# INTENTION TOWARDS SUSTAINABLE ENTREPRENEURSHIP: COMPARISONS AMONG MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES)

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#### Abstract

Current businesses are expected to be sustainable-centered. However, not many businesses have successfully transformed themselves into sustainable businesses. It is important to understand individual's intention towards sustainable entrepreneurship because intention is a crucial predictor of entrepreneurial behavior. Nevertheless, not many studies have embarked on business owner-managers' intention towards sustainable entrepreneurship. Thus, this study was conducted to discuss the differences on intention towards sustainable entrepreneurship and its antecedents among the micro, small and medium enterprises (MSMEs). Based on the data collected from 404 ownermanagers of MSMEs, significant differences were found in sustainability attitude and social norm among the MSMEs. However, MSMEs did not show any differences in ratings of self-efficacy and intention towards sustainable entrepreneurship. This study enriched the entrepreneurship literature through providing insights on MSMEs owner-managers' intention towards sustainable entrepreneurship and stressed that different policies, practices and strategies should be drafted to cater the different needs from MSMEs.

**Keywords:** Entrepreneurship, intention, micro small and medium enterprises (MSMEs), sustainability

# KECENDERUNGAN TERHADAP KELESTARIAN KEUSAHAWANAN : PERBANDINGAN ANTARA PERUSAHAAN MIKRO, KECIL DAN SEDERHANA (PMKS)

#### Abstrak

Perniagaan zaman kini dijangka untuk memberatkan kelestarian. Namun, tidak banyak perniagaan yang telah berjaya mengubah diri ke perniagaan lestari. Memahami kecenderungan individu ke arah keusahawanan lestari adalah penting kerana kecenderungan adalah peramal yang penting bagi tingkah laku keusahawanan. Walau bagaimanapun, tidak banyak kajian yang telah mengaji kecenderungan terhadap keusahawanan lestari di kalangan pengurus-pemilik perniagaan. Jadi, kajian ini dijalankan untuk membincangkan perbezaan kecenderungan terhadap keusahawanan lestari dan juga penyebabnya di kalangan perniagaan mikro, kecil dan sederhana (PMKS). Berdasarkan data yang diperolehi daripada 404 pemilik-pengurus PMKS, sikap kelestarian dan norma sosial telah mencatatkan perbezaan yang ketara di kalangan PMKS. Namun, PMKS tidak menunjukkan apa-apa perbezaan untuk efikasi kendiri dan kecenderungan terhadap keusahawanan lestari. Kajian ini telah memperkayakan literatur dalam bidang keusahawanan dengan membincangkan penemuan tentang kecenderungan terhadap keusahawanan lestari di kalangan pemilikpengurus PMKS dan menegaskan bahawa polisi, amalan dan strategi yang berbeza perlu digubal untuk memenuhi keperluan yang berbeza dari PMKS.

**Kata kunci:** Keusahawanan, kecenderungan, perusahaan mikro kecil dan sederhana (PMKS), kelestarian

#### INTRODUCTION

Entrepreneurial practices have caused many problems to the environment. For instance, environmental degradation was a consequence of market failure (Cohen & Winn, 2007). Environmental problems such as pollutions, deforestation and overused of non-renewal resources are closely associated to business activities. Knowing that environmental problems can leave a disastrous effect to the lives of human beings, entrepreneurs are urged to play a more active role in rectifying the situation. Thus, sustainable entrepreneurship was introduced as a possible strategy to overcome environmental issues (Dean & McMullen, 2007).

Sustainable entrepreneurship brings a paradigm shift in businesses (Nowduri, 2012) by shifting them from profit-centered to sustainable-centered (Smith & Sharicz, 2011). It is a type of voluntary sustainable practice which requires

business owner-managers' extensive interaction. Thus, at the very first stage of developing sustainable entrepreneurship, studying the business practitioners' intention to embark on sustainable entrepreneurship is important. However, many of the entrepreneurship literature have overlooked the psychological aspects such as intention and motivation (Shepherd & Patzelt, 2011).

