationship between attitude toward intention, ME at age ≥ 40 have a strong relationship. In the meantime, at age of < 40 does not have a significant relationship. In sum, the findings inform the CBE program's influence depends on the ME entrepreneurs age. The strongest relation is found in the relationship between intention toward behaviors, while others vary.

Table 6. Analysis of PLS-SEM Outcome – Age

Age	Coefficient		t-statistic		p-values		Decision	
	< 40	≥ 40	< 40	≥ 40	< 40	≥ 40	< 40	≥ 40
PBC --> Int.	0.298	0.366	2.750	1.055	0.006*	0.292	Supported	Not Supported
Int. --> Bhv.	0.582	0.640	6.585	8.821	0.000**	0.000**	Supported	Supported
SN --> Int.	0.474	0.242	1.051	1.588	0.294	0.113	Not Supported	Not Supported
Att. --> Int.	0.290	0.527	2.567	3.800	0.011	0.000**	Not Supported	Supported



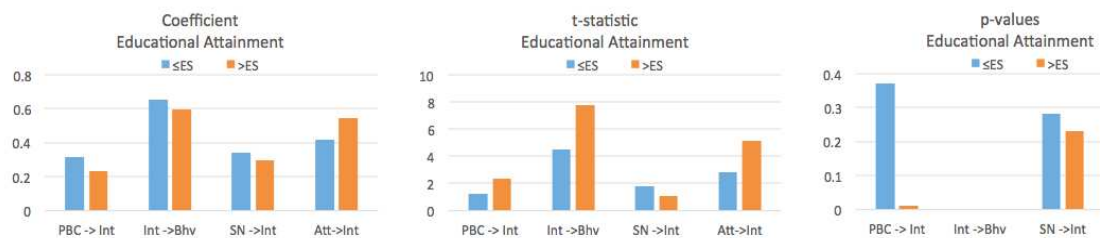
Note: significant level * $p < 0.05$, ** $p < 0.001$

Based on the analysis using educational background (Table 7), ME entrepreneurs who have higher education have a higher level of confidence to develop their business. Different educational backgrounds do not make a difference on others

variable relationship. The relationship between attitudes toward intentions and intentions toward behavior to develop the business have a similarity that CBE programs give positive and significant relationship emphasis. Conversely, the relationship between the subjective norms of intention tend not to have a strong relationship. The strongest relationship in the age analysis results between intention and behavior to develop the business.

Table 7. Analysis of PLS-SEM Outcome – Education

Education		Coefficient		t-statistic		p-values		Decision	
		ES	> ES	ES	> ES	ES	> ES	ES	> ES
PBC	-->	0.314	0.233	1.247	2.320	0.213	0.021*	Not	Supported
Int.								Supported	
Int.	-->	0.651	0.592	4.472	7.743	0.000**	0.000**	Supported	Supported
Bhv.									
SN	--> Int.	0.338	0.293	1.801	1.039	0.072	0.299	Not	Not
Att.	--> Int.	0.416	0.542	2.806	5.144	0.005*	0.000**	Supported	Supported

