

THE IMPORTANCE OF INTERNAL PSYCHOLOGICAL MOTIVATIONS IN PREDICTING GREEN PURCHASING BEHAVIOUR

Yi Jin Lim¹, Selvan Perumal¹ and Norzieiriani Ahmad¹

ABSTRACT

Adoption of green purchasing behaviour is vital for mitigating global climate change and environmental problem that happened in every part of the world. However, statistics showed that consumers' attitudes to protect the environment are not synchronized with their actual behaviour. The limited availability of green products and limited knowledge among the consumers in Malaysia compared to the west has provided more opportunities to monitor the attitude and behavioural patterns of the consumers in this country. Moreover, waste segregation plan that has been implemented since September 2015 in Malaysia is a good starting point for the consumers to gradually embrace green purchases. Hence, these factors which include environmental attitude, environmental knowledge, and recycling participation in the aspect of waste segregation are worth for further investigation. The proposed conceptual model in this paper may serve as a foundation and useful guideline for future research to improve their studies.

Keywords: Environmental attitude, environmental knowledge, recycling participation, waste segregation, green purchasing behaviour

INTRODUCTION

"Green", a popular word to describe the environmental aspect is being promoted and disseminated since decades. Looking from a global perspective, global warming and climate change are critical issues that arise. Global climate change has caused more extreme weather patterns such as more hurricanes and drought, colder weather in Northern Europe and longer spells of dry heat or intense rain (Shah, 2015). Several studies have shown that human behaviour is closely connected to environment demolition (BBC, 2014; Shah, 2015; Sheldrick, 2014; Siregar, Utomo, & Tambunan, 2014) and the current environmental conditions could be minimized with the help of the human being itself which typically called as "green consumer".

As an environmentally responsible consumer, it is important to understand that changing our shopping habits could make a difference and it could be nurtured by transforming our ordinary shopping behaviour into a greener form of purchasing behaviour. Lifestyle change by adopting green purchasing behaviour is necessary as an ordinary form of shopping behaviour could destroy the environment. Over the years, the number of individuals inclined to green purchase is increasing gradually but their inclination is not transformed into real action (TNS, 2014; Young, Hwang, McDonald, & Oates, 2010). The statistics are supported by Nielsen (2015) which conducted the survey in the Asia Pacific whereby only 11% of consumers that care for the environment and 8% of the consumers that care for society are willing to buy green products. This again showed that their attitudes are not in tandem with their actual behaviour (Gleim & Lawson, 2014; Moser, 2015).

¹ School of Business Management, Universiti Utara Malaysia

As been suggested by Nedra, Sharma, and Dakhli (2015), consumer purchasing behaviour was first stimulated by one's personality and internal psychological motivations. To address the problem, several researchers have pointed out environmental attitudes as one of the significant personal factors to green purchasing behaviour (Chekima, Wafa, Igau, & Chekima, 2015). It was supported by Yeoh and Paladino (2013) that attitude is a more powerful variable than an intention to predict behaviour. Furthermore, the contradiction was discovered between the expressed attitude of consumers and their actual purchasing practices (Uddin & Khan, 2016). Lee (2014) further supported that green marketing targets could not be achieved if environmental attitude-behavioural gap still exists among the consumers. Hence, it is important to further delve into the attitude-behavioural issue as different consumers possess different opinions toward the subject matter. However, by examining only environmental attitude may not enough and other possible variables should be discovered (Joshi & Rahman, 2016).

Therefore, another variable which is environmental knowledge is proposed. It is especially important in Malaysia context as Malaysia is still in its initial stage of adopting green (Nezakati, Hosseinpour, & Hassan, 2014), so consumers might have limited environment knowledge as compared to other countries. If there are enough environmental knowledge available, Malaysian consumers will understand the disadvantages of using goods or services that are harmful to the environment which subsequently leads to a green purchasing decision. Apart from perceived environmental knowledge, recycling participation is another key variable to be examined in this research study. According to Phipps, Ozanne, Luchs, Subrahmanyam, Kapitan, Catlin, Gau, Naylor, Rose, Simpson and Weaver (2013), past behaviour could be the determinant of future sustainable behaviour. Recycling participation is particularly suitable to be applied in Malaysia context as Government has enforced the rules to segregate household wastes in eight states starting from 1st, September 2015 in Malaysia (Ministry of Urban Wellbeing, Housing and Local Government, 2015), which is still fresh among the consumers. Hence, it would be a very good opportunity to test whether their sustainable behaviour cultivated at home will translate into actual practices of buying green products. To the author knowledge, there are no research has been found to investigate the relationship between recycling participation in the aspect of waste segregation and green purchasing behaviour. The relationship of environmental attitude, environmental knowledge and recycling participation with green purchasing behaviour should be critically explored.

