

## SMEs' Intention towards Sustainable Entrepreneurship

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### Abstract

Environmental degradation could be considered as one of the negative consequences of entrepreneurial activities. As such, entrepreneurs are urged to be proactive in resolving environmental problems through sustainable entrepreneurship. However, this new practice has not been fully accepted and exercised by many SMEs. Moreover, the studies pertaining to sustainable entrepreneurship are also very scarce in the literature. Therefore, this paper was conducted to investigate the contexts that directly and indirectly influence the SMEs owner-managers' intention towards sustainable entrepreneurship. A model was developed based on Theory of Planned Behaviour and Entrepreneurial Event Model. This study surveyed 404 SMEs in Malaysia by using self-administered questionnaires. It found that owner-managers' intention towards sustainable entrepreneurship was rather encouraging. In addition, factors such as positive sustainable value, favourable sustainable attitude, supporting social norm and sufficient governmental legislation directly increased the intention towards sustainable entrepreneurs. Moreover, those factors were also found to indirectly influence the intention through individual's perception. As such, this paper pointed out some critical factors that should be emphasized in promoting and developing sustainable entrepreneurship. Some recommendations for future studies have also been given at the last part of this paper.

**Keywords:** Entrepreneurship, Intention, Perception, Small and medium enterprises (SMEs), Sustainability

### Introduction

Environmental degradation is a serious problem that requires the attention from all parties. Market failure from the entrepreneurial activities is believed to be a cause of environmental degradation (Cohen & Winn, 2007). As such, entrepreneurs are urged to play a proactive role in transitioning the current economy to a sustainable economy (Parrish & Foxon, 2009). In fact since 1970s, business firms have been continuously showing great efforts in improving environmental quality (Keijzers, 2002). However, many environmental issues are still unresolved and they would definitely leave a great impact on our mother earth. Although much efforts have been put forth to encourage high participation in sustainability practices among business firms, its result is still far from satisfactory. For instance, Kyoto Protocol has long been implemented; unfortunately, its result is still slow (Greenpeace International, 1998; Grubb & Depledge, 2001; McKittrick & Wigle, 2002). The earth continues to suffer from over development, over deforestation and overused of non-renewable resources.

Realizing that environmental problems could bring disastrous effects to us and our future generations, businesses are urged to be active in resolving environmental problems (Palazzi & Starcher, 1997; Dean & McMullen, 2007). This has given birth to a new concept known as sustainable entrepreneurship. In business practices, sustainable entrepreneurship can be considered as something new (Cohen & Winn, 2007; Richomme-Huet & Freyman, 2011) which requires further investigations due to its low number of studies in literature (Hall, Daneke, & Lenox, 2010; Shepherd & Patzelt, 2011; Nowduri, 2012).

Sustainable entrepreneurship can be regarded as a practice which links entrepreneurial activities to sustainable development (Schaltegger & Wagner, 2008). It is a new practice in business (Richomme-Huet & Freyman, 2011) which transforms the businesses from being profit-centred to sustainability-centred (Crals & Vereck, 2004; Smith & Sharicz, 2011). It could also be regarded as a possible solution to sustainability issues through business activities. However, to most business firms in Malaysia, practicing sustainability in business is still considered as something new (Moorthy *et al.*, 2012). Specifically, small and medium enterprises (SMEs) regard sustainability management as costly and difficult to implement (Omar & Samuel, 2011). This has caused the low participation of SMEs in practicing sustainability.

From the theoretical perspective, entrepreneurship is regarded as a process of doing something new and it is affected by individual's cognitive aspects. Since entrepreneurship is regarded as a process, the development of sustainable entrepreneurship can be deemed as a challenging effort that involves multiple processes. As such, the first step could be focusing on understanding people's intention in the process of becoming sustainable entrepreneurs. However, there is a lack of studies which investigate the people's entrepreneurial intention because the topic is commonly neglected and under-exploration (Casrud & Brännback, 2011; Zachary & Mishra, 2011).

From the extant literature, sustainable entrepreneurship studies are mainly focusing on the practices (e. g. : Crals & Vereck, 2004; Cohen & Winn, 2007; Richomme-Huet & Freyman, 2011, etc. ) or contributions (e. g. : Dean & McMullen, 2007; Parrish & Foxon, 2009; Hockerts & Wüstenhagen, 2010). Those studies have successfully explained how people practice sustainable entrepreneurship and what their contributions are. Unfortunately, the psychological aspects, such as intention and motivation that drive people towards sustainable entrepreneurship have not been fully addressed in the current literature.