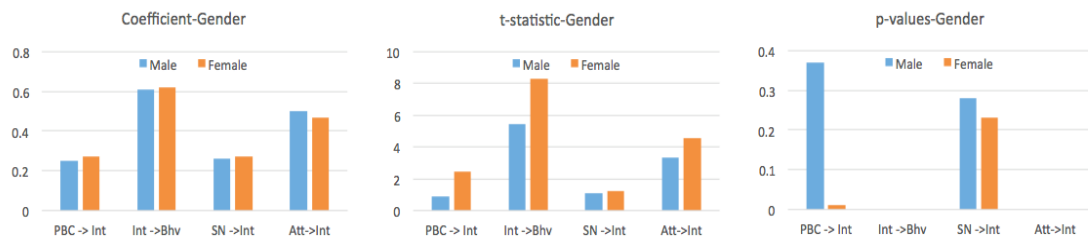


*Note: significant level * $p < 0.05$, ** $p < 0.001$*

Analysis using a gender background finds that a significant difference between male and female lies solely in the confidence of the entrepreneur. In sum, female entrepreneurs have more confidence than male entrepreneurs. The result was evidenced by the relationship between PBC and intention to develop business tends to be more significant (Table 8). Meanwhile, relationships among other variables tend to have no difference. The CBE programs have a positive and significant impact on the relationship between intention to behavior and also attitudes toward intention. Moreover, both relationship has a very strong relationship which is described on the value indicated from both coefficients. While the relationship between the subjective norm with the intention of both have no significant relationship.

Table 8. Analysis of PLS-SEM Outcome – Gender

Gender	Coefficient		t-statistic		p-values		Decision	
	Male	Female	Male	Female	Male	Female	Male	Female
PBC --> Int.	0.250	0.270	0.900	2.440	0.370	0.010*	Not Supported	Supported
Int. --> Bhv.	0.610	0.620	5.450	8.310	0.000**	0.000**	Supported	Supported
SN --> Int.	0.260	0.270	1.080	1.200	0.280	0.230	Not Supported	Not Supported
Att. --> Int.	0.500	0.470	3.340	4.520	0.000**	0.000**	Supported	Supported



Note: significant level * $p < 0.05$, ** $p < 0.001$

RESULT AND DISCUSSION

The CBE education program evidently influence the entrepreneurial commitment to rural ME entrepreneurs in developing their business. The findings of this study is fully supported by prior studies that examined education's role in encouraging entrepreneurship (Fayolle *et al.*, 2006; Njeje, 2015; Peterman and Kennedy, 2003; Soutaris *et al.*, 2007). The CBE program drove the relationship between rural ME entrepreneurs intention and behavior in developing the ME's businesses. The other finding of this study also indicate that internal factors as well as attitude showing a dominant part. Other finding shows The CBE program has strengthened the confidence of rural ME entrepreneurs to develop their business as a main driver of entrepreneurial activity. Rural ME entrepreneurs reduce their perceptions of difficulties such as barriers to develop their business and transform them into a positive perspective. Last finding suggests that the entrepreneurial commitment of rural ME entrepreneurs is not influenced by social factors due to different perspectives in their social environment which is not common having a profession as an entrepreneur.

The rural MEs demographic study report several interesting findings. The findings support previous studies which suggest that entrepreneurial activity is influenced by entrepreneurs' profile (Lévesque and Minniti, 2011; Lamotte and Colovic, 2013; Minniti *et al.*, 2005; Turker and Selcuk, 2009; Wilson *et al.*, 2007; Humbert, 2010). In detail, the study shows significant differences in PBC variables on developing the business commitment by age, gender, and education level. In short, the main point is that CBE education programs are only effective for certain characteristics. For example, positive and strong perception in developing the business is shown in the age group under 40 years and younger, while those 40 years and older perceive not significantly. Younger ME entrepreneurs may consider more confidence to develop the business rather than older ME entrepreneurs. The desire to try new things at a younger

age may strengthen this perception. Contrariwise, the age of more than 40 years has a better attitude in developing the business. This possibility is due to age group has a more stable psychological condition compared with age 40 and below.

Based on educational background, ME entrepreneurs with a higher education level than elementary school have a better confidence than those with an elementary school background and below. The level of education provides better insight into entrepreneurship because more education helps ME overcome obstacles or at least reduce the constraints that arise. Finally, female entrepreneurs have a better level of confidence in developing the business. This finding is reinforced by prior research reporting the important role of demographic factors such as gender in developing a business (Afrin *et al.*, 2010; Bönte *et al.*, 2007). In contrast, male ME entrepreneurs have lower confidence. Female at a certain age in rural areas who are positioned as housewives consider self-employment to be a solution to increase their welfare. While men who are considered the breadwinner of the family tend to avoid risk which believe entrepreneurial activity is more pressure and insecure due to high uncertainty. Thus, they continuously work as a farmer and others stable profession (Hendrayani, 2013; Wisantyo and Madiistriyatno, 2015).

