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Article

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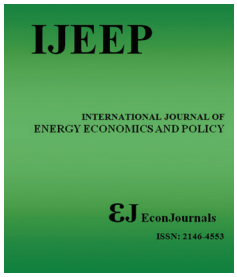

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Are Malaysian Companies Ready for Environmental Practices? An Extension of Theory of Planned Behavior

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ABSTRACT

Changes of climate and pollution globally have been the most concerning issue in the recent decades. The negative impacts of climate change and pollution towards the environment and human well-being have been significantly concern. Among them, Malaysia has been actively involved in looking for solutions to reduce the environmental degradation issues lately. This study adopted the extended theory of planned behaviour, norm activation model and Maslow's Hierarchy of Needs in examining the comprehensive motivational factors towards their intention to environmental practices. This study is aimed to provide insights related to the environmental practices among Malaysian companies specifically public listed companies. Questionnaires are distributed via email due to the location of the companies. The collected and usable data for this study is 107 companies. The targeted respondents are those who ranked manager and above from investor relations department. The data is being analysed by employing partial least square-structural equation modelling in investigating the relationship between the motivational factors that influence companies' environmental practices intention. The findings showed that corporate norm and actualisation needs are positively associated to the intention among companies to be environmental friendly.

Keywords: Environmental Practices Intention, Attitude, Subjective Norm, Corporate Norm, Actualisation Needs, Government Policy, Extended Theory of Planned Behaviour
JEL Classifications: P28, Q58

1. INTRODUCTION

The worsening of environmental degradation is a serious problem that our planet is currently facing and the causes are nonetheless due to the over consumption of natural resources which have caused carbon dioxide (CO_2) emissions to increase drastically. According to World Health Organization (WHO) (2019), there are more than 3 million deaths recorded in a year due to air pollution. 94% of the deaths are because of heart and lung related diseases. These diseases are believed to be linked with air pollution exposure (National Institute of Environmental Health, 2019). Furthermore, one third of the global air pollutant deaths is happening in Asia Pacific (WHO, 2018). Locally, Malaysian environment condition is out of equalisation. Environmental degradation issue has been disturbing untouched high which 95% of 1,199 Malaysians believe that climate change is real and 85% believe that it will affect their lives (Chu, 2019). Furthermore, Malaysia's CO_2 emissions has been in the increasing trend and recorded at 8.13 in year 2014 for CO_2 emissions in term of metric tons per capital (The World Bank, 2019a). The CO_2 emissions recorded the highest in Malaysia throughout the year. Continuing high development rates does not compatible to supportable improvement. An inclination for mega projects over more environmentally friendly options disturbed the normal parity of ecosystems in term of water and air quality. It further compromises the general wellbeing, lives and clean environment.

This study was prompted and informed by the low participating rate of environmental disclosure score by Bloomberg among public listed companies in Bursa Malaysia. According to

Bloomberg (2019), the number of companies which disclosed their environmental practices has been dropped sharply with 75 companies in 2017 to only 27 companies in 2018. In other words, it has decreased 64% just in a year. Regardless, the inquiry emerges on the reasons of the decreasing number of Malaysian companies dropped drastically in spite of the considerable number of initiatives and efforts by the authorities.

Besides that emerging countries are now more actively seeking alternatives to attract foreign direct investment (FDI) as FDI will help to boost the country's economy. However, as stated in The World Bank (2019b), the FDI or net inflow based on the percentage of GDP for Malaysia is in a decreasing trend. It dropped significantly as compared to the highest net inflow of FDI gotten in the year 1992, which is 8.761 and the net inflow of FDI in the year 2018 only at 2.419. Specifically, it has decreased 72.39%. Even though, Southeast Asia has the most foreign investment inflows, Malaysia's has continued lagging behind in term of foreign investment inflows as compared to its major regional such as Singapore, Indonesia and Viet Nam (Asean Secretariat, 2018). Due to that, authorities are actively looking into new alternative ways to attract FDI (The Star, 2018). This is because most of the multinational corporations are concentrating on sustainability practices which these practices are believe to be able to generate higher profits in the long run.

Apart from the decreasing FDI figure, based on Choong (2017), Malaysia is also being labelled as the worst performing stock market in Asia for the year of 2017. As alluded by The Star (2019), Bursa Malaysia is the only loser in Asia for 2019. Due to this matter, thus there is a need to conduct this study to ensure that Malaysia will have a better position in attracting the environmental investment. As stated by Molina-Azorín et al. (2009), environmental practices by companies impact significantly on companies' financial performance. In addition, Arthur et al. (1996) also stated that there is a positive relationship between companies' financial performance and stock market performance. Hence, in order to attract more investors, one of the alternatives is by having companies to get involved in environmental practices. This is because global investors have begun to focus on non-financial factors in their portfolio selection processes in the recent years. Companies' practices in the area of environmental, social and corporate governance have become their major focus to be considered (Galbreath, 2013).

Nevertheless, Department of Statistics Malaysia (2019) stated that the total environmental protection expenditure performance for the year of 2017 was registered an annual growth rate of 0.8% to RM 2592.6 million as compared to 2015 at 27.7% to RM 2,551.3 million. The low annual growth rate of environmental protection expenditure has prompts the importance of conducting this study in examining further on the motivational factors among Malaysian companies to get involve in environmental friendly activities.

Additionally, in the local context, only Malaysia Green Technology Corporation which is formed under the care of the Ministry of Energy, Science, Technology, Environment and Climate Change formerly known as Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA) is entrenched. The agency is accountable to look after the green technology improvement and development in Malaysia. Their principle objective is to reinforce the local green technology industry and develop talents in the green technology developments (Green Bank Network, 2018). Moreover, Malaysia has implemented pricing reform recently on the oil prices in the effort to reduce CO_2 emissions (OECD, 2019). Nevertheless, the initiatives and efforts taken by the Malaysia government seems to be ineffective to stimulate the growth of green practices adoption among companies in Malaysia. In short, this study is aimed to provide insights related to environmental practices intention among companies in the Malaysia and hopes to create awareness among them to adopt environmental practices behaviour.

2. LITERATURE REVIEW

This study uses three theories which are theory of planned behaviour (TPB), norm activation model (NAM) and Maslow's Hierarchy of Needs Theory in building the research framework. TPB is being used as the foundation to develop the research framework.

2.1. TPB

TPB (Ajzen, 1991) is being developed based on the initial theory, Theory of Reasoned Action (TRA) in which behaviour is expected have total voluntary control under the assumption of the theory (Hackman and Knowlden, 2014). According to TPB, three motivational factors which are personnel's attitude, subjective norm and perceived behavioural control (PBC) are the main motivational factors to the intention to conduct the behaviour (Ajzen, 1991). In addition, TPB is also a widely used theory to examine environmental practices related issues (Luu, 2019; Marnewick et al., 2019; Chan et al., 2018; Scalco et al., 2017; Tan et al., 2017; Goh et al., 2017; Wang et al., 2017; Paul et al., 2016; Cordano and Frieze, 2000). TPB is being derived from TRA and it is being used widely to examine the influence of personal determinants. Thus, in this study extended TPB will be adopted to predict the companies' readiness to implement circular economy approach (Azjen, 1991; Long et al., 2017a; Long et al., 2017b).

2.2. NAM

NAM is used to examine altruistic behaviour under social-psychological model (Schwartz, 1977). In the recent decades, NAM has been widely adopted specifically in the area of examining pro-environmental behaviour, for example, the usage of new transportation technology (He and Zhan, 2018; Nordlund et al., 2016) and personnel environmentally responsible voluntary turnout (Han, 2014). Latest studies also found to integrate both TPB and NAM to examine environmental related intention (Gkargkavouzi et al., 2019; Rezaei et al., 2019). Hence, in this study, corporate norm is being included as one of the variables that influencing the environmental practices intention because corporate norm shared the same similarity with personal norms as it is internalised.

