

DETERMINANTS OF BEHAVIOURAL INTENTION TOWARDS GREEN INVESTMENTS: THE PERSPECTIVES OF MUSLIMS

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Date submitted: 2nd August 2018; Date Accepted: 15th January 2019

ABSTRACT

Green investment in Malaysia is still in its infancy stage, due to lack of exposure of the green concept among the general population. It is a type of investment that considers the environmental aspects within the context of rigorous financial analysis. Accordingly, this study attempts to identify factors influencing Muslims' intention to adopt green investment. The theory of planned behaviour (TPB) framework was adopted which include attitude, subjective norms, perceived behavioural control, knowledge, reputation and religious values. The data for the study were collected through self-administered questionnaires using a six point Likert Scale among 270 respondents in the Klang Valley area. This study discovered that the five variables comprising attitude, perceived behavioural control, knowledge, reputation and religious values significantly influenced Muslims' intention to participate in green investment, with religious values as the most significant contributor. Correspondingly, some implications have been identified and future research directions are also indicated for promoting green investment.

Keywords: Green Investment, Halal, Shariah Principles

INTRODUCTION

The focus for environment sustainability has become one of the main agenda of the Eleventh

Malaysian Plan 2016, particularly towards becoming a developed nation by 2020. Hence, the public as a whole need to be well-informed, regarding the consequences that may bring harm to the environment through the buying of certain products and services. Consequently, Tang (2014) asserted that the consumers at large need to be advocated on buying green products to resolve those issues, urging a sense of responsibility among them, for a better living. Consumers started to express their interests for environment through divergence of common products and services to healthier, greener and eco-friendly product (Golnaz, Phuah, Zainalabidin and Mad, 2013). Hence, green investment is essential as it promotes and supports the course of financial mechanism and related services, towards the development and execution of sustainable business models, investments, trade, economic, environmental and social projects and policies.

Accordingly, Shipochka (2013) defined green investment as investment activities that focus on companies or projects that are committed not only on the conservation of natural resources, but extend beyond the discovery and production of alternative energy sources, execution of green water and air projects and environmentally sensible business practices. Green investment can be explained as investment necessary to reduce greenhouse gas and air pollutant emissions, without reducing the production and consumption of non-energy goods significantly (Eyraudn, Clements and Wane (2013). Accordingly, Bright (2017) considered green investment as an investment in a company which aims to actively improve the health of the environment by introducing new, clean through green initiatives and technologies.

Currently, financial institutions which include financial service providers, asset management firms and insurance companies started to change their core business objectives towards environmental-friendly approach, by directing their resources and lending decision towards curbing environmental degradation, as well as merging the green financial products and services with banking activities (United Nations Environment Programme Finance Initiative, 2007). Green banking and investment commenced its establishment by the government, media and corporations through the increasing focus on environmental protection (Boulatoft and Boyer, 2009). Accordingly, the investment arms started to provide specific green funds in the late 1980s to cater to the demand for green investment and the first environmental fund in Europe, Merlin Ecology was then launched in April 1988 in United Kingdom (Kreander, 2001). In 2017, the first green sukuk issuance was initiated in Malaysia in which these funds were dedicated for a specific environmentally sustainable infrastructure project, including the construction of renewable energy generation facility (Hadad-Zervos, 2017). Interestingly, Universiti Teknologi MARA (UiTM) became the first institution of higher learning in the world to issue a green sustainable and responsible investment (SRI) sukuk worth RM222.3 million to develop a solar photovoltaic (PV) power plant (The Star, 29 April, 2018).

Generally, this study revolves around banking or investment product having green investment initiatives. Accordingly, the objective of this study is to examine the most important factor that contributes to behavioral intention towards green investment particularly among Muslim investors, by adopting the theory of planned behavior. Although the theory is widely used in many areas of studies, studies focusing on the area of green investment, particularly from the perspectives of the Muslims are limited.

The article proceeds in the following manner. First, we briefly review the literature regarding the theory of planned behaviour and its components. Next, hypotheses concerning the influence of the related variables towards the behavioural intention of green investment were developed. Subsequently, the data collection method and analytical procedures were explained. Finally, we provide research findings and the discussion on the managerial and theoretical implications of the study.

