

A Proposed Model of the Impact of Green Image on Green Loyalty: Application on Natural Cosmetics in Egypt

Doaa Ayoub¹ and Madiha Metawie²

**¹Faculty of Business Administration, Economics
and Political Science, British University in Egypt**

Doaa.Ayoub@bue.edu.eg

**²Business Department, Faculty of Business, Ain
Shams University, Egypt, Faculty of Business
Administration, Economics and Political Science,**

British University in Egypt,

Madiha.metawie@bue.edu.eg

ملخص البحث

الغرض من هذه الدراسة هو دراسته تأثير صورة العلامة التجارية الخضراء على الولاء الأخضر مع اختبار الثقة الخضراء والرضا الأخضر كمتغير وسيط وكيف تعمل الديموغرافيات على إعتدال هذه العلاقات. تهدف هذه الدراسة إلى دراسة خمسة قيم للرضا الأخضر: وظيفية ، وإقتصادية ، وعاطفية ، وإجتماعية ، وبيئية ، وفحص العلاقات بين الصورة الخضراء ، والثقة الخضراء ، والرضا الأخضر ، والولاء الأخضر ، والكلام الإيجابي الشفهي في الوقت الحاضر حيث تجذب القضايا البيئية إنتباه الأكاديميين والمهنيين حول العالم . تم جمع البيانات باستخدام استتمارة استقصاء عبر الإنترنت للعملاء الإناث لإختبار النموذج المقترح تجريبياً باستخدام أسئلة منظمة، وتم تطوير نموذج المعادلة الهيكلية لإختبار فرضيات البحث بعينة من ٢٨٤. تشير النتائج إلى ملاءمة النموذج المقترح. علاوة على ذلك ، تم دعم جميع فرضيات البحث إحصائياً ، باستثناء الإرتباط بين رضا العملاء والقيم الإقتصادية وبين رضا العملاء والقيمة البيئية.

الكلمات الرئيسية: التسويق الأخضر ، صورة العلامة التجارية الخضراء ، الولاء الأخضر ، الرضا الأخضر ، الثقة الخضراء ، الكلام الإيجابي ، قيم العملاء الخضراء ، مستحضرات التجميل الطبيعية ، التركيبة السكانية ومصر .

ABSTRACT

The purpose of this study is to test a proposed model of the impact of green brand image on green loyalty mediated by green trust and green satisfaction and how demographics moderates these relationships. This study aims to study five antecedents of green satisfaction: functional, economic, emotional, social and environmental and to examine the relationships between green image, green trust, green satisfaction, green loyalty and positive word of mouth. At present, environmental issues attract the attention of academics and professionals around the world. Data were collected using an online surveys of female customers to test the proposed model empirically using structured questions, and structural equation model was developed to test the research hypotheses with a sample of 284. The findings indicate the goodness of fit of the proposed model. Moreover, all the research hypotheses were statistically supported, except for the association between customer satisfaction and economic values and between customer satisfaction and environmental value.

Keywords: Green marketing, Green brand image, Green loyalty, Green satisfaction, Green trust, Positive Word of Mouth, Green Customer Values, Natural Cosmetics, Demographics and Egypt.

1. Introduction

Today's marketplace is increasingly attractive for marketers of green products. Customers are considering more the options of green products especially with the increase of environmental problems as global warming, air and water pollution and resources depletion (Jones, Hillier and Confort, 2014). The considerable attention to green products increased the number of environmentally friendly products and the sales of related brands (Borin, Lindsey and Krishnan, 2013; Chen, 2010; Lin, Lobo and Leckie, 2017a). Furthermore, this escalation changed the focus of both academics and organizations from the initial purchase to repeat purchases, through building strong and sustainable relationship between the consumer and the green brand. Many organizations have integrated environmental protection into their strategy to differentiate their offers and gain competitive advantage globally (Duffett et al., 2018). However, strong relationships between consumers and green brands are difficult to achieve due to the complexities of the specific "green" sector. As consumers find green products expensive to purchase where effort and time are consumed to evaluate and search for such products (Gleim et al., 2013).

Green marketing started in the early 1990s and the first phase was named ecological green marketing, in which all marketing activities focused on environment problems. The second phase was named environmental green marketing; in this phase, the marketing activities focused on clean technology that involved designing of innovative new products that take care of waste problems and pollution. The third phase was sustainable green marketing. This led to the term sustainable development (Polonsky, 1994).

Green marketing involves actions directed to all consumers, and it includes a broad range of marketing activities designed to achieve the company's objective in minimizing the environmental effect of its products and services (Groening, Sarkis and Zhu, 2018). Isaak (2002) and Peattie (1995) showed

that Green marketing is the whole process of marketing activities within the firm to reduce the environmental impact of products and services and their manufacturing processes in a way that is profitable to the firm. Furthermore, Pride and Ferrell (2008) consider that the objectives of green marketing could include eliminating waste, re-inventing the concept of product in order to become consistent with the environmental commitment and pricing products to reveal the real cost.

According to Kangis (1992), green marketing must be more than either a green way of marketing, or the marketing of so-called green products. Green involves the methods used and the product itself. Generally, cosmetics products are made of chemical ingredients such as synthetics components which improve the instant results on consumers' body. However, most of the chemical ingredients used in cosmetics products are toxic, which affects the health in the long run (Oishi, 2002). Recently, green cosmetics were invented, which is free from side-effects. In the context of the cosmetics industry, "green cosmetics" (sometimes called sustainable cosmetics) are referred as cosmetics products that are made from natural ingredients produced from renewable raw materials (Acme-Hardesty, 2019). The marketers of green cosmetics consider sustainable packaging that shows eco-label in each product design (Lin.,, 2018). In present day, using green cosmetics became a lifestyle of self-care and treating the environment with respect (Lin et al., 2018). Being driven by favourable demand many organizations are now producing and selling green cosmetics products (Green Choices, 2012).

Therefore, the green marketing needs considerable analysis and investigation. Still, research focusing on building and maintaining customer satisfaction, trust and loyalty towards green products remains limited.

The structure of this study is as follows. A literature review is discussed in section 2. Section 3 describes the research methodology, the sample, data collection, and the measurement of the constructs. Then, the reliability and validity of the

measurement, factor analysis, descriptive statistics, correlation coefficients between the constructs and the results of structural equation modeling (SEM) are shown in section 4. In the end, the conclusions, discussions about the findings, implications, research limitations, and possible directions for future research are discussed in section 5.

2. Literature Review

Green marketing

A new economic era has been developed by ecological conscience consumers as a result of the power the green consumers exert on business. Various competitive advantages and opportunities recognized by business (Johri, 1998) that arise from this ecological consuming approach, entering the word “green” in many of their activities. In parallel with the concept of Corporate Social Responsibility, the concept of “green marketing” has also been cultivated with sufficiently effective practices (Papadopoulos et al. ,2010).

Green marketing can be considered from three different perspectives; from the retail perspective it is the marketing of environmentally safe products and from the social perspective it the development and marketing of products which lessen the negative effect on the environment. The last one is the environmental perspective which shows the organizational efforts to produce, promote and package products which i responsive to the environmental concerns. (AMA, 2013). Likewise, Peattie (2001) and Leonidou, Katsikeas, and Morgan, (2013) described green marketing as marketing activities which are designed to accomplish the firm’s strategic and financial goals and attempt to reduce the negative social and environmental impacts of existing products and production systems and to promote less damaging products and services.

