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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v9-i9/6283  DOI: 10.6007/IJARBSS/v9-i9/6283

Received: 29 June 2019, Revised: 27 July 2019, Accepted: 20 August 2019

Published Online: 10 September 2019

In-Text Citation: (Koe, Alias, & Othman, 2019)
To Cite this Article: Koe, W.-L., Alias, N. E., & Othman, R. (2019). Factors Influencing the Intention towards Sustainable Entrepreneurship among University Students. International Journal of Academic Research in Business and Social Sciences, 9(9), 210–218.

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Factors Influencing the Intention towards Sustainable Entrepreneurship among University Students

Wei-Loon Koe, Nurul Ezaili Alias, Rozana Othman
Universiti Teknologi MARA, Cawangan Melaka, Malaysia
Email: koeweiloon@yahoo.com

Abstract
Sustainable entrepreneurship is considered a new concept to many people. Furthermore, not many studies have scrutinized the intention towards sustainable entrepreneurship. Thus, this study aimed at identifying factors which influenced the intention towards sustainable entrepreneurship among university students in Malaysia. The factors included green marketing factor, changing customer behavior and favorable market condition. The population was full-time bachelor’s degree students from a local public university. A total of 185 respondents were surveyed through self-administered questionnaires. Based on the results obtained from the multiple regressions analysis, it could be concluded that all the three factors (i.e.: green marketing factor, changing customer behavior and favorable market condition) significantly influenced intention towards sustainable entrepreneurship. This study contributed to both literature and practice. Literally, it provided new information about influential factors on intention towards sustainable entrepreneurship. Practically, it suggested that developing supportive policies and financing systems and encouraging greater use of sustainable products or services are substantial in sustainable entrepreneurship development. Some recommendations for future researchers have also been put forth in the study.

Keywords: Entrepreneurship, Intention, Students, Sustainability, University

Introduction
Sustainable entrepreneurship could be deemed as an emerging field in the entrepreneurship study. Although quite a number of scholars have emphasized the importance of sustainable entrepreneurship in the current business world, many business operators still think that it is new (Moorthy et al., 2012). Indeed, in Malaysia, in despite of much effort has been exerted to encourage businesses to exercise sustainable practices, not many businesses have actually embarked on sustainable entrepreneurship. For instance, Koe and Majid (2013) found that merely 14.7% of Malaysian small and medium enterprises practiced sustainability. This indicates that developing a greater number of sustainable entrepreneurs is indeed needed.

In fact, Malaysian government is not lacking behind the other countries in promoting sustainable development. For instance, the government has established Malaysia’s Roadmap
towards Zero Single-Use Plastics 2018-2030, which indicates the zero use of single-use plastic throughout the whole country in 2030. This initiative could be considered as one of the strategic moves to overcome the country’s sustainability issues. In order to make this initiative a successful one, encouraging sustainable businesses in the country is essential. Therefore, understanding the extend of intention to start a sustainable business is truly needed. Nonetheless, the availability of such information is still lacking.

Situational conditions do affect a person’s decision to be or not to be an entrepreneur. This is because successful entrepreneurs would identify opportunities that exist in the market prior to take advantage of them. Students are considered as potential entrepreneurs because they may choose to start their own business after graduation. As urged by many existing scholars, developing sustainable entrepreneurs should start from understanding people’s intention. However, intention towards sustainable entrepreneurship is considered as an under-researched topic. Thus, this study focused on students’ intention toward sustainable entrepreneurship. In addition, studies regarding the influence of factors such as marketing factor, customer behavior and market condition on the intention towards sustainable entrepreneurship are still scarce in the literature. Therefore, this study was aimed at determining the factors that influence the intention towards sustainable entrepreneurship.