2.3. Maslow's Hierarchy of Needs Theory

Hierarchy of needs theory was developed by Maslow (1943) to describe the needs of individual that inspire his/her behaviour,

a theory of human inspiration. According to Maslow (1943), there are 5 basic needs for every individual. Among them, are physiological needs, safety needs, love and belonging needs, esteem needs and self-actualisation needs.

The final goal of an individual is to achieve self-actualisation needs. Self-actualisation means the individual has achieved its full potential of what they can be and must be. It is also referred to the desire of an individual for self fulfilllment. The tendency for them to become actualised in what they are potential. Self actualisation to a company means, they are able to fulfill the company's vision, to be sustainable, to be able to satisfy all their stakeholders and they are looking to contribute to the society as a part of the society (Tuzzolino and Armandi, 1981).

In this study, the needs of actualisation is treated as a variable that will positively influence the environmental practices intention.

2.4. Definitions of Environmental Practices

Corporate environmental practices are defined as activities that assist companies in managing their environmental issues (Henriques and Sadorsky, 1996). It is the actions taken by companies to produce a sustainable decision-making framework which is harmless or cause minimal damage to the environment (Gagnon et al., 2012). In other words, it is the reaction plans, strategies and policies taken by companies to prevent the environmental from further degradation (Vilchez et al., 2017).

2.5. Environmental Practices Intention

According to the TPB, behavioural intention is the immediate antecedent to behaviour. Intention is being viewed as a summary of all the pros and cons a person take into account when consciously reasoning whether he/she should perform the behaviour. It is an indicator of the person's will to perform the certain behaviour and the measure of the efforts that individual is planning to carry out in order to perform the said behaviour. The relationship between the intention to engage in the behaviour and the likelihood of its performance is deemed to be positive (Ajzen, 1991). In other words, behavioural intention is the judgment made by individual about the probability of the said behaviour and it also reflect the will of the personnel with respect to the behaviour (Wang et al., 2017). Thus, behavioural intention is being influenced by the motivational factors such as attitude, subjective norm, PBC, corporate norm, government policy and actualisation needs.

2.5.1. Attitude on environmental practices intention

According to TPB, behavioural intention is the immediate antecedent to behaviour. Attitudes towards a behaviour being defined as the measurement of a personnel's evaluation and expression either pondering about someone or something which the it is replicated in a personnel's behaviour. Besides that, it emerges from a personnel's convictions about the outcomes which the outcomes are the results from the executions or reactions of the behaviour (Cordano and Frieze, 2000). As a result, attitudes towards a behaviour are the actions that performed from a personnel in accepting the believed results from the behaviour performed (Ajzen, 1991). Study between the link of attitude and intention has been widely examined in the area of marketing, recycling and behavioural study.

To put it plainly, if the personnel have positive attitudes towards environment awareness, then the commitment from the personnel to perform environmental protection actions will be greater. If companies having favourable attitude toward environmental practices behaviour, they are more likely to commit in environmental practices (Ajzen, 1991). Studies done by Wang et al. (2017), Goh et al. (2017) suggested that attitudes and behavioural intention are positively related. Most of the previous studies conducted in examining the relationship between attitude and behavioural intentions were done at China, India, Taiwan and Brazil which the relationship was being examined in the household level instead of corporate level (Echegaray and Hansstein, 2017; Kumar et al., 2017; Nguyen et al., 2017; Shih, 2017; Wang et al., 2016; Wang et al., 2011; Chen and Tung, 2010). Thus, there are limited studies being conducted in Malaysia and especially in term of environmental practices by companies. This study therefore aims to close the research gap. Based on the TPB model, Hypothesis 1 is proposed below.

H_1: Attitude towards environmental practices behaviour and environmental practices intention are positively related.

2.5.2. Subjective norm on environmental practices intention

Subjective norm is being defined as the perceived stress given by the society to carry out the behaviour (Ajzen, 1991). In other words, given that the social pressure on a personnel, he/she will tend to make decision to perform environmental practices behaviour. To promote the intention to behave environmental friendly, subjective norm on environmental practices intention means the pressure given by external forces will influence the intention of the personnel.

Furthermore, subjective norm captures personnel's feeling related to the social pressure from behaviour performed. Types of food for consumptions, the accommodation choice, purchase intention and recycling intention are found to have positive relationship between subjective norms and behaviour intentions (Muniandy et al., 2019; Wan et al., 2017; Scalco et al., 2017; Tan et al., 2017; Han et al., 2010). In order to close the research gap of examining the environmental practices intention among companies in Malaysia this study is being carried out. Hypothesis 2 is put forward as below.

H_2: Subjective norm and environmental practices intention are positively related.

2.5.3. PBC on environmental practices intention

PBC means the degree of difficulty which is perceived by an individual to perform the said behaviour (Ajzen, 1991). The perceived degree of difficulty by an individual is also being referred to the perceived obstacles (Wu et al., 2016). Perceived obstacles means the perception of an individual regarding the barriers that blocking his/her way or prevents or hinders the progress (Meske et al., 2018).

The motivational factor which assessed by PBC has showed that in order to perform the behaviour, individual will also relate it to

perceived obstacles (Wu et al., 2016). They applied partial least square-structural equation modelling (PLS-SEM) to examine the relationship. On the other hand, Freire (2018) applied multiple linear regression to examine the relationship between the PBC and environmental practices intention also found that managers will be confident and willing to engage the behaviour once they have the control and ability to perform the said behaviour. Studies done by Tashakor et al. (2019), Freire (2018), Long et al. (2017a; 2017b), Wu et al. (2016) and Zhang et al. (2014) showed that there is a positive link between perceived behavioral control and the intention to perform the said behavior. Studies conducted are mostly on individual so to closer the research gap, this study is being carried out to examine the relationship between PCB and environmental practices intention among companies. Hypothesis 3 is presented below.

H_3: PBC and environmental practices intention are positively related.

2.5.4. Corporate norm on environmental practices intention

Corporate norm is being defined as the voluntarily commitments given by companies back to the society as a part of the society (Cox, 2016). In the literature, personal norm from NAM Model is extensively used and reflects the commitment of individual with internalised values as the feelings of personal obligation to engage in a certain behaviour (Schwartz, 1977). Personal norm is considered a feeling of personal obligation that guides behaviour (Harland et al., 1999).

Moreover, 396 respondents were gathered in China and through path coefficient estimation, He and Zhan (2018), found that personal norms and adoption of electric vehicles intention are positively related. Reliability and validity have been conducted in the study and confirmatory factor analysis is being performed.

In the same area of study, intention to use electric vehicles is also being examined. 3,000 car owners were being gathered as a sample in Sweden with the age range of 20-75 years to conduct the study. Nordlund et al. (2016) found that personal norms and the intention to use electric vehicles in Sweden are positively related. They analysed the data collected by employing SEM and suggested that policies and campaigns should focus more on creating consumers awareness of norms in order to make a positive change in a pro-environmental direction which result a better impact of adoption of environmental friendly transport. Besides that, Bamberg et al. (2007) found that the relationship between personal norm and the decision to use public transport instead of car is positively related. In their study, there is a total of 1336 respondents from Germany participate in the questionnaire distributions. In order to perform the analysis, SEM is being applied. Bamberg et al. (2007) suggested that the behavioural intention is based upon the recognition of a strong moral responsibility towards society.

Since, corporate norm and personal norm share the similar characteristics in which the norm is activated by certain internalised objective, corporate norm is proposed in this study and Hypothesis 4 is being constructed as follows.

H_4: Corporate norm and environmental practices intention are positively related.

2.5.5. Government policy on environmental practices intention

Government policy is an affirmation of a government's administrative activities, plans and goals related to a solid reason to an entire legislative session. It is the external forces to encourage environmental activities among companies. In other words, government policy is the overall plans and actions taken by the government to promote their main objectives. Government is playing a very important role in promoting environmental protection. As insinuated by OECD (2011), policies are identified as a key factor to enhance the green development regionally. In other words, to promote environmentally friendly practices, the government has played a significant role to accommodate the purchases of green products. Government procurement is the main contributor towards sustainability of the economy and the environment as they are the biggest purchaser of a country (Buniamin et al., 2016).