Therefore, this study is geared towards investigating the contexts that influence the entrepreneurs' intention towards sustainable entrepreneurship. Specifically, it focuses on determining the factors that directly and indirectly influence the intention towards sustainable entrepreneurship among SMEs owner-managers in Malaysia.

## Literature Review

### **Sustainable Entrepreneurship**

Sustainable entrepreneurship is considered as a sub-field of entrepreneurship. It is considered as a new practice in business due to the increasing awareness of sustainability development among business practitioners (Hall *et al.*, 2010). Over the years, researchers have used many terms interchangeably, such as sustainable-minded entrepreneurs (Gagnon, 2012) or sustainability-driven entrepreneurs (Majid *et al.*, 2012). Generally, sustainable entrepreneurship is a practice which links sustainable development to business activities (Schaltegger & Wagner, 2008). According to World Commission of Environmental Development (WCED, 1987), sustainable development is regarded as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs". Therefore, sustainable entrepreneurship could be deemed as business or entrepreneurial activities that emphasize on nature preservation, life support and community welfare for achieving current and future economic and non-economic gains (Shepherd & Patzelt, 2011).

Sustainable entrepreneurship is very much related to the concept of triple- bottom-line (TBL). TBL emphasizes on creating value through economic prosperity, environmental quality and social justice (Elkington, 2004). It has also been widely adopted by researchers in explaining sustainable entrepreneurship (Schlange, 2006; Dixon & Clifford, 2007; Hall *et al.*, 2010; Hockerts & Wüstenhagen, 2010). However, some important domains have been overlooked in this concept (O'zeill, Hershauer & Golden, 2009). As such, some researchers have suggested that sustainable entrepreneurship should encompass an equal footing on four domains, namely economic, social, ecological and cultural (Majid & Koe 2012).

### **Factors Affecting Intention**

Entrepreneurship has a rich collection of literature in regards to entrepreneurial intention. Past studies have also developed various models to explain the factors influencing the individual's entrepreneurial intention. However, the most widely used models are Entrepreneurial Event Model (EEM) and Theory of Planned Behaviour (TPB) (Krueger *et al.*, 2000; Liñán *et al.*, 2005). As such, this paper utilized the two models as the underlying models.

Shapero and Sokol (1982) explained in their EEM that entrepreneurship is an event in which new venture is created. However, the creation of new venture is affected by the entrepreneur's perceived desirability and perceived feasibility. Over the years, many researchers have adapted the model in studying entrepreneurial intention, for examples Krueger *et al.* (2000), Audet (2004) and Fitzsimmons and Douglas (2011), just to name a few.

Ajzen (1991) developed TPB to explain the relationship between intention and behaviour. TPB explains that human behaviour is a result of intention. Thus, it regards intention as a predictor of human behaviour. The theory delineates that there are several factors that affect a person's intention, such as personal attitude, subjective norm and perceived behavioural control. Many researchers have adapted TPB in predicting individual's entrepreneurial intention (e. g. : Engle *et al.*, 2010; Shook & Bratianu, 2010; Moriano *et al.*, 2011, etc. ) and also individual's pro-environmental intention (e. g. : Kaiser & Gutscher, 2003; Kaiser *et al.*, 2005, etc. ).

Both EEM and TPB could be considered as reliable models in investigating entrepreneurial intention, but they are not without any limitations. For instance, they only explain the direct influence of various factors on intention and not the indirect influence. Also, the application of both models in studying sustainable entrepreneurship has not been widely performed as well. Furthermore, more variables should be incorporated into the models to increase their predictive utility. Therefore, the models require an extension.

### **Theory of Reasoned Action (TRA)**

Human do not behave in certain manner without any triggers. Theory of reasoned action (TRA) could be considered a reliable early theory which explains human behavior (Fishbein & Ajzen, 1975). Greene (2009) further explained that TRA illustrated the cause-and-effect relationship between people's cognition and behavior. Simply put, the theory delineates that human behavior is an effect of their behavioral intention. Thus, individual's intention can be deemed as a stimulant for one's behavior. Over the years, TRA has showed consistent results in various fields of studies such as dental hygiene, education, contraceptive behavior, smoking, blood donation etc. (Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992).

Based on the theory, it is believed that intention is a good predictor of behavior. Intention is further affected by attitudinal and normative factors. As Hale, Householder and Greene (2002) mentioned, TRA could be used to explain volitional behaviors. Engaging sustainable practices in business is definitely a voluntary, intentional and planned behavior; as such, TRA is deemed appropriate for this study.