Although many efforts have been exerted to encourage sustainable practices in businesses, small- and medium-size businesses are not showing great passion about it (Boxer, 2005). In Malaysia, small and medium enterprises view sustainable practices as something new (Moorthy et al., 2012) and they have low engagement on sustainable practices (Omar & Samuel, 2012). It is a fact that Malaysian government has established various blueprints, plans and policies for micro, small and medium enterprises (MSMEs) to embark on sustainability management. However, most of those policies and regulations view MSMEs as one whole group and adopt a one-strategy-fits-all system. Thus, the practice requires a re-examination because businesses of different sizes possess different amount of resources, expertise and ways of doing things. However, studies that investigate sustainability practices of MSMEs are scant.

As a result, this study was geared towards identifying the differences in intention towards sustainable entrepreneurship and also its antecedents, by comparing MSMEs.

## LITERATURE REVIEW

## SUSTAINABLE ENTREPRENEURSHIP AND INTENTION

Sustainable entrepreneurship is considered as a new field of study which requires further investigations (Shepherd & Patzelt, 2011; Moorthy et al., 2012). It is a new concept that links business activities to sustainable development (Schaltegger & Wagner, 2008). At present, a universally accepted definition of sustainable entrepreneurship is still lacking. Thus, Majid and Koe (2013) have attempted to extend the description of sustainable entrepreneurship based on the concept of triple-bottom-line (TBL). Their model illustrates that sustainable entrepreneurship covers the preservation of economic, social, environmental and cultural aspects in an equal manner through continuous entrepreneurial commitments. Sustainable entrepreneurship can be deemed as a strategy to rectify sustainability issues through entrepreneurial activities. However, active participation from business practitioners is still slow (Moorthy et al., 2012).

Since sustainable entrepreneurship requires interactions from human beings, becoming a sustainable entrepreneur is definitely an intentional and planned behavior. It does not happen in vacuum because people are triggered by various stimulants before they decide to embark on entrepreneurship; one of such

stimulants is behavioral intention (Krueger et al., 2000; Hisrich et al., 2013). Theory of planned behavior (TPB) developed by Ajzen (1991) is one of the most widely used models in studying behavioral intention. The theory is important in understanding, predicting and changing human behavior (Ajzen, 2011). Ajzen (1991) defined intention as "predictor of actual behavior, the degree of how hard people are willing to try, of how much of an effort people are willing to exert in a behavior" (p. 181). The theory further delineates that intention can be predicted by attitude towards behavior, subjective norm and perceived behavioral control; and there is a causal relationship between intention and actual behavior.

# PREDICTORS OF INTENTION TOWARDS SUSTAINABLE ENTREPRENEURSHIP

According to Ajzen (1991), attitude can be explained as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (p. 188). Researchers such as Paço *et al.* (2011) and Moriano *et al.* (2012) have unanimously confirmed that attitude positively influenced a person's entrepreneurial intention. Similarly, Tonglet et al. (2004) also proved that attitude was a main predictor of pro-environment intention.

Meanwhile, Ajzen (1991) referred subjective norm as "perceived social pressure to perform or not to perform a particular behavior" (p. 188). It is basically the social influence or social norm that affects a person's decision to perform a particular behavior. Vermeir and Verbeke (2008) found that an individual's sustainable behavioral intention was influenced by opinions of family members, friends, colleagues or business partners. Similarly, Meek *et al.* (2010) explained that social norms were crucial in influencing the environmental entrepreneurial actions of people. Furthermore, Yaacob (2010) identified that entrepreneur's closed family members, such as spouse, have significantly influenced the entrepreneur's decision in engaging in green businesses.