LITERATURE REVIEW

The theory of planned behavior (TPB) shapes the theoretical framework of this paper because it offers a clearly defined structure that allows the investigation of certain constructs which include attitude, personal and some other cultural determinants, towards the behavioral intention to invest in green investment. More importantly, Masrom and Hussein (2008) considered that the theory of planned behaviour can be applied to various field of study in order to identify behavioural intention in many settings. A study by Amin and Chong (2011) showed that the theory of planned behaviour framework was used to examine the factors influencing customer intention and acceptance on Islamic financing. Similarly, Adam and Shauki (2014) also applied the framework in evaluating investor's decision-making process to participate in social responsible investment.

Ajzen (1991) defined intention as the measure of strength of an individual's willingness to adopt certain behaviour or conduct. He further explained that intention is the indication of how much effort they are willing to exert in order to perform the specific behaviour. Many previous studies have used intention in predicting the behaviour as a dependent variable of behavioural intention model. For instance, Alam and Sayuti (2011), Huda et. al (2012) and Hasbullah et. al (2015) had employed the theory of planned behaviour to examine the relationship between attitude, subjective norms, perceived behavioural control and behavioural intention. Similarly, Promontosh and Sajedul (2011) and Khalek et al. (2015) also investigated customers' behaviour intention of purchasing goods by modifying the theory with additional determinant factor, while a study by Hofmann et al. (2008) revealed that intention has not been extensively examined on social-responsibility investment

decision-making behaviour.

Since green investment is gaining prevalence in institutional investment practice, thus it is essential for investors to be informed of the views and practice of their peers (Amenc, Goltz and Tang, 2010). Shipochka (2013) considered green investment as investment activities that focus on companies or projects that are committed not only on the conservation of natural resources, but also focus on discovery and production of alternative energy sources, execution of green water and air projects and environmentally sensible business practices. A study by Voica, Panait and Radulescu (2015) focused on the important role of green investment among the private and Muslim authorities. Bui (2015) suggested that the behavioural intention to participate in green investment was derived from values, knowledge or belief, need and motivation, attitude, as well as demographic factors. Azizan and Suki (2014) discovered that health consciousness was the main factor to induce consumers' intention towards green products and services.

Attitude

Attitude is important in predicting and explaining human behavior as mentioned by Ajzen (1991). Azjen and Fishbein (1980) refers to attitude as the degree of an individual's favourable or unfavourable evaluation of the behaviour. In another view, Shook and Bratianu (2010) argued that individual's attitude towards subject matter can be formed through individual's beliefs in the possible outcomes.

Several studies have been conducted pertaining to the relationship between attitude and behavioural intention in a different context. For instance, Sudin, Geoffrey and Hanudin (2009) and Mokhtar and Butt (2012), found that attitude and subjective norms were positively related to the intention of choosing halal products among consumers. On the same note, a study disclosed that attitude showed significant influence on the intention to pay zakah among academicians (Sapingi, Ahmad and Mohamad, 2011). Other than that, a study conducted by Alam and Sayuti (2011) showed that attitude, subjective norms and behavioural control have significant impact on intention to purchase halal food. Furthermore, an interesting study done by Khalek et al. (2015) among young Malaysian customers in Klang Valley found that positive attitude among young customers towards halal food is the most significant determinant for their behavioural intention in consuming halal food. While in the context of corporate waqf, attitude is significantly associated with employees' intentions at Majlis Agama Islam Wilayah Persekutuan (MAIWP) to contribute in corporate waqf (Hasbullah, Khairi and Ab. Aziz, 2015).

In addition, Tarkiainen and Sundqvist (2005) asserted that consumers' intentions to buy

organic food can be predicted with their attitude. This finding is in line with a study by Sudin et al. (2009) which found out that attitude was significantly related to halal products consumption. Apparently, Ramayah and Mohamad (2006) found that attitude was significantly related to students' behavioural intention to use mobile personal computer. Eventually, an empirical study by Fauziah, Ramayah and Razak (2008) among 300 postgraduate students from three Individual's Muslim universities in Malaysia namely, International Islamic University Malaysia (IIUM) Universiti Teknologi Mara (UiTM) and Universiti Putra Malaysia (UPM) concluded that attitude had a significant relationship with the intention to engage in Islamic home financing.