Companies seek competitive advantage as brand image and reputation through the production of green products (Chen, 2010). It is also defined as the full management process dealing

with customers and society environmental requirements in a sustainable and profitable approach (Peattie, 1995). Shil (2012) also defines it as the process of marketing products and/or services which are produced and/or packaged in an environmentally friendly way. Polonsky (2011) and Soonthonsmai, (2007) mentioned as well that an effective definition of green marketing must include transformative change that creates value and satisfaction for costumers, society and environment. In addition, Peattie and Crane (2005) suggested that “all labels including greener marketing, environmental marketing, sustainable marketing which represents progress towards sustainability” could be considered as green marketing. Bansal and Roth (2000), mentioned three reasons for a firm to go green; seeking competitive advantage, complying with legislation and social obligations.

The market tendency to support green products has driven a considerable increase in both the number of products promoted as environmentally friendly and the sales growth enjoyed by such brands (Borin, Lindsey and Krishnan,2013; Chen, 2010; Olsen, Slotengraaf and Chandukala,2014; Lin, Lobo and Leckie, 2017a). Even though various researches which explored the topics of satisfaction, trust and loyalty, these topics were not taken from a green marketing perspective (Chen, 2013; Martínez, 2015). Furthermore, Narula and Desore, (2016) noted the lack of researches indicating the factors which contribute to the purchase of green products.

Green Satisfaction

Customer satisfaction is defined as “a general feeling of pleasure or gratification experienced by a consumer arising from the ability of a product or service to satisfy the customers’ expectations, desires and needs” (Mai and Ness’s, 1999). Following this definition, Martínez, (2014) defined Green satisfaction as “a pleasure level of consumption-related fulfilment to satisfy customers’ environmental desires, sustainable expectations and green needs”.

Green Image

Brand image is the impression of consumers regarding a certain product or brand. Brand image is defined by Keller (1993) as established perceptions of a brand as reflected by brand associations in consumer's recall of brands. Based on the previous definition by Keller (1993), green overall image was defined by Chen (2010), as "a set of perceptions of a firm in a consumer's mind that is linked to environmental commitments and concerns". It has been found to produce some valuable outcomes, such as green trust, satisfaction and brand equity (Chen 2010), word-of-mouth intention and green competitive advantage (Wang et al., 2018). Andreassen and Lindestad (1998) stated that the overall image is believed to create a halo effect on customers' satisfaction judgment. Additionally, Nguyen and Leblanc (2002, p. 244) state that "a favourable image is a powerful tool to improve levels of satisfaction toward the company". Overall image and customer satisfaction are positively related (Chang and Tu, 2005). Therefore, the following hypothesis could be developed:

- H1. Green image positively influences green customer trust.
- H2. Green image positively influences green customer loyalty.
- H3. Green image positively influences green customer satisfaction.

Customer Green Values

Customers' consumption values contribute to all positive forms of behavioural outcomes, including customer satisfaction, trust and loyalty (Chang and Fong, 2010; Chen, 2013; Gallarza, Ruiz and Gil, 2016; Mohd Suki, 2017; Woo and Kim, 2019; Wu and Cheng, 2017).

The theory of consumption value developed by Sheth, Newman and Gross, (1991) has been instrumental in explaining the reasons why customers make the consumption choices they do. The theory of consumption has been applied to various contexts,

including green offers (Khan and Mohsin, 2017; Lin and Huang, 2012; Woo and Kim, 2019).

The theory views customer choice as a function of five distinctive consumption values that have different and independent inputs in any purchase situation. These consumption values are functional, conditional, social, emotional and epistemic (Sheth, Newman and Gross, 1991).

According to Sweeney and Soutar's (2001) PERVAL, a consumer's decision to use or purchase durable goods is subjected to four consumption values: functional, economic, social and emotional. The extant pro-environmental literature has often added an environmental value when investigating consumers' decisions to adopt eco-friendly offers (Biswas, 2017; Gordon et al., 2018; Khan and Mohsin, 2017; Koller, Floh and Zauner, 2011). Since this study focuses on natural cosmetics, adding the "environmental value" to the four conventional consumption values in the PERVAL provides a comprehensive insight into the drivers of green consumption (Gordon et al., 2018).

Functional value refers to the perceived utility of a product to achieve the core utilitarian or physical performances that result from a set of physical attributes (Lin and Huang, 2012). Ecological conscious consumers prefer products that are sustainable, environment friendly, organic in nature and made from natural ingredients without the use of animal testing (Norazah, 2013).

Economic value represents how satisfactory a product is, based on the monetary or non-monetary costs spent in acquiring it (Gordon et al., 2018). Given that eco-friendly offers are generally more expensive than their conventional. Customers are becoming more focused towards value, they are accepting eco-friendly products and are willing to pay even premium for sustainable green products (Tsay, 2009). Customers with little concern for the environment are most likely to have a weak perception of the price of environmental products and a high price sensitivity towards environmental products (Papista et al., 2018). Moreover, D'Souza et al., (2007) suggested that fair pricing and better

quality may significantly increase customer perceived value regarding green products and services.

Social value. This is described as the perceived social utility of a product to improve the consumer's social self-image and association with one or more specific social groups (Papista et al., 2018). The social value reflects the perceived net utility derived from the consumption of green products, based on the perception of social pressure or social prestige gained through engagement in eco-friendly consumption (Biswas and Roy, 2015). It results from the social approval of significant others, such as friends and family members, which improves the consumer's self-image (Sweeney and Soutar, 2001).

Emotional value refers to the perceived utility that consumers associate to stir up feelings or affective states (Mohd Suki, 2016). The consumption of eco-friendly products is frequently connected to customers' emotional responses whether positive or negative (Khan and Mohsin, 2017). Emotional values may show great enjoyable and experiential green purchase behaviour as it enhances the belief that environmental consumption may protect the environment in a longer term (Lin and Huang, 2012).

Environmental value denotes the consumer's expression of the value of environmental protection through the adoption and consumption of eco-friendly offers (Khan and Mohsin, 2017). Customers are more likely to adopt and purchase green products as their according to their concern and the value they attach to the environment protection increase (Kautish and Sharma, 2018; Khan and Mohsin, 2017). Many researches supported the strong contribution of environmental values in influencing eco-friendly consumption (Biswas, 2017; Gordon et al., 2018; Khan and Mohsin, 2017).

Previous studies have identified that customers' values affect their level of satisfaction with the specific green offer (El-Adly, 2019; Gallarza et al., 2016; Iyer, Davari and Mukherjee).

Based on the previous studies, this research identified that the five dimensions of consumer value positively influence customer

satisfaction toward natural cosmetic products. Thus, the following hypotheses are proposed:

- H4. Customer green values positively influences customer satisfaction towards natural cosmetics products.
- H4-1 Functional value positively influence customer satisfaction towards natural cosmetics products.
- H4-2 Economic value positively influences customer satisfaction towards natural cosmetics products.
- H4-3 Emotional value positively influences customer satisfaction towards natural cosmetics products.
- H4-4 Social value positively influences customer satisfaction towards natural cosmetics products.
- H4-5 Environmental value positively influences customer satisfaction towards natural cosmetics products.

Customer Loyalty

Chang and Fong (2010) and Wu (2017) identified customer loyalty as a commitment to repurchase eco-friendly products and a desire to recommend the product to others. Oliver, (1999) defined customer loyalty as a stronger commitment to a particular brand over its substitutes. Furthermore, Petrick (2004) confirmed that it is six times cheaper to keep existing consumers than to attract new ones. Satisfied consumers are likely to repeat a purchase, accept increase in price, and recommend the product to other consumers (Martínez, 2015; Gallarza et al., 2016; Mohd Suki, 2017). Many researches confirmed a linear relationship between satisfaction and loyalty (Mittal and Kamakura, 2001; Seiders et al., 2005).

Hence, the following hypothesis is proposed:

- H5. Green customer satisfaction positively influences green customer loyalty towards natural cosmetics products.