CONCLUSION

Convincingly the CBE program is able to encourage behavior of ME to develop their business. The CBE program accelerate them to be able to realize developing their business and not just an intention. The CBE programs are also able to emphasize the attitude and entrepreneurial confidence of ME in the development of their business. However, the CBE program is not able to change the perception of ME in terms of social factors. This is due to differences in social conditions of society with the current profession. This problem is caused by differences of views between the entrepreneurs and their living social environment. Entrepreneurs are profession that is not common in their daily lives which dominated by farmers and other stable professions. In implementing a similar program, it is anticipated to have a distinctive study as it is proven that the demographic profile of the entrepreneurs shows an essential role in the effectiveness of the program.

Practical Implications. This study provides benefits to stakeholders of the CBE education program. For community development activists, this study shows that the developed model is acceptable and also has significant influence in rural ME entrepreneurs' commitment to develop their business. The study also provides information that the CBE education program should adapt to demographic backgrounds as well as age, gender, and education to ensure the sustainability and effectiveness of this program. The rural ME entrepreneur's profile should specify under 40 years of age, female, and with education higher than elementary school as the target of community development program implementation. As for faculty in higher education institutions, the CBE education program can increase their social competence through imparting the university values (Sasmoko *et al.*, 2016).

The CBE education program also have an advantage to the government. The CBE model can be a reference for the development of social welfare, especially in rural

areas. In addition, the CBE program can serve as a partner for effective local government in channeling policies such as village grant programs (*Dana Desa*) and credit for businesses programs (*Kredit Usaha Rakyat*) or for private institutions as an instrument for conducting their corporate social responsibility (CSR) program.

Limitation and Future Research. This research has several restraints. First, the study only examines some areas; therefore, the results cannot be generalized and may not reflect the results in other areas. This shortcoming can be addressed in further research by implementing this model in other areas. Second, the sample used is very limited, which may compromise the data validity (Hair *et al.*, 2010). The biggest challenge encountered is securing participation of the rural MEs by using the model. We realize our program is not yet supported by many parties and also lacks incentives for rural MEs. In the future, similar research is expected to be conducted with more and varied samples to enrich the insight and improve the data analysis. Last, the demographic attributes used in this study are still limited. A specific demographic review of rural entrepreneurship is also a potential research area for the future.

Acknowledgments. We gratefully acknowledge the support from the PPKM-Community Development team Prasetya Mulya University who accompanied us to collect data for this research. Special thanks go to Ringkar Situmorang, PhD, for his review and feedback on an earlier manuscript. The authors also thank the mayor of Cianjur Regency, West Java, Indonesia, and the business community around Cianjur Regency for their generous support.

REFERENCE

- Addis, M. (2003). Basic skills and small business competitiveness: some conceptual considerations. *Education + Training*, Vol. 45 Issue: 3, 152-161.
- Afrin, S., Islam, N., & Ahmed, S. (2010). Micro Credit and Rural Women Entrepreneurship Development in Bangladesh: A Multivariate Model. *Journal of Business and Management*, Vol. 16, No. 1.
- Ajzen, I. (2006). Constructing a Theory of Planned Behavior Questionnaire. *TPB Questionnaire Construction*. Retrieved from <http://people.umass.edu/aizen/pdf/tpb.measurement.pdf>
- Ajzen, I. (2012). The theory of planned behavior. In P. A. Lange, A. W. Kruglanski, & E. T. Higgins, *Handbook of theories of social psychology* (Vol. 1) (pp. 438-459). UK: Sage.
- Ajzen, I. (2015). Consumer attitudes and behavior: the theory of planned behavior applied to consumption decisions. *Rivista di Economia Agraria*, Anno LXX, n. 2, 121-138.
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. In W. Stroebe & M. Hewstone (Eds.). *European Review of Social Psychology*, 1-33.
- Alam, S. S., & Sayuti, N. M. (2011). Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing. *International Journal of Commerce and Management*, 21(1), 8 - 20. Retrieved May 2, 2016