Additionally, Wang et al. (2017) directed their examination in China mainly due to the China's environmental pollution and energy security issues. China government came out financial aid policy to help the citizen of China in purchasing new energy vehicles (NEVs). They conducted their study from July to November 2015 on urban families across the nation, covering North, South, East, Central, Northwest, Southwest and Northeast of China. There are a total of 323 questionnaires gathered with 254 valid questionnaires were received. The study is being conducted by adopting SEM and the results showed that a positive relationship between government policy and purchase intention. Hence, Hypothesis 5 is stated as below.

H_5: Government policy and environmental practices intention are positively related.

2.5.6. Actualisation needs on environmental practices intention

This study adopts TPB model as the foundation for this research. TPB is a model which it is utilised to anticipate a personnel's intention to perform the behaviour at a specific place and time (Ajzen, 1991). This model ignored the growth stages of companies' life cycle. This is because companies will require different needs at the different growth stages. As alluded by Churchill and Lewis (1983), the growth pattern of the businesses can be divided into five stages. The first stage is existence in which companies are concerning to gather customers and deliver the products and services. Second stage of the growth is survival. In this stage, companies are focusing on profitability of the business for breakeven and business continuous. Moreover, third stage of the business growth is success which means companies are looking at their accomplishments for expansion or keep themselves stable and profitable in term of managing the profits and relationship hand in hand. Forth stage of the business growth is taken off. Companies are focusing on how to make themselves growth rapidly and finance the growth. Finally, the fifth stage, resource maturity, it means companies are taking advantages of size, financial resources, and managerial talent for the sustainable status. Index of size, diversity, and complexity are being used to categorised the different stages of companies as per five management factors which are managerial style, organisational structure, extent of formal systems and major strategic goals.

According to Tuzzolino and Armandi (1981), the growth stages of companies will have different hierarchy of needs. At the beginning stage or existence stage of companies, profits will be the physiological needs or the fundamental of survival. Hence, companies at this stage are looking at getting sustainable profits in order for their survival. Moving to another stage of the growth development, survival, companies are looking for satisfaction consistent profits with a stable dividend policy for long term shareholders' wealth maximisation. If the benchmark of stable dividend payout is successful, companies may need to look for a second tiered of safety need, the safety needs satisfaction by reducing environmental uncertainty. As the companies grow bigger, in the success stage, companies now are looking emerging the profit and managed competition to be satisfied. In other words, affiliation needs is what companies are focusing now. They are concerning in establishing, maintaining or restoring a positive relationship with others. In the fourth stage where companies are ready to take off, they will need to achieve patent position, price leadership, and better bond rating so that they will have sufficient fun for the growth. At this stage, companies are looking at establishing esteem and status needs in order to outperform others. Finally, at the top of the companies growing stage, resource maturity, companies are looking at the sense of purpose, companies might find themselves in making sizeable commitment to restore the ecosystem by budgeting in term of cost allocation as the percentage of sales to achieve actualisation needs. They are looking at environmental improvement costing strategies which will create value for them as a part of the ecosystem.

In short, satisfying physiological and safety needs is answerable to companies' shareholders. On the other hand, in satisfying affiliation needs is aiming to address to their peers and finally, actualisation needs is appeased to their claimants (Tuzzolino and Armandi, 1981). Actualisation needs is being embraced from Maslow (1943). In his study, he stated that everyone has to fulfill all his basic needs in order to achieve its motivation. Hence, he introduced Maslow's Hierarchy of Needs, a theory in psychology. The need for self-actualisation will develop although the personnel has achieved all his needs because it is the needs of satisfaction that he is doing what he is most fitted in which means actualise one's potential.

Study done by Axelrod (1994), suggested that people recognised and are motivated by needs and desires as stated in Maslow's hierarchy of needs theory to perform their thinking and behavioural decision. Axelrod (1994) stated that value orientations play a key role in guiding individual decisions regarding ecological issues. If environmental preservation and economic outcomes are in conflict, environmentally-oriented people will perform actions towards the benefits of the environment.

It is very clear that to put stakeholders at the first place, self-actualisation is viewed to satisfy employees, consumers and investors than the lower order needs to be based on physiology or safety concerns. The conceptualisation of CSR, is more effectively to be persuaded and operationalised with regards to organisational-need hierarchy (Tuzzolino and Armandi, 1981). Aside, Prameswar and Prasad (2017) have suggested a positive relationship between CSR and corporate profitability. According to Prasad (2011), he found out that self-actualised leader will likely to produce happiness at the workplace and this is further supported by the finding between peak performance and self-actualisation. In order to maximise the performance, ones has to be self-actualised (Thornton et al., 1999).

The above statement is further supported by the study conducted by Dahana et al. (2019) in which self-actualisation needs will contribute to the maximization of performance or profitability. Their study showed that consumers' self-actualisation needs appeared to increase the probability of a consumer to be frequent buyer thus generated the larger average customer lifetime values. This is because a self-actualisation needs was being viewed as improving self-competency which stimulated the consumers to recognise the needs. Dahana et al. (2019) obtained the data for their study from an online shopping mall company through a data contest organized by the Joint Association Study Group of Management Science in Japan. The mall's customers can purchase fashion products such as apparel, shoes, bags, and accessories from more than 900 independent tenant shops through the mall's commercial website. The sample consists of 3052 customers in which 960 men who responded to the survey during the collection period. The data also comprised customers' purchase history from April 2015 to March 2016.

According to Kuhn (2001), in the humanistic psychology, the concept of actualisation needs means the needs is being placed on human potential has offered a way out in handling environmental crisis by identifying the nonhuman natural world. Individuals who have extensively sentiment of self-belonging to the nature will act naturally to protect the environment because the health of the environment is being associated to their own personal health. This can be further explained by the human intelligence which it is the key to human success (Kuhn, 2001). Human beings will felt threaten by the environmental degradation because it will lead to the development of individuals' sense of threaten in term of spiritual intelligence. According to Collins (2010), the development of sustainable future can be achieved if human being achieved ecological actualisation. Moreover, self-actualised individual will protect the environment as a part of himself. Being part of the environment is not only about their enjoyment but it is more towards to fulfil the needs of belonging (Kunchamboo et al., 2017). Then again, when it comes to the needs of companies in term of actualisation needs fulfilment, they will review their initial thought of having the businesses which the objectives of the companies are to contribute to a better society. Companies generally will take the claim on the environmental degradation which the environmental improvement cost will take into their consideration of sales (Tuzzolino and Armandi, 1981).

As the modern unrest advanced, it created across the board of success and balancing in the society. Generally, companies are moving to the course of centering larger amount of necessities, and actualisation needs. Actualisation needs is the most profound sense of being and concentration in the US and developed nations of Europe in the rising enthusiasm for otherworldly existence in business. Nevertheless, there are some difficulties in finding the

relationship in the emerging countries because of the unevenly spread of wealth (Tischler, 1999). In this study, actualisation needs imply selfless scarification commitment by Malaysia's companies to achieve its best as a part of the society and contribute to the best beneficial towards the society in protecting the environment. This is to achieve the highest needs among the stakeholders (Prameswar and Prasad, 2017). As to satisfy the community, moving towards the utmost needs of actualisation, it drives individuals to take a more holistic view of the environment and paves the way for global environmentalism (Kuzulugil, 2007). In a nutshell, at the different growth stages of the companies, companies will require different needs in order for them to be able to sustain (Marrewijk, 2002). With the aim of ensuring the comprehensiveness and validity of this study, actualisation needs should be included in predicting the intention. Hypothesis 6 is being put forward as followings.

H_6: Actualisation needs and environmental practices intention are positively related.

3. RESEARCH FRAMEWORK

The framework for this study as presented in Figure 1 was being developed from the comprehensive literature review. The entire framework consists few constructs which the foundation of the framework is adopted from the original TPB model. It is being extended to further examine the motivational factors on the companies' intention to be environmental friendly. The entire framework looks at how attitudes, subjective norm, PBC, corporate norm, government policy and actualisation needs influence the intention of companies to adopt environmental practices.