Perceived behavioral control was a concept originated from the Bandura's concept of self-efficacy (Ajzen, 2002). Thus, some researchers equated it to self-efficacy. Chen *et al.* (1998) argued that self-efficacy was a better predictor for understanding intention. In addition, Armitage and Conner (2001) also found that self-efficacy was strongly correlated to intention.

From the above discussions, it shows that human behavior is a complex process which involves various determinants. Therefore, it is important to understand people's intention and its antecedents to further understand why people behave in certain manners (Krueger et al., 2000). Unfortunately, behavioral intention is an "abandoned topic without being fully explored" in entrepreneurship literature

(Casrud & Brännback, 2011), especially studies that examined people's intention towards sustainability management.

#### SUSTAINABLE ENTREPRENEURSHIP AND MSMES

In Malaysia, MSMEs have significantly contributed to the country's gross domestic product (GDP) and also workforce employment. Malaysian government has established an agency, known as SME Corporation Malaysia (abbreviated as SME Corp. Malaysia) to formulate policies, draw up strategies and implement development programs for MSMEs. In 2013, due to the country's rapid economic development, SME Corp. Malaysia has revised the definitions of MSME (Table 1).

Table 1: Definitions of Micro, Small and Medium Enterprise (MSME)

Size	Manufacturing	Services and other sectors
Micro	Sales turnover of less than RM300000 OR Employees of less than 5	Sales turnover of less than RM300000  OR  Employees of less than 5
Small	Sales turnover from RM300000 to less than RM15 million OR Employees from 5 to less than 75	Sales turnover from RM300,000 to less than RM3 million OR Employees from 5 to less than 30
Medium	Sales turnover from RM15 million to not exceeding RM50 million OR Employees from 75 to 200	Sales turnover from RM3 million to not exceeding RM20 million OR Employees from 30 to 75

Source: SME Corp. Malaysia

It is a fact businesses are now getting aware of environmental management and development (Rasi *et al.*, 2010). However, their actual embarkation on sustainability management is still less embracing than large organizations (Schaper, 2002). This could be caused by the reasons that MSMEs found that

sustainability initiatives were costly and difficult to implement (Omar & Samuel, 2011) and they also lacked of large-scale technology and necessary

resources for sustainability management (Nowduri, 2012). As such, as the initial stage in developing sustainable entrepreneurship among MSMEs is to understand their owner-manager's cognitive process, such as their intention towards sustainable entrepreneurship. Fini *et al.* (2012) supported that studying owner-managers' intention is crucial to identify the factors that lead them to be entrepreneurial.

To date, there are scant empirical studies exploring the differences between the likelihood of firms with different sizes and years of operations to engage in sustainability practices (Hall *et al.*, 2010). One significant study was done by Hockerts and Wüstenhagen (2010) who conducted a case study on the engagement of "Emerging Davids" (new and small firms) and "Greening Goliaths" (old and large firms) in sustainable entrepreneurship. The study revealed that it was the Davids who took the initiatives to engage in sustainable entrepreneurship, and then Goliaths mimicked the Davids' initiatives. The results showed that differences existed in the process of sustainable entrepreneurship engagement between new and small firms, and old and large firms. As such, the size of firms could be regarded as a factor for firms to engage in sustainable entrepreneurship. Based on the above discussion, the following hypotheses were suggested:

H1: There is a difference in sustainability attitude among MSMEs.

H2: There is a difference in social norm among MSMEs.

H3: There is a difference in self-efficacy among MSMEs.

H4: There is a difference in intention towards sustainable entrepreneurship among MSMEs.

### **METHODOLOGY**

This study used quantitative method; in which it collected, used and produced numerical data (Punch, 2003; Awang, 2010). It employed quantitative method because its variables could be measured, numerical data could be obtained and hypotheses could be tested (Awang, 2010). Since this study attempted to study people's intention, data collection was performed by using cross-sectional method, in which the data was collected only once, at one point of time.