### **Research Model and Hypotheses Development**

In predicting intention towards sustainable entrepreneurship, this study adapted the attitudinal and normal factors from TPB as well as the perception factors from EEM. In addition, two variables were added, namely sustainability value and government legislation (Figure 1). The discussions below explain the development of research model and hypotheses.

According to McGee *et al.* (2009), personal values and beliefs affect one's entrepreneurial intention. Besides their ability in influencing entrepreneurial intention, they can also be regarded as important factors that affect people's environmental considerations (Schlange, 2006) and engagement in sustainability (Spence *et al.*, 2011). Sustainable value plays a vital role in motivating sustainable entrepreneurship (Tilley, 1999) because it is a driving factor for entrepreneurs to attach to sustainable practices (Gagnon, 2012). Therefore, this paper hypothesized that:

H1: Sustainability value (SV) positively influences intention towards sustainable entrepreneurship (ITSE).

According to Ajzen (1991), attitude is a determinant of behavioural intention. Many studies have also proven the positive influence of individual attitude on entrepreneurial intention, for examples Schwarz *et al.* (2009), do Paço *et al.* (2011), Moriano *et al.* (2012), just to name a few. In addition, attitude was also found as an influential factor of intention towards pro-environmental behavior (Stern, 2000; Tonglet *et al.*, 2004; Bamberg & Möser, 2007). As Chen *et al.* (2011) pointed out, whether or not people would engage sustainable practices was affected by their positive or negative attitude. Thus, it was posited that:

H2: Sustainability attitude (SA) positively influences intention towards sustainable entrepreneurship (ITSE).

External stimuli could also affect an individual's behavioral intention (Yoon & Tello, 2009). In fact, Fishbein and Ajzen (1975) and Ajzen (1991) have agreed on the positive effects of social factors on intention. Interestingly, the positive relationships

between social norm and sustainable practices were further confirmed by Meek (2010) and Yaacob (2010). Therefore, the hypothesis below was suggested:

H3: Social norm (SN) positively influences intention towards sustainable entrepreneurship (ITSE).

Apart from pressures or influences from the society, governmental rules and regulations also stimulated entrepreneur's sustainable behavior (Moorthy *et al.*, 2012; Rasi *et al.*, 2010). Indeed, one of the obvious reasons that caused businesses to practice sustainability was governmental influence (Delmas & Toffel, 2004). Specifically, sustainability policies established by government were treated as the guidelines to most entrepreneurs in maintaining business gains and environmental quality (Schlange, 2006). Worthington and Patton (2005) also mentioned that suitable pro-environmental regulations could drive entrepreneurs to respond to environmental issues. As such, it suggested that:

H4: Government legislation (GL) positively influences intention towards sustainable entrepreneurship (ITSE).

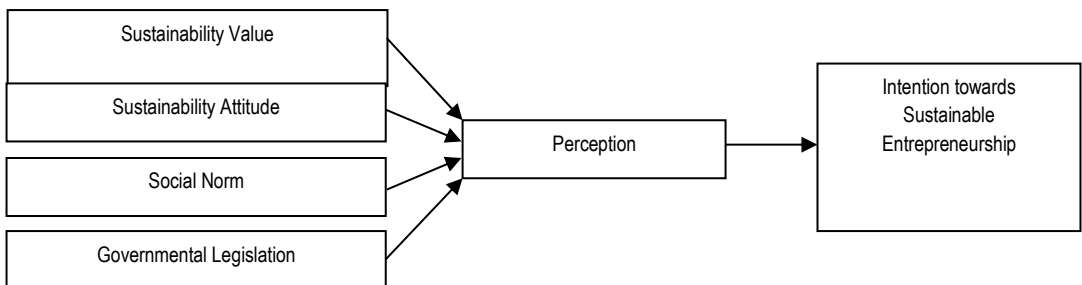
People's perception which affects their entrepreneurial intention consists of perceived desirability and perceived feasibility (Shapero & Sokol, 1982). Truly, the increased in both perceived desirability and perceived feasibility did inspire the creation of new ventures (Krueger *et al.*, 2000). Chuluunbaatar *et al.* (2011) further found that these two perceptions were strongly and significantly related to entrepreneurial intention. Without doubt, past literature has confirmed the positive and direct relationship between perception and intention. However, Shepherd and Krueger (2002) explained that there are various external factors that influence one's intention through perceived desirability and perceived feasibility. As supported by Liñán and Santos (2007), social factors affected individual's intention through perceived desirability and perceived feasibility. The mediating role of perception between the influencing factors and behavioral intention was further verified by Izquierdo and Buelens (2008) and Liñán *et al.* (2005). Therefore, this paper hypothesized that:

H5a: Perception (PERC) mediates the relationship between sustainability value (SV) and intention towards sustainable entrepreneurship (ITSE).

