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# **EXPLORING GREEN PACKAGING ACCEPTANCE IN FAST MOVING** CONSUMER GOODS IN EMERGING ECONOMY: THE CASE OF MALAYSIA

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ABSTRACT. Background: Green packaging plays an important role to reduce environmental wastes and protect the environments which aligned with the Sustainable Development Goals (SDG). However, the lack of environmental awareness, inconvenience of support, cost, and lack of government enforcement is the most frequently cited reasons for discouraging green packaging usage. This study aims to establish a model to understand the motivational drivers of green packaging acceptance from the lens of the Theory of Consumption Value.

Methods: Data from self-administered questionnaire were obtained for this qualitative study to address the affirmation hypotheses. A total of 426 questionnaires were distributed among the shopping centres consumer's in Klang Valley, Malaysia. Each individual was approached at the major shopping centers where the green packaging was in practice. The researchers employed a partial least squares-structural equation modeling (PLS-SEM) approach using the SmartPLS 3 package to analyze the data.

**Results:** Findings from this study indicated that three values have a significant impact on consumer's green packaging acceptance which is emotional, functional, and social value while conditional and epistemic have no statistical impact on consumer's green packaging acceptance.

Conclusion: These research findings contribute to the growing body of knowledge on the drivers that motivate consumers to shift from traditional packaging to green packaging and subsequently contributing to long-term urban sustainability and quality of life predominantly in the emerging economy. Future researcher should be taken forward by undertaking further studies which include longitudinal and comparative studies of consumer acceptance towards green packaging in both developed and developing countries..

Key words: green packaging, sustainability, acceptance, environmental, consumption value.

#### **INTRODUCTION**

Green packaging is recognized - 25 a sustainable wrapper to package the goods which have a very low negative effect on both environment and energy consumption. Green packaging is not only eco-friendly in nature, nonetheless, it includes sustainable materials that are produced from the environmentally aware method by energy-efficient phases [Auliandri, et al., 2018]. Green packaging is made from materials that can be broken down hydrogen, into oxygen, and carbon [Dharmadhikari, 2012]. The products in the market are mostly come with packaging to ensure the product are in a safe condition as well as for marketing purpose. For instance, green packaging brings favourable feeling to green consumers which create loyalty and confidence for customers to consume the products [Rajendran et al., 2019]. Recently, regarding there is strong awareness sustainability packaging globally [Singh and

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Pandey, 2018]. This is because, nonenvironmentally friendly products had created serious issues of waste pollution worldwide bring negative impacts to humans and the environment [Kristensson et al., 2017; Siracusa & Rosa, 2018]. Thus, sustainable packaging is important for people's health, waste disposal, energy consumption, resources, environment [Wang & Zhou, 2015].

Thus, green packaging had successfully caught attention to be eco-friendlier and sustainable. The market of green packaging worldwide is expected to provide significant growth in the coming years through strong policies and regulatory enforcement by the government. A few initiatives have taken place which includes bio-plastics as a raw material to eliminate waste and pollution [Groh et al., 2019], no more petroleum and oil products require for future packaging which is completely biodegradable that able to reduce the environmental burden of carbon footprint [Guillard et al., 2018]. Green packaging is industries crucial in most including pharmaceutical, personal body care, and Fast-Moving Consuming Goods (FMCG) [Ma et al., 2020]. Several reasons to handpicked green carbon packaging comprising footprint reduction, easy disposal. biodegradable, flexible and versatile, secure and improve the image of the brand, save cost, ability to recycle, reuse and reduce, customer base expansion, cost reduction and eliminate plastic usage [Moustafa et al., 2019; Nguyen et al., 2020].

All countries are implementing the 2030 Agenda for Sustainable Development which was adopted in 2015 by United Nations Member States to provide harmony and peace. Green packaging associated with Goal 9: Industry, Innovation, and Infrastructure which much related to packaging innovations and improvements, Goal 12: Responsible Production and Consumption focusing on encouragement to the organization and individual to utilize sustainable packaging and Goal 14: Life Below Water concerned on waste management to reduce and prevent marine pollution [UNDP, 2015]. Asian countries including Malaysia, Singapore, Thailand, India, Korea, Japan, and China are

practicing green concepts by launching their scheme of eco-labelling connected to the material of non-toxic plastic packaging, hazardous metal-free electrical, agricultural and degradable products [Wong & Yazdanifard, 2015]. According to Martinho et al. [2015], the majority of the respondents are willing to pay more than the usual price for sustainable fast food packaging.