H1: There is a significant relationship between attitude and Muslims' intention to adopt green investment.

Subjective norms

The second independent variable used in this study is subjective norms. Ajzen (1991) stated that subjective norms can be defined as the perceived social pressure to perform or not to perform a specific behaviour. It is an individual's belief about what others will think about the specific behaviour. In fact, only behavioural referents will influence an individual's decision making. Normally, individuals want to get a feedback either to perform or not to perform a specific behaviour from the specific group or individual. Hence, this study describes subjective norms as how individual is being influenced by his family and group of friends in deciding his involvement in green investment.

Amin and Chong (2011) discovered a positive relationship between subjective norms and intention to adopt Ar-Rahnu or Islamic pawnshop. There is a positive relationship between subjective norms and intention of postgraduate students to engage in Islamic home financing as disclosed by Fauziah et al. (2008). Similarly, subjective norms were found to be positively related to intention of halal products use among consumers with subjective norms being the most influential predictor as mentioned by Lada et al. (2009). Promotosh and Sajedul (2011) who conducted a study to investigate factors influencing customers' purchase intention of green product found that there was a significant influence between subjective norms and customers' purchase intention.

A study by Omar and Frimpong (2007) found that subjective norm significantly influence Nigerian consumers' intention towards buying life insurance. On the same note, subjective norm was found to be important predictors of consumers' intentions to purchase financial service products such as credit card, life insurance and other financing facilities (Dzuljastri and Muhamad, 2012; Amin et. al, 2011; and Omar and Frimpong, 2007). The significant

effect of subjective norms was also disclosed in Husin, Ismail and Rahman (2016) study on the intention to purchase a family takaful scheme. Gopi and Ramayah (2007) found that there was a direct positive relationship between subjective norms and intentions to use internet stock trading. Similarly a study by Adam and Shauki (2014) revealed that attitude and subjective norms has significant influence on the intention of investors in considering social responsibility investments in Malaysia.

H2: There is a significant relationship between subjective norms and Muslims' individual intention to adopt green investment.

Perceived behavioural control

On the other hand, Ajzen (1991) stated that perceived behaviour control can be defined as people's perception of the ease or difficulty of performing the behaviour of interest. He further elaborated that perceived behaviour control may change depending on situations and types of behaviour to be performed. Individual intention may be discouraged if he is not equipped with enough resources or information, although he has favourable attitudes and/or subjective norms to perform the behaviour (Madden, Gorja, Strominger and Wiley, 1992). Consequently, individuals are likely to engage in certain behaviour if they believe they have adequate resources and confident enough to perform the behaviour. Thus, this study describes perceived behavioural control as individual's perception of his ability to understand the related information in participating in green investment.

The significant effect of perceived behavioural control was also discussed in previous studies. Khalek et al. (2015) found that the intention to consume halal food among young customers have portrayed significant role by perceived behavioural control. Similarly, theory of planned behaviour indicated that individual's intention to pay zakah is influenced by perceived behavioural control (Huda et. al, 2012). An interesting study by Hasbullah et al. (2015) showed that there is also a significant relationship between perceived behavioural control and intention to contribute in corporate *waqf*. Likewise, Alam and Sayuti (2011) concluded that perceived behavioural control has significant impact on intention to purchase halal food. On the other ground, a study by Hofmann, Hoelzl, and Kirchler (2008) found no significant correlation between perceived behavioural control and the intention to make an investment decision. Similarly, Teo and Lee (2015) discovered that there is insignificant association between perceived behavioural control and intention to employ the technology.

H3: There is a significant relationship between perceive behavioral control and Muslims' individual intention to adopt green investment.

Knowledge of green investment

Writz and Matilla (2003) defined awareness as having or showing realization, perception or knowledge of a situation or fact. Accordingly, knowledge is clearly defined as the fact or condition of knowing something with familiarity gained through experience or education (Coakes, 2004).