H5b: Perception (PERC) mediates the relationship between sustainability attitude (SA) and intention towards sustainable entrepreneurship (ITSE).

H5c: Perception (PERC) mediates the relationship between social norm (SN) and intention towards sustainable entrepreneurship (ITSE).

H5d: Perception (PERC) mediates the relationship between governmental legislation (GL) and intention towards sustainable entrepreneurship (ITSE).



**Figure 1: Research Model**

### Research Methodology

This study selected the sample from the list of SMEs in the directory of SME Corp Malaysia, a reputable and reliable agency responsible for SME development in the country. From a total of 1600 questionnaires distributed, 404 returned responses were deemed completed and usable. Thus, the response rate was about 25%. The respondents were mostly male (79.

21%), mainly in the serving sector (63. 12%), operating a sole proprietorship business (73. 76%), employed less than five full-time employees (57. 43%) and have established for five to ten years (37. 87%).

Since this research employed a questionnaire survey method, the instrument used was a self-administered questionnaire. It consisted of 80 items pertaining to respondent's background (5 items), sustainability value (SV - 13 items), sustainability attitude (SA - 15 items), social norm (SN - 8 items), governmental legislation (GL - 7 items), perception (PERC - 26 items) and intention towards sustainable entrepreneurship (ITSE - 6 items). All the items were adapted from previously established questionnaires to ensure their reliability and validity. The items used 10-point Likert-type rating scale, in which 1 denoted strongly disagree and 10 indicated strongly agree. The goodness of measures was achieved because all constructs recorded a Cronbach's alpha value higher than 0. 70 and; exploratory factor analysis also grouped the items into their respective group.

### Findings and Discussions

The preliminary data analysis revealed that the data were approximately normally distributed and have obtained linearity and homoscedasticity. Thus, they were suitable for multivariate analysis. Table 1 summarizes the means and standard deviations of each variables as well as correlation coefficients (r) of pairs of variables. The descriptive results found that the ITSE among SME owner-managers were rather high (M = 7. 045; SD = 1. 737). Meanwhile, the mean values for other factors ranged from the lowest 6. 461 (GL) to the highest 7. 464 (SV). The Pearson correlation results revealed that the r-values for each pair of variables were between 0. 303 (GL-SA) and 0. 694 (PERC-SN). The results confirmed that all pairs of variable were significantly associated (sig. < 0. 01) and the highest r-value was 0. 694 (PERC-SN); as such, the issue of multicollinearity was not existed. Thus, the variables were suitable for regression analysis.

**Table 1: Mean, Standard Deviation and Correlation**

	M	SD	SV	SA	SN	RG	PERC	ITSE
SV	7. 464	1. 285	1					
SA	6. 809	1. 277	0. 455**	1				
SN	7. 313	1. 459	0. 526**	0. 496**	1			
GL	6. 461	1. 665	0. 332**	0. 303**	0. 501**	1		
PERC	7. 160	1. 321	0. 636**	0. 483**	0. 694**	0. 532**	1	
ITSE	7. 045	1. 737	0. 341**	0. 387**	0. 477**	0. 364**	0. 593**	1

\*\* . Correlation is significant at the 0. 01 level (2-tailed).

Table 2 illustrates the results of regression analysis to determine the influence of SV, SA, SN and GL on ITSE. The F-statistics obtained was 38. 323 (p-value < 0. 000), indicated that the data fitted the model. The value of R<sup>2</sup> was 0. 278, which showed that 27. 8% of the variance in ITSE was explained by SV, SA, SN and GL. In particular, SN was the most important factor ( $\beta$  = 0. 283; sig. 0. 000), followed by SA ( $\beta$  = 0. 172; sig. 0. 001), GL ( $\beta$  = 0. 149; sig. 0. 003) and SV ( $\beta$  = 0. 116; sig. 0. 028). Thus, hypotheses H1, H2, H3 and H4 were supported.

**Table 2: Regression - Influence of SV, SA, SN and GL on ITSE**

	Standardized Coefficients (Beta)	t	Sig.
SV	0. 116	2. 272	0. 028
SA	0. 172	3. 382	0. 001
SN	0. 283	4. 935	0. 000
GL	0. 149	3. 013	0. 003

F = 38. 323 (0. 000); R<sup>2</sup> = 0. 278; Dependent Variable: ITSE

For the purpose of testing hypotheses H5a to H5d, A four-step Baron-Kenny Approach was employed. The first step of the approach was determining the influence of SV, SA, SN and GL on ITSE. The results were presented in Table 2 in which all the four independent variables significantly influenced dependent variable. Meanwhile, Table 3 shows the results of second step, whereby the influence of SV, SA, SN and GL (independent variable) on PERC (mediating variable) were found positive

and significant. Specifically, SN recorded the highest  $\beta$ -value at 0.373 (sig. 0.000), followed by SV ( $\beta = 0.332$ ; sig. 0.000), GL ( $\beta = 0.210$ ; sig. 0.000) and SA ( $\beta = 2.268$ ; sig. 0.024).