Malaysia government also apply a holistic approach of AFFIRM comprising of Awareness, Faculty, Finance, Infrastructure, Research, and development as well as Marketing to acquire commitment from stakeholders (employees, customers, and accomplish Malaysia's government) to environment protection [Rajadurai et al., 2018; Osman et al., 2015]. Alike, Indonesia had emerged as one of the competitive markets in these areas by implementing campaigns such as practicing less usage of plastic packaging and focus more on green packages and green products [Auliandri, et al., 2018; Rajendran & Wahab, 2017]. It is proof that acceptance among Asian consumers towards sustainable packaging is high [Prakash & Pathak 2017]. Therefore, the objective of this study is to reaffirm factors that influence the acceptance of green packaging among Klang Valley's consumers in the emerging economy based on the theory of consumption values (TCV). In line with the commitment towards sustainable environment practices, factors that scrutinize green packaging acceptance could potentially benefit stakeholders within the Malaysian entrepreneurs and the retailing industry. Findings from this study would provide better thoughtful to practitioners on the factors affecting green packaging acceptance in general. It is an avenue for the practitioners to frame strategies to further advance these study findings towards better green packaging implementation within their organizations. As this research effort appears to be among a few to examine factors affecting green packaging from the lance of TCV in Klang Valley, Malaysia, it could enrich the green packaging literature and contributes to the overall body of knowledge.

Onwards, the next section starts with describing the underpinning research theory

that grounds the green packaging acceptance. Then, the paper continues by reviewing previous literature that is associated with green packaging and subsequently proposes a conceptual model, followed by the methodology employed for this study. Further, data analysis and findings were discussed and finally, a concluding remark is drawn which covers several research implications and necessary for future research initiatives.

# LITERATURE REVIEW

## Theory of Consumption Values

The theory of consumption values consists of social, emotional, functional, conditional, and epistemic value to explain the purchase intention or consumer decision. The values are the basic aspects of human beings' daily lives. This theory is concentrating on consumption values in three aspects, namely, the choice to accept or not accept the usage of green packaging products, the choice of using green packaging products, and the choice of using a specific brand of green packaging [Sheth et al., 1991]. There are numerous areas, such as sociology, economics, and user acceptance have contributed this theory to the values. This study is associated with consumer behaviour towards green packaging, hence, this theory seen able to engage consumer consumptionrelated value [Gonçalves et al., 2016; Biswas & Roy, 2015a]. User's acceptance may be affected by any of the five consumption values. Thus, this theory serves as the foremost factor representing consumer acceptance of green packaging.

# **Hypotheses Development**

Functional value in the context of this study relates to the disintegration, reusable or recyclability, size of the packaging, and packaging simplification that highly triggering customer's decision making. The right size of green packages that enable generating benefits such as space utilization, costs reduction, and able to improve the overall supply chain efficiency will eventually attract consumer's attention [Wilson, et al., 2017; Rundh, 2016]. Consumers are not favored to pay a higher price on green packaging since quality, durability, and reliability are the main focus in product decision and selection making [Barber et al., 2014; Lin & Huang, 2012]. The quality of green packaging must be good which includes non-radiation, ecologically friendly, and non-toxic material at a reasonable price [Huang, 2017]. Moreover, green packaging with an artistic design able to attract customer's interest [Biswas & Roy, 2015b; McCarthy & Liu, 2017]. Considering the preceding discussion, the below hypotheses is derived:

# H1: Functional value has a positive influence on green packaging acceptance.

Social value is associated with the improvement of self-image which brings impacts on consumer behaviour on green packaging [Gonçalves et al., 2016]. Social value in green packaging refers to aspects that included personal convenience, moral norms, self-image, and social pressures [Sun et al., 2019; Gilli et al., 2018]. A sense of responsibility, social awareness, and motivation towards the green environment will trigger consumer's actions towards green packaging buying behaviour [Czajkowski et al., 2015; Paul et al., 2016]. Additionally, individual lifestyle or influences from family, friends, society, and the government will eventually influence the eco-friendly packaging decision towards sustainable environment practices [Mamun, et al., 2018; Hao et al., 2019]. Alike, according to Joshi & Rahman [2015], environmental awareness and green environment knowledge will highly influence the eco-friendly packaging products buying decision. Given the above thoughtful, the following hypotheses are postulated:

# H2: Social value has a positive influence on green packaging acceptance.

Emotional value related to the consumer's feeling grounded on their self-experiences and emotion that leads to green purchasing intention [Kato & Tsuda, 2017]. Consumer's intention to purchase green packaging is precisely related to positive, negative, or mixed feelings. For instance, customers with positive emotions will trigger high acceptance of green packaging products due to their responsibility

and trust to protect the environment [Xie et al., 2015; Asshidin et al., 2016]. Contrarily, negative emotion implies other-condemning emotions consists of inappropriate and immoral feeling such as guilt, disgust, anger, and contempt that affects purchasing decision [Liang et al., 2019]. Customers prefer products that composition, production, and packaging which bind to each other. Thus, some nondegradable products will trigger negative emotions to green consumer's which include prices [Mamun et al., higher 2018]. Researchers have noticed that attractive packaging, informative and user-friendly green packaging will influence consumer's green packaging acceptance [Sijtsema et al., 2016]. Subsequently, the underneath hypothesis is derived:

# H3: Emotional value has a positive influence on green packaging acceptance.

The epistemic value was well-defined as the perceived value derived from services or products that enable to stimulate the interest. provide uniqueness, or fascinate a desire consumer knowledge [Gonçalves et al., 2016]. Knowledge is a vital element that enables the stimulus of consumer choice towards new products or services [Majid et al., 2018]. Consumers with high epistemic value tend to seek more innovative products which will make a significant impact on the purchase decision such as green packaging (Barnes, 2016). Alike, consumer's lifestyles are varied with different information, perception, and personal values perceived [Olaisen & Revang, 2017]. Biswas & Roy [2015a] affirm that consumers are more likely to purchase green packaging items with sufficient environmental information such as certifications, eco-labels, and extensive insight regarding its impacts. Knowledge and innovation work simultaneously generate effective to acceptance of green packaging. The higher the concern and information related to ecological packaging, the higher possibility for consumers to purchase green packaging items [Joshi & Rahman, 2015]. Hence, the following hypotheses are posited.

*H4: Epistemic value has a positive influence on green packaging acceptance.* 

Conditional value is denoted as a situational and circumstances capability that enables to influence the acceptance of the decisionmaker. [Lin & Huang, 2012]. A study by Gonçalves et al. [2016] confirms that there is a positive impact on green packaging product behaviour when there is a clear indication of the importance of the need to protect the environment through sustainable packaging [Ali, 2017]. Similarly, Biswas & Roy [2015b] in their study highlight the negative impact of not opt the green packaging. Consequently, to support green purchasing, the Indian government continuously encouraged green innovation and investment to mitigate the pressure on the environment [Van Leeuwen & Mohnen, 2017]. Likewise, the Malaysian government is actively encouraging consumers to support environmentally friendly packaging products through the execution of green subsidy and policy which includes the Green Government Procurement initiatives [Ahmad al., 2016; Mohamed et al., 2015]. et Conditional value is concerning with the awareness of utility that a service or product able to deliver to the decision-maker [Gadenne et al., 2011]. The different situations will influence the purchasing behaviour and decision of consumers differently. Lin & Huang [2012] mentioned in their study that conditional value will affect the behaviour of green customers. Considering these conditions, this study posited the following hypothesis:

# H5: Conditional value has a positive influence on green packaging acceptance.

The proposed framework provides a more precise and transparent explanation of the earlier discussion as illustrated in Figure 1.



Fig. 1. Theoretical framework

### METHODOLOGY

#### **Respondents and Procedure**

Data from the self-administered questionnaire were obtained for this qualitative study to address the affirmation hypotheses. A total of 426 questionnaires were distributed among the shopping centres consumer's in Klang Valley, Malaysia. Each individual was approached at the major shopping centers where the green packaging was in practice. Data were collected between May to August 2020. A total of 253 questionnaires were collected yielding a 59.39% valid response rate. According to Krejcie and Morgan [1970], 384 would be the minimum sample size required when the target population is more than 1 million. However, the minimum sample size of 92 is adequate based on the G\*Power 3.1 statistical analysis [Faul et al., 2009]. Therefore, the 253 sample size is adequate as it in line with good practices.