There are several studies conducted pertaining to the relationships between knowledge and investment (eg. Bengtsson, 2008; and Sakuma and Louche, 2008; Louche and Lydenberg, 2006; and Hudson and Wehrell, 2005). Accordingly, it is found that most of the studies indicated high level of knowledge in relation to social responsibility investment (Humphrey and Lee, 2011). Similarly, a study conducted in Spain indicated that the level of awareness towards socially responsible investment (SRI) among the Spanish religious groups and charities was high (Valor & Cuesta, 2007). Liao and Chu (2013) found that customer's intention to purchase new product can be influenced by their awareness of the resale value of an already possessed product. Apparently, Liu, Hong, Zhu, Yan, Qi and Liu (2018) asserted that lacking subjective knowledge is a hindrance towards the acceptance of green-labeled residential buildings. Additionally, Darko and Chan (2017) argued that one of the most important barriers concerning green adoption of products and services is due to lack of knowledge.

H4: There is a significant relationship between awareness and knowledge and Muslims' individual intention to adopt green investment

Reputation of the service providers

Reputation is based on perceptions of the reliability, credibility, social responsibility and trustworthiness of the organizations (Fombrun, 1996). In fact, reputation according to Balmer and Gray (1998) is perceived as a value judgement about the company's attributes and apparently, it may evolve over time as a result of consistent performance reinforced by effective communication.

Gronroos (1984) found that reputation plays a vital role in service organization which is determined by customers' overall assessment of the services they receive, as well as maintaining customers' behavioral intention (Raj, 1985). Lai, Griffin and Babin (2009) and Barnett, Jermier and Lafferty (2006) indicated that customer's behavioral intention was influenced by customer satisfaction through looking at the reputation of the organization. Consequently, based on previous literature, most of the studies revealed that the factor that

would influence a particular behavioral intentions are perceived value, service quality, reputation and customer satisfaction (Ha and Jang, 2009; Matzler, Renzl, and Rothenberger, 2006; Shonk and Chelladurai, 2008; Yu and Ramanathan, 2012). Furthermore, high level of customer satisfaction through positive reputation would raise individual's behavioral intentions (Anderson, Fornell and Lehmann, 1994).

H5: There is a significant relationship between reputation and Muslims' intention to adopt green investment.

Religious values

Another factor that contributes towards the behavioural intention towards green investment is religious values. Many previous studies showed that religious values significantly affect customers' behavioural intention (Mokhlis, 2010; Haron, Ahmad, & Planisek, 1994; Metawa and Almossawi, 1998; Bley and Kuehn, 2003; Okumus, 2005; Gait and Worthington, 2008; and Mokhlis, Hazimah, Mat, and Salleh, 2008).

Amin et. al (2011) defined religious values as the role of religion in influencing individual's decision and activities. As stated by Butt et. al, (2011), religious values are through certain criteria including free from interest, investment in Halal business and equal distribution of wealth, especially those values from the standpoint of Islamic principles. Hence, it is believed that individual choice to participate in green investment can be affected by the fact that this type of investment offered is parallel to Shari'ah law. Thus, this study proposed that the level of religious values embedded within an individual can be a determinant factor of a person's intention to involve in this investment.

In addition, a study conducted by Mukhtar and Butt (2012) discovered that attitude, subjective norm and religiosity are important factors in predicting intention to choose Halal products. Similarly, Czerwonka (2014) found that faith and religiosity give more impact to individual's willingness toward Social Responsibility Investment (SRI). Okumus (2005) considered religion as the most important factor of a banking selection criterion. A study by Haque, Rahman and Ahmad (2011) revealed that religiosity largely influences young Muslim customers' purchasing behaviour. Amin and Chong (2012) examined the determinants which influence the intention to adopt Ar-Rahnu. The study concluded that religious values play a vital role and has significant positive impact in determining customers' intention to use Ar-Rahnu. On the contrary, a study by Ali, Raza and Hong (2015) revealed that religious values have a negative and significance influence on the intention to use Islamic personal financing. However, Amin et al. (2011) concluded that there is no significant association between religious values and the intention to use Islamic personal financing.

H6: There is a significant relationship between religious values and Muslims' behavioral intention to adopt green investment.