LITERATURE REVIEW

Green purchasing behaviour: Definition and concept

Consumer behaviour is defined as the way of consumers behave when they do their searching, purchasing, using, evaluating and disposing of products, services, and ideas that can make them feel content (Solomon, Bamossy, Askegaard, & Hogg, 2009; Vani, Babu, & Panchanatham, 2010). It also involved the decision on how consumers spend their resources including time and money on choosing the products to fulfill their needs and wants (Alamgir, Nasir, Shamsuddoha, & Nedelea, 2010). Consumer behaviour could occur in various inconsiderate situations (Kardes, Cronley, & Cline, 2010) that involved individual, group or an organization when dealing with services and ideas as well as tangible products (Sharma, 2006). Also, consumer behaviour occurs when people considered what they have purchased in the last few days and what brands that they finally chose (Kardes *et al.*, 2010).

In a deeper sense, it is called as consumer buying behaviour, which involved purchasing process from considering what to buy to customer's final decision of product, brand and seller choices, purchase timing, the amount spent and frequency of shopping (Khaniwale, 2015). It is also involving decision processes and actions of buying and using products by ultimate consumers or groups (Rani, 2014) according to their needs and wants (Daria & Sara, 2011). Similarly, Armstrong, Adam, Denize, and Kotler (2014) added that consumer buying behaviour is the purchase behaviour of individuals and households for personal usage.

In recent year, green purchasing phenomenon is evolving gradually due to the lifestyle changes. Numerous definitions of green purchasing behaviour can be found in the literature. Although green purchasing behaviour has become a significant and prevalent topic in marketing research, there is still no conclusive response to the query on what is the social responsibility of marketing (Carrigan & Attalla, 2001) and there is the presence of discrepancy when defining green purchasing behaviour. For instance, Bertrandias and Gambier (2014) and Corzine and Jackson (2006) advocated that green purchasing includes a determination to keep away from buying products that could cause damage to the environment and switch to products with less carbon footprint.

Similarly, Wang (2014) defined green purchasing as the process to choose products that are environmentally friendly and have less harmful impacts to the environment that covering the whole process from manufacturing, distribution to consumption as well as disposal of the products. In a deeper sense, Lee (2014) has described green purchasing behaviour as included buying products that are green in nature, fairly traded products from a developing country, organically planted, against animal cruelty and so forth. In general, green purchasing can be treated as a social responsibility behaviour and also a complex form of ethical decision-making behaviour (Joshi & Rahman, 2015).

Since developing countries are evolving rapidly and the environmentally sensitive market segment has lately appeared, it was suggested to conduct the research in such countries (Albayrak, Aksoy, & Caber, 2013). Malaysia has fulfilled this criterion as this country has implemented waste segregation in recent year (Ministry of Urban Wellbeing, Housing and Local Government, 2015). It was supported by Testa, Iraldo, Vaccari, and Ferrari (2015) that consumers from different countries might have different behavioural patterns. Therefore, it is worth to carry out the research study in other countries that have different cultures.

In Malaysia, there are extensive researches regarding sustainable behaviour. However, most of the studies have focused on green purchase intention (Aman, Harun, & Hussein, 2012; Azizan & Suki, 2014; Chekima, Wafa, Igau, & Chekima, 2015; Goh & Balaji, 2016; Kong, Harun, Sulong, & Lily, 2014; Lasuin & Ching, 2014; Suki *et al.*, 2016; Rezai, Teng, Mohamed & Shamsudin, 2013; Tsen, Hasan & Buncha, 2006). Although there are also studies on green purchase behaviour (Chen & Chai, 2010; Lim *et al.*, 2013; Mun, 2014; Noor *et al.*, 2016; Saleki & Seyedaleki, 2012; Shahnaei, 2012; Suki, 2013; Wahid *et al.*, 2011), the results are contradicting to each other. For instance, Shahnaei (2012) and Sinnappan and Rahman (2011) have found that environmental attitude significantly influence green purchasing behaviour but Chen and Chai (2010), Mun (2014), Rahbar and Wahid (2010) and Wahid, Rahbar, and Shyan (2011) have revealed that environmental attitude have no significant impact on green purchasing behaviour.