Green Trust

Chen , (2010) defines “Green trust is the willingness to depend on one object based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental performance”. Previous research indicates that there is a positive relationship between customer satisfaction and customer trust (Horppu et al., 2008). Furthermore, other studies showed that customer trust is positively influenced by image of companies (Flavián, Guinaliu and Torres, 2005). Therefore, if the image is perceived positively, the customers will show more confidence due to the feeling generated by the level of care the company shows about its environmental commitment.

Delgado and Munuera, (2005) recognizes that trust is crucial to develop and retain relationships with customers. Several studies confirm the direct and positive relationship between customer satisfaction and trust (Kim, Kim and Kim, 2009; Martínez and Rodríguez del Bosque, 2013). Furthermore, Chang and Fong (2010) and Chen (2013) argued that green trust and green satisfaction are antecedents of green loyalty, indicating that both of these significantly, positively influence green loyalty. Brown , Crosono and Tong, (2019) concluded the existence of a positive relationship between customer trust and customer loyalty. Also, customers who are satisfied with green products are likely to develop a higher level of trust (Wang et al., 2018). Thus, trust plays an important role in influencing loyalty.

H6. Green customer satisfaction has a positive impact on green customer trust.

H7: Green customer satisfaction has a positive impact on green customer loyalty.

Positive word of mouth

Ruane and Wallace, (2015) defines word-of-mouth (WOM) as the possibility of a customer making positive references to the company or brand to another potential customer or informal communication between individuals regarding the goods and services (Ruane and Wallace, 2015). Customers who spread

favorable WOM about a company or a brand can become the company's best salespeople (Kumar, Pozza and Ganesh, 2013); therefore, WOM was recognized as a powerful tool in increasing sales and attracting new customers (Popp and Woratschek, 2017). Moreover, (Martínez, (2015), Watson et al., (2015) have considered positive word of mouth (PWOM) as being a part of green customer loyalty. Similarly, Kordshouli et al., (2015); Wang et al., (2018) proved that customer satisfaction leads to positive word of mouth. Hence, the following hypotheses can be formulated:

H8. Green customer trust has a positive impact on PWOM.

H9. Green customer satisfaction has a positive impact on PWOM.

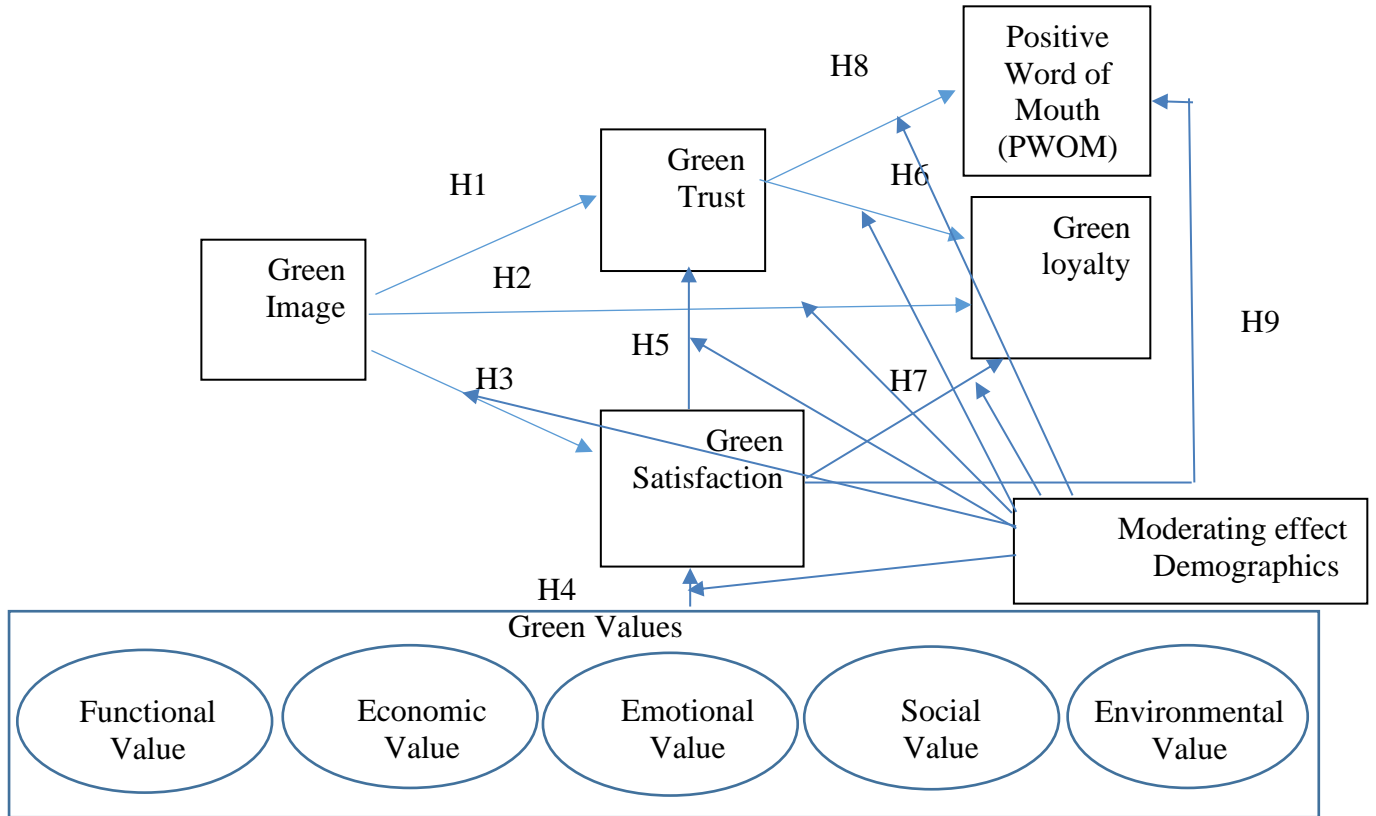
Demographic Variables

It is important to note that Gupta and Abbas, (2013), found that older and richer consumers do not have favourable attitudes towards green products. This highlights the importance of consumers' demographics in consumer behaviour towards green marketing. It has been found that the younger consumers are more concerned about the saving the environment. While on the other hand, Singhal and Malik, (2018), concluded that the attitude of female consumers towards green cosmetic product packaging are same irrespective of age, education and income level. Quoquab, Jaini and Mohammad, (2020) suggested that gender and income level could be used as moderators as consumers' backgrounds are different and might lead to different behaviour. Many studies analysed the effect of demographic characteristics such as gender, age, and education (Meyer, 2016; Rice, 2006) on pro-environmental behaviour.

Therefore, the following hypothesis is proposed:

H10. There is a significant difference in the strength of the relationships proposed in the model across the age and income variables.

Figure 1: Conceptual Framework and Hypothesis



The current study makes a theoretical contribution by proposing an integrated model that encompasses green image, green customer satisfaction, and customer trust as antecedents of green customer loyalty and PWOM and discovers how the structural relationships in the model differ according to the demographics of consumers. By addressing the gaps discussed above, this research makes important contributions to the green marketing perspective.

3. Research Methodology

Questionnaire and pre-test

To ensure clarity, a pilot study was conducted and the questionnaire was distributed to 30 individuals to seek feedback on the design. On the basis of this feedback, several minor changes were made and the final version was used to collect data. The study focused on natural cosmetics, which are an expanding niche market implementing green-product strategies in the cosmetics industry.

Sample and Data Collection

This study tests the hypotheses and research framework by means of questionnaire survey with an extensive literature review. The research object of this study is Egyptian female consumers who purchase natural cosmetics. The questionnaire was sent to the randomly selected consumers.