RESEARCH METHODOLOGY

Using survey questionnaire approach, a total of 115 respondents participated in the face to face survey conducted within the Klang Valley area from Muslims, both investors and non-investors. The reason this area was selected is because it offers established investment banking products and services particularly for Muslim consumers to choose (Suddin et al., 2009). Such development has exposed Muslims' consumers to a range of investment products and services, thus, it becomes a practical response to this research study.

The same set of questionnaires was also distributed online, using Google Form. The link of the questionnaires was shared through Facebook and WhatsApp to reach out to a wider range of target respondent. This study adopted online survey due to the rapid growth of internet use and mobile communication. Another 155 respondents answered the online survey, which made up the total of 270. Sample size adequacy for multiple regression analysis was applied based on Green's (1991) method as $N > 50 + 8p$ where p is the number of predictors. Hence in this study, $N = 50 + 8(6)$, thus 98 participants, therefore a sample size of 270 is adequate.

Variables and measurement

All instruments were adapted from various literatures and were modified for adaptation to the green investment context. The dependent variable, behavioral intention was measured using items derived from Syah Alam and Sayuti (2012). On the other hand, the variable attitude was adopted from Suki (2016), perceived behavioral control was adopted from Amin, Rahman and Razak (2014), subjective norms was adapted from Gopi and Ramayah (2007), while knowledge, reputation and religious values were adopted from Jaafar and Musa (2014). All responses were measured using six-point Likert type scale anchored by "strongly disagree" (1) to "strongly agree" (6). Completed questionnaires were analyzed using statistical methods such as descriptive statistics, reliability analysis, correlation analysis and regression analysis via the Statistical Package for Social Sciences (SPSS) for Windows version 21.

Goodness of measure

Since this study involves a relatively large sample, the central limit theorem could be applied

and hence there is no question on normality of the data. Two major methods were utilized in order to determine the presence of multicollinearity among independent variables in this study. These methodologies involved calculation of both a tolerance test and variance inflation factor (VIF) (Kleinbaum et al., 1988). The results of these analyses are presented in Table II. As can be seen from these data:

- none of the tolerance levels is ≤ 0.01 ; and
- all VIF values are well below 10.

Thus, the measures selected for assessing independent variables in this study do not reach levels which indicate the existence of multicollinearity. The acceptable Durbin-Watson range is between 1.5 and 2.5. In this analysis, Durbin-Watson value of 1.755, which is between the acceptable ranges, show that there were no auto correlation problems in the data.. Thus, the measures selected for assessing independent variables in this study do not reach levels indication of multicollinearity problem (Table II).

Next, reliability testing was applied to determine the degree to which these measures are free from random errors. Cronbach's a reliability analysis was applied to identify how well the items grouped are positively correlated to one another. Cronbach's a value of 0.70 and above, is considered to have reliability (Nunnally and Bernstein, 1994). A value of 0.70 and above indicates items are homogenous and measuring the same construct. Hair et al. (2006) suggested that a value of 0.60 would be deemed the lower value of acceptability. The result of the factor and reliability analysis is presented in Table I.

Table 1 : Measurement of Questionnaire

		Tolerance		α
Description		VIF		
Attitude (Suki,2016)	I feel choosing green investment is a wise idea.	0.732	0.846	2.816
	I feel that green investment performance is generally reliable			
	I feel that green investment claims are generally trustworthy			
Subjective Norms (Gopi & Ramayah,2007)	Most people whose opinion I value would approve my participation in green investment.	0.775	0.850	2.413
	Most people who are important to me think I should participate in green investment.			
	My family who are important to me think I should participate in green			

investment

Perceived behavioral Control (Amin, Rahman & Razak, 2014)	I would be able to participate in green investment. For me to participate in green investment would be easy. I believe that I have control in choosing types of green investment that I want to invest. It is mostly up to me to participate in green investment.	0.739	0.831	2.166
Knowledge (Jaafar & Musa, 2014)	I know about the existence of green investment I participate in green investment because it is environmental friendly. I participate in green investment because it has more environmental benefit than others. Green investment could be a beneficial investment in long-term.	0.777	0.821	1.914
Reputation (Jaafar & Musa, 2014)	I believe financial institutions and agencies that provide green investment uphold Islamic reputation and image. I believe financial institutions and agencies that provide green investment contribute to the environment friendly. I believe financial institutions and agencies that provide green investment goal enhance standard of living and welfare of community. I believe financial institutions and agencies that provide green investment are transparent	0.692	0.848	2.323
Religious values (Jaafar & Musa, 2014)	Islamic financial institutions and agencies that provide green investment are compliant with Shariah or Islamic law. Islamic financial institutions and agencies that provide green	0.671	0.783	1.843

investment are interest free.