Despite prior evidence have displayed a significant relationship between environmental knowledge and sustainable purchasing, some scholars such as Rahbar and Wahid (2010) and

Wahid *et al.* (2011) that grounded their studies on TRA have indicated environmental knowledge did not have a significant influence on consumers' green purchasing behaviour. Although the results are somewhat contradicting to each other, anyhow most of the studies in Malaysia have shown a prominent effect of environmental knowledge in sustainable behaviour study. It was agreed by Chen and Chai (2010) that environmental knowledge should be exerted when observing sustainable purchasing which are also important for the government to comprehend environmental knowledge of the citizen in order to cultivate a good perception on green product among the Malaysian.

In a recent study, Noor *et al.* (2016) have tested the influence of green awareness, green commitment, green companies, green circle (family and friends) and green experience on the green purchase decision. The authors have revealed that all variables significantly affected green purchase decision except for green circle and green experience. However, the results might be due to this study was conducted at only one state in Malaysia and convenience sampling was applied in this study. Hence, the results could not imply or represent all consumers from Malaysia. In light of previous studies, recycling participation could refer to the past green experience of the consumers (Joshi and Rahman, 2016; Lee, 2014). Since the Malaysian government has enforced the rules of waste segregation, it is worth to study on whether this behaviour (recycling participation) will have an influence on green purchasing behaviour in Malaysia.

Attitude

Another variable to be studied in this research is attitude. According to Cheah, Phau, and Liang (2015), most of the attitude-behaviour relationship could be obtained from several psychological theories such as Theory of Planned Behaviour (TPB), Social Cognitive Theory (SCT) and Technology Acceptance Model (TAM). Ajzen (1985), Andrews and Bianchi (2013) and Autio, Keeley, Klostner, Parker, and Hay (2001) asserted that attitude is the positive or negative perception toward performing a certain behaviour. The definition is supported by Ajzen (1991) that attitude is the extent to which an individual has agreeable or disagreeable perception or judgment towards a behaviour. Jain, Khan, and Mishra (2017) further described attitude as an individual's firm conviction to execute a behaviour.

Added to that, Shahnaei (2012) explained attitude as comprising of three elements which included affective, conative and cognitive whereby cognitive is individual's evaluation about attitude of mind and personal knowledge on the relevant matter; feeling of the individual on the subject matter will contribute to effective attitude and conative is driven by one's action or intention of behaviour towards the subject matter. On the other hands, Chekima *et al.* (2015) stated that a person can sometimes hold both favorable and unfavorable attitude concurrently instead of just either positive or negative attitude towards the item in the question of a place, thing, event or person.

From the perspective of environmental studies, Rashid (2009) described an environmental attitude in a clear and definite manner whereby environmental attitude is a learned inclination to behave consonantly agreeable or disagreeable manner on the environmental matter. Lee (2008, 2009) defined environmental attitude as the cognitive appraisal of an individual towards environment conservation. Besides the cognitive appraisal, Schultz, Shriver, Tabanico, and Khazian (2004) added that environmental attitude also included effective and conative elements of an individual towards environmental activities or problems. Therefore, those people that aspired after a healthy lifestyle and a clean environment are supposed to possess positive attitude towards environmental protection (Almossawi, 2014), which subsequently guided them to sustainable purchasing.

Attitude and Consumer Purchasing Behaviour

Andrews and Bianchi (2013) and Sinnappan and Rahman (2011) have revealed that attitude is the best predictor of consumer purchasing behaviour. Andrews and Bianchi (2013) posited that a favorable attitude is needed for consumers' continuous intention to purchase online. It was supported by Cheah *et al.* (2015) that discovered significant relationship did exist between attitude and purchase intention towards electronic deals among Australian consumers. In a recent study by Chiu and Leng (2016) and Jain *et al.* (2017) have also found positive attitude will guide consumers towards purchasing counterfeit sporting goods and luxury fashion goods respectively. In Malaysia, Khor and Hazen (2016) that applied the Theory of Planned Behaviour (TPB) have also found that attitude significant and positively drive consumers towards remanufactured products purchase intention. In the online shopping context, Jamil and Mat (2011) and Wu *et al.* (2014) also proclaimed attitude has a positive and significant relationship with online shopping.