3.1. Sampling Method

In this study, purposive sampling method was applied and thus it was a non-probability sampling technique. The targeted respondents have to be well informed regarding the companies' environmental practices and be able to represent the companies to answer the questionnaire. Thus, they are based on informant selection (Tongco, 2007). The target respondents will be the personnel who ranked manager and above for each company from investor relations department. This is because investor relations department is the best department that going to represent the companies in term of enquiries raise by stakeholders. Furthermore, they are well verse of the companies' environmental practices an companies' environmental practices intention.

3.2. Data Collection Method

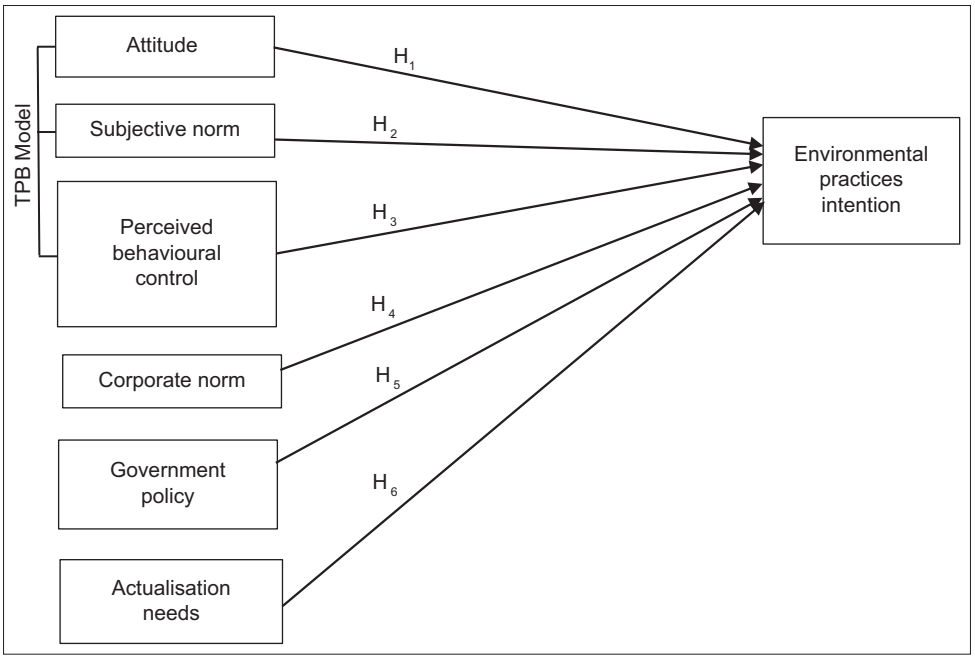
A structured questionnaire will be sending to the designated department. The designated department is investor relations department. This is because this department is charge of the communication between companies and stakeholders. The targeted respondents will receive email and followed up by phone calls. They have to be ranked manager and above in order to be able to answer the questionnaires. In this study, 576 questionnaires were sent via email and the collected usable questionnaires were 107. The response rate for this study is 18.58%.

4. DATA ANALYSIS

576 questionnaires were sent to Bursa Malaysia main market public listed companies through email and followed up by calls in the 1st week of July 2019. A 2 months period was given to these responding manufacturing companies to complete the questionnaires. Nevertheless, after the stipulated period, 107 questionnaires were received. All the responded questionnaires were usable due to the setting inside Google Form. No more questionnaires were received after the deadline. Hence, the response rate was recorded as 18.58%. The collected data was then be analysed using Smart PLS 3.0.

Among the 107 participated public listed companies, the majority them are located at Federal Territories, 47 companies (43.93%),

Figure 1: Research framework



followed by Selangor, 37 companies (34.58%), and Melaka, 8 companies (8.41%). As for the company's market capitalisation, there are 66 companies (61.68%) with the market capitalisation worth more than RM 1 billion, 25 companies (23.36%) worth more than RM 500 million but less than RM 1 billion and 16 companies (14.95%) worth less than RM 500 million. Moreover, there are 65 companies (60.75%) with the number of employees more than 1000 people, 19 companies (17.76%) between 500 and 1000 people, 17 companies (15.89%) between 100 and 499 people and finally and 6 companies (5.61%) <100 people. Summary of the participated public listed companies' profile is presented in Table 1.

4.1. Assessment of Measurement Model

The construct validity and reliability is used as the main criteria to assess the goodness of measurement model in this study. Reliability is a consistency test of the measurement models measures over a repetitive measurement, while validity concerns how well a measurement model capable of measuring the particular theory or concept (Hair et al., 2019). Convergent and discriminant validity determines the construct validity in this study. Convergent validity denotes to the degree of each indicators reflect a construct meeting in comparison to indicators measuring other constructs (Ramayah et al., 2018).

In this study, factor loadings, composite reliability (CR), and average variance extracted (AVE) were used to assess the validity and reliability of the constructs. Factor loadings, and construct reliability (CR) and AVE with a minimum value of 0.708, 0.70 and 0.50 respectively (Hair et al., 2019). Factor loadings measure the correlation of the latent constructs and their respective indicators. If the value is above 0.708, it indicates that the construct explains more than 50% of the indicator's variance. In order to assess the internal consistency reliability, CR is used in PLS-SEM analysis instead of Cronbach's Alpha. AVE with value higher than 0.50 indicates that the construct explained at least 50% of the variance of its items (Hair et al., 2019).

As the factor loadings for all construct indicators were being assessed and their value should exceed 0.708 (Hair et al., 2019). Thus, GP4 and GP5 were removed due to loadings with <0.708. Table 2 shown the factor loadings, CR and AVE in this study met the given threshold. Hence, the results shown provide evidence that the measurement model is reliable and has adequate convergent validity.

Table 1: Profile of participated public listed companies

	Frequency	%
Location		
Federal territories	47	43.93
Johor Darul Ta'zim	5	4.67
Kedah Darul Aman	0	0.00
Kelantan Darul Naim	0	0.00
Melaka	9	8.41
Negeri Sembilan Darul Khusus	0	0.00
Pahang Darul Makmur	1	0.93
Pulau Pinang	6	5.61
Perak Darul Ridzuan	2	1.87
Perlis Indera Kayangan	0	0.00
Selangor Darul Ehsan	37	34.58
Terengganu Darul Iman	0	0.00
Sabah	0	0.00
Sarawak	0	0.00
Market capitalisation		
More than RM 1 billion	66	61.68
More than RM 500 million but less than RM 1 billion	25	23.36
Less than RM 500 million	16	14.95
Listed sector		
Industrial products and services	15	14.02
Consumer products and services	19	17.76
Construction	10	9.35
Trading services	1	0.93
Technology	7	6.54
Property	9	8.41
Finance	26	24.30
Infrastructure project companies	7	6.54
Hotel	1	0.93
Plantation	3	2.80
Mining	0	0.00
REITS	1	0.93
Transportation and logistics	2	1.87
Utilities	1	0.93
Healthcare	3	2.80
Telecommunication and media	2	1.87
Number of employees		
>1000	65	60.75
500-1000	19	17.76
100-499	17	15.89
<100	6	5.61

Table 2: Measurement model

Constructs	Items	Loadings	Composite reliability	Average variance extracted
1 Attitude	ATT1	0.849	0.938	0.754
	ATT2	0.881		
	ATT3	0.772		
	ATT4	0.935		
	ATT5	0.896		
2 Subjective norm	SN1	0.89	0.929	0.766
	SN2	0.879		
	SN3	0.91		
	SN5	0.82		
3 Perceived behavioural control	PBC1	0.783	0.936	0.708
	PBC2	0.844		
	PBC3	0.82		
	PBC4	0.83		
	PBC5	0.877		
	PBC6	0.889		
4 Corporate norm	CN1	0.811	0.929	0.724
	CN3	0.749		
	CN4	0.913		
	CN5	0.874		
	CN6	0.895		
5 Government policy	GP1	0.924	0.922	0.798
	GP2	0.901		
	GP3	0.854		
6 Actualisation needs	AN1	0.951	0.98	0.906
	AN2	0.961		
	AN3	0.944		
	AN4	0.936		
	AN5	0.966		
7 Environmental practices intention	INT1	0.938	0.98	0.908
	INT2	0.956		
	INT3	0.965		
	INT4	0.95		
	INT5	0.955		