Religion motivates me to participate
in green investment.

Intention to participate (Alam & Sayuti, 2012)	I am likely to participate in green investment in the future	0.748	0.759	1.694
	I expect to participate in green investment in the future.			
	I will definitely participate in green			

The multiple regression analysis model was significant ($p < 0.01$) with F-value of 92.048. The coefficient of determination (R^2) is 0.591 which indicate that 59.1 percent of the variation in behavioral intention towards green investment is explained by the independent variables (attitude, subjective norm, perceived behavioral control, knowledge, religious values and reputation. Meanwhile the adjusted R^2 value was 0.584.

The multiple regression analysis in this stage also indicates that the tested variables are significant at $p < 0.05$. The beta-values (standardized coefficients) for each of the variables are as follows: attitude ($\beta = 0.107$), subjective norm ($\beta = 0.008$), perceived behavioral control ($\beta = 0.240$), knowledge ($\beta = 0.126$), religious values ($\beta = 0.229$) and reputation ($\beta = 0.255$) indicating that the independent variables were all positively related to behavioral intention towards green investment. The results of the multiple regression analysis indicate that all the hypotheses were supported except for H2 (subjective norms). Table 2 illustrates the result of the multiple regression.

Table 2: Results of multiple regression analysis

Variable	Standardized β	t-value	Hypothesis
<u>Model variables</u>			
Attitude	0.107**	2.213	Supported
Subjective norm	0.008	0.162	Not supported
Perceived behavioral control	0.240**	4.977	Supported
Religious values	0.229**	5.391	Supported
Reputation	0.255**	5.210	Supported
Knowledge	0.126**	2.781	Supported
<i>F</i>	92.048 * *		
<i>R-squared</i>	0.591		
<i>Adjusted R-squared</i>	0.584		

Notes: * $p < 0.05$, ** $p < 0.01$

DISCUSSION

This study has shown that attitude towards behavior, perceived behavioral control, religious values, reputation and knowledge have direct significant positive relationship with behavioral intention towards green investment. More importantly, the theory of planned behavior has somewhat proven to be an important theory in predicting the adoption of green investment among Muslims in Malaysia. Indeed, the direct positive relationship of attitude was supported by previous studies in some other context that have been conducted by Khalek et al. (2015), Alam and Sayuti (2011), Sudin, Geoffrey and Hanudin (2009) and Mokhtar, Butt (2012) and Hasbullah, Khairi and Ab.Aziz (2015).

Nevertheless, subjective norms were found to have no direct influence on the behavioural intention of green investment. Apparently, this study does not support the study of Karijin et al. (2007), where it was found that subjective norm was positively and significantly related to intention in other context of study. One possible reason may cause by the fact that investment is considered a personal objective rather than a collective approach (Karijin et al., 2007). In addition, possibly the findings are related to Leeuw, Valois, Ajzen and Schmidt's (2015) study, as it signifies the importance of individuals' action rather than their opinion. Hence, the behavior of the parents and family in general, and to some extent celebrity endorsement is vital to induce the adoption of green investment.

The previous studies by Khalek et al. (2015), Hasbullah et al. (2015), Huda et al. (2012) and Alam and Sayuti (2011) have supported the hypothesis statement pertaining to the significant positive relationship between perceived behavioural control and intention towards green investment. The influence of perceived behaviour control is strong towards the behavioural intention of individual's belief towards the importance of green investment. Most of the investors in Malaysia would have some sort of experience in accessing information pertaining to investment through the internet for the latest share/stock information, foreign stock market and Malaysian market condition, internet banking, online bill payment, online purchasing and many other forms of internet transactions.