The required sample size was determined based on Hair et al.'s (1998) recommendation i.e. to have 10 times observation as the number of variables to be analysed. Accordingly, the required sample size for this study supposed to be $28 \times 10 = 280$. In total, 308 responses were received which exceeds the minimum required number of the responses. In total, 24 cases were deleted because of incomplete answers, which generated 284 usable responses to proceed for analysis, around 23.2 % are aged between 18 to 25 years, almost 9.2% between 26 to 35, 32.4 % between 36 to 45, 32.4 % between 46 and 55, and 2.8 % above 56 years. In terms of education, around 2.8% from high school, 54.2% earned a bachelor degree and 43 had a post graduate degree. In terms of Job level, around 18.3% were business person, 47.2% were employees, 31% were unemployed and 3.5% retired. In terms of income, almost 23.2% had income more than 5000 L.E, around 16.9% had income between 5000 and 10000, 13.4% had income from 10000 to 15000, around 8.5% had income from

15000 to 20000, around 12.7% had income from 20000 to 25000 and 25.4% had more than 25000. Finally, regarding the marital status 31% were single, 56.3% were married, 11.3% were divorced and 1.4% are widowed.

The Measurement of the Constructs

This study measures the questionnaire items by means of “five-point Likert scale from 1 to 5” rating from strongly disagreement to strongly agreement. To measure green overall image, five items based on the study by Cretu and Brodey (2007) were used. Five items based on Chen (2010) were used to measure green trust. The consumption value constructs were adapted from studies by Biswas and Roy (2015), Gallarza, Ruia and Gil, (2016) and Khan and Mohsin (2017). In all, 16 items were used to measure the 5 consumption value dimensions in this study. The construct PWOM was measured by five items adapted from Chen, Lin and Chang (2014) and Popp and Woratschek (2017). Consumers’ loyalty toward natural cosmetics measured using five items. We used the same two loyalty items that Vogel, Evanschitzky and Ramaseshan (2008) use and added three items that Zeithaml, Berry and Parasuraman, (1996) conceptualize. Finally, the questionnaire concluded with some demographic questions including the age, education, job level, income and marital status.

Analysis of Constructs Reliability and validity

Reliability

The results of Cronbach's alpha were used to measure reliability and average inter-item correlation to assess intrinsic validity. The following table presents the result of Cronbach's alpha measure and average inter-item correlation. From the following table, it is clear that the questionnaire is reliable as the Cronbach's alpha and average inter-item correlation coefficient for all items greater

than 0.7, emphasizing a good level of internal consistency (Nunnally & Bernstein, 1994)

Table (1): Reliability Statistics

Items	Cronbach's Alpha	Average Item Correlation
Green Trust	0.860	0.507
Word of Mouth	0.899	0.641
Customer Loyalty	0.903	0.650
Economic Values	0.711	0.429
Emotional Values	0.909	0.768
Environmental Values	0.744	0.649
Functional Values	0.906	0.706
Social Values	0.908	0.767
Customer Satisfaction	0.871	0.529
Green Image	0.902	0.647

Validity

All communalities values for all components are greater than 0.5 which indicate high validity of these items, all values of loadings are greater than 0.5 indicates high correlation between these questions.

Descriptive Statistics of Variables

In this section, the variables of the study are described through comprising their mean, minimum, maximum, standard deviation and coefficient of variation as shown in table (3).

Table (2): Descriptive Statistics

	Minimum	Maximum	Mean	Standard Deviation	Coefficient of Variation
Green Trust	1.5	5	3.7136	0.61289	16.5%
Word of Mouth	1	5	3.4761	0.79421	22.8%
Customer Loyalty	1.6	5	3.6662	0.74595	20.3%
Economic Values	1.67	5	3.2817	0.74936	22.8%
Emotional Values	1.33	5	3.8052	0.76388	20.1%
Environmental Values	2	5	3.7042	0.56157	15.2%
Functional Values	1.25	5	3.5739	0.75253	21.1%
Social Values	1	5	2.9671	0.92960	31.3%
Customer Satisfaction	1.83	5	3.5540	0.66860	18.8%
Green Image	1	5	3.5972	0.69974	19.5%

From the previous table, the average of most of the variables is between 3 and 4 which means that respondents tend to neutrally agree to the statements that measure these variables except in the social values statement. It is noted that the variable with highest agreement is the emotional values while the variable with least agreement is the social values. The homogeneous variable (variable with least variation) is the environmental values with coefficient of variation equals 15.2% while the variable with highest variability is the social value with coefficient of variation equals 31.3%.

Correlation Analysis

Table (3): Correlation Coefficients

	GT	WOM	CL	Eco.V	Emo.V	Env.V	Fun.V	Soc.V	CS	GI
GT	1									
WOM	0.635**	1								
CL	0.634**	0.794**	1							
Eco.V	0.463**	0.482**	0.471**	1						
Emo.V	0.452**	0.623**	0.703**	0.282**	1					
Env.V	0.368**	0.278**	0.265**	0.297**	0.225**	1				
Fun.V	0.640**	0.651**	0.745**	0.500**	0.632**	0.291**	1			
Soc.V	0.225**	0.368**	0.493**	0.246**	0.378**	0.22**	0.388**	1		
CS	0.591**	0.723**	0.834**	0.397**	0.759**	0.302**	0.756**	0.551**	1	
GI	0.593**	0.473**	0.547**	0.504**	0.376**	0.324**	0.596**	0.393**	0.668**	1

From the previous table it is clear that with 95% confidence interval: there is positive significant correlation between green trust and all the other variables. There is positive significant correlation between customer loyalty and all the other variables. Also there is positive significant correlation between all values and all the other variables. There is positive significant correlation between customer satisfaction and each of the other variables and finally, there is positive significant correlation between green image and each of the other variables.

Analysis of the Structural Model

Structural Equation Modelling (AMOS 24) was used to test the research hypotheses and the proposed model. The overall model fit was assessed using number of measures. The maximum likelihood estimation method was used to conduct the structural analysis of the model. The structural model results displayed satisfactory model fit indices: $\chi^2/DF= 2.388$; AGFI= 0.876; CFI = 0.968; TLI = 0.934; NFI = 0.951; IFI = 0.973; RMSEA =0.0258. The previous shows that all the goodness of fit measures

of the model are at acceptable limits, especially NFI, IFI, TLI, and CFI is close to one. Also the value of RMSEA is less than 0.05.

The SEM showed that the social value has direct positive impact on customer satisfaction and this effect = 0.25. Following the functional value has direct positive impact on customer satisfaction and this effect = 0.34. Regarding the emotional value, it has direct positive impact on customer satisfaction and this effect = 0.56, while the environmentally value, and economic value have insignificant impact on customer satisfaction. On the other hand, the green image has direct positive impact on customer satisfaction and this effect = 0.40 and on green trust and this effect = 0.39. On the other hand, customer satisfaction has direct positive impact on green trust and this effect = 0.29. The green image was found to have direct negative impact on loyalty and this effect = -0.13. Green trust has direct positive impact on customer loyalty and this effect = 0.27, customer satisfaction has direct positive impact on customer loyalty and this effect = 0.68 and on word of mouth and this effect = 0.46. Finally, the green trust has direct positive impact on word of mouth and this effect = 0.34.