Discriminant validity test is related to the need to identify the content and substance of constructs. Due to the intangibility of constructs, therefore it is required to show evidence for all constructs in a model are distinct (Voorhees et al., 2016). As alluded by Henseler et al. (2015), heterotrait-monotrait (HTMT) ratio has superior performance as compared to Fornell-Larcker criterion and the assessment of (partial) cross-loadings. HTMT ratio is the geometric mean of the heterotrait-heteromethod correlations (i.e., the correlations of indicators across constructs measuring different phenomena) divided by the average of the monotrait-heteromethod correlations or in other words, it means the correlations of indicators within the same construct (Garson, 2016). Hence, in this study, we adopted HTMT <0.85 as recommended by Kline (2011). Table 3, shown all the value is <0.85 and SN4 was further deleted based on HTMT assessment.

Table 3: Heterotrait-monotrait assessment (discriminant validity)

	1	2	3	4	5	6	7
1 Attitude							
2 Subjective norm	0.64						
3 Perceived behavioural control	0.41	0.75					
4 Corporate norm	0.52	0.8	0.81				
5 Government policy	0.61	0.52	0.47	0.5			
6 Actualisation needs	0.39	0.56	0.48	0.58	0.25		
7 Environmental practices intention	0.36	0.58	0.57	0.67	0.3	0.65	

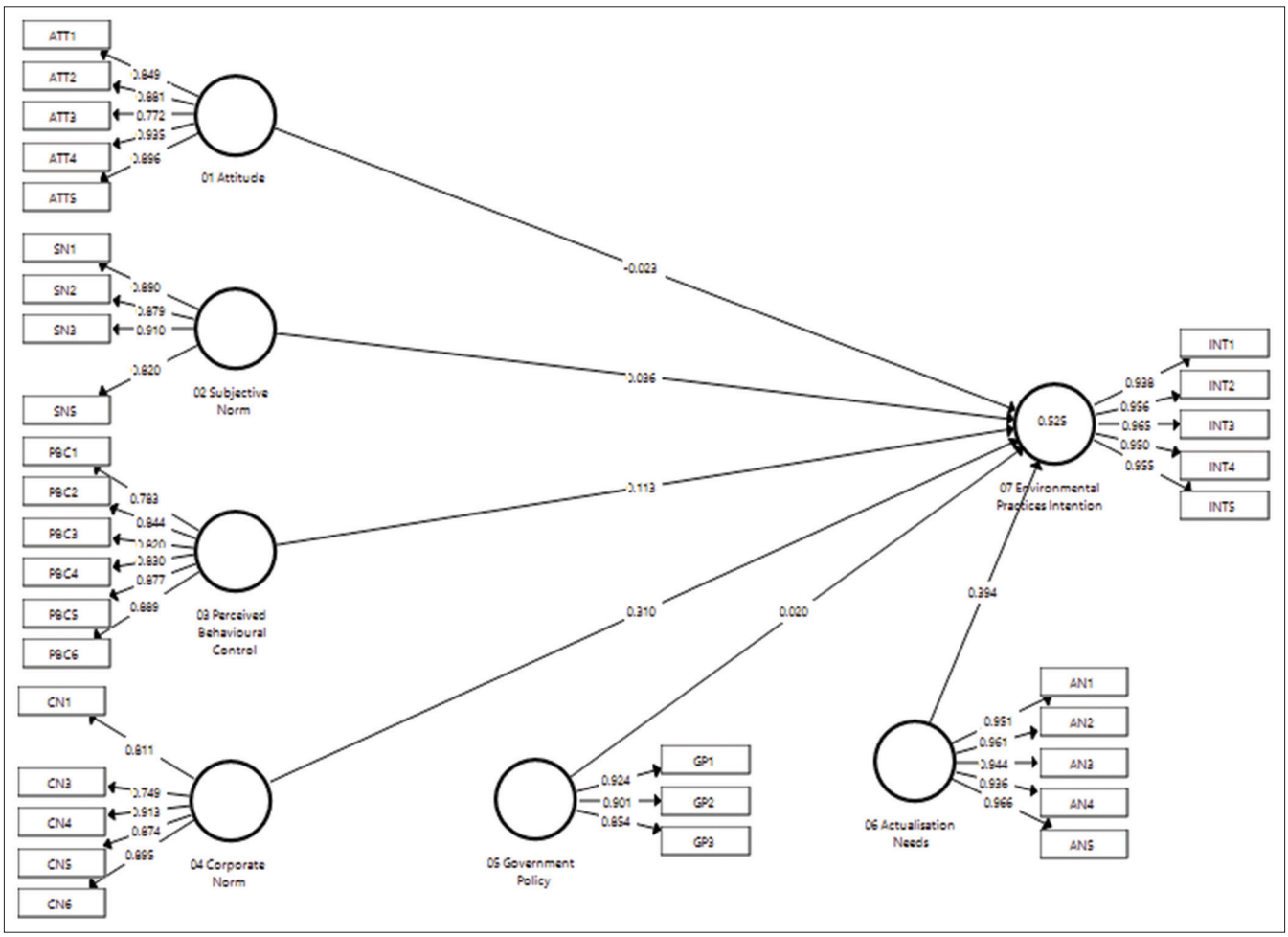
4.2. Assessment of Structural Model

Figure 2 demonstrates the structural model that was being analysed in this study. The results revealed that the R^2 value for environmental practices intention (INT). The commonly used method to evaluate the structural model is the coefficient of determination (R^2 value). This is because R^2 value is the measure of the model's predictive power and is calculated as the squared correlation between a specific endogenous construct's actual and predicted values (Hair et al., 2017). The R^2 value for environmental practices intention is 0.525, it means, the exogenous constructs are able to explained 52.50% of the endogenous construct and suggested that the extended TPB model is substantial useful in predicting the companies' environmental practices intention by all the stated constructs (Cohen, 1988). The paths between the indicators and constructs showed the value of loadings at Figure 2. Table 4 tabulated the R^2 value for the study.

4.3. Lateral Collinearity Assessment

Before evaluating the structural model, it is important to ensure that the model has no lateral collinearity issue. Kock and Lynn (2012) stated that lateral collinearity might mislead the findings although criteria for discriminant validity are met. This is because

Figure 2: Structural model



discriminant validity only examines vertical collinearity. Variance inflation factor (VIF) is being defined as the reciprocal of the tolerance (i.e., VIFxs = 1/TOLxs). In order to ensure there is no lateral multicollinearity, inner VIF value has to be <5 (Hair et al., 2017). CN2 was finally deleted due to this criterion. All the inner VIF values of the constructs as shown at Table 5, results of lateral collinearity were <5 thus we conclude that, there were no lateral collinearity issue.

4.4. Path Coefficient Assessment

Last but not least, evaluation of path estimates in the structural model was done by applying bootstrap analysis which the statistical significance of the path coefficients was determined. In this study, 5000 resamples as recommended by Streukens and Leroi-Werelds (2016) was used to produce path coefficient and corresponding t-values. For the advanced setting for confidence interval method, Bias-Corrected and Accelerated Bootstrap, is recommended by (Kelley, 2005) was employed. Due the tested hypothesis and the objective of this study, bootstrapping analysis was initiated on one tailed test with the significant level of 0.05. Table 6 is the summary for the hypothesis testing of the structural model which it indicated there is a significant positive relationship between corporate norm on environmental practices intention and actualisation needs on environmental practices intention. Hence, H_4 and H_6 were supported with the t-value > 1.645 and P < 0.01. However, H_1, H_2, H_3 and H_5 were not supported.