Consumers are well guided by the Bank Negara as well as the Securities Commissioner in relation to viable investments. Indeed, the result in relation to knowledge and behavioural intention towards green investment is supported by previous studies including Liao and Chu (2013). Ajzen, Joyce, Sheikh and Coth (2011) asserted that knowledge about Islam is significant towards supporting a pro-Muslim position. In addition, knowledge corresponds towards the purchase intention of green products as mentioned by Mostafa (2007).

Additionally, this study has similar findings as knowledge has significant impact to risky credit behaviors (Xiao, Tang, Serido and Shim, 2011).

Another variable, religious value is illustrated to have significant impact on the behavioural intention towards green investment. More importantly, it is considered the most important factor to determine the adoption of green investment. In fact, this finding has supported the importance of religious values towards behavioural intention, similar to the other findings of studies which have been conducted in different settings, involving Czerwonka (2014), Mukhtar and Butt (2012), Amin and Chong (2012), as well as Haque, Rahman and Ahmad (2011) and Okumus (2005), since there is limited research that is conducted in the area of green investment. Apparently, Shariah principles are laid down to uphold the Halal principle knowledge that describes what is fit to be consumed and what is not. Further, it is an obligation for all Muslims to consume only the lawful and stay away from the unlawful whereby the consequences of consuming the Halal are rewarded, consuming the *haram* is punishable and omitting the *haram* is rewarded. In addition, Mukhtar and Butt (2012) acknowledged the cognitive dimension of Muslims' religious belief. Hence, religious values including the prohibitions of *riba*, *gharar* or uncertainty, as well as gambling, have been highlighted in Islam. More importantly, it signifies the fact that these religious values positively influence Muslims' behavioral intention towards green investment.

On the other hand, previous studies by Barnett et al. (2006), Lai et al. (2009) and Wu and Wu (2014) supported the hypothesis statement by showing positive significant between reputation and intention in many different fields. Reputable organizations will derive customers' satisfaction and in turn, will lead to individuals' behavioural intention. It was also found that investment in the development of green core competence was helpful to businesses for the enhancement of their green innovation and green reputation (Chen, 2008). Indeed, customers are considered to expect a relatively high dependence on reputation in industries where it is relatively important that customers trust the firm including financial service providers (Brammer and Pavelin, 2005). Significantly, older firms may have the benefit in strengthening their available resources to increase their economic returns through economies of scale, as well as through reputation and market position (Cainelli et al. 2015).

Managerial Implication

Results from this study has shed some light on which constructs in the intention-based model can be an alternative to answer some managerial problem of factors influencing intention towards green investment. The insights provided by this study could be used by organizations and policy makers as a foundation to formulate strategies to increase green investment.

Firstly, religious values are considered the most significant factor that influences Muslims'

intention to participate in green investment. Indeed, it is prevalent to understand the ultimate purposes of green investment and one of which is to preserve and protect the environment as religious commandment. Hence, it will develop an individual's religious values and responsibilities particularly in realizing the importance of protecting the environment as one of the important *Maqasid* Shariah (objectives of the Islamic law), embedded in human life.

More importantly religious values do not seem to have any contradiction towards investment and faith (Louche, Arenas, and Van Cranenburgh, 2012). What is more prevalent is that the investment markets need to provide tools and services to incorporate the needs and demands of Muslims to further promote green investments. Nevertheless, the religious values need to be further acknowledged and further advocated towards the non-financial impact of their investment activities. Subsequently, the public needs to be taught on the importance of the environment at a young age and further reinforce those values to safeguard the mother nature. One of the ways is through Integrated marketing communication on green investment can be a useful tool to educate the public.

Secondly, reputation of the green investment providers seems to be the second strong predictor towards the adoption of green investment. Hence, this study also assists an investment companies to establish a sound reputation and image among Muslims especially by providing all the necessary data and information including the controlling and the monitoring measures of those funds. By highlighting the issues of the environment, an investment company with high level of reputation and good image will convince an individual to participate in green investment. More importantly, the real improvement in environmental performance must be taken seriously by the top management of the investment providers, and should not signify only as an image to enhance business. Investment corporations should design green investment products towards sustainability. Furthermore, investment providers should emphasize green investments as part of the initiatives of social responsibility investment, thus, it may contribute to boosting the reputation of the investment providers. Strategic planning of the providers of green investment should address the issues of the environment to remain relevant and prevalent.