Figure 2: The Structural Model

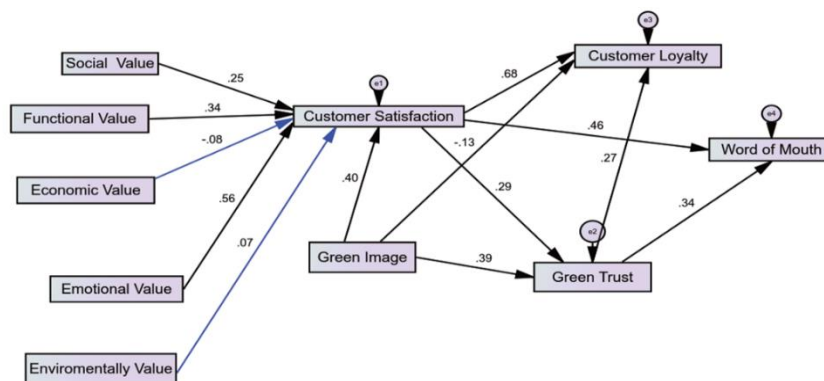


Table (5) illustrate the path coefficients of the overall model. The results provide support to all research hypothesis except the sub hypothesis H (4-5) and H (4-2).

Table (5) Regression Weights: (Group number 1 - Default model)

Hypothesis	Dep vars	Independent variables	Standardized Estimate	S.E.	C.R.	Decision	P
H4-4		<-- Social Value	.252	.027	5.112	***	Accept
H4-1		<-- Functional Value	.338	.033	6.862	***	Accept
H3	Customer Satisfaction	<-- Green Image	.396	.035	8.027	***	Accept
H4-5		<-- Environmentally Value	.067	.044	1.369	.171	Reject
H4-3		<-- Emotional Value	.558	.032	11.326	***	Accept
H4-2		<-- Economic Value	-.081	.033	-1.636	.102	Reject
H1	Green Trust	<-- Green Image	.387	.061	5.119	***	Accept
H5		<-- Customer Satisfaction	.287	.085	3.803	***	Accept
H2	Customer Loyalty	<-- Green Image	-.129	.059	-2.084	.037	Accept
H 6		<-- Green Trust	.274	.074	4.342	***	Accept
H7		<-- Customer Satisfaction	.337	.079	11.455	***	Accept
H8	Word-of-mouth	<-- Green Trust	.460	.079	4.896	***	Accept
H9		<-- Customer Satisfaction	.682	.089	6.680	***	Accept

To test the moderation effect of the warning label of different paths a multi-group analysis is used. Multi-group analysis in structural equation modeling (SEM) is another form of moderation analysis but using categorical variables or grouping variables (e.g. Male and Female). This process is straightforward in AMOS as the grouping variable is already specified in the data set. In cases where available data are continuous (e.g. Age) or ordinal (e.g. Likert scale responses), conducting Multi-group analysis is also possible. (Simaes and Costa, 2019). There are 2 moderators which are income, and age. So we will repeat the analysis twice, once for age and once for income.

Concerning age, it was found that it moderates the relationship between functional value and customer satisfaction, as the p-value is less than 0.05. Such that the effect of functional value on satisfaction for those who aged less than 45 is greater than the same effect for those who are aged more than 45.

Also, age moderates the relationship between green trust and customer loyalty, as the p-value is less than 0.05. Such that the effect of green trust on customer loyalty for those who aged less than 45 is greater than the same effect for those who are aged more than 45.

In addition, the statistics indicated that age moderates the relationship between customer satisfaction and customer loyalty, as the p-value is less than 0.05. Such that the effect of customer satisfaction on customer loyalty for those who aged less than 45 is less than the same effect for those who are aged more than 45.

Table (6): Moderation effect for age

			Estimate Age less than 45	Estimate Age 45 and more	Z- value	p-value
Customer Satisfaction	<---	Social Value	0.227	0.448	1.059	0.11
Customer Satisfaction	<---	Functional Value	0.395	0.111	-3.415	0.00
Customer Satisfaction	<---	Green Image	0.352	0.504	0.596	0.17
Green Trust	<---	Green Image	0.363	0.477	0.888	0.13
Green Trust	<---	Customer Satisfaction	0.354	0.106	-0.82	0.14
Customer Loyalty	<---	Green Image	-0.098	-0.225	-0.99	0.12
Customer Loyalty	<---	Green Trust	0.355	0.123	-2.084	0.02
Word-of-mouth	<---	Green Trust	0.377	0.253	-1.178	0.10
Word-of-mouth	<---	Customer Satisfaction	0.475	0.38	-0.186	0.20
Customer Loyalty	<---	Customer Satisfaction	0.626	0.794	1.966	0.03
Customer Satisfaction	<---	Emotional Value	0.569	0.47	-1.393	0.08

From the analysis it was found that income moderates the relationship between functional value and customer satisfaction, as the p-value is less than 0.05. Such that the effect of functional value on satisfaction for those who earned less than 15000 is greater than the same effect for those who are earned more than 15000.

Income also moderate the relationship between green image and customer satisfaction, as the p-value is less than 0.05. Such that the effect of green image on satisfaction for those who earned less

than 15000 is less than the same effect for those who are earned more than 15000. Furthermore, income moderates the relationship between green trust and customer loyalty, as the p-value is less than 0.05. Such that the effect of green trust on customer loyalty for those who earned less than 15000 is less than the same effect for those who are earned more than 15000.

Finally, income moderates the relationship between green trust and customer satisfaction, as the p-value is less than 0.05. Such that the effect of customer satisfaction on green trust for those who earned less than 15000 is less than the same effect for those who are aged more than 45.

Table (7): Moderation effect for income

			Estimate income less than 15000	Estimate Income 15000 and more	Z- value	p-value
Customer Satisfaction	<--	Social Value	0.104	0.308	1.646	0.051
Customer Satisfaction	<--	Functional Value	0.594	0.127	-4.956	0.000
Customer Satisfaction	<--	Green Image	0.192	0.55	3.201	0.001
Green Trust	<--	Green Image	0.401	0.358	0.186	0.196
Green Trust	<--	Customer Satisfaction	0.286	0.312	-2.533	0.008
Customer Loyalty	<--	Green Image	0.064	-0.261	0.783	0.147
Customer Loyalty	<--	Green Trust	-0.034	0.436	3.142	0.001
Word-of-mouth	<--	Green Trust	0.148	0.436	1.623	0.053
Word-of-mouth	<--	Customer Satisfaction	0.606	0.372	-1.248	0.092
Customer Loyalty	<--	Customer Satisfaction	0.751	0.676	-0.193	0.196
Customer Satisfaction	<--	Emotional Value	0.542	0.529	-0.494	0.177

Discussion and Conclusions

The study aimed to investigate the impact of green brand image on green loyalty mediated by green trust and green satisfaction and analysed how demographics moderate these relationships. This study aims to study five antecedents of green satisfaction: functional, economic, emotional, social and environmental and to examine the relationships between green image, green trust, green satisfaction, green loyalty and positive word of mouth.

The research made significant understandings of concepts related to green marketing, which is important for both academicians and marketers. Structural Equation Modelling (SEM) was used to assess the series of interrelated relationship among the research variables simultaneously. SEM results indicate the goodness of fit of the proposed model. Moreover, all the research hypotheses were statistically supported, except for the association between economic values and customer satisfaction and between environmental value and customer satisfaction.

The findings were consistent also Martínez, (2014), as green image was found to have positive direct effects on green trust, green satisfaction and green loyalty. Furthermore, both green trust and green satisfaction have positive effects on green loyalty. This indicates that increasing consumer perceptions regarding green image, trust and satisfaction can aid in increasing customer loyalty for natural cosmetics. Moreover, empirical evidence that green satisfaction and green trust mediates the relationship between green image and green loyalty, which is consistent with Lee et al. (2010). This implies the importance of enhancing customer stratification and trust towards natural cosmetics.

