

Article

# Examining the Moderating Effects of Green Marketing and Green Psychological Benefits on Customers' Green Attitude, Value and Purchase Intention

Ying-Kai Liao <sup>1</sup>, Wann-Yih Wu <sup>1</sup> and Thi-That Pham <sup>2,\*</sup> 

<sup>1</sup> Program of International Business, Nanhua University, Chiayi County 62249, Taiwan; yksuper889@nhu.edu.tw (Y.-K.L.); wwanyi888@gmail.com (W.-Y.W.)

<sup>2</sup> Department of Business Administration, Nanhua University, Chiayi County 62249, Taiwan

\* Correspondence: thatphamldcd@gmail.com

Received: 30 July 2020; Accepted: 4 September 2020; Published: 10 September 2020



**Abstract:** The purpose of this study is to integrate the theoretical base of green purchasing by using the signaling theory approach to green marketing. Since previous studies do not combine relevant factors from the perspective of Signaling Theory and Attitude-Behavior-Context (ABC) Theory for green purchase, this study attempts to examine the effects of green customer value and attitude towards green products on green purchase intention. Moreover, it aims to identify the moderating effects of green marketing and green psychological benefits on the relationships between customer value, attitude, and green purchase intention. This study involved a survey that comprised 319 customers with at least a year's experience in buying green products in Cambodia. The findings empirically revealed a significant and positive influence of green customer value on attitude towards green products. Furthermore, both green customer value and attitudes towards green products have a positive effect on green purchase intention. Green marketing (environmental advertising, and green word-of-mouth) and green psychological benefits (warm glow, self-expressive benefits, and nature experience) moderate the relationships between customer value, attitude towards the green product, and green purchase intention. The results may be beneficial for managers and marketers to develop appropriate green marketing strategies. They may also be helpful for academicians to conduct further validations regarding the theoretical framework of green purchasing.

**Keywords:** attitude towards green product; green marketing; green customer value; green psychological benefits; green purchase intention; Signaling Theory; ABC Theory

## 1. Introduction

With a huge apprehension of global warming and the increasing pressure of environmental pollution, many organizations have engaged the way to become more socially responsible by developing green products. Environmental management has become a primary concern for small and medium enterprises businesses [1]. The phenomena of green consumer behaviors have changed as a new model for marketers and academicians [2,3]. The modern idea of green marketing has emerged as a competitive tendency to grab and win customers' attention in the marketplace.

Consequently, firms are paying more attention to the production of green products which will not poison the environment and can be recycled or maintained using low-toxicity materials [4]. Comprehending consumers and developing green marketing strategies to entice targeted consumers have become common research topics. Environmental concern has a substantial impact on people's behavior in environmentally related domains. Thus, the essential to produce green products has forced

firms to concentrate more on environmental matters in their productions. Most previous studies tend to use the Theory of Planned Behavior (TPB) to examine the motivation of green purchasing [5–7]. Consumer's green value is also regarded as another important factor for attitude and intention towards green purchasing. Kim and his colleagues [8] developed the Value-based Adoption Model (VAM) to explain the effect of value on the intention of (green) purchasing. All of the above models did not assess the impacts of environmental concerns, green marketing, green-word-of-mouth (GWOM), and psychological benefits.

First of all, the concept of green marketing has become a rising force, creating a need for additional efforts to promote eco-friendly products [9]. In the context of green marketing, advertisements addressing environmental concerns are always very powerful to facilitate green purchasing [10]. GWOM has served as an unofficial message or supplementary recommendation that can bring a higher degree of credibility towards green products, which can promote green consumption [11–13]. Green marketing is to create environmental awareness about the implication of global warming, non-biodegradable solid waste, and damaging pollutants [14]. Green marketing actions through all four Ps are to be shaded green purchasing [15]. Previous studies regarding this research issue are still limited especially still in lack of empirical validation. This study asserts that green marketing, including environmental advertisement and GWOM, would serve as moderators that, in the situation with higher levels of green marketing activities, using environmental advertisement and GWOM, the influence of green customer value and attitude towards green purchasing would be significantly higher.