Thirdly, perceived behavioral control concerned about the way of investing in green investment. Thus, the establishment of investment arms and corporations are vital to promote green investment. Perhaps, more subsidies are needed in terms of tax exemption to further boost the behavioral intention towards green investment. Online investment should be made available since more individuals have the skills, ability and confidence to use computers and other hand-held gadgets. More importantly, the service providers need to also put into place the protection of privacy for all users in relation to the security of the information of the internet (Akhter, 2014). Indeed, it is vital for all consumers to know how to use the internet

when dealing with investments, especially in protecting their private information from being misused by unauthorized bodies.

Fourth, attitude was also found to be another predictor of intention to purchase green investment, and subsequently perceived behavioral control. Muslims who are highly concerned about the environment should be encouraged to invest in green investment. When consumers' attitude is positive and display higher concern for environment, they will more likely to put efforts to reduce the environmental impact (Singh and Gupta, 2014). More importantly, there seems to be some preference towards products that concern the environment, thus, the marketers need to embrace such values to push for such consumption inclination. The respondents might have been exploring for evidence regarding environmental problems and consider that the behavior stemming in support to sustainability arise from a belief in a more objective and a safer planet. Policy makers, on the other hand, should assist in creating the awareness and develop separate campaigns using "opinion leaders" or influencers including celebrities to develop constructive social pressure to invigorate the adoption of green investments.

Lastly, knowledge on green investment has an impact on the adoption of green investment. Hence, this feature emphasizes the importance of governments and schools in generating an awareness of environmental concern. This study emphasizes the need to enhance consumers' existing knowledge about green investment to push actual purchase behavior. Our findings suggest that individuals' intentions to engage in green consumption may be shaped by their evaluations of how much green consumption really contributes to environmental sustainability (attitude toward the behavior). Therefore, policies that emphasize on presenting broad information about how the numerous methods of green consumption promotes environmental sustainability are expected to widen consumers' intentions to accomplish such behavior.

Marketing campaigns that develop public awareness in relation to the strength of green consumption or the consequences of this behavior may lead to a significant movement in consumers' conviction about numerous features of green consumption and boost their intentions to act correspondingly (Pagiaslis and Krontalis, 2014). Specifically, marketers should create communication that present constructive attitudes toward purchasing green investment, emphasize the intrinsic environmental values of such conduct and inspire consumption by concentrating on distinctiveness of product advantages (Moser, 2015). Thus, marketers need to ensure that consumers have inclusive knowledge about numerous features of their green investment offerings, including information about those green investment and the values of the investment as well as pricing. Specifically, marketers should ensure that consumers are provided information utilizing all aspects of marketing communication including advertising, sales promotion, public relations, direct marketing, and social media,

through their corresponding mix of campaigns, methods, networks, media, and activities. As a result, all the messaging and communication strategies need to operate simultaneously as a merging strength. Hence, it is a process designed to ensure that all messaging and communications strategies are coherent across all channels and are targeted on the customer (Liu, Segev and Villar, 2017).

Limitation and suggestion for future research

Some limitations of this study suggest potential research opportunities. First, the result of this study should be construed with thoughtfulness, given the convenience sampling procedures with single-time measures. Nevertheless, the results generated from the data provide some general overview of Muslims and their impressions of green investment. Second, the descriptors in relation to religious values or even knowledge may not have been taken into perspective by different respondents, since it depends highly on their interpretation. Third, the study was quite general as it is mainly identifying the response of the Muslims only, and therefore these findings may not be generalized to other beliefs.

As the research is exploratory in nature, future researchers should examine green investments across multiple experiences, particularly those who have invested this products or services. Possibly, studies need to be conducted by incorporating in relation to its impact, particularly on corporate behavior. It should also look into some areas of corporate social responsibility, ethical investments, social responsibility investment, to name a few, and how it differs from one another. More importantly, some other theories may be incorporated in future studies, including the institutional theory and resource-based view. Moderating variables including the demographic features such as gender, age and income could provide significant empirical results for managerial decision making to generate more acceptance towards green investment for environmental mindfulness. Green investment may not be considered by the millennials or the generation Z, thus, there is a need to identify the contributing factors that may encourage those age groups to adopt green investment.

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