Literature Review
Sustainable Entrepreneurship and Intention
Sustainable entrepreneurship is one of the concepts under the umbrella of entrepreneurship. To date, there is no consensus on how sustainable entrepreneurship could be defined. Some scholars would associate sustainable entrepreneurship to economic generation, environment protection and social welfare development (e.g. Abrahamsson, 2007; Hockerts and Wüstenhagen, 2010; Shepherd and Patzelt, 2011). However, Majid and Koe (2012: 300) have proposed a more comprehensive description of sustainable entrepreneurship; in which they described it as “a process in which entrepreneurs exploit the opportunities in an innovative manner for economic gains, society equity, environmental quality and cultural preservation on an equal footing”.

Researchers such as Shapero and Sokol (1982) and Bird (1988) have pointed out that an individual must has sufficient intention prior to act entrepreneurially. Thus, it is important to research on a person’s level of entrepreneurial intention. A person’s level of entrepreneurial intention could be triggered by external factors. According to entrepreneurial event model (EEM) model, a person’s entrepreneurial intention was influenced by precipitating events (Shapero and Sokol, 1982). The model also pointed out that situational or environmental factors gave rise to entrepreneurial events. Similarly, Birds (1988) illustrated that social, political and economic context affected a person’s intention to become an entrepreneur. In addition, Schlange (2006) also highlighted in their study, context variables drove sustainable entrepreneurs. As Muñoz and Dimov (2015) mentioned, support from social context such as social norms and community culture was relevant to the development of sustainable ventures. Since sustainable entrepreneurship is considered as a sub-field of entrepreneurship, it is believed that understanding of external factors affecting people’s intention towards sustainable entrepreneurship is also crucial.
Factors Affecting Intention towards Sustainable Entrepreneurship

This study identified three external factors which affect intention towards sustainable entrepreneurship from Kushwaha and Sharma (2017); they were (i) green marketing factor; (ii) changing consumer behavior and; (iii) favorable market condition.

The rise of ecological concern and the increased of green awareness among the consumers have caused businesses to produce more green products and services. True, many businesses nowadays need to attract a greater number of consumers in the green market (Gleim et al., 2013). Integrating green marketing principles into operations of business firms could yield sustainable competitive advantage and long-term benefits (Nadanyiova et al., 2015). For instance, green marketing practices such as promoting the purchase and use of environmentally friendly outdoor products could be deemed as a way to protect the fragile environment and a solution to sustainability problems (Fuentes, 2015). Moreover, Chan (2013) found that many hotel operators have adopted various level of green marketing strategies, ranging from lean to extreme strategies. It can be said that adoption of green marketing factor is important in attracting future customers and development of sustainable entrepreneurship.

Enterprising individuals who are market driven would react to external pressures such as customers (Hockerts and Wüstenhagen, 2010). In other words, business firms would change the ways they perform their business in order to fulfil customers’ needs. Changing consumer behavior, such as moving towards ethical consumption has changed consumers’ consumption patterns, marketing efforts and production of products (Newholm and Shaw, 2007). Indeed, Sigala (2014) discussed that in the tourism industry, customers played an influential role in implementation of sustainable supply chain management by the industry players such as hotel and restaurant operators. Research also found that ecological issues have changed the way consumers made their purchases (Aagerup and Nilsson, 2016). Many consumers are showing green purchase behavior because green products are more environmentally friendly than traditional products (Saputra et al., 2012). The change in consumer purchase behavior has encouraged the development of sustainable entrepreneurship.

Entrepreneurs are sensitive to opportunities found in a market. A favorable market condition played a significant role in establishment of new ventures (Nikolaou et al., 2011). For instance, external factors influenced social entrepreneurial activities and development (Zhang and Swanson, 2014). Specifically, government’s roles in supporting sustainable entrepreneurship include establishing and implementing policies, managing and strengthening new tendency, market infrastructure and economy (Uslu et al., 2015). Apart from supportive policies, infrastructure and access to finance were also substantial to sustainable entrepreneurship development (Lawal et al., 2016). Furthermore, creating a favorable institutional context, such as having good ties, networks and connections with external stakeholders is crucial for ecological sustainable entrepreneurs. Operating sustainable ventures in a favorable condition is extremely important for the survival of new and small ventures with limited resources and minimal influence on public policy (Gast et al., 2017; Darwish, 2016).