The population frame of this study was obtained from the list of MSMEs available on the website of SME Corp. Malaysia. The MSMEs were

from all sectors, including manufacturing and service. In sample selection, this study

employed a probability sampling method because there was a known population size (Awang, 2010). The key respondents of this study were the owner-managers or key decision makers of MSMEs. According to Krejcie and Morgan (1970), the sample size needed for this study was at least 380 cases. In total, 1600 questionnaire were sent out and 411 responses were returned after two reminders. Eventually, only 404 responses were deemed usable. As such, the response rate was about 25%.

This study employed a questionnaire survey method to collect the desired data. As such, a self-administered questionnaire was developed. In order to ensure the reliability and validity of instrument, all items were adapted from previous studies such as Braun (2010), Kennedy *et al.* (2003), Nasurdin *et al.* (2009), Moriano *et al.* (2012), McGee et al. (2009) and Liñán and Chen (2009). Minor modifications were performed on the items so that they fitted into the context of this study. All items were measured by using 10-point Likert-type rating scale, ranging from "1" strongly disagree to "10" strongly agree.

The factor analysis performed showed that the items were successfully loaded into their respective factor. In addition, items in the questionnaire were tested for reliability by using Cronbach's alpha coefficient ( $\alpha$ ). The results indicated that all variables were considered as preferable with  $\alpha > 0.80$  (Pallant, 2011).

### FINDINGS AND DISCUSSIONS

# RESPONDENTS' BACKGROUND

The owner-managers of MSMEs in this study consisted of 320 (79.21%) males and 84 (20.79%) females. In terms of classification of MSMEs sector, the dominating sector was servicing (F=255; 63.12%), followed by manufacturing (F=123; 30.45%), construction (F=15; 3.71%), agriculture (F=7; 1.73%) and others, such as quarry and mining (F=4; 1.00%). Mass majority of the MSMEs were registered as sole proprietorship (F=298; 73.76%), followed by partnership (F=32; 7.92%) and corporations (F=74; 18.32%). This study categorized the size of firm according to the firm's number of full time employees. More than half of them fell into micro category with less than five employees (F=232; 57.43%); meanwhile 105 respondents were deemed as small with five to 74 employees (25.99%) and 67 businesses were considered as medium which hired between 75 and 200 employees (16.58%).

# COMPARISONS OF INTENTION TOWARDS SUSTAINABLE ENTREPRENEURSHIP

In order to determine the differences in intention towards sustainable entrepreneurship among micro-enterprises (less than 5 employees), small-

enterprises (5-74 employees) and medium-enterprises (75-200 employees), one-way ANOVA test was performed. Table 2 depicts the results of one-way ANOVA test.

The mean scores recorded ranged from 6.23 (S.D. = 1.90) to 7.71 (S.D. = 1.35). The Levene's test for homogeneity of variance showed insignificant values (>0.05) for all variables, indicated that homogeneity of variance assumption was not violated (Dugard *et al.*, 2010; Pallant, 2011). The results further indicated that significant differences were found among the micro, small and medium enterprises in the mean scores of sustainability attitude (F = 2.95; p-value = 0.03) and social norm (F = 3.28; p-value = 0.02). However, it was regretted that the significance value of self-efficacy and intention towards sustainable entrepreneurship was above 0.05; thus, no significant difference were found.

Table 2: One-way ANOVA Test

Dependent veriables	Mean (Std. Dev.)		Levene	F	C! ~	
Dependent variables	Micro	Small	Medium	(Sig.)	r	Sig.
Sustainability attitude	6.80 (1.22)	7.29 (1.18)	6.43 (1.49)	0.74 (0.48)	2.95	0.03*
Social norm	7.60 (1.35)	7.39 (1.43)	7.02 (1.84)	1.69 (0.28)	3.28	0.02*
Self-efficacy	7.10 (1.30)	7.13 (1.25)	7.25 (1.36)	0.15 (0.86)	0.35	0.70
Intention towards sustainable entrepreneurship	7.15 (1.77)	7.01 (1.69)	7.04 (1.83)	0.81 (0.45)	0.16	0.86