In addition, based on the Signaling Theory and the Model of Symbolic and Conspicuous Consumption, psychological benefits including warm glow, self-expressive benefit, and nature experience can be critical for green purchasing [16]. People are more willing to pay money for green purchasing if it can create a psychological benefit of warm glow and self-satisfaction due to the pursuit of a positive emotional state to help others (or the earth) [17,18]. Psychological benefits derived from self-expressive socially observable consumption can result in a high intention of green purchasing [19,20]. Psychological benefits from nature experience, which evoked by advertising included natural imagery could be very powerful to create emotional responses in terms of attitude improvement [21], value formation [22]; and pro-environmental behavior [23]. Since previous studies regarding the influence of psychological benefits on green purchasing are still limited, this study asserts that in the situation with the high level of psychological benefits from the warm glow, self-expressive benefits, and nature experience, the influence of green customer value and attitude towards green purchasing would be significantly stronger.

Moreover, this study's purpose is to explore the relationship between the signals, which are unpredictable factors, and consumers' attitude as a response to these signals. However, to explain the complex phenomena of green marketing and green purchase, signaling theory is not sufficient, as it fails to encompass consumers' value perception and green psychological benefits. Thus, this study aims to integrate both the signaling theory and Attitude-Behavior-Context (ABC) Theory. More specifically, based on the signaling theory and ABC Theory, this study investigates the moderating effect of green marketing and green psychological benefits on the relationship between customers' attitudes towards green products, customer value, and purchase intentions in the emerging economy of Cambodia.

## 2. Theoretical Background

### 2.1. Signaling Theory Approach to Green Marketing

Signaling Theory explores the spread of information from a person (sender) to another person (receiver) [24]. From this theoretical background, many economists and marketers have applied Signaling Theory to patterns within commerce and business. The signalers have information that might be useful to receivers but is not available to them. This information plays an essential role in the behavioral decision-making process. Information asymmetry has a critical impact on the quality and intent of information transfer [25]. The receivers are uncertain about the characteristics, while the

signalers have concerns about the behavioral intention of receivers. Firms, as signalers, try to signal their quality to stakeholders, as receivers, which can affect the perception and behaviors of stakeholders. Signaling, therefore, can lead to favorable outcomes such as investment or purchase [26]. Based on the meaning of this theory, Signaling Theory is a good explanation for green marketing and green purchase intention.

## 2.2. Attitude-Behavior-Context (ABC) Theory

This study also depends on the Attitude-Behavior-Context (ABC) Theory to well understand the influence of consumers' behaviors on green purchasing intentions [27]. This theory assumes that people act consistently with their expectations from specific actions [28]. Therefore, the ABC Theory provides a valuable framework for exploring how attitudes result in certain behaviors [29]. Although previous studies have evaluated the issues of green marketing and green purchase, for instance, climate change, environmental issues, and social problems, from different perspectives, few of them integrated theoretical concepts of ABC Theory to create a comprehensive research model. Moreover, since the theoretical concepts of green purchase are limited, this study intends to adopt the signaling theory and ABC theory to explain the phenomenon of green purchase behaviors. Therefore, there are three significant issues to be clarified in this current study: (i) To examine the relationships of customer values, attitude and green purchase intention; (ii) To test the moderating effect of green marketing; and (iii) To test the moderating effects of green psychological benefits.

## 3. Literature Review and Hypotheses Development

### 3.1. The Relationship between Green Customer Values and Attitude towards Green Product

The relationship between customer perceived value and green purchase intention has been tested and proven by several researchers, such as Eggert and Ulaga; Tam and Chen and Chang [30–32]. Previous studies on human values suggest that values are the guiding principle of judgment and action [33]. These judgments and actions comprise conflicting motivation—for instance, personal interest versus the welfare of others. Environmental awareness is a precondition for pro-environmental for making decisions and actions [34]. Still, literature has frequently revealed that environmental consciousness and attitudes are not always displayed in actual actions [35]. Previous researchers have attempted to elucidate why consumers make particular choices and sought to find the relationships among the values, attitudes, and behavioral intentions of consumers.