Research Model and Hypotheses

As discussed in the previous section, green marketing factor, changing consumer behavior and favorable market condition were regarded as the independent variables. They were
posited to have influences on the dependent variable, i.e: intention towards sustainable entrepreneurship. The relationship between them is illustrated in Figure 1.

![Research Model](image)

**Figure 1: Research Model (adapted from Kushwaha and Sharma, 2017)**

Based on the research model (Figure 1), three hypotheses were suggested to guide this study:

H1: Green marketing factor significantly influences intention towards sustainable entrepreneurship.
H2: Changing customer behavior significantly influences intention towards sustainable entrepreneurship.
H3: Favorable market condition significantly influences intention towards sustainable entrepreneurship.

**Research Methodology**

This study utilized a quantitative research method. This was because all the four variables were quantifiable and measurable. Specifically, it employed questionnaire survey method. A self-administered questionnaire was constructed based on the items adapted from Kushwaha and Sharma (2017) and Liñán and Chen (2009) to ensure their reliability and validity. Slight modifications on the items were performed to ensure they match the context in Malaysia. The questionnaire consisted of 20 closed-ended items, which used 5-point Likert-scale ranging from “1=strongly disagree” to “5=strongly agree”. Based on the Cronbach’s alpha values, all constructs were considered reliable because the α-values were between 0.76 and 0.83.

The population comprised of full-time final-year bachelor’s degree students from a local public university. They were deemed appropriate because they would leave the university soon and start to be employed or self-employed. In terms of sampling, this study employed proportionate stratified sampling method in accordance to the six faculties found in the university. The sample size was determined by referring to Krejcie and Morgan’s table (1970). Based on the table, a minimum of 175 respondents were required for this study. Questionnaires were distributed to the respondents with the help from their lecturers. Respondents were required to fill up the questionnaire before the start of lectures or tutorials. All collected data were keyed into the computer for further statistical analyses.

**Findings and Discussions**

**Respondent’s Background**
The researchers distributed 250 questionnaires to the respondents. However, a total of 185 questionnaires were deemed completed and usable. This indicated that the response rate was 74%. The descriptive analysis showed that a vast majority of the respondents were female (n=136; 73.51%). Most of them were from Faculty of Business and Management (n=88; 47.57%). Majority of them obtained a cumulative grade point average (CGPA) between 3.00 and 3.49 (n=96; 51.89%). About one third of them had family member who operates a business (n= 60; 32.43%). More than half of them had studied the subject of entrepreneurship (n=132; 71.35%). About 81.62% (n=151) of the respondents have heard about sustainability development.

### Mean, Standard Deviation and Correlation

|        | m   | sd  | ISE | GME | CCB | FMC |
|--------|-----|-----|-----|-----|-----|-----|
| ISE    | 3.672 | 0.844 | 1   |   |   |   |
| GMF    | 3.821 | 0.748 | 0.491** | 1 |   |   |
| CCB    | 3.756 | 0.584 | 0.784** | 0.726** | 1 |   |
| FMC    | 3.765 | 0.551 | 0.240** | 0.495** | 0.587** | 1 |

**. Correlation is significant at the 0.01 level (2-tailed).
ISE: intention towards sustainable entrepreneurship; GMF: green marketing factor; CCB: changing customer behavior; FMC: favorable market condition

Table 1 depicts the mean scores (m), standard deviations (sd) and Pearson correlation coefficients (r) of the variables in this study. The highest mean score was recorded by GMF (m=3.821; sd=0.748) while ISE (m=3.672; sd=0.844) obtained the lowest mean score. In terms of Pearson correlation analysis, all pairs of variables were found to be significantly correlated to each other. The highest r-value was found between ISE and CCB (r=0.784) while the lowest r-value was recorded by ISE and FMC (r=0.240). Pearson correlation also showed that multicollinearity did not exist because the r-values recorded by all pairs of independent variables were well below 0.90 (Pallant, 2011). Thus, the data were suitable for multiple regressions analysis.