- Anton, S. A., Muzakan, I., Muhammad, W. F., Syamsudin, & Sidiq, N. P. (2015). An Assessment of SME Competitiveness . *Journal of Competitiveness*, Vol. 7, Issue 2, 60 - 74.
- Ayyagari, M., Kunt, A. D., & Maksimovic, V. (2011). Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth . *Policy Research Working Paper*.
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *Academy of Management Review*, 13, 442–453.
- Addis, M. (2003). Basic skills and small business competitiveness: some conceptual considerations. *Education + Training*, Vol. 45 Issue: 3, 152-161.
- Afrin, S., Islam, N., & Ahmed, S. (2010). Micro Credit and Rural Women Entrepreneurship Development in Bangladesh: A Multivariate Model. *Journal of Business and Management*, Vol. 16, No. 1.
- Ajzen, I. (2006). Constructing a Theory of Planned Behavior Questionnaire. *TPB Questionnaire Construction*. Retrieved from <http://people.umass.edu/aizen/pdf/tpb.measurement.pdf>
- Ajzen, I. (2012). The theory of planned behavior. In P. A. Lange, A. W. Kruglanski, & E. T. Higgins, *Handbook of theories of social psychology* (Vol. 1) (pp. 438-459). UK: Sage.
- Ajzen, I. (2015). Consumer attitudes and behavior: the theory of planned behavior applied to consumption decisions. *Rivista di Economia Agraria*, Anno LXX, n. 2, 121-138.
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. In W. Stroebe & M. Hewstone (Eds.). *European Review of Social Psychology*, 1-33.
- Alam, S. S., & Sayuti, N. M. (2011). Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing. *International Journal of Commerce and Management*, 21(1), 8 - 20. Retrieved May 2, 2016
- Anton, S. A., Muzakan, I., Muhammad, W. F., Syamsudin, & Sidiq, N. P. (2015). An Assessment of SME Competitiveness . *Journal of Competitiveness*, Vol. 7, Issue 2, 60 - 74.
- Ayyagari, M., Kunt, A. D., & Maksimovic, V. (2011). Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth . *Policy Research Working Paper*.
- Bird, B. (1988). Implementing Entrepreneurial Ideas: The Case for Intention. *Academy of Management Review*, 13, 442–453.
- Blackburn, R., & Jarvis, R. (2010). The role os small and medium practices in providing business support to small and medium sized enterprises. *Small and Medium Practices Commitee, IFAC Information Paper*.
- Bönte, W., Falck, O., & Heblich, S. (2007). Demography and Innovative Entrepreneurship. *Jena Economic Research Paper No. 2007-084*.
- BPS. (2016). *Rural and Urban Poverty in Indonesia*. Jakarta: BPS.
- Bradshaw, T. K. (2007). Theories of Poverty and Anti-Poverty Programs in Community Development. *Journal Community Development*, Volume 38, Issue 1, 7-25.