5. DISCUSSION AND LIMITATION

The aim of this study is to examine the readiness among companies in Malaysia to practice environmental friendly activities. According to Ajzen (1991), TPB model was being developed to examine the intention of the behavioural actions taken by an individual, which it was further being extended to examined the intention of companies by the economic circular (Long et al., 2017a; 2017b). The collected data showed the 52.5% of the R^2 value on the environmental practices intention. It means that the extended TPB model explained 52.5% of the total variance among public listed companies in Bursa Malaysia, main market. On the other hand, the remaining 47.5% was due to the factors that not included in the model. As stated by Cohen (1988), this model is substantial to predict the intention of the companies' environmental practices intention.

The findings showed that there were significant positive relationship between corporate norm (β = 0.31, SE = 0.126) and actualization needs (β = 0.394, SE = 0.14) on environmental practices intention. The findings showed that corporate norm was positively significant on environmental practices intention at t-value > 1.645 (one tailed) and P < 0.01. They had indicated that practising environmental friendly activities were their moral obligation even the action came with higher cost and there was the urgency to protect the environment. They believed that stock prices maximization could be achieve by practising environmental friendly activities. Given that the majority of the responded companies were in finance industry, 26 (24.30%) companies, they were definitely well aware of the impact from environmental practices behavioural on stock maximisation. Plainly, companies believed that they should be responsible towards protecting the environment. It indicated a positive relationship on the companies' environmental practices intention. The result shown was found to be consistent with the previous studies Han et al. (2019); Poortvliet et al. (2018) and He and Zhan (2018). Thus, NAM theory is said to be applicable in justifying the companies' intention towards environmental practices.

Moreover, the path coefficient from the study also showed that actualisation needs is positively significant on environmental practices intention at t-value > 1.645 (one tailed) and P < 0.01. This indicated that they believed practising environmental friendly activities will eventually beneficial to their companies and environmental friendly activities inspired them to perform environmental practices behaviour. They understood that ultimately, companies had to be visionary in practising environmental friendly activities and the company's goodwill will be realising. In order to be the market leader, companies have to continuous cautious on the environmental impact from the companies' daily business activities is much needed because companies were being viewed as a part

Table 4: Results of coefficient of determination, R^2

	R square
7 Environmental practices intention	0.525

Table 5: Results of lateral collinearity

	7 Environmental practices intention
1 Attitude	1.838
2 Subjective norm	2.907
3 Perceived behavioural control	2.509
4 Corporate norm	2.969
5 Government policy	1.551
6 Actualisation needs	1.524

Table 6: Summary of hypothesis testing

Hypothesis	Relationship	Standard beta	Standard error	t-value	Decision
H_1	1 Attitude -> 7 Environmental practices intention	−0.023	0.08	0.283	Not supported
H_2	2 Subjective norm -> 7 Environmental practices intention	0.036	0.084	0.426	Not supported
H_3	3 Perceived behavioural control -> 7 Environmental practices intention	0.113	0.093	1.214	Not supported
H_4	4 Corporate norm -> 7 Environmental practices intention	0.31	0.126	2.459***	Supported
H_5	5 Government policy -> 7 Environmental practices intention	0.02	0.096	0.211	Not supported
H_6	6 Actualisation needs -> 7 Environmental practices intention	0.394	0.14	2.819***	Supported

***P<0.01

of the and they always aims to use its strength and potentialities to practice environmental friendly to protect the environment. 30 (28%) and 44 (41%) responded companies stated that practising environmental friendly activities provided opportunities for their companies to grow and develop business position. This study was aimed to closer the research gap where actualisation needs was being treated as one of the constructs that will influence the environmental practices intention. From the findings it showed that actualisation needs, construct adopted from Maslow's hierarchy of needs theory had a significant positive relationship towards the environmental practices intention. Hence, the findings from this study contributed to closer the research gap and indicated that actualisation needs adopted from Maslow's hierarchy of needs theory should be included as one of the predictor to examine the companies' environmental practices intention.

Aside, the findings also showed that the constructs, attitude, subjective norm, PBC and government policy did not show significant relationship towards environmental practices intention. The majority of the responded public listed companies strongly agreed that environmental practices behaviour is good, beneficial, satisfactory, valuable and wise move. As stated by Ajzen (1991), attitudes by a personnel is the actions where he/she accepting the believed results from the behaviour performed. In other words, attitude also means the feelings or beliefs related practices (Wang et al., 2011). Moreover, PBC was also found to be not significant towards the environmental practices intention. In short, it indicated that the public listed companies were yet to be ready for the behaviour although they were aware the benefits of the said behaviour which at the same time they believed that they have the full control over the environmental friendly activities. This probably due to the lack of technologies advancement and limited financial initiatives provided to ensure the environmental friendly activities to be able to generate substantial profits at the lower costs. At the current stage, Malaysia still required RM 33 billion investment for the renewable energy sector (Bernama, 2019). Despite the financial initiatives given by the government, the initiatives given still appeared to be insufficient due to the huge capital required from the green activities (Clarke et al., 1994). As Walley and Whitehead (1994) point out, practising environmental friendly activities could hurt the business. Thus, it indicated that there are still rooms for company to perform environmental friendly activities. The findings from this study appeared to be consisted with Wan et al. (2017) and Wang et al. (2016) which attitude was not significant towards intention. Government should act as the facilatator in order to encaourage the environmental practices among companies. All in all, this study indicated that Malaysian companies are yet to be ready for the environmental prcatices due to several challenges faced such as lack of technologies advancement and resources. Nonetheless, they are preparing to embrace the changes to be environmental friendly.

This study relied on self-reports of public listed companies' environmental practices intention which may understated or overstated involvement in companies' environmental practices therefore biasing the results and presenting an unrepresentative picture of environmental practices among companies in the study area. Besides that, the collected sample size in this study seems to be little. The limited sample size may be contributed by the distribution channel, which the distribution channel for this study was online survey questionnaires, thus the alternative for the data collection may be observational method, but due to time and cost constraints, it made this impractical. Nevertheless, it is suggested that future studies may conduct using observational method.

6. CONCLUSION

The natural beauty of Malaysia is evident in the greenery that canopies vast swaths of forested hills and valleys. However, the natural balance of the ecosystem is fragile and can easily be disrupted by modern industries which further the concerns on balancing the economic growth and environmental protection in Malaysia context. This is because environmental degradation issues have been alarming in the recent decades. Thus, it is importance that this study is conducted to examine the motivational factors that influencing the intention of companies' environmental practices in Malaysia context. The findings suggested that an extended TPB model incorporating variables from the NAM, corporate norm (Schwartz, 1977) and Maslow's hierarchy of needs theory, actualisation needs (Maslow, 1943) which remain neglected in studies conducted on companies' environmental practices and they can be used to predict the environmental practices intention among companies.

The findings showed that added variables, corporate norm and actualisation needs are having positive significant relationship on environmental practices intention among responded companies. Besides, there is no significant relationship between attitude, subjective norm, PBC and government policy on environmental practices intention. This implied that Malaysian companies are yet to be ready for the environmental friendly activities but they are preparing for it and in order to practices environmental friendly activities, it should be internalized rather than by forces. It is suggested the role of government as the facilitator rather than enforcer.

To sum up, this study is aimed to closer the research gap particularly in Malaysia public listed companies and contributed to the body of knowledge in which corporate norm and actualisation needs should be included as one of the motivational factors when extended TPB model is adopted to investigate the companies related environmental issues intention.

REFERENCES

Ajzen, I. (1991), The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179-211.

Arthur, W.B., Holland, J.H., LeBaron, B., Palmer, R., Tayler, P. (1996), Asset Pricing Under Endogenous Expectations in an Artificial Stock Market. Working Paper. Available from: https://www.ssrn.com/abstract=2252.