Since statistical significant differences were found in sustainability attitude and social norm, it was necessary to determine the effect size or strength of association by using eta squared ( $\eta^2$ ) (Pallant, 2011). For differences of mean scores in sustainable attitude and social norm, the  $\eta^2$  obtained was 0.02 (17.547 / 750.802) and 0.03 (23.624 / 884.633) respectively. The results showed that the actual differences in mean scores for the above two variables among the groups

were rather small (Cohen, 1988). In addition, a post-hoc analysis, i.e.: Tukey's Honestly Significant Difference (HSD) test was carried out.

For sustainability attitude, significant difference was found between the mean score of Small (M = 7.29; S.D. = 1.18) and Medium (M = 6.43; S.D. = 1.49). Meanwhile, for social norm, mean score for Micro (M = 7.60; S.D. = 1.35) was significantly different from Medium (M = 7.02; S.D. = 1.84). Based on the above results, hypotheses H1 and H2 were supported while H3 and H4 were not supported.

## **DISCUSSIONS**

Based on the analysis results from the previous section, significant differences were found in sustainability attitude and social norm among the enterprises of different sizes. Indeed, size was a determining aspect of pro-active environmental management among firms (López-Gamero *et al.*, 2010). Previous studies have found that large-listed firms (ERMM, 2002; Buniamin *et al.*, 2011) and big-size manufacturing firms (Omar & Samuel, 2011) were more keen to sustainable practices then the small ones. As larger firms have more financial resources and internal abilities, i.e.: knowledge and expertise, they are more able to implement pro-environmental initiatives (Branzei & Vertinsky, 2002). This could be a possible reason why medium-size enterprises had a more positive sustainability attitude than small-size enterprises.

Since the process of engaging in sustainable entrepreneurship differs between firms of various sizes (Hockerts & Wüstenhagen, 2010), influences from other parties may play an influential role. Societal pressures for sustainability came from various sources, such as trade associations, competitors and media (Branzei & Vertinsky, 2002). It is obvious that firms of different sizes experience different level of pressures because of their nature of characteristics. Thus, this study found that medium-size firms and micro-size firms reacted differently in terms of social norm.

However, it was found that micro, medium and small enterprises did not show any differences in ratings of self-efficacy and intention towards sustainable entrepreneurship. This could be due to all firms participated in this study were collectively categorized as "small and medium enterprises" although they could be further grouped into "micro", "small" and "medium". Due to this reason, they received the same amount of assistance and same level of attention from government and various agencies such as SME Corp Malaysia, Perbadanan Usahawan Nasional Berhad (PUNB), SME bank etc. They also possessed the same or almost the same amount of resources, such as funds, knowledge and expertise.

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#### CONCLUSION

This study was performed with the aim to identify the differences in intention towards sustainable entrepreneurship and also its antecedents (i.e.: sustainability attitude, social norm and self-efficacy) among micro, medium and small enterprises. Based on the analysis performed, it could be concluded that businesses of different sizes exhibited differences in regard to their favorable evaluation on sustainable entrepreneurship and pressures from social factors. However, firms of all sizes did not show any differences in their sense of competence and intention towards sustainable entrepreneurship.

This study contributed to both literature and practice. In terms of literature, it enriched the entrepreneurship literature through providing insights on MSMEs owner-managers' intention towards sustainable entrepreneurship. Practically, this study stressed that businesses of different sizes did react differently to sustainable entrepreneurship. Thus, different policies, practices and strategies should be drafted to cater the different needs of from MSMEs.

This study had several limitations also. For instance, it only employed Ajzen's (1991) TPB model. Future researchers are suggested to develop an integrated model to enhance the current model. Future studies are also urged to examine the MSMEs of different sectors and years of operations.

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