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## Impacts of Corporate Social Responsibility on the Links Between Green Marketing Awareness and Consumer Purchase Intentions

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### Abstract

This study examines the mediating roles of corporate social responsibility on the links between green marketing awareness and consumer purchase intentions. Data was analyzed using the partial least squares (PLS) approach for the analysis of structural equation models with SmartPLS computer program version 2.0. PLS results revealed that corporate social responsibility partially mediated the link between green marketing awareness and purchase intentions of the product. Consumers develop positive green marketing awareness based on the growing environmental knowledge. They were aware of the green marketing program of the retail store when they noticed that the store allocated specified space to sell eco-friendly products. Furthermore, the companies make their green marketing activities known to the publics by distributing eco-friendly fliers which helps to increase sales revenue, raise consumer awareness, and develop greater intention to purchase the products. The outcomes of the mediating effects of this study add a new momentum to the growing literature and preceding discoveries on consumer green marketing awareness, which is inadequately researched in the Malaysian setting.

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**Keywords:** Green marketing; awareness, corporate social responsibility; purchase intention

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## 1. Introduction

Green marketing is defined as “the effort by a company to design, promote, price and distribute products in a manner which promotes environmental protection” (Polonsky, 2011, p. 1311). Green marketing is part of the key movements in modern business sustainability though their primary concern has always been revenues and profits (Akenji, 2014; Maniatis, 2015; Yang et al., 2015). Companies focusing on the natural ecological balance in their entire operation are more environmentally friendly while maximizing profits, they reduce environmental pollution, conserve natural resources and protect the environment. They gain a unique competitive advantage and develop new markets as they improve their corporate image their reputation and their product image from the consumer perspective (Chen, 2008). Consumer green marketing awareness is materialized when customers have confidence in eco-label and eco-brand which influences their green product purchase behaviour (Norazah, 2013a, 2013b; Rahbar & Abdul Wahid, 2011).

Numerous studies have been conducted to establish the influence of consumer attitude towards green products and its impact on customer satisfaction in the Western countries but few studies of consumer green marketing awareness and purchase intention have been done in Asian countries, including Malaysia (Haytko & Matulich, 2008; Menichelli et al., 2014). Hence, this research aims to examine the mediating roles of corporate social responsibility on the links from green marketing awareness to consumer purchase intention. Research output on the existence of mediating effects would add a new impetus to the emergent literature and preceding studies on consumer green marketing awareness, which has been so far inadequately researched in the Malaysian setting.

Following this introduction, the ensuing section reviews the literature on green marketing awareness, purchase intention, and corporate social responsibility with the key hypotheses. Next, a clarification of the research method is presented. The subsequent section presents the data analysis, path analysis and hypotheses testing based on the development of structural equation models via the partial least square (PLS) approach. The final section is the discussion and conclusion of the research findings.

## 2. Literature review

Green marketing awareness is related to companies' understanding of their accountability for the quality of the environment while meeting customer needs, demands and satisfaction (Chan et al., 2012; Soonthonsmai, 2007). Scholars like Boztepe (2012), Haws et al. (2010), Kai et al. (2013), Maniatis (2015), Tseng and Hung (2013), Thøgersen et al. (2012), Yang et al. (2015) have investigated about customers' attitudes and behaviours concerning green consumerism. The key influencers of consumers' selection of a green product are green features of the product, and environmental awareness related to the particular product (Boztepe, 2012; Thøgersen et al., 2012). Consumers trust green labeling as an indicator of green features in the product that they otherwise might have known through some research and study (Thøgersen et al., 2012).

Prior research like Wheeler et al. (2013) noted that rejection of 'green' brands is due to a lack of awareness where a 'green' message is not sufficient to influence the shoppers' consideration set. Moreover, Haws et al. (2010) identified five factors contributing to environmental consciousness while buying products - consciousness about impact of products on environment, considering impacts of personal actions on environment, linking purchase habits with environmental protection, concerned about waste, commitment to environmental protection, and willing to be inconvenienced for taking environment friendly actions.

Green purchase intention is related to an individual's inclination to buy and use products with eco-friendly features when purchase considerations are based on the product features and source country of the product (Nik Abdul Rashid, 2009). Indeed, green product quality such as clear product ingredients information, eco-labeling, product appearance, and general assurance of user friendliness affected consumer green purchase decision making (Maniatis, 2015; Tseng & Hung, 2013). Producers position the environmental benefits of green products in consumers' minds to evoke their purchasing decision (Rex & Baumann, 2007, p. 567). Consumers tend to mix their green knowledge and attitudes with green brand awareness while choosing a green product (Matthes et al., 2013; Zhao et al., 2014).