Axelrod, L. (1994), Balancing personal needs with environmental preservation: Identifying the values that guide decisions in ecological dilemmas. Journal of Social Issues, 50(3), 85-104.

Bamberg, S., Hunecke, M., Blo, A. (2007), Social context, personal norms and the use of public transportation : Two field studies. American

Psychological Association, 7, 190-203.
Bernama. (2019), Malaysia Needs RM33 Bln Investment to Hit Renewable Energy Target Yeo. Available from: http://www.bernama.com/en/news.php?id=1763530.
Bloomberg. (2019), Environmental Disclosure Score. New York: Bloomberg Terminal.
Buniamin, S., Ahmad, N., Rauf, F.H.A., Johari, N.H., Rashid, A.A. (2016), Green government procurement practices (GGP) in Malaysian public enterprises. Procedia Economics and Finance, 35(16), 27-34.
Chan, K.H., Ng, T.H., Fadi, A. (2018), What do undergraduates think about green investment ? Empirical evidence from a developing nation. Indian Journal of Public Health Research and Development, 9(11), 627-632.
Chen, M.F., Tung, P.J. (2010), The moderating effect of perceived lack of facilities on consumers' recycling intentions. Environment and Behavior, 42(6), 824-844.
Choong, E.H. (2017), This is Asia's Worst-Performing Stock Market So Far This Year. Bloomberg. Available from: https://www.bloomberg.com/news/articles/2017-11-21/malaysia-becomes-asia-s-worst-stock-market-as-election-looms.
Chu, M.M. (2019), Vast Majority of Malaysians Polled Blame Humans for Climate Change. The Star Online. Availble from: https://www.thestar.com.my/news/nation/2019/09/23/vast-majority-of-malaysians-polled-blame-humans-for-climate-change#iUsCJouKX0OZyAyI.99.
Churchill, N.C., Lewis, V.L. (1983), The Five Stages of Small Business Growth. Harvard Business Review. Available from: https://www.hbr.org/1983/05/the-five-stages-of-small-business-growth.
Clarke, R.A., Stavins, R.N., Greeno, J.L., Bavaria, J.L., Cairncross, F., Esty, D.C., Smart, B., Piet J., Wells, R.P., Gary, R., Fischer, K., Schot, J. (1994), The Challenge of Going Green. Hard Business Review. Available from: https://www.hbr.org/1994/07/the-challenge-of-going-green.
Cohen, J. (1988), Statistical Power Analysis for the Behavioral Sciences. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
Collins, M. (2010), Spiritual intelligence: Evolving transpersonal potential toward ecological actualization for a sustainable future. World Futures: Journal of General Evolution, 66(5), 320-334.
Cordano, M., Frieze, I.H. (2000), Pollution reduction preferences of U.S. Environmental managers: Applying ajzen's theory of planned behavior. Academy of Management Journal, 43(4), 627-641.
Cox, J.D.B. (2016). How understanding the nature of corporate norms can prevent their destruction by settlements. Duke Law Journal, 66(3), 501. Available from: http://www.go.galegroup.com.proxy1.lib.uwo.ca/ps/i.do?p=AONE&sw=w&u=lond95336&v=2.1&it=r&id=GALE%7CA477086186&sid=summon&asid=2c166f32109b94172495fd3db718b8a1.
Dahana, W.D., Miwa, Y., Morisada, M. (2019), Linking lifestyle to customer lifetime value: An exploratory study in an online fashion retail market. Journal of Business Research, 99, 319-331.
Department of Statistics Malaysia. (2019), Survey of Environmental Protection Expenditure; 2018. Available from: https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=154&bul_id=L1BTVXhaaEFPeERDc2Y1K3JLWVdMQT09&menu_id=NWVEZGhEVlNMeitaMHNzK2htRU05dz09.
EAN Secretariat. (2018), ASEAN Investment Report 2018 Foreign Direct Investment and the Digital Economy in ASEAN. Jakarta: ASEAN Secretariat. Available from: https://www.asean.org/storage/2018/11/ASEAN-Investment-Report-2018-for-Website.pdf.
Echegaray, F., Hansstein, F.V. (2017), Assessing the intention-behavior gap in electronic waste recycling: The case of Brazil. Journal of Cleaner Production, 142, 180-190.
Freire, P. A. (2018). Enhancing innovation through behavioral stimulation: The use of behavioral determinants of innovation in the implementation of eco-innovation processes in industrial sectors and companies. Journal of Cleaner Production, 170, 1677-1687.
Gagnon, B., Leduc, R., Savard, L. (2012), From a conventional to a sustainable engineering design process: Different shades of sustainability. Journal of Engineering Design, 23(1), 49-74.
Galbreath, J. (2013), ESG in focus: The Australian evidence. Journal of Business Ethics, 118(3), 529-541.
Garson, G.D. (2016), Partial Least Squares: Regression and Structural Equation Models. Asheboro: Statistical Publishing Associates.
Gkargkavouzi, A., Halkos, G., Matsiori, S. (2019), Environmental behavior in a private-sphere context: Integrating theories of planned behavior and value belief norm, self-identity and habit. Resources, Conservation and Recycling, 148,145-156.
Goh, E., Ritchie, B., Wang, J. (2017), Non-compliance in national parks: An extension of the theory of planned behaviour model with pro-environmental values. Tourism Management, 59, 123-127.
Green Bank Network. (2018), Malaysia Green Technology Corporation. Available from: https://www.greenbanknetwork.org/malaysia-green-technology-corporation.
Hackman, C., Knowlden, A. (2014), Theory of reasoned action and theory of planned behavior-based dietary interventions in adolescents and young adults: A systematic review. Adolescent Health, Medicine and Therapeutics, 5, 101.
Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. (2017), A Primer On Partial Least Squars Structural Equation Modeling (PLS-SEM). Thousand Oaks: Sage Publications, Inc.
Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. (2019), When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2-24.
Han, H. (2014), The norm activation model and theory-broadening: Individuals' decision-making on environmentally-responsible convention attendance. Journal of Environmental Psychology, 40, 462-471.
Han, H., Hsu, L.T.J., Sheu, C. (2010), Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism Management, 31(3), 325-334.
Han, H., Yu, J., Kim, W. (2019), Environmental corporate social responsibility and the strategy to boost the airline's image and customer loyalty intentions. Journal of Travel and Tourism Marketing, 36(3), 371-383.
Harland, P., Staats, H., Wilke, H.A.M. (1999), Explaining proenvironmental intention and behavior by personal norms and the theory of planned behavior. Journal of Applied Social Psychology, 29(12), 2505-2528.
He, X., Zhan, W. (2018), How to activate moral norm to adopt electric vehicles in China? An empirical study based on extended norm activation theory. Journal of Cleaner Production, 172, 3546-3556.
Henriques, I., Sadorsky, P. (1996), The determinants of an environmentally responsive firm: An empirical approach. Journal of Environmental Economics and Management, 30(3), 381.
Henseler, J., Ringle, C.M., Sarstedt, M. (2015), A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135.
Kelley, K. (2005), The effects of nonnormal distributions on cconfidence intervals around the standardized mean difference: Bootstrap and parametric confidence intervals. Educational and Psychological Measurement, 65(1), 51-69.
Kline, R.B. (2011), Principles and Practice of Structural Equation Modeling. New York: Guilford Press.
Kock, N., Lynn, G.S. (2012), Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. Journal of the Association of Information Systems, 13(7), 546-580.
Kuhn, J.L. (2001), Toward an ecological psychology. Journal of Humanistic Psychology, 41(2), 9-24.
Kumar, B., Manrai, A.K., Manrai, L.A. (2017), Purchasing behaviour for environmentally sustainable products: A conceptual framework and