**Table 3: Regression - Influence of SV, SA, SN and GL on PERC**

	Standardized Coefficients (Beta)	t	Sig.
SV	0.332	8.822	0.000
SA	0.083	2.268	0.024
SN	0.373	9.003	0.000
GL	0.210	5.885	0.000

F = 164.361 (0.000); R<sup>2</sup> = 0.622; Dependent Variable: PERC

Table 4 depicts the results of regression for third step in Baron-Kenny Approach. In step 3, the result successfully proved that the mediating variable (PERC) significantly influenced dependent variable (ITSE) ( $\beta = 0.512$ ; sig. 0.000).

**Table 4: Regression - Influence of SV, SA, SN, GL and PERC on ITSE**

	Standardized Coefficients (Beta)	t	Sig.
SV	0.105	1.990	0.047
SA	0.129	2.716	0.007
SN	0.092	1.571	0.117
GL	0.041	0.861	0.390
PERC	0.512	7.947	0.000

F = 48.067 (0.000); R<sup>2</sup> = 0.377; Dependent Variable: ITSE

In step 4, the mediating effects of PERC were determined through comparing the  $\beta$ -values of SV, SA, SN and GL in Table 2 to Table 4. The shrunk in  $\beta$ -values of SV (0.116 to 0.105), SA (0.172 to 0.129), SN (0.283 to 0.092) and GL (0.149 to 0.041) indicated that PERC recorded partially mediating effects in the relationships between the of the above factors and ITSE. In addition, the results of Sobel's test (Table 5) denoted that the mediation effects of PERC were significance (sig. < 0.05). Therefore, hypotheses H5a, H5b, H5c and H5d were partially supported.

**Table 5: Sobel's Test Results**

Variable	a	Sa	b	Sb	z	Sig.
SV – PERC – ITSE	0.341	0.039	0.673	0.085	5.869	0.000
SA – PERC – ITSE	0.086	0.038	0.673	0.085	2.176	0.030
SN – PERC – ITSE	0.338	0.038	0.673	0.085	5.914	0.000
GL – PERC – ITSE	0.167	0.028	0.673	0.085	4.764	0.000

The results from the above analyses supported the previous studies in which SV, SA, SN and GL were playing significant and influential roles in determining ITSE. Specifically, the findings confirmed the predictability of variables in TPB on behavioural intention. It also supported that both internal factors (i. e. : SV and SA) and external factors (i. e. : SN and GL) could affect an individual's intention. In addition, the partially mediation effects of PERC in SV-ITSE, SA-ITSE, SN-ITSE and GL-ITSE relationships clearly showed that PERC accounted for some, but not all of the intervening role in the formation process of ITSE. Therefore, PERC successfully explained the process of how SV, SA, SN and GL led to ITSE. It also

supported the previous finding that a person's intention was indirectly influenced by various internal and external factors through perception (Shepherd and Krueger, 2002; Liñán and Santos, 2007).

## Conclusion

This study was conducted with aim to investigate the contexts that influence the entrepreneurs' intention towards sustainable entrepreneurship. The results found that SMEs owner-managers in Malaysia showed a rather encouraging level of intention towards sustainable entrepreneurship. In another words, they favoured sustainability and were quite positive towards being sustainable in their business activities. This could be deemed as an encouraging result because it could support our country's development agenda in building a sustainable society.

Moreover, based on the model developed, this paper also found that factors such as positive sustainable value, favourable sustainable attitude, supporting social norm and sufficient governmental legislation were not to be left out in the effort of developing sustainable entrepreneurs. Of course, the intervening role of perceptions such as perceived desirability and perceived feasibility was also vital in ensuring a high intention towards sustainable entrepreneurship among SMEs owner-managers. Thus, the mental or psychological factor should be emphasized as well.

There are some limitations of this paper. For instance, the independent variables included in the study were internal and external factors, some other factors may have been overlooked. Thus, future studies should include more factors. Furthermore, this study considered only one single mediating variable, i. e. : perception. Therefore, future researchers should adopt a multi-mediator model to further explain the intention process.

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