### Variable Measurement

The questionnaire consists of three mains sections. Section A inquired about the respondent's demographic information and some basic information about green packaging. Next, Section B covers the acceptance of green packaging with seven items adapted from Lin and Huang [2012]. Finally, Section C discovered the consumption values adopted from Suki (2016) comprised of functional value (7 items), social value (7 items), emotional value (6 items), conditional value (6 items), and epistemic value (4 items). All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to (5 strongly agree).

## **Statistical Techniques**

The researchers employed a partial least squares-structural equation modeling (PLS-SEM) approach using the SmartPLS 3 package to analyze the data. This software is appropriate in analyzing the non-parametric data, consider a robust software in evaluating the structural models [Aramburu and Pescador, 2019], and able to accept small sample sizes [Hair et al., 2018]. Following Anderson and Gerbing [1988], data for this study were analyzed in two stages. First the assessment of the measurement model, and secondly the assessment of the structural model.

# FINDINGS AND DISCUSSIONS

### Demographics profile of respondents

As shown in Table 1, a total of 174 respondents were female, and 79 were male. The majority of respondents were aged 19 to 35 years old (62.1%) and 36 to 49 years old (27.7%). Respondents aged less than 18 years old and more than 50 years old formed minorities in this study. It is a slightly equal distribution in terms of the respondent's race. In the aspect of salary, the majority of the respondents (85%) earned a monthly salary below RM 4,000 (roughly USD 960) and the rest earned RM4,000 and above. They are mainly worked in the private sector (80.6%) while 19.4% worked in the public sector.

Table 1. Respondents profile information

Demographics	Descriptions	Frequency	Percentage
Gender	Male	79	31.2
	Female	174	68.8
Age	< 18 years old	25	9.9
•	19-35 years	157	62.1
	old		
	36-49 years	70	27.7
	old		
	> 50 years old	1	0.4
Race	Malay	72	28.5
	Chinese	80	31.6
	Indian	98	38.7
	Others	3	1.2
Monthly Income	< RM 2500	11	4.3
-	RM 2501 -	98	38.7
	RM 3000		
	RM 3001 -	106	41.9
	RM 4000		
	> RM 4001	38	15.0
Occupation	Government	49	19.4
•	Private	204	80.6

Figure 2 demonstrated the green packaging decision making by the respondents. The majority of the respondent is in the position of the green packaging decision making (63.6%). Most of the respondents decided to use green

packaging two to three times a week (46.6%) and less than one time a week. This might be due to work constraints. Others will decide to

use green packaging more than four times a week.



Fig. 2. Purchasing decision and green packaging usage (in numbers)

#### Measurement model test

Table 2 present the reliability and validity of all constructs. The result reveals that epistemic value presents the higher average variance extracted (AVE) value (0.780). The result indicates that the construct reliability and validity is achieved as recommended by Hair et al. [2017]. Similarly, all of the constructs have AVE and CR values of above 0.5 and 0.7 respectively. The higher composite reliability (CR) is achieved by social value (0.957) and the higher Cronbach's alpha value was also for social value (0.947). Hence, this indicates that the constructs are measuring what they are supposed to measure, and the set of items is consistent with what it intends to measure [Hair et al., 2017]. The factor loading value for all constructs was above 0.60 which indicated that the construct reliability of this study was attained (Figure 3).

Constructs and Items	Code	Factor Loadings	AVE	CR
Functional Value (FunV)		0.933	0.712	0.945
The green packaging has				
reasonably priced.	FunV1	0.859		
economically priced.	FunV2	0.852		
acceptable standard of quality.	FunV3	0.825		
good quality.	FunV4	0.845		
consistency in quality.	FunV5	0.852		
comfortability to practice.	FunV6	0.838		
reliability to practice.	FunV7	0.836		
Social Value (SocV)		0.947	0.760	0.957
Using green packaging would help me to feel acceptable.	SocV1	0.821		
Using green packaging would give its owner social approval.	SocV2	0.874		
Using green packaging would make a good impression on me.	SocV3	0.873		
Advice from family and friends are crucial to use green packaging.	SocV4	0.892		
People's surroundings can motivate individuals to use green packaging.	SocV5	0.895		
Trustable news from social media will motivate me to use green packaging.	SocV6	0.870		
The current trend of society will influence me to use green packaging.	SocV7	0.875		