- Breton, T. L. (2013). The role of education in economic growth: theory, history and current returns. *Journal Educational Research*, 121-138 .
- Buaphiban, T., & Truong, D. (2017). Evaluation of Passengers` Buying Behaviors Toward Low Cost Carriers in Souteast Asia. *Journal of Air Transport Management*, 59, 124-133.
doi:http://dx.doi.org/10.1016/j.jairtraman.2016.12.003
- Bynner, J., & Parsons, S. (1997). It Doesn't Get Any Better. *BSA, London*.
- Cali, M., & Menon, C. (2012). Does Urbanization Affect Rural Poverty? Evidence. *THE WORLD BANK ECONOMIC REVIEW*, vol 27, no 2, 171-201.
- Child, D. (2006). In *The Essentials of Factor Analysis* (p. 56). Continuum International Publishing Group Ltd.
- Dana, L. P. (1995). Entrepreneurship in a remote sub-Arctic community. *Entrepreneurship Theory and Practice*, 20(1), 57-73.
- Effendi, D. (2018, February 20). Program KKN Harus Sesuai Kebutuhan Masyarakat. Jakarta.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assesing the Impact of Entrepreneurship Education Programmes: A New Methodology. *Hournal of European Industrial Training*, 710-720.
- Field, A. (2005). *Discovering statistic using SPSS 2nd ed.* Sage.
- Gunasekaran, A., Rai, B. K., & Griffin, M. (2011). Resilience and competitiveness of small and medium size enterprises: an empirical research. *International Journal of Production Research*, 49(18), 5489-5509.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tathan, R. (2010). *Multivariate Data Analysis: Seventh Edition*. New Jersey: Pearson Prentice Hall.
- Hardjasoemantri, K. (2007). Peran Pemuda Pelajar Indonesia dalam Perjuangan Bangsa: sebuah refleksi dan harapan. *Jurnal Sejarah (Yayasan Masyarakat Sejarawan Indonesia)*.
- Haro, A. (2015). Understanding TPB Model, Availability, and Information on Consumer Purchase Intention for Halal Food. *International Journal of Business and Commerce*, Vol. 5, No.08, 47-56.
- Hendrayani, D. (2013). Pengaruh Komitmen dan Job Insecurity Terhadap Intensi Turnover Pada Operator Garuda Call Center. *MIX:Jurnal Ilmiah Manajemen*, 3(1), 109-120.
- Ho, R. (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. Boca Raton, Florida: Chapman & Hall.
- Humbert, A. L. (2010). Gender, entrepreneurship and motivational factors in an Irish context. *International Journal of Gender and Entrepreneurship*, Volume 2, Issue 2, 173-196.
- Karaev, A., Koh, S. C., & Szamosi, L. T. (2007). The cluster approach and SME competitiveness: a review. *Journal of Manufacturing Technology Management*, Vol. 18 Issue: 7, 818-835.
- Katz, J., & Gartner, W. (1988). Properties of emerging organizations. *Academy of Management*, 13, 429-441.
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory & Practice*, Vol. 21, No. 1, 47-57.

- Krisnawati, L. D. (2009). Service-Learning in Duta Wacana Christian University: Past, Present, and Future States". *New Horizons in Education*. *New Horizons in Education*, 57 (3), 74–81.
- Krueger, N. F., & Carsrud, A. (1993). Entrepreneurial Intentions: Applying the Theory of Planned Behavior. *Entrepreneurship and Regional Development*, 315-330.
- Lamotte, O., & Colovic, A. (2013). Do demographics influence aggregate entrepreneurship? *Applied Economics Letters*, Vol. 20, Issue 13, 1206-1210.
- Lévesque, M., & Minniti, M. (2011). Age matters: how demographics influence aggregate entrepreneurship. *Strategic Entrepreneurship Journal*, Vol. 5, Issue 3, 269-284.
- Liñán, F., & Chen, Y. (2006). Testing the Entrepreneurial Intention Model on a Two-Country. *Departament d'Economia de l'Empresa*.
- Minitti, M., Arenius, P., & Langowitz, N. (2005). *Report on women and entrepreneurship*. Babson Park, MA and London: Babson College and London Business School.
- Moser, S. C. (1999). A Fresh Start: Improving Literacy and Numeracy. *DfEE, Sudbury*.
- Njeje, D. (2015). factors affecting entrepreneurship education and its effect on entrepreneurial intentions in public universities in kenya. Meru: Kenya Methodist University .
- Oganisjana, K., Koke, T., Rahman, S., Fernate, A., & Rutka, L. (2014). The Development of Entrepreneurship in Interdisciplinary Study Environment: First Achievements, Hindrances, and Perspectives. *International Journal of Business and Society*, Vol. 15 No. 3, 447 - 464.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory and Practice*, 129-144.
- Purusottama, A., & Soehadi, A. W. (2016). Kajian Peran Pendidikan Kewirausahaan Terhadap Keinginan Berbisnis Mahasiswa Dalam Perpektif Theory of Planned Behavior. *Jurnal Pengembangan Bisnis & Manajemen*, ISSN : 1412-7628, Vol XV, No 30.
- Rao, V. M. (2003). Women Self Help Groups. *Profiles from Andhra Pradesh and Karnataka, Kurukshetra*, 50(6), 26–32.
- Rostek, K. (2012). The reference model of competitiveness factors for SME medical sector. *Economic Modelling*, 29, 2039-2048.
- Sallem, N. R., Nasir, N. E., Nori, W. M., & Kassim, C. K. (2017). Small Medium Enterprises: Critical Problems and Possible Solution. *International Business and Management*, 47-52.
- Sasmoko, Trilaksono, Indrianti, Y., & Ahmad, R. B. (2016). Diagnostic evaluation of lecturer quality in learning process at “new private higher education institutions” in Tangerang, Indonesia. *Advance Science Letters*, 22 (5-6), 1662-1665.
- Sharma, S. (1996). *Applied multivariate techniques*. New York: John Wiley & Sons, Inc.
- Solesvik, M. W. (2012). Student intentions to become selfemployed: Student intentions to become selfemployed:. *ournal of Small Business and Enterprise Development*, Vol. 19, No. 3, 441–460.