Corporate social responsibility (CSR) is in a “pre-paradigmatic phase where there is scant agreement on definitions and terms and no consensus has been reached about what it includes and does not include in its boundaries” (Googins et al., 2007, p. 29). Companies which participate in ecologically sound activities provide social value to customers and stakeholders and project an image that they are responsive to the environment while operating business transactions (Lingreen et al., 2009; Susniene & Sargunas, 2009). CSR positively impacts product image, quality attributes, corporate image, and consumer purchase intention (Ko et al., 2008; Lee et al., 2010).

In accordance to the above reasoning, the following hypotheses are posited.

H1: Green marketing awareness has positive impact on consumer purchase intention.

H2: Green marketing awareness has positive impact on corporate social responsibility.

H3: Corporate social responsibility has positive impact on consumer purchase intention.

H4: Corporate social responsibility mediates the links between green marketing awareness and consumer purchase intention.

### 3. Methodology

Respondents were engaged from the public who practiced a green lifestyle with green products purchasing experience such as buying organic vegetables at least once a week in the Federal Territory of Labuan, Malaysia by utilizing a convenience sampling method. The questionnaires were distributed to 250 respondents in January 2014 over a period of two weeks. There is 83% response rate with 200 questionnaires were found to be usable and valid for the data analysis. The questionnaires were designed into three sections. Section A presented socio-demographic questions. Section B of the questionnaire raised questions on the consumers' experience of green marketing. Section C confined questions on consumers' perception of green marketing. Five items emphasized green marketing awareness and were adapted from Kim (2002), four items of corporate social responsibility, and three items of purchase intention were jointly borrowed from Ko et al. (2008) and Winter (1986). These items were measured on a five-point Likert scale, stretching from 1 (strongly disagree) to 5 (strongly agree). Data was analyzed using the partial least squares (PLS) method, which is a variance-based technique for the analysis of structural equation models via SmartPLS computer program version 2.0.

### 4. Data analysis

Detailed socio-demographic characteristics of the respondents are offered in Table 1. A total of 200 respondents were included in the sample. Respondents comprised 53 percent females and 47 percent males. Greater than three-quarters of the respondents were 21 years old and above. The respondents' highest level of education completed varied, with 7 percent having a high school certificate, 33 percent a college degree, 10 percent a diploma, 32 percent a university graduate degree, and 18 a university postgraduate degree. The responses revealed a high level of polarization regarding occupation distribution (i.e., the majority of responses were received from students, followed by professionals). Almost 36% of the respondents were earning more than Ringgit Malaysia 2,501 per month. The highest frequency of retail store visits per month was 3 times (29 percent), while only 18 percent the visited more than 5 times. Almost 85 percent of the respondents consumed green items less than 10 times per month, 10 percent 11-15 times a month and 5 percent 16 times and above. Only 6 percent spent RM501 and above.

#### 4.1. Partial least squares

PLS was performed through two stages of data analysis, the measurement and structural models. Assessments of the internal consistency, convergent validity, and discriminant validity of the construct measures was examined at the measurement model stage. Results are presented in Table 2.

Table 1. Socio-demographic profile of respondents

Variable	Frequency	Percentage	Variable	Frequency	Percentage
<i>Gender</i>					
Male	94	47.0	<i>Frequency of retail stores visit per month</i>		
Female	106	53.0	1 times	33	16.5
<i>Age (years old)</i>					
16-20	23	11.5	2 times	45	22.5
21-25	93	46.5	3 times	57	28.5
26-30	50	25.0	4 times	29	14.5
31-35	19	9.5	> 5 times	36	18.0
> 36	15	7.5	<i>Monthly expenditure in retail stores</i>		
<i>Occupation</i>					
Students	115	57.5	< RM100	51	25.5
Professional	56	28.0	RM101-RM250	90	45.0
Retired	4	2.0	RM251-RM500	48	24.0
Lecturer	25	12.5	RM501-RM750	9	4.5
<i>Education level</i>					
SPM	14	7.0	> RM751	2	1.0
STPM/Matriculation	67	33.5	<i>Experiences in green consumption per month</i>		
Diploma	20	10.0	1-5 times	84	42.0
Degree	64	32.0	6-10 times	85	42.5
Master	35	17.5	11-15 times	20	10.0
<i>Monthly income</i>					
< RM2000	113	56.5	16-20 times	10	5.0
RM2001-RM2500	16	8.0	> 21 times	1	0.5
RM2501-RM3000	32	16.0			
RM3001-RM3500	7	3.5			
> RM3501	32	16.0			