Table 2. Construct reliability and validity

Constructs and Items	Code	Factor Loadings	AVE	CR
Emotional Value (EmoV)		0.923	0.722	0.940
Using green packaging instead of traditional packaging would				
feel like contributing to the environment.	EmoV1	0.858		
feel like a better person.	EmoV3	0.879		
feel like preserving the planet.	EmoV4	0.853		
feel positive.	EmoV5	0.827		
feel energetic.	EmoV6	0.833		
change how people judge.	EmoV7	0.848		
Epistemic Value (EpiV)		0.906	0.780	0.934
I prefer using green packaging when there is				
new design attracts my attention.	EpiV3	0.871		
new and creative innovation.	EpiV5	0.862		
desire for knowledge.	EpiV6	0.898		
new experience.	EpiV7	0.899		
Conditional Value (ConV)	•	0.915	0.703	0.934
I will use green packaging when there is				
subsidy by the government.	ConV1	0.726		
availability in the market.	ConV2	0.876		
reduction of environmental issues.	ConV3	0.869		
high health precaution.	ConV5	0.879		
good functionality.	ConV6	0.783		
good characteristics.	ConV7	0.886		
Green Packaging Acceptance (GPA)		0.932	0.711	0.945
I am aware that environmentally friendly packaged products are available in the market.	GPA1	0.856		
I am more likely to buy green products that are packaged in an eco-friendly manner and made easy for recycling or composting	GPA2	0.864		
I am willing to pay more to buy green packaged products to save the	GPA3	0.854		
Lalways purchase a green product in my daily shopping	GPA4	0.855		
I acknowledge different brands offering green products	GPA5	0.855		
I will switch to a different product if it is eco-friendly	GPA6	0.862		
I am aware of the benefit of green products on the environment and human	GPA7	0.002		
health.	01717	0.823		



#### **Discriminant analysis**

The discriminant validity of the measurement model was then assessed by using the Heterotrait-Monotrait Ratio (HTMT) technique. The maximum HTMT values are well below the threshold of 0.9 [Henseler et al., 2015]. Table 3 details all the values which fulfil the criterion of HTMT. HTMT values of <0.90 denote that the true correlation between two constructs should differ, and this indicates that the discriminant validity is observed

within the measurement model, signifying an acceptable level of discriminant validity. The square root of AVE for each latent construct higher than the correlations of any other latent constructs. Given that the VIF values are consistently below the value of 5, this, is also not an issue for multicollinearity [Hair et al., 2017]. These results infer that discriminant validity has been ascertained. Besides, the result of HTMT inference also displays that the confidence interval does not portray a value of 1 on any of the constructs, which also confirms discriminant validity [Henseler et al. 2015].

Table 3. Discriminant validity

	CD (	a			- ···	a
	GPA	ConV	EmoV	EpiV	FunV	SocV
GPA	0.843					
ConV	0.760	0.839				
EmoV	0.819	0.805	0.850			
EpiV	0.755	0.842	0.774	0.883		
FunV	0.838	0.793	0.829	0.800	0.844	
SocV	0.798	0.791	0.814	0.791	0.810	0.872

Diagonal entries are the square root of the average variance extracted (italicized). Off-diagonal elements are correlations among constructs

#### Structural model test

Five direct hypotheses are developed between the constructs (Table 4). Based on the assessment of the path coefficient as an exhibit in Table 4, three relationships are found to have a t-value  $\geq 1.645$ , therefore, significant at 0.05 level of significance. Explicitly, the predictors of functional value ( $\beta = 0.376$ , p = 0.001), social value ( $\beta = 0.209$ , p = 0.015), and emotional value ( $\beta = 0.249$ , p = 0.037) are significantly influence consumers green packaging acceptance. Thus, H1, H2, and H3 are supported. However, epistemic value ( $\beta$  = 0.053, p = 0.255) and conditional value ( $\beta$  = 0.057, p = 0.293) have no statistical impact on consumer's green packaging acceptance. Hence, H4 and H5 are rejected. The R2 values of 0.767 are above the 0.75 value as suggested by Hair et al. [2017] which indicates a substantial model. Since the correlation figures are below 0.7, the constructs are discriminant from each other, and common method bias is not a severe concern in this study [Bagozzi et al., 1991]. Figure 4 shows the results of the empirical analysis of the research model.