- Soutaris, V., Zerbinati, S., & Al-laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing* 22, 566 - 591.
- Suci, R. P. (2009). Peningkatan Kinerja Melalui Orientasi Kewirausahaan, Kemampuan Manajemen, dan Strategi Bisnis: Studi pada Industri Kecil Menengah Bordir di Jawa Timur. *Jurnal Manajemen dan Kewirausahaan*, Vol.11, No. 1, 46-58.
- Tambunan, T. (2008). SME Development in Indonesia: Do Economic Growth and Government Supports Matter? *International Journal of Asia Pacific Studies*, Vol. 4, No. 2, 111-133.
- Tkachev, A., & Kolvereid, L. (1999). Self employment intentions among Russian students. *Entrepreneurship and Regional Development*, 11(3), 269-280.
- Tung, L. C. (2011). *The impact of entrepreneurship education on entrepreneurial intention of engineering students*. Hong Kong: City University of Hong Kong.
- Turker, D., & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, Vol. 33 No. 2, 142-159.
- UGM. (2015, Desember 10). Kuliah Kerja Nyata Pembelajaran Pemberdayaan Masyarakat Universitas Gadjah Mada (KKN-PPM UGM) sebagai Kegiatan Unggulan Bidang Pengabdian kepada Masyarakat. *Artikel Universitas Gadjah Mada*.
- Vabo, M., & Hansen, H. (2016). Purchase intentions for domestic food: a moderated TPB-explanation. *British Food Journal*, Vol. 118 Issue: 10, 2372-2387.
- Wang, S., & Fu, Y.-Y. (2015). Application of Planned Behavior and Place Image to Visit Intentions: a Casino Gaming Context. *Advances in Hospitality and Leisure*, 11, 67-87.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, Volume 31, Issue 3, 387-406.
- Wisantyo, N. I., & Madiistriyatno, H. (2015). Pengaruh Stres Kerja, Disiplin Kerja dan Kepuasan Kerja Terhadap Intensi Turnover. *MIX: Jurnal Ilmiah Manajemen*, 5(1), 54-69.
- Wong, K. K.-K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques. *Marketing Bulletin*, 24, Technical Note 1.
- Yunus, M. (2008, February 20th). *Grameen bank at a glance*. Retrieved from http://www.grameeninfo.org/bank/GB_Glance.htm.
- Yuzhanin, S., & Fisher, D. (2016, March). The Efficacy of The Theory of Planned behavior for Predicting Intention to Choose a Travel Destination: a review. *Tourism Review*, 71(2), 135-147.