Moreover, a major driver of environmental purchasing intention is an environmental image [36]. Ledden et al. [37] indicated that the image denotes the advantages of a higher status that adds to the general understanding of an organization in the psyches of its customers and in the broader social setting. Reputational benefits are acknowledged on the more comprehensive supply chain by adding to the customer's abilities as a provide descending in the supply channel [38]. Environmental image is measured to signify the consequence of the provider's emphasis on ecologically oriented developments. Saputra et al. [39] indicated that consumer repurchase intention is prejudiced by "consumer attitudes towards green brands and the quality perceived by consumers in the green products they use". Hence, the hypothesis regarding customers' environmental image is proposed as follows:

**Hypothesis 1a (H1a).** *Green customer value, including perceived value and environmental image, is positively associated with the attitude towards the green product.*

### 3.2. The Relationship between Attitude towards Green Product and Green Purchase Intention

As one of the three conceptually independent determinants of intention in the Theory of Planned Behavior, attitude towards a behavior refers to the level of one's favorable or unfavorable assessment of the action in question [40,41]. For instance, Panda et al. [42] determined that consumers' purchasing intentions are reliant on their environmental attitudes. Tsen et al. [43] argued that philosophy is

among factors that play a prominent part in forecasting intentions of consumers who are willing to pay more for green products. In their work, Huang et al. [44] showed that green brand attitudes influence green purchase intentions. Additionally, Chekima et al. [45] indicated that attitude towards the environment refers to an assessment of the environment carried out by consumers and valued through their perceptions and desires to act. In the same vein, the concept of environment concern on environmental attitude is one of the most significant factors to directly impact green purchase intention [46,47]. Furthermore, Amoako et al. [48] demonstrated that there is a positive and significant relationship between green attitude and purchasing behavior. Attitude thus has an exact part in the choice to take a specific behavior, and this idea forms the basis of the next hypothesis:

**Hypothesis 1b (H1b).** *Attitude towards the green product is positively associated with green purchase intention.*

### 3.3. Green Customer Value and Green Purchase Intention

The typical green consumer will only buy environmentally friendly things. Green customer denotes to the consumer of products which are environmentally valuable and recyclable [49,50]. Consumer decision is founded on partial evidence, perceived values of products that are represented as a signal to their purchase intention [51–53]. Perceived value is related to consumer's perception of a product's values [54–56]. According to Chen and Chang [32], green perceived value is an overall assessment of a consumer's actual income of a product or the service. It is also measured as one of the emergent factors among green consumers [57]. Green purchase intention is an essential part of the actual green purchasing customer's behavior. It represents that he/she aims to purchase that product if it is attractive and valuable to him/her [58]. Besides, as customer-centric environmentalism is predominant, researchers suggest that the perceived green value of a customer acts as the main character in buying behavior [59,60]. Hence:

**Hypothesis 1c (H1c).** *Green customer value, including perceived value and environmental image, is positively associated with green purchase intention.*

### 3.4. The Moderating Effect of Green Marketing

Green marketing, which promotes products by using environmental claims, has become a significant area of research. It is becoming more and more significant to reach sustainable growth by sustaining a competitive benefit and making a positive brand image [61]. Other customers' recommendations are probable to boost consumers to change their decision making [11]. Ahmad and Ilkay [62] indicated that content marketing can affect consumers' purchase intention in the context of home appliances. Thus, green marketing strategies, for instance, environmental advertisements and GWOM need to be focused on the companies. Fong [63] concluded that effective advertising plays as a moderator towards the relationship between pricequality influential and purchasing intention of recyclable products. The convincing advertising messages will accelerate the influence of customer value and customer attitude on green purchase intention. Word-of-mouth (WOM) is a significant factor for customers' decision making, and a lot of companies adopt it as a current marketing approach [12]. Keller and Fay [13] proposed that positive WOM can carry a high degree of creditability. It means that companies with well GWOM are more likely to succeed in forming the beliefs and attitudes of consumers which enhances green purchasing intention [12]. Jaini et al. [64] argued that electronic WOM plays a vital role as a moderator of the link between personal norm and green purchase intention.