Table 4. Discriminant validity

	Relationship	β	SE	t-value	p-value	Decision
H1	$FunV \rightarrow GPA$	0.376	0.122	3.132	0.001	Supported
H2	$SocV \rightarrow GPA$	0.209	0.090	2.173	0.015	Supported
H3	$EmoV \rightarrow GPA$	0.249	0.151	1.784	0.037	Supported
H4	$EpiV \rightarrow GPA$	0.053	0.071	0.659	0.255	Not supported
H5	$ConV \rightarrow GPA$	0.057	0.087	0.546	0.293	Not supported
Note: 3	*p < 0.05					

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Fig. 4. Results of the structural equation model

# DISCUSSION

This study determines the five values to be the predictors of green packaging acceptance through the lens of TCV. The PLS-SEM analysis revealed that, out of five values, three values are proven and accepted to have a direct effect on green packaging acceptance. The finding for the first hypotheses which is functional value is consistent with Wilson et al. [2017], Rundh (2016), and Lin and Huang [2012] and therefore, supported H1. These findings show that consumers valued the functionality of the green packaging particularly in terms of its disintegration, reusable or recyclability, size, and simplicity. Additionally, cost, quality, and design factors likewise capable to fascinate consumer's attention to opting for green packaging. This study result reprises the findings from Biswas and Roy [2015b], McCarthy and Liu [2017], and Huang [2017] that the functional value affects and influences consumer's green packaging acceptance.

Furthermore, the empirical results showed that the second hypothesis results of this study support the acceptance of H2, which means the acceptance of green packaging among Klang Valley's consumers in the emerging economy was stimulus by social value. The result asserted that the acceptance of green packaging depends on personal convenience or environmental responsibility and social awareness. Alike, individual lifestyle or encouragement from family, friends, society, and the government will motivate the acceptance of green packaging. This is also consistent with preceding studies, for instance, Gonçalves et al. [2016], Sun et al. [2019], and Paul et al. [2016]. The influence from social media platforms which includes Facebook and Instagram are greatly influenced and prompts mindfulness and confidence among consumers to elect green packaging products in their daily life.

Additionally, the PLS-SEM analysis of the structural model concerning the influence of emotional value on green packaging acceptance was significant, hence supporting H3. It is also consistent with previous studies [Asshidin et al., 2016; Liang et al., 2019]. Consumers will be further enticed to embrace green packaging when user-friendly features are being embedded. Similarly, attractive and informative packaging will ultimately influence a consumer's decision choice. These results are concurred by the earlier studies which include Mamun et al. [2018] and Sijtsema et al. [2016]. Xie et al. [2015] acknowledged that deep feelings to protect the environment will raise the mindfulness and self-obligation among consumers to accept green packaging. The work from Kato and Tsuda [2017] enriched the importance to consumer's self-experiences upraise and emotions while opting for green packing towards a better green purchase experience. This will led to a rise in their trust and responsibility to protect the environment. These outcomes also coincided with those of previous literature, e.g., Asshidin et al. [2016], Sijtsema et al. [2016].

On the other hand, the result for epistemic value is contradictory with earlier studies, hereafter H4 was not supported. The insignificant outcomes inferred that the acceptance of green packaging required uniqueness and innovativeness to stimulate consumer's purchase decisions. This result contradicts with the earlier studies, e.g., Majid et al. [2018] and Barnes [2016]. Beforehand, scholars have witnessed that sufficient environmental information such as green certifications, eco-labels and extensive insight concerning green packaging has a significant impact on green packaging acceptance [Biswas & Roy, 2015a]. Hence, this study result enlightened that the lack of informative and less attractive packaging resulted in a weak connection between the epistemic values and

green packaging acceptance. Although the green concept is considered new to the Klang Valleys consumers in the emerging economy, the awareness of the environmental issues enables to facilitate consumers to shift their purchase decision towards green packaging products. As highlighted by Joshi & Rahman [2015], the information about ecological packaging must be made accessible through a variety of platforms to allow consumers to be more conscious of the importance of green packaging towards the environment.