empirical study. Journal of Retailing and Consumer Services, 34, 1-9.
Kunchamboo, V., Lee, C.K.C., Brace-Govan, J. (2017), Nature as extended-self: Sacred nature relationship and implications for responsible consumption behavior. Journal of Business Research, 74, 126-132.
Kuzulugil, S.S. (2007), Economy Versus Environment: A Review of Environmentalism in The Face of Needs. Antalya, Turkey: 5th International Conference on Environmental Mutagens in Human Populations. p1-9.
Long, X., Chen, Y., Du, J., Oh, K., Han, I. (2017a), Environmental innovation and its impact on economic and environmental performance: Evidence from Korean-owned firms in China. Energy Policy, 107,131-137.
Long, X., Chen, Y., Du, J., Oh, K., Han, I., Yan, J. (2017b), The effect of environmental innovation behavior on economic and environmental performance of 182 Chinese firms. Journal of Cleaner Production, 166, 1274-1282.
Luu, T.T. (2019), Building employees' organizational citizenship behavior for the environment: The role of environmentally-specific servantlleadership and a moderated mediation mechanism. International Journal of Contemporary Hospitality Management, 31(1), 406-426.
Marnewick, C., Silvius, G., Schipper, R. (2019), Exploring patterns of sustainability stimuli of project managers. Sustainability, 11(18), 5016.
Marrewijk, M.V. (2002), Concepts and definitions of csr and corporate sustainability. Journal of Business Ethics, 44, 2-11.
Maslow, A.H. (1943), A theory of human motivation. Psychological Review, 50(4), 370-396.
Meske, C., Heidekrüger, R., Brockmann, T., Czerwonka, M., Stieglitz, S. (2018), Adoption of Collaborative Technology to Enhance Master Data Quality Across Municipal Administrations-Identifying Drivers and Barriers. Vol. 9. Proceedings of the 51st Hawaii International Conference on System Sciences. p164-173.
Molina-Azorín, J.F., Claver-Cortés, E., Pereira-Moliner, J., Tarí, J.J. (2009), Environmental practices and firm performance: An empirical analysis in the Spanish hotel industry. Journal of Cleaner Production, 17, 516-524.
Muniandy, K., Rahim, S.A., Ahmi, A., Rahman, N.A.A. (2019), Factors that influence customers' intention to visit green hotels in Malaysia. International Journal of Supply Chain Management, 8(3), 994-1003.
Nguyen, T.N., Lobo, A., Greenland, S. (2017), Energy efficient household appliances in emerging markets: The influence of consumers' values and knowledge on their attitudes and purchase behaviour. International Journal of Consumer Studies, 41(2), 167-177.
Nordlund, A., Jansson, J., Westin, K. (2016), New transportation technology: Norm activation processes and the intention to switch to an electric/hybrid vehicle. Transportation Research Procedia, 14, 2527-2536.
OECD. (2011), Towards Green Growth: Monitoring Progress: OECD Indicators. Innovation, Report. p1-143.
OECD. (2019), Update on Recent Progress in Reform of Inefficient Fossil-Fuel Subsidies that Encourage Wasteful Consumption. Available from: https://www.oecd.org/fossil-fuels/publication/OECD-IEA-G20-Fossil-Fuel-Subsidies-Reform-Update-2019.pdf.
Paul, J., Modi, A., Patel, J. (2016), Predicting green product consumption using theory of planned behavior and reasoned action. Journal of Retailing and Consumer Services, 29, 123-134.
Poortvliet, P.M., Sanders, L., Weijma, J., Vries, J.R.D. (2018), Acceptance of new sanitation: The role of end-users' pro-environmental personal norms and risk and benefit perceptions. Water Research, 131, 90-99.
Prameswar, N., Prasad, R. (2017), Humanistic leadership, organizational culture and corporate citizenship behavior. Journal of Management and Spirituality, 9(2), 46-53.
Prasad, P. (2011), Employee drives and role of motivational factors. International Journal of Business and Management Research, 1(4), 253-261.
Ramayah, T., Cheah, J., Chuah, F., Ting, H., Memon, M.A. (2018), Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated and Practical Guide to Statistical Analysis. 2nd ed. Singapore: Pearson.
Rezaei, R., Safa, L., Damalas, C.A., Ganjkhanloo, M.M. (2019), Drivers of farmers' intention to use integrated pest management: Integrating theory of planned behavior and norm activation model. Journal of Environmental Management, 236, 328-339.
Scalco, A., Noventa, S., Sartori, R., Ceschi, A. (2017), Predicting organic food consumption: A meta-analytic structural equation model based on thetheory of planned behavior. Appetite, 112, 235-248.
Schwartz, S.H. (1977), Normative influences on altruism. Advances in Experimental Social Psychology, 10(C), 221-279.
Shih, H.S. (2017), Policy analysis on recycling fund management for e-waste in Taiwan under uncertainty. Journal of Cleaner Production, 143, 345-355.
Streukens, S., Leroi-Werelds, S. (2016), Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. European Management Journal, 34(6), 618-632.
Tan, C.S., Ooi, H.Y., Goh, Y.N. (2017), A moral extension of the theory of planned behavior to predict consumers' purchase intention for energy-efficient household appliances in Malaysia. Energy Policy, 107, 459-471.
Tashakor, S., Appuhami, R., Munir, R. (2019), Environmental management accounting practices in Australian cotton farming: The use of thettheory of planned behaviour. Accounting, Auditing and Accountability Journal, 32(4), 1175-1202.
The Star. (2018), Gov't Taking Proactive Steps to Increase FDI. The Star Online. Available from: https://www.thestar.com.my/business/business-news/2018/08/06/govt-taking-proactive-steps-to-increase-fdi.
The World Bank. (2019a). CO_2 Emissions (MetricTtons per Capita)-Malaysia. Available from: https://www.data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=MY.
The World Bank. (2019b), Foreign Direct Investment, Net Inflows (% of GDP). Available from: https://www.data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS?locations=MY.
Thornton, F., Privette, G., Bundrick, C.M. (1999), Peak performance of business leaders: An experience parallel to self-actualization theory. Journal of Business and Psychology, 14(2), 253-265.
Tischler, L. (1999), The growing interest in spirituality in business. Journal of Organizational Change Management, 12(4), 273-280.
Tongco, M.D.C. (2007), Purposive sampling as a tool for informant selection. Ethnobotany Research and Applications, 5, 147-158.
Tuzzolino, F., Armandi, B.R. (1981), A need-hierarchy framework for assessing corporate social responsibility. Academy of Management Review, 6(1), 21-28.
Vilchez, V.F., Darnall, N., Correa, J.A.A. (2017), Stakeholder influences on the design of firms' environmental practices. Journal of Cleaner Production, 142, 3370-3381.
Voorhees, C.M., Brady, M.K., Calantone, R., Ramirez, E. (2016), Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. Journal of the Academy of Marketing Science, 44(1), 119-134.
Walley, N., Whitehead, B. (1994), It's not easy being green. Harvard Business Review, 72, 46-52. Available from: https://www.hbr.org/1994/05/its-not-easy-being-green.
Wan, C., Shen, G.Q., Choi, S. (2017), Experiential and instrumental attitudes: Interaction effect of attitude and subjective norm on recycling intention. Journal of Environmental Psychology, 50, 69-79.
Wang, Z., Guo, D., Wang, X. (2016), Determinants of residents' e-waste

recycling behaviour intentions: Evidence from China. Journal of Cleaner Production, 137, 850-860.

Wang, Z., Zhang, B., Yin, J., Zhang, Y. (2011), Determinants and policy implications for household electricity-saving behaviour: Evidence from Beijing, China. Energy Policy, 39(6), 3550-3557.

Wang, Z., Zhao, C., Yin, J., Zhang, B. (2017), Purchasing intentions of Chinese citizens on new energy vehicles: How should one respond to current preferential policy? Journal of Cleaner Production, 161, 1000-1010.

Wu, J.H., Li, S.H., Sung, W.Y. (2016), The study of perceived environment and its relation to senior citizen's physical activity behavior intention. Journal of Business Research, 69(6), 2259-2264.

Zhang, Y., Wang, Z., Zhou, G. (2014), Determinants of employee electricity saving: The role of social benefits,ppersonal benefits and organizational electricity saving climate. Journal of Cleaner Production, 66, 280-287.