Past studies have found that green advertising can impact and improve the attitudes of consumers towards green purchasing. Haytko and Matulich [65] recognized different types of consumer responses that express the viability of green advertising, including the willingness to pay the first-class price, trust in the product quality and belief that it causes less harm, and loyalty. Kotler et al. [66] contended that WOM is a vital marketing device that quickly transmits information of a brand among customers at a very minimal cost. According to Lang and Hyde [67], customers perceive WOM as the most reliable

and trustworthy communication tool compared to advertising and other traditional media, which is stimulated through conventional communication tools. Herr et al. [68] stated that positive WOM among customers can reinforce their trust and value and enhance the intention to purchase the products as the information presented through WOM is likely to be more credible. Information transferred from WOM may be more convinced, which can reinforce customer's trust, value, and attitude, that further result in higher green purchase intention. Consequently, GWOM may serve as an important moderator that, when interacting with customer value and attitude, can significantly accelerate green purchase intention. Thus:

**Hypothesis 2 (H2).** *Green marketing including (a) environmental advertising and (b) GWOM will moderate the effects of green customer value and attitude to green products on green purchase intention.*

### 3.5. The Moderating Effects of Green Psychological Benefits

According to Sweeney and Webb [69], psychological benefits refer to “the feeling of trust or confidence in the other party that results in greater peace of mind”. According to the Signaling Theory and the Symbolic and Conspicuous Consumption Model, psychological benefits are originated from self-expressive benefits [16]. Self-expressive benefits have major effect on green customer behavior [19]. People are willing to purchase eco-products or services which give them self-expressive benefits and/or self-satisfaction [23,70], because a warm glow or a positive emotional state, is instigated by the pursuit to help others voluntarily [18,71]. Therefore, following Signaling Theory, the marketer (signaler) can send a message (regarding environmental concerns) to receiver to promote the attitudes and behavior of customers toward green purchasing [24]. If the signal is strong enough which echoed by customers, the level of customer's self-expressive benefits may be amplified, then the influence of customer attitudes towards green products on green purchasing intention will be strengthened.

In addition, Van der Linden [72] contented that an empathy-driven motivation has always caused people to derive a sense of warm glow from helping others. While warm glow is always regarded as an antecedent of pro-environmental behavior, it is also regarded as mediator that mediate the influence of prior pro-environmental behavior on future pro-environmental behavior [73]. Vander Linder [72] suggested that warm glow affect mostly drives low rather than high-cost sustainable behavior. However, Hartmann et al. [73] suggested that warm glow may moderate customer's future behavior intention. This study thus asserts that warm glow may serve as a moderator that can accelerate the influence of customer value and attitude on behavior intention toward green purchasing.

Furthermore, as people always want to be with nature in order to recover their physical and mental health, nature experience becomes an important factor for psychological benefits, especially in the context of environmental concerns and green purchasing [74]. People in a higher level of nature experiences tend to develop a higher awareness of protecting the nature [75]. Such awareness plays an important role for the formation of customer values and attitudes towards green product, which result in pro-environmental behaviors. Andereck and Nyaupane [76] argued that, if a customer spends a lot of time in a nature environment, they are more likely to feel that their quality of life is ensured. Therefore, nature experience which can elicit environmental awareness and emotional well-being may serve as a moderator that can strengthen the effect of customer values and attitudes towards green products on green purchasing.

Positive emotional answers to marketing result in a different positive brand attitude, thus touching the purpose to purchase [23,77]. Positive influence suggested by advertising-induced nature experiences gives rise to brand attitude change that expands purchase intention [21]. Mayer et al. [22] recommended that nature experiences play a significant part in the foundation of environmental values and attitudes, thus positively touch pro-environmental behavior as well as green purchase intention. Thus:



**Hypothesis 3 (H3).** *Green psychological benefits of (a) warm glow, (b) self-expressive benefit, and (c) nature experience moderate the effects of green customer value and attitude towards green product on purchasing intention of green products.*

## 4. Research Design and Methodology

### 4.1. Research Framework

The main purposes of this study are first to investigate the relationships among green customer value, attitude towards green products, and green purchase intentions. It then evaluates the moderating role of green marketing, including (a) environmental advertising and (b) GWOM, on green customer value, attitude to green products, and green purchase intention. Finally, the moderating effects of the green psychological benefits of (a) warm glow, (b) self-expressive benefit, and (c) nature experience on green customer value, attitude towards green products, and purchasing intention are examined. The research framework of this study is presented in Figure 1.