Concerning the influence of conditional value on green packaging acceptance, this relationship was insignificant, thus H5 was not supported. The insignificant results in line with Biswas and Roy [2015b] findings whereby they indicated that consumers required strong evidence on the importance and implication to protect the environment through green packaging. Although the government continuously encouraged consumers to upkeep environmentally friendly packaging products, consumers still not aware due to lack of awareness and unpleasant packaging. Similarly, Gadenne et al. [2011] acclaimed that awareness will strongly affect the behaviour of green customers. Findings from this study validated that attractive packaging conditions delineated by entrepreneurs, retailing industry government including promotional and discounts, subsidy and monetary benefits would contribute to consumer's green packaging acceptance [Lin & Huang, 2012]. Besides, conditional value characteristics (i.e., quality of package materials based on durability, colour and shape) are also vital in the effort to enhance the acceptance of green packaging among Klang Valley's consumers [Rajendran et al., 2019].

# CONCLUSION AND DIRECTION FOR FUTURE RESEARCH

Findings from this study have vigorous implications for both scholars and practitioners as the association of TCV able to provides a unique influence on future decision-making among entrepreneurs and the retailing industry.

### Theoretical implication

From the perspective of theoretical viewpoint, the application of TCV and the findings of this research contribute to the growing body of literature which associate with the five consumption values and acceptance of green packaging, a topic that has not received considerable empirical attention. It is subsequently donated to the theory advancement relevant to sustainable practices. The empirical result from this study discloses how the five consumption values tie with green packaging acceptance. The findings presented in this study may help to advance a better thought, particularly in the emerging economy context. Wilson et al. [2017], Sun et al. [2019], and Rajenderan et al. [2017] in their study, proven functional, social, and emotional values as the essential facet that enables them to inspire a positive attitude concerning green packaging acceptance. Surprisingly, the epistemic and conditional value appears as not having any significant impact on consumer's packaging acceptance green which is considered new to the existing literature. Thus, sufficient environmental information and awareness on the importance to protect the environment must be made available by the relevant stakeholders [Rajendran et al., 2019]. Alike, according to Biswas & Roy [2015a], Gadenne et al. [2011], and Rajenderan et al. [2017], packaging must be informative, attractive, and always of high quality thus, stimulus consumer's decision choice. This study enlightens factors affecting green packaging acceptance, consequently extends the TVC framework. It delivers adequate clarification of the green packaging acceptance among Klang Valley's consumers in the emerging economy. Remarkably, this study broadens the mounting literature associated with green packaging and sustainable practices. It is favorable that this research framework can be replicated, extended, and used as a supporting article and act as a foundation for any related study of green packaging in a Malaysian perspective or even broader scope in different fields of studies.

### Practical implication

Meanwhile, from a practical standpoint, the findings proposed an active promotion of the need to opt for green packaging. The entrepreneurs and regulators need to promote the functional values of green packaging in their marketing activities towards encouraging consumers to keep aware of the importance of green packing particularly to protect the environment. With a basic model of five consumption values, it provides direction for managers to continue and start the execution of green packaging constructively. Functional aspects of cost, quality and practicality of the green packaging should be given a priority. Additionally, managers should be very sensitive to improve the epistemic and conditional values towards attracting more consumers to opt for green packaging to achieve long-term sustainable development and improve quality of life. Realizing the importance of green packaging to enhance sustainable development goals, practitioners may formulate strategies for improving the awareness of the importance of green packaging among consumers. It is hoped that this study able to offer insights for key players such as entrepreneurs, decision-makers, and regulators to understand the disposition of the current green practices within Klang Valley and re-think on leveraging their current marketing practices to boost sustainable practices and at the same time sustaining companies a competitive advantage.

## **Future research directions**

This study could be valuable hence, a future researcher should be taken forward by undertaking further studies which include longitudinal and comparative studies of consumer acceptance towards green packaging in both developed and developing countries. It is also important to analyse greater samples to attain better generalisability of findings. Taking COVID-19 as a serious pandemic issue, future research should consider running two groups of respondents offline and online to see the difference in data generalization. Moreover, this study is only focusing on five values based on the TCV, nevertheless, few other factors might influence consumer's

acceptance towards green packaging. Factors include convenience, reusability, and protective capability could be undertaken to assess the effect of moderating and mediating variables in the proposed research framework thus, increase the overall study explanatory power.

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