### Multiple Regressions

This study has suggested three hypotheses. Multiple regressions analysis was conducted to test the hypotheses and the results were summarized in Table 2. The results conformed to Pearson correlation analysis in which multicollinearity was not an issue because all tolerance values were greater than 0.10 while VIFs were below 10 (Pallant, 2011). The model was proven to be statistically fit because the F-statistics was 137.616 (sig. <0.001). The R-squared value (0.695) indicated that 69.50% of the variance in ISE were explained by GMF, CCB and FMC. Other variables explained as much as 30.50%. All the three independent variables significantly influenced ISE. The most important factor was CCB (β=1.324; sig. <0.001), followed by GMF (β=1.119; sig. <0.01) and FMC (β=1.061; sig.=0.009). The results further depicted that H1-H3 were supported.

|        | Standardized Beta | Sig. | Tolerance | VIF |
|--------|-------------------|------|-----------|-----|

Table 2: Multiple Regressions Analysis
GMF | 1.119 | <0.001 | 0.465 | 2.148
FMC | 1.061 | 0.009 | 0.404 | 2.476
CCB | 1.324 | <0.001 | 0.645 | 1.551

F-statistics | 137.616 (sig <0.001)
R-squared | 0.695

Dependent Variable: intention towards sustainable entrepreneurship (ISE)
GMF: green marketing factor; FMC: favorable market condition
CCB: changing customer behavior;

Discussion
It was not surprising to obtain a significant influence of changing customer behavior on intention towards sustainable entrepreneurship. The importance of this factor was highlighted by Newholm and Shaw (2007), Sigala (2014) and Kushwaha and Sharma (2017). It is understandable that customer behavior would affect a product’s demand and also a firm’s performance. In most cases, business firms would offer products which suit the consumers’ needs and wants. Thus, having a segment of customers who understand sustainability and prone to buying green products could be a great attraction for people to embark on sustainable entrepreneurship.

In addition, this study found that green marketing factor significantly influenced intention towards sustainable entrepreneurship. Green marketing factor is essential in sustainable entrepreneurship development (Kushwaha and Sharma, 2017; Nadanyiova et al., 2015; Fuentes, 2015). Entrepreneurs normally take advantages on the business opportunities found in a market. Therefore, a marketing environment which is in favor for green product, such as high green products awareness and sufficient green product labelling would provide many valuable business opportunities to entrepreneurs. Consequently, it would increase the people’s intention to set up a sustainable business.

The findings also indicated that favorable market condition significantly influenced intention towards sustainable entrepreneurship. The role of supportive market condition to sustainable entrepreneurship has been stressed by Kushwaha and Sharma (2017), Gast et al. (2017), Uslu et al. (2015) and Lawal et al. (2016). Entrepreneurship is about starting and managing a business. A business cannot survive without a favorable market condition. In other words, factors such as business-friendly governmental policy, ease to get loan and steady demand for sustainable products definitely would attract more people to start and operate a sustainable business.

Conclusion
The main objective of this study was to identify the influence of green marketing factor, favorable market condition and changing customer behavior on intention towards sustainable entrepreneurship among university students. Based on the results obtained from the analysis, it could be concluded intention towards sustainable entrepreneurship was significantly influenced by those three factors. This study contributed to the literature by providing new information about influential factors on intention towards sustainable entrepreneurship. Practically, it provided some new ideas on sustainable entrepreneurship development. For instance, providing a conducive business environment through developing
supportive policies and financing systems is important in encouraging sustainable entrepreneurship. In addition, educating the general public in regard to sustainable products or services and encouraging greater sustainable products consumption are also crucial in ensuring more sustainable entrepreneurial activities. Some limitations were found in this study. For instance, it focused on market factors and university students only. Future researchers are suggested to expand the variables and subjects of study.

Acknowledgement
The authors would like to express their deepest gratitude to the management of Universiti Teknologi MARA (UiTM), Cawangan Melaka for providing the financial support and all their friends and colleagues who have offered their helping hands in various occasions.

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