The research results confirm the positive association between green satisfaction and green trust which was consistent with (Chen and Chang, 2013; Issock, et.al, 2019) These findings also support the suggestion by Chen (2013) that green trust and green satisfaction directly influence green loyalty. Additionally, Sukhu and Scharff, (2018 found that customers' trust in green hotels affects their loyalty. According to the empirical results in this study, companies should raise their green satisfaction in order to increase their green trust in the environmental era.

The results were also consisted with (Kordshouli, Ebrahimi and Bouzanjani, 2015; Wang et al., 2018; Issock, et.al, 2019) regarding the influence of green customer satisfaction on PWOM, as satisfied customers speak positively about their experience. Furthermore, the influence of green trust on PWOM which was found in our study, is consistent with (Issock, et.al, 2019; Chen ,

Lin and Chang, 2014; Wang et al., 2018) that showed that customers who trust green products recommend these products to others.

The functional value had significant impact on customer satisfaction which is inconsistent with (Issock, et.al, 2019), this could be related to the moderating effect of income and age on the relationship between the functional value and customer stratification what was proved in the research. while the results of the effect of emotional and social values on customer satisfaction were consistent with their findings. However, it was found that the economic value had no impact on green customer satisfaction, which is inconsistent with previous findings of (Mohd Suki, 2017; Woo and Kim, 2019). Furthermore, our study did not confirm the significant impact of environmental value on customer satisfaction contradicting the results of (Issock, et.al, 2019; Mohd Suki, 2017). The previous results could be related to the consumers' awareness regarding green products and the moderation effect of the demographic variables.

Management and Consumer Implications

This research is important because it informs marketers on specific values which consumers are expected to look for when they purchase green products. They should set strategies to help potential customers to develop sufficient green trust. Furthermore, this study highlights the importance of PWOM and the continuous the need to develop consumer-to-consumer communication. The findings can help marketers to develop their green marketing communications strategies as a way of differentiating and positioning their products. Therefore, managers should adhere to the environmental concerns of consumers in order to seize new opportunities in the scope of green markets.

Managers in natural cosmetics should design strategies to raise perception of green image to increase consumers' green satisfaction and trust.

Natural cosmetics companies should try to promote green initiatives, and develop an integrated communication strategy

with multiple information channels to show the competitive advantages of natural cosmetics. They could use the social media to promote their products to consumers to develop a favourable overall image based on environmental aspects.

Limitations and directions for future research

The research study has some limitations. First, these findings are limited to the specific product category of natural cosmetics. Thus, it could be further tested on other product categories. The future studies may also consider attributes such as green pricing strategy, which may affect green image and consumer decision-making regarding natural cosmetics.

Second, this study concentrates on Egyptian consumers. Future research can focus on other consumers in other countries and compare with this study.

Third, the study focused on female consumers. Future research can test the proposed model on male consumers.

Fourth, the study did not include consumers' attitudes toward the environment which could be important to show the differences between consumers with strong environmental concerns with those who were less concerned about environmental matters.

The study follows previous researches of green marketing and identified areas that need to be addressed by marketers specifically for natural cosmetics in Egypt which is a valuable contribution to the literature.

References

- 1- Acme-Hardesty (2019), "Green cosmetics: the push for sustainable beauty", available at: www.acme-hardesty.com/green-cosmetics-sustainable-beauty/ (accessed 21 January 2019).
- 2- American Marketing Association (2013), "Green marketing", Dictionary of Marketing Terms, available at: www.marketingpower.com/_layouts/dictionary.aspx?DLetterG (accessed 20 January 2021).

- 3- Andreassen, T. and Lindestad, B. (1998), "Customer loyalty and complex services", *International Journal of Service Industry Management*, Vol. 9 No. 1, pp. 7-23.
- 4- Azila, Jaini and Farzana, Quoquab. (2020), "I buy green products, do you...?" The moderating effect of eWOM on green purchase behaviour in Malaysian cosmetics industry", *International Journal of Pharmaceutical and Healthcare Marketing* Vol. 14 No. 1, pp. 89-112.
- 5- Bansal, P. and Roth, K. (2000), "Why companies go green: a model of ecological responsiveness", *Academy of Management Journal*, Vol. 43 No. 4, pp. 717-36.
- 6- Biswas, A. (2017), "A consumption value-gap analysis for sustainable consumption", *Environmental Science and Pollution Research*, Vol. 24 No. 8, pp. 7714-7725.
- 7- Biswas, A. and Roy, M. (2015), "Green products: an exploratory study on the consumer behaviour in emerging economies of the East", *Journal of Cleaner Production*, Vol. 87, pp. 463-468.
- 8- Borin, N., Lindsey-Mullikin, J. and Krishnan, R. (2013), "An analysis of consumer reactions to green strategies", *Journal of Product & Brand Management*, Vol. 22 No. 2, pp. 118-128.
- 9- Brown, J.R., Crosno, J.L. and Tong, P.Y. (2019), "Is the theory of trust and commitment in marketing relationships incomplete?", *Industrial Marketing Management*, Vol. 77, pp. 155-169.
- 10- Chang, C.H. and Tu, C.Y. (2005), "Exploring store image, customer satisfaction and customer loyalty relationship: evidence from Taiwanese hypermarket industry", *Journal of American Academy of Business*, Vol. 7 No. 2, pp. 197-202.
- 11- Chang, N.J. and Fong, C.M. (2010), "Green product quality, green corporate image, green customer satisfaction, and green customer loyalty", *African Journal of Business Management*, Vol. 4 No. 13, pp. 2836-2844.

- 12- Chen, Y.S. (2010), "The drivers of green brand equity: green brand image, green satisfaction, and green trust", *Journal of Business Ethics*, Vol. 93 No. 2, pp. 307-319.
- 13- Chen, Y.S. (2013), "Towards green loyalty: driving from green perceived value, green satisfaction and green trust", *Sustainable Development*, Vol. 21 No. 5, pp. 294-308.
- 14- Chen, Y.-S., Lin, C.-Y. and Chang, C.-H. (2014), "The influence of greenwash on green word-of-mouth (green WOM): the mediation effects of green satisfaction and green perceived quality", *Qualitative Quantitative*, Vol. 48 No. 8, pp. 2411-2425.
- 15- Cretu, A.E. and Brodey, R.J. (2007), "The influence of brand image and company reputation where manufacturers market to small firms: a customer value perspective", *Industrial Marketing Management*, Vol. 36 No. 2, pp. 230-240.
- 16- D'Souza, C., Taghian, M., Lamb, P. and Peretiak, R. (2007), "Green decisions: demographics and consumer understanding of environmental labels", *International Journal of Consumer Studies*, Vol. 31 No. 4, pp. 371-376.
- 17- Delgado, E. and Munuera, J.L. (2005), "Does brand trust matter to brand equity?", *The Journal of Product and Brand Management*, Vol. 14 No. 3, pp. 187-196.
- 18- Duffett, R., Edu, T., Haydam, N., Negricea, I.-C. and Zaharia, R. (2018), "A multi-dimensional approach of green marketing competitive advantage: a perspective of small medium and micro enterprises from Western Cape, South Africa", *Sustainability*, Vol. 10 No. 10, pp. 1-27.
- 19- El-Adly, M.I. (2019), "Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty", *Journal of Retailing and Consumer Services*, Vol. 50, pp. 322-332.
- 20- Flavián, C., Guinaliú, M.E. and Torres, E. (2005), "The influence of corporate image on consumer trust: a comparative analysis in traditional versus internet banking", *Internet Research*, Vol. 15 No. 4, pp. 447-470.

- 21- Gallarza, M.G., Ruiz-Molina, M.E. and Gil-Saura, I. (2016), "Stretching the value-satisfaction-loyalty chain by adding value dimensions and cognitive and affective satisfactions: a causal model for retailing", *Management Decision*, Vol. 54 No. 4, pp. 981-1003.
- 22- Gleim, M.R., Smith, J.S., Andrew, D. and Cronin, J.J. Jr. (2013), "Against the green: a multi-method examination of the barriers to green consumption", *Journal of Retailing*, Vol. 89 No. 1, pp. 44-61.
- 23- Gordon, R., Dibb, S., Magee, C.A., Cooper, P. and Waitt, G.R. (2018), "Empirically testing the concept of value-in-behavior and its relevance for social marketing", *Journal of Business Research*, Vol. 82, pp. 56-67.
- 24- Green Choices (2012), "Toiletries and cosmetics green choices", available at: www.greenchoices.org/green-living/toiletries-cosmetics (accessed 1 July 2018).
- 25- Groening, C., Sarkis, J. and Zhu, Q. (2018), "Green marketing consumer-level theory review: a compendium of applied theories and further research directions", *Journal of Cleaner Production*, Vol. 172 No. 2, pp. 1848-1866.
- 26- Gupta, A.K. and Abbas, S.S. (2013), "Green marketing and Indian consumer", *International Journal of Engineering Science and Innovation Technology*, Vol. 2 No. 2, pp. 481-487.
- 27- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis with Readings*, 5th ed., Prentice Hall, Englewood Cliffs, NJ.
- 28- Horppu, M., Kuivalainen, O., Tarkiainen, A. and Ellonen, H.K. (2008), "Online satisfaction, trust and loyalty, and the impact of the offline parent brand", *Journal of Product & Brand Management*, Vol. 17 No. 6, pp. 403-13.
- 29- Isaak, R. (2002), "The making of the ecopreneur", *Greener Management International*, Vol. 38, pp. 81-92.
- 30- Isock, Paul Blaise Isock, Mpinganjira, Mercy and Lombard, Mornay Roberts-. (2019), "Modelling green

- customer loyalty and positive word of mouth Can environmental knowledge make the difference in an emerging market?”, *International Journal of Emerging Markets* Vol. 15 No. 3, 2020 pp. 405-426
- 31- Iyer, P., Davari, A. and Mukherjee, A. (2018), “Investigating the effectiveness of retailers’ mobile applications in determining customer satisfaction and repatronage intentions? A congruency perspective”, *Journal of Retailing and Consumer Services*, Vol. 44, pp. 235-243.
- 32- Johri, L.M. (1998), “Green marketing of cosmetics and toiletries in Thailand”, *Journal of Consumer Marketing*, Vol. 15 No. 3, pp. 265-81.
- 33- Jones, P., Hillier, D. and Comfort, D. (2014), “Sustainability in the global hotel industry”, *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 1, pp. 5-17.
- 34- Kangis, P. (1992), “Concerns about green marketing”, *International Journal of Wine Marketing*, Vol. 4 No. 2, pp. 21-4.
- 35- Kautish, P. and Sharma, R. (2018), “Study on relationships among terminal and instrumental values, environmental consciousness and behavioral intentions for green products”, *Journal of Indian Business Research*, available at: <https://doi.org/10.1108/JIBR-01-2018-0013> (in press).
- 36- Keller, K.L. (1993), “Conceptualizing, measuring and managing customer-based brand equity”, *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.
- 37- Khan, S.N. and Mohsin, M. (2017), “The power of emotional value: exploring the effects of values on green product consumer choice behavior”, *Journal of Cleaner Production*, Vol. 150, pp. 65-74.
- 38- Kim, T., Kim, W.G. and Kim, H.B. (2009), “The effects of perceive justice on recovery satisfaction, trust, word-

- of-mouth, and revisit intention in upscale hotels”, *Tourism Management*, Vol. 30 No. 1, pp. 51-62.
- 39- Koller, M., Floh, A. and Zauner, A. (2011), “Further insights into perceived value and consumer loyalty: a ‘green’ perspective”, *Psychology & Marketing*, Vol. 28 No. 12, pp. 1154-1176.
- 40- Kordshouli, H.R., Ebrahimi, A. and Bouzanjani, A.A. (2015), “An analysis of the green response of consumers to the environmentally friendly behaviour of corporations”, *Iranian Journal of Management Studies*, Vol. 8 No. 3, pp. 315-334.
- 41- Kumar, V., Pozza, I.D. and Ganesh, J. (2013), “Revisiting the satisfaction-loyalty relationship: empirical generalizations and directions for future research”, *Journal of Retailing*, Vol. 89 No. 3, pp. 246-262.
- 42- Lee, J.S., Hsu, L.T., Han, H. and Kim, Y. (2010), “Understanding how consumers view green hotels: how a hotel’s green image can influence behavioral intentions”, *Journal of Sustainable Tourism*, Vol. 18 No. 7, pp. 901-914.
- 43- Leonidou, C.N., Katsikeas, C.S. and Morgan, N.A. (2013), “Greening” the marketing mix: do firms do it and does it pay off?”, *Journal of the Academy of Marketing Science*, Vol. 41 No. 2, pp. 151-170.
- 44- Lin, J., Lobo, A. and Leckie, C. (2017a), “The role of benefits and transparency in shaping consumers’ green perceived value, self-brand connection and brand loyalty”, *Journal of Retailing & Consumer Services*, Vol. 35, pp. 133-141.
- 45- Lin, P.-C. and Huang, Y.H. (2012), “The influence factors on choice behavior regarding green products based on the theory of consumption values”, *Journal of Cleaner Production*, Vol. 22 No. 1, pp. 11-18.
- 46- Lin, Y., Yang, S., Hanifah, H. and Iqbal, Q. (2018), “An exploratory study of consumer attitudes toward green

- cosmetics in the UK market”, *Administrative Sciences*, Vol. 8 No. 4, pp. 71-84.
- 47- Mai, L.W. and Ness, M.R. (1999), “Canonical correlation analysis of customer satisfaction and future purchase of mail-order specialty food”, *British Food Journal*, Vol. 101 No. 11, pp. 857-870.
- 48- Martínez, P. (2014), “Customer loyalty: exploring its antecedents from a green marketing perspective”, *International Journal of Contemporary Hospitality Management* Vol. 27 No. 5, 2015 pp. 896-917.
- 49- Martínez, P. (2015), “Customer loyalty: exploring its antecedents from a green marketing perspective”, *International Journal of Contemporary Hospitality Management*, Vol. 27 No. 5, pp. 896-917.
- 50- Martínez, P. and Rodríguez del Bosque, I. (2013), “CSR and customer loyalty: the roles of trust, customer identification with the company and satisfaction”, *International Journal of Hospitality Management*, Vol. 35 No. 1, pp. 89-99.
- 51- Meyer, A. (2016), “Heterogeneity in the preferences and pro-environmental behaviour of college students: the effects of years on campus, demographics, and external factors”, *Journal of Cleaner Production*, Vol. 112 No. 4, pp. 3451-3463.
- 52- Mittal, V. and Kamakura, W.A. (2001), “Satisfaction, repurchase intent, and repurchase behavior: investigating the moderating effect of customer characteristics”, *Journal of Marketing Research*, Vol. 38 No. 1, pp. 131-142.
- 53- Mohd Suki, N. (2016), “Consumer environmental concern and green product purchase in Malaysia: structural effects of consumption values”, *Journal of Cleaner Production*, Vol. 132, pp. 204-214.
- 54- Mohd Suki, N. (2017), “Green products usage: structural relationships on customer satisfaction and loyalty”,