Table 2. Reliability and validity analysis

Factors	Items	Standardized Loadings	Cronbach's alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Green Marketing Awareness	AWA1	0.797	0.843	0.889	0.614
	AWA2	0.765			
	AWA3	0.783			
	AWA4	0.776			
	AWA5	0.799			
Corporate Social Responsibility	RES1	0.785	0.788	0.862	0.610
	RES2	0.759			
	RES3	0.807			
	RES4	0.773			
Purchase Intentions	INT1	0.772	0.782	0.873	0.698
	INT2	0.883			
	INT3	0.847			

#### 4.2. Reliability and validity analysis

Reliability of the measurement items was inspected using Cronbach's alpha and composite reliability whereby results for all constructs exceeded the threshold value of 0.70 (see Table 2), indicating strong reliability among the measures. Besides, the convergent validity is achieved when the AVE values are above 0.50 set by Fornell and Larcker (1981). All shared variances between factors were below the square root of the individual factors AVE, endorsing adequate discriminant validity.

### 4.3. Structural model

Based on the path coefficients of the PLS approach, with all direct relationships were supported, it point towards a comprehensive model specification. The explanatory power ( $R^2$ ) of the predictor construct (i.e. purchase intention) is 33 percent (see Table 3). Consumer awareness of green marketing had a significant and positive relationship with purchase intention ( $\beta_1=0.203$ ) and corporate social responsibility ( $\beta_2=0.573$ ). Thus, H1 and H2 were supported. Likewise, corporate social responsibility had a significant and positive association on purchase intention ( $\beta_3=0.153$ ), meaning that H3 was also retained. Next, corporate social responsibility partially mediates the relationship between consumer awareness of green marketing and retail purchase intentions of the product, implying that H4 was sustained, as estimated. The variance accounted for (VAF) value was calculated in order to estimate the ratio of the indirect effect to the total effect. In this research model, the VAF value indicates that 50.5% of the total effect (i.e. consumer awareness of green marketing on retail purchase intentions of the product) is explained by the indirect effect (i.e. corporate social responsibility).

Table 3. Statistical results of the structural model

Hypothesized Paths	$\beta$	t-value	$R^2$	Results
<i>Direct Effects</i>				
Green Marketing Awareness $\rightarrow$ Purchase Intention	0.203	2.991*	0.328	H1 Supported
Green Marketing Awareness $\rightarrow$ Corporate Social Responsibility	0.573	8.229*		H2 Supported
Corporate Social Responsibility $\rightarrow$ Purchase Intention	0.153	2.414*		H3 Supported
<i>Mediation Effects</i>				
Green Marketing Awareness $\rightarrow$ Corporate Social Responsibility $\rightarrow$ Purchase Intention		2.328*		H4 Partially Supported

Note: \* Statistically significant at  $p < 0.05$  (for t-value  $> 1.960$ )

## 5. Discussion and conclusion

PLS results discovered that corporate social responsibility partially mediated the effect of green marketing awareness on consumer purchase intentions of the retail product. Research by Dinnie et al. (2006), Hartmann and Ibañez (2006), Norazah (2013a, 2013b) have highlighted that consumers develop positive green marketing awareness based on the growing environmental knowledge. They were aware of the green marketing program of the retail store when they noticed that the store allocated specified space to sell eco-friendly products. Marketing managers should optimize the budget allocation for resources in corporate social responsibility activities, consumerism, and community relations programs and engage in voluntary programs for positive return on investment through increased business profitability and long run business sustainability (Shim, 2009). The company could receive greater prominence and experience high media publicity from consumer viewpoints with high attention given for being socially responsive. They need to show that their business operations are in line with the rules and regulations of government environmental standards and other related bodies (Smith & Perks, 2012). Opportunities exist to further advance this research by examining the effect of moderating variables, like demographics and culture.

## Appendix A: Measurement of instruments

### Green Marketing Awareness

- This store distributes eco-friendly published fliers.
- This store deals with clothing products with green labels.
- There is eco-friendly shopping space in this store.
- This store increases sales of brands of eco-friendly products
- This store operates eco-shops to sell eco-friendly products

### Corporate Social Responsibility

- This company contributes to the development of the community.
- This company endeavors to protect the environment.
- This company has ethical business management.
- This company contributes to national development.

### Purchase Intentions

- Above all, I am willing to buy a product at this store if quality and price are similar with other stores.
- I would recommend a product of this store to other people.
- I would continue to shop at this store rather than competing stores.

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