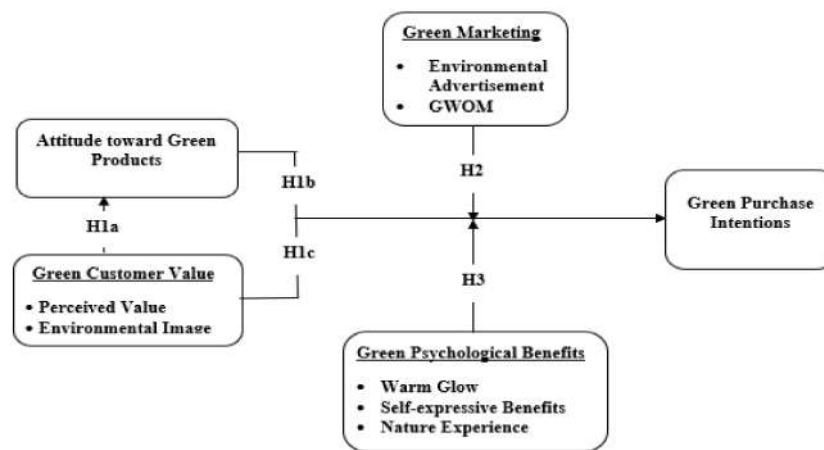


Figure 1. The research framework.

### 4.2. Constructs Measurement

In this study, five constructs were measured. The construct of green customer value consists of two factors: perceived value and environmental image. The questionnaire items for perceived values were adapted from Oskamp et al. [70] (5 items), and those for the environmental image were adapted from Appolloni et al. [38] (5 items). Items on attitude towards green products were adapted from Ajzen [78] and Ivancevich et al. [79] (5 items). The construct of green marketing consists of two factors: environmental advertising and GWOM. Environmental advertising items were adapted from Haytko and Matulich [65] and Tsen et al. [43] (6 items), and GWOM items were adapted from Chen et al. [24] and Keller and Fay [13] (5 items). The construct of green psychology benefits consists of three factors: warm glow, self-expressive, and nature experience. Warm glow items were adapted from Clark et al. [80], Andreoni [81], and Menges et al. [82] (6 items); self-expressive benefits were adapted from Aaker [16], Glazer and Konrad [83], and Hartmann and Apaolaza-Ibáñez [19] (6 items); and nature experience items were adapted from Leather et al. [84] and Maller et al. [85] (6 items). Green purchase intention items were adapted from Lai and Cheng [2], Chan [86], and Mostafa [50] (7 items). All items were rated using a five-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree).

### 4.3. Sampling and Data Collection

The survey, solely consisting of questionnaire items, was sent via online or offline addresses to customers in Phnom Penh, Cambodia. The purposive sampling technique was used. Respondents who had green product purchasing experience at least a year were invited as the qualified samples

in this study. A total of 420 online and offline survey questionnaires were sent out to respondents by using online platforms via e-mail, Facebook, LinkedIn, and postage mail. After two and a half months, 339 valid questionnaires were collected, of which 319 were usable for further analysis. Among these 319 respondents, 62.4% were female. The most common age group among respondents was 26–35 (46.1%), followed by those under 25 (41.7%). The majority of respondents—56.7%—had an undergraduate level of education, and respondents were most often employed in the private sector, at 35.7%.