Although a significant relationship was found in most of the studies between attitude and consumer purchasing behaviour, the effect of attitude did not play the same consistent outcome with green purchasing behaviour. Moreover, despite attitude is found to be the most commonly used variable in most of the consumer purchasing behaviour studies, it is called into research due to the uncertainty of whether the actual purchasing practices will take place following positive environmental attitude expression from the consumers and also what is the main predictor of consumer purchasing behaviour (Gupta & Ogden, 2009; Moser, 2015, 2016). Yeoh and Paladino (2013) who applied Theory of Reasoned Action (TRA) to test the mediating effect of green purchasing attitudes on green purchasing behaviour have ascertained that attitude is the better choice compared to intention to influence consumer behaviour. However, several theories have proven that not only attitude that could affect behaviour, there are also various factors have guided consumers towards purchasing behaviour while in the meantime, work upon the potency of attitude-behaviour relationship (Joshi & Rahman, 2015). Hence, the hypothesis is generated as below:

H1: Environmental attitude significant positively predict green purchasing behaviour

Knowledge

Knowledge towards a subject matter contribute a significant role in the research of consumer purchasing behaviour, therefore more research is needed in relevant fields. It was supported by Aertsens, Mondelaers, Verbeke, Buysse, and Huylenbroeck (2011) that product knowledge involved various stages including product evaluation, purchase intention and satisfaction before consumer behaviour can take place. Following the definition by Brucks (1985) whereof product knowledge is all about the ability of consumer to recall and comprehend the item in question, Brucks (1985) and Lin and Chen (2006) professed that there are three major components of product knowledge which included subject knowledge or perceived knowledge, objective knowledge and experience-based knowledge. In other words, product knowledge is highly dependent on the degree of understanding and consciousness towards a product with a certain confidence level on it (Lin & Zhen, 2005). By applying to the context of general green products purchasing, green knowledge is the level of understanding about the environmental issues that can influence an individual's decision-making process (Rashid, 2009).

Knowledge and Consumer Purchasing Behavior

It is important to study knowledge as one of the variables in consumer purchasing behaviour research as a person's underlying know-how can aid the consumer to distinguish attributes of green product from the conventional one, which subsequently forms more favorable attitude on green products (Gracia & Magistris, 2007). Han and Stoel (2016) that utilized the Theory of Planned Behaviour (TPB) have revealed that objective and subjective knowledge has a significant impact on the attitudes towards purchasing organic cotton and fair trade apparel. It was supported by Bian and Moutinho (2011) that hypothesized product knowledge as negatively influence counterfeits purchase intention but the final result indicated rejection which means that consumers with knowledge on related products will proceed to purchase counterfeit branded products.

Other than having a direct significant relationship on insurance and catering services purchase decision, knowledge was intercorrelated with purchase decision even with different product involvement (Lin & Chen, 2006). For instance, in the green purchase context, Rahbar and Wahid (2010) indicated that consumers with environmental knowledge have a better understanding regarding the advantages from green consumption that subsequently change their purchase patterns into more environmentally-friendly form. However, past research on the relationships of environmental knowledge and green purchase behaviour have implied mixed results. Several past studies have indicated insignificant results between environmental knowledge and green purchase behaviour (Aertsens, Mondelaers, Verbeke, Buysse, & Huylbroeck, 2011; Rahbar & Wahid, 2010) while the others showed that there is significant positive relationship between knowledge on environmental issues and green purchase behaviour (Almossawi, 2014; Göçer & Oflaç, 2017; Joshi & Rahman, 2016; Wahid, Rahbar, & Shyan, 2011; Yeoh & Paladino, 2013). Lin and Niu (2018) further supported that environmental knowledge indicates individuals' responsibilities toward the environment, which in turn transform into positive environmental behaviour. Based on the critical review of the current literature, the hypothesis is created as below:

H2: Environmental knowledge significant positively predict green purchasing behaviour

Recycling participation

Past behaviour is an action or response of an individual that resulted from internal or external impetus in the past while habit is an individual's automatic response or action produced from mental manifestation (Sommer, 2011). Although there are slight differences when defining past behaviour and habits, Azjen (1991) advocated that both past behaviour and habit are anything but identical. In this study, recycling participation represents the past behaviour that the consumers practice at their home, which is a form of sustainable or pro-environmental behaviour (Joshi & Rahman, 2016; Lee, 2014; Park & Ha, 2012). Paço, Alves, Shiel, and Filho (2013) further supported that it is a type of sustainable behaviour which portrays consumers' protective behaviour. It also exhibits consumers' behaviour which included the process of separating, chucking out and transforming those recyclable items or wastes for the purpose of materials or energy renewal (Martinho, Magalhaes, & Pires, 2017; Park & Ha, 2012; Varotto & Spagnoli, 2017).

Past Behaviour of Recycling Participation and Consumer Purchasing Behaviour

Past behaviour of recycling participation is another predictor that might influence on green purchasing behaviour. Weisberg, Te'eni, and Arman (2011) that study on the intention to purchase

in e-commerce have revealed that past purchase experience contributed the most in predicting purchase intention. Similarly, Albarracin and Wyer Jr. (2000), Khare (2015) and Kumar and Ghodeswar (2015) advocated that past behaviour play a significant role in guiding consumers towards future purchasing decisions. It is because past environmental behaviour can change individuals' perception of green products that subsequently lead them to behave environmentally-friendly. According to Carrus, Passafaro, and Bonnes (2008), past behaviour should be manipulated through the course of habit formation for behaviour that maintains in firm contexts. Following government initiative that enforcing the scheme that mandate households to segregate wastes, the current condition is likely to get some improvement in term of waste separation knowledge and availability of garbage truck that come to collect recyclable items once per week, which lead to the formation of recycling habits.

Based on the extensive review within the literature, although past experience has been examined in ecological behavioural research, the operationalization of this variable was manifold or either it was not been investigated simultaneously with other variables such as attitudes and social norms as the antecedents for green behaviour (Carrus, Passafaro, & Bonnes, 2008). Phipps *et al.* (2013) have found that although the past experience may be the most vital factor to influence green purchasing behaviour, it appeared to be one of the least researched areas among others. Johnstone and Hooper (2016) advocated that government initiatives will drive green consumption behaviour among consumers. For instance, individuals have reduced smoking at home when the government set a regulation that forbid smoking in public areas (Nyborg, 2003). Therefore, it is anticipated that government initiative which promotes household wastes recycling among the citizens will trigger green purchasing behaviour among the consumers. Therefore, the hypothesis is suggested below:

H3: Recycling participation significant positively predict green purchasing behaviour.

Based on the extensive literature reviews, the conceptual model is proposed as below:

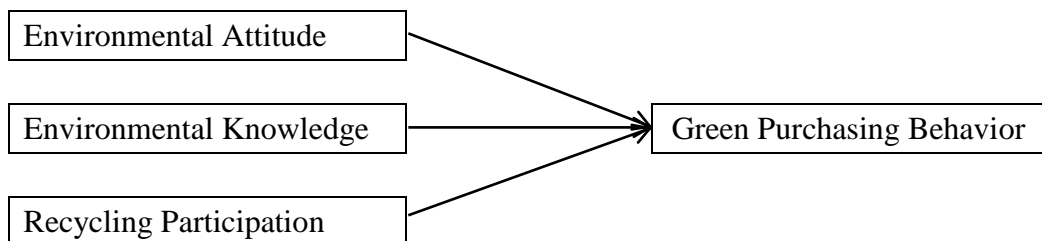


Figure 1: Conceptual model

CONCLUSION

Although environmental attitude, environmental knowledge, and recycling participation are proven to be an important driver that may predict green purchasing behaviour, there are scant empirical researches that investigated these factors concurrently to predict green purchasing behaviour. Furthermore, there is no research has been found to focus on recycling participation in the aspect of waste segregation to predict green purchasing behaviour. The inconsistency results among

environmental attitude, environmental knowledge, and green purchasing behaviour are necessary to be further explored. Further empirical research is urged to validate and prove the influence of these factors on green purchasing behaviour. In conclusion, this paper argued that internal factors such as environmental attitude, environmental knowledge, and recycling participation in the aspect of waste segregation are important determinants than external factors to influence green purchasing behaviour. If the waste segregation rules are strictly and continuously enforced by the government, it will be a good tactic to increase the awareness of the citizens in Malaysia about the importance of forming the good habits of segregate the wastes that subsequently bring about behaviour change to adopt green purchases.

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