- International Journal of Sustainable Development & World Ecology, Vol. 24 No. 1, pp. 88-95.
- 55- Narula, S.A. and Desore, A. (2016), “Framing green consumer behaviour research: opportunities and challenges”, *Social Responsibility Journal*, Vol. 12 No. 1, pp. 1-22.
- 56- Nguyen, N. and Leblanc, G. (2002), “Contact personnel, physical environment and the perceived corporate image of intangible services by new clients”, *International Journal of Service Industry Management*, Vol. 13 No. 3, pp. 242-262.
- 57- Norazah, M.S. (2013), “Consumer ecological behaviour: structural relationships of environmental knowledge, healthy food, and healthy way of life”, *Journal Sustainable Science and Management*, Vol. 8 No. 2, pp. 100-107.
- 58- Nunnally, J.C. and Bernstein, I.H. (1994). *Psychometric Theory* (3rd ed.), New York, NY, McGraw-Hill.
- 59- Oishi, S. (2002), “Effects of propyl paraben on the male reproductive system”, *Food and Chemical Toxicology*, Vol. 40 No. 12, pp. 1807-1813.
- 60- Oliver, R.L. (1999), “Whence consumer loyalty?”, *Journal of Marketing*, Vol. 63, Special Issue, pp. 33-44.
- 61- Olsen, M.C., Slotengraaf, R.J. and Chandukala, S.R. (2014), “Green claims and message frames: how green new products change brand attitude”, *Journal of Marketing*, Vol. 78 No. 5, pp. 119-137.
- 62- Papadopoulos, I. Karagouni, G. Trigkas, M. and Platogianni, E. (2010). *Green Marketing- the case of Greece in certified and sustainable managed timber products*. *Euro Med Journal of business*, 5(2)
- 63- Papista, E., Chrysochou, P., Krystallis, A. and Dimitriadis, S. (2018), “Types of value and cost in consumer–green brands relationship and loyalty behaviour”, *Journal of Consumer Behaviour*, Vol. 17 No. 1, pp. e101-e113.

- 64- Peattie, K. (1995), *Environmental Marketing Management: Meeting the Green Challenge*, Pittman, London.
- 65- Peattie, K. (2001), "Towards sustainability: the third age of green marketing", *The Marketing Review*, Vol. 2 No. 2, pp. 129-146.
- 66- Peattie, K. and Crane, A. (2005), "Green marketing: legend, myth, farce or prophesy?", *Qualitative Market Research*, Vol. 8 No. 4, pp. 357-70.
- 67- Petrick, J.F. (2004), "Are loyal visitors desired visitors?" *Tourism Management*, Vol. 25 No. 4, pp. 463-470.
- 68- Polonsky, M. (1994), "An introduction to green marketing", *Electronic Green Journal*, Vol. 1 No. 2, pp. 1-10.
- 69- Polonsky, M.J. (2011), "Transformative green marketing: impediments and opportunities", *Journal of Business Research*, Vol. 64 No. 12, pp. 1311-1319.
- 70- Popp, B. and Woratschek, H. (2017), "Consumer-brand identification revisited: an integrative framework of brand identification, customer satisfaction, and price image and their role for Brand loyalty and word of mouth", *Journal of Brand Management*, Vol. 24 No. 3, pp. 250-270.
- 71- Pride, W.M. and Ferrell, O.C. (2008), *Marketing*, 14th ed., Ch. 4, Houghton Mifflin, New York, NY.
- 72- Quoquab, Frazana., Jaini, Azila. and Mohammad, Jihad. (2020), "Does It Matter Who Exhibits More Green Purchase Behavior of Cosmetic Products in Asian Culture? A Multi-Group Analysis Approach", *International Journal of Environmental Research and Public Health*, 21;17(14):5258.
- 73-
- 74- Rice, G. (2006), "Pro-environmental behaviour in Egypt: Is there a role for Islamic environmental ethics?", *Journal of Business Ethics*, Vol. 65 No. 4, pp. 373-390.
- 75- Ruane, L. and Wallace, E. (2015), "Brand tribalism and selfexpressive brands: social influences and brand

- outcomes”, *Journal of Product & Brand Management*, Vol. 24 No. 4, pp. 333-348.
- 76- Seiders, K., Voss, G.B., Grewal, D. and Godfrey, A.L. (2005), “Do satisfied customers buy more? Examining moderating influences in a retail context”, *Journal of Marketing*, Vol. 69 No. 4, pp. 26-43.
- 77- Sheth, J.N., Newman, B.I. and Gross, B.L. (1991), “Why we buy what we buy: a theory of consumption values”, *Journal of Business Research*, Vol. 22 No. 2, pp. 159-170.
- 78- Shil, P. (2012), “Evolution and future of environmental marketing”, *Asia Pacific Journal of Marketing & Management Review*, Vol. 1 No. 3, pp. 74-81.
- 79- Simões, C., Gomes, A. R., & Costa, P. (2019). “A Multi-Group Analysis of the Effect of Cognitive Appraisal on Nurses' Psychological Distress”, *Nursing Research*, 68(3), E1-E11. doi:10.1097/nnr.0000000000000352
- 80- Singhal, Aakanksha and Garima, Malik. (2018), “The attitude and purchasing of female consumers towards green marketing related to cosmetic industry”, *Journal of Science and Technology Policy Management*, Vol. 12 No. 3, pp. 514-531.
- 81- Soonthonsmai, V. (2007), “Environmental or green marketing as global competitive edge: concept, synthesis, and implication”, *EABR (Business) and ETLC (Teaching) Conference Proceeding, Venice*.
- 82- Sukhu, Anupama and Scharff, Robert, (2018), “Will ‘doing right’ lead to ‘doing well’? An examination of green behaviour”, *Journal of Consumer Marketing* 35/2 (2018) 169–182.
- 83- Sweeney, J.C. and Soutar, G.N. (2001), “Consumer perceived value: the development of a multiple item scale”, *Journal of Retailing*, Vol. 77 No. 2, pp. 203-220.
- 84- Tsay, Y.Y. (2009), August). “The impacts of economic crisis on green consumption in Taiwan”, *PICMET’09-2009 Portland International Conference on Management of Engineering & Technology*, IEEE, pp. 2367-2374.

- 85- Vogel, V., Evanschitzky, H. and Ramaseshan, B. (2008), "Customer equity drivers and future sales", *Journal of Marketing*, Vol. 72 No. 6, pp. 98-108.
- 86- Wang, J., Wang, S., Xue, H., Wang, Y. and Li, J. (2018), "Green image and consumers' word-of-mouth intention in the green hotel industry: the moderating effect of millennials", *Journal of Cleaner Production*, Vol. 181, pp. 426-436.
- 87- Watson, G.F., Beck, J.T., Henderson, C.M. and Palmatier, R.W. (2015), "Building, measuring, and profiting from customer loyalty", *Journal of the Academy of Marketing Science*, Vol. 43 No. 6, pp. 790-825.
- 88- Woo, E. and Kim, Y.G. (2019), "Consumer attitudes and buying behavior for green food products: From the aspect of green perceived value (GPV)", *British Food Journal*, Vol. 121 No. 2, pp. 320-332, available at: <https://doi.org/10.1108/BFJ-01-2018-0027> (in press).
- 89- Wu, H.-C. (2017), "What drives experiential loyalty? A case study of Starbucks coffee chain in Taiwan", *British Food Journal*, Vol. 119 No. 3, pp. 468-496.
- 90- Wu, H.-C. and Cheng, C.-C. (2017), "What drives green advocacy? A case study of leisure farms in Taiwan", *Journal of Hospitality and Tourism Management*, Vol. 33, pp. 103-112.
- 91- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996), "The behavioural consequences of service quality", *Journal of Marketing*, Vol. 60 No. 2, pp. 31-46.