## 5. Data Analysis and Results

This study utilized a statistically robust procedure to analyze the survey data with the support of two software packages: SPSS (Version 21, IBM, Armonk, New York, NY, USA) and Smart PLS (Version 3, SmartPLS GmbH, Ismaning, Germany). First, it relied on the coefficient of determination ( $R^2$ ), which measures the amount of explained variance of each endogenous latent variable. Schroer and Hertel [87] suggest that  $R^2$  values of more than 0.672 are substantial, deals starting at 0.33 are described as moderate, and less than 0.19 is weak. Second, the average variance extracted (AVE) was used to assess the convergent validity; the AVE should be higher than 0.5 to explain more than half of its indicators' clash [88]. Last, composite reliability (CR) should be higher than 0.6 to authorize that the variance shared by the respective indicators is strong [80]. Cronbach's alpha coefficient was also used to confirm the internal consistency of the research items. All Cronbach's alpha should be higher than 0.7 [88].

As shown in Table 1, the coefficients of determination ( $R^2$ ) for the endogenous latent variables are as follows: attitude towards the green product (0.445), perceived value (0.391), environmental advertising (0.213), GWOM (0.39), warm glow (0.401), self-expressive benefits (0.413), nature experience (0.453), and green purchase intentions (0.711). The AVEs of the constructs ranged from 0.567 to 0.758, values which are much higher than the recommended benchmark of 0.5. Moreover, the AVE demonstrated acceptable reliability and convergent legitimacy of the research constructs. The Cronbach's alpha coefficients ranged from 0.728 to 0.894, fulfilling the criteria of 0.7 and confirming the internal reliability of the measurement items. The CR coefficients ranged from 0.795 to 0.932, values which are higher than the criteria of 0.6. Therefore, it can be determined that the reliability and convergent validity of the research constructs are adequate, thus enabling us to proceed with an assessment of the structural model.

**Table 1.** Evaluation of the measurement model (n = 319).

Construct	AVE	CR	Cronbach's Alpha ( $\alpha$ )	$R^2$
<b>Attitude towards green product</b>	0.758	0.926	0.894	0.445
<b>Green Customer Value</b>				
<i>Perceived Value</i>	0.600	0.885	0.733	0.391
<i>Environment Image</i>	0.577	0.820	0.728	-
<b>Green Marketing</b>				
<i>Environment Advertisement</i>	0.730	0.915	0.877	0.213
<i>GWOM</i>	0.658	0.795	0.775	0.390
<b>Green Psychological Benefits</b>				
<i>Warm Glow</i>	0.632	0.932	0.916	0.401
<i>Self-expressive Benefits</i>	0.567	0.867	0.810	0.413
<i>Nature Experience</i>	0.648	0.878	0.833	0.453
<b>Green Purchase Intention</b>	0.595	0.897	0.862	0.711

Note: The good-of-fitness = 0.491.

Since the data on independent and dependent constructs were gathered from the same sample, it could be subject to common method bias [89]. This study applied Harman's single factor test [89,90], which clarified only 23% of the variance (hence suggesting that common method bias is not an important problem). Furthermore, the cumulative of all latent factors was 53.7%, further authorizing the non-appearance of common method bias in this study.

### 5.1. Direct Effects

The structural model was adopted to examine the relationship between constructs using the bootstrapping resampling technique. Following Hair et al.'s [91] recommendation, 5000 bootstrapping sub-samples were created. Table 2 displays the analysis of the path coefficient for hypotheses testing. In terms of the influence of green customer value on attitude towards the green product (H1a), perceived value and environmental image both had a significant effect on attitude towards the green product ( $\beta = 0.540, p < 0.00$ ;  $\beta = 0.229, p < 0.00$ , respectively). Hence, H1a was supported. This finding implies that green customer value, including perceived value and environmental image, has a positive relationship with the attitude towards the green product.

**Table 2.** Results of direct effects.

Hypothesis	Path	Standardized Estimate	t-Value	p-Value	Remarks
H1a	Green customer value → Attitude towards green products				<b>Supported</b>
	Perceived value → Attitude towards green products	0.540	25.291	***	
	Environmental image → Attitude towards green products	0.229	10.237	***	
H1b	Attitude towards green products → Green purchase intention	0.124	5.809	***	<b>Supported</b>
H1c	Green customer value → Green purchase intention				<b>Supported</b>
	Perceived value → Green purchase intention	0.242	9.346	***	
	Environmental image → Green purchase intention	0.326	14.157	***	

Notes: \*\*\*  $p < 0.001$

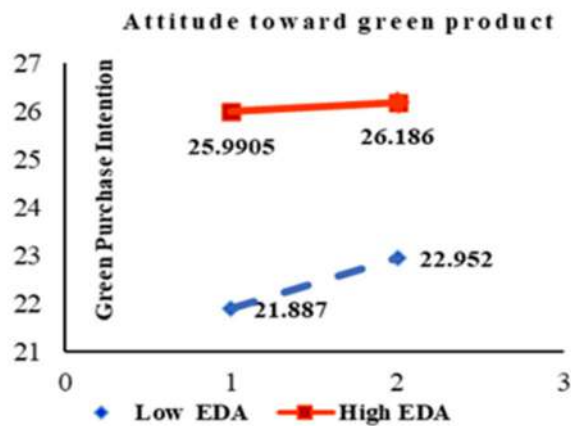
In terms of the influence of attitude towards green product on green purchase intention (H1b), attitude towards green product had a significant effect on green purchase intention ( $\beta = 0.124, p < 0.01$ ). Aligning with the study results of Maichum et al. [92], this finding suggested that attitude had the most significant influence on consumers' purchase intention. Therefore, H1b was supported. In terms of the influence of green customer value on green purchase intention (H1c), both perceived value and environmental image had a significant effect on green purchase intention ( $\beta = 0.242, p < 0.00$ ;  $\beta = 0.326, p < 0.00$ , respectively). This implies that perceived value and environmental image could generate green purchase intention. Appolloni et al. [38] suggested that environmental image contributes to the customer's environmental standing downstream in the value chain, as the image is found to be a strong predictor of customer perceived value and attitude towards such products [93]. Therefore, green customer value, including perceived environmental value and perceived environmental image, has a positive influence on green purchase intention. Thus, H1c was supported.

### 5.2. Analyzing the Moderating Effect of Green Marketing

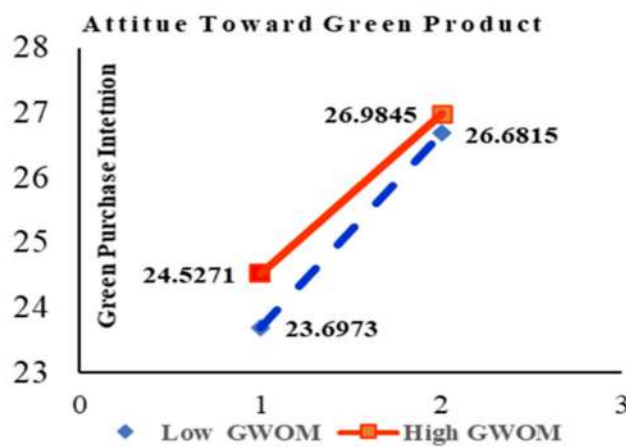
To evaluate the moderating effects of green marketing, this study used the k-means method to cluster the respondents into four groups for each green marketing variable. For instance, when using environmental advertising (EAD) as the moderator, the respondents were divided into four groups using EAD and attitude towards the green product (ATT) as the two-categorizing variables. As a



result, the respondents were divided into four groups as follows: (1) High ATT/High EAD, (2) High ATT/Low EAD, (3) Low ATT/High EAD, and (4) Low ATT/Low EAD. The ANOVA results, which were used to compare the mean values of green purchase intention among these four groups, are shown in Figures 2 and 3, Table 3. These results indicated that respondents with a higher level of exposure to such environmental advertising and a higher positive attitude towards green product have more intention to buy the green product ( $F = 18.131, p < 0.000$ ) than the respondents who have a lower level of a positive attitude towards green product and lower level of exposure to such environmental advertisement.



**Figure 2.** The role of green marketing (environmental advertisement) moderators. Notes: EAD: environmental advertisements.



**Figure 3.** The role of green marketing (green world-of-mouth) moderators. Notes: GWOM: green world-of-mouth.

As using the same categorizing method for another green marketing moderator, it could be concluded from Figure 2 and Table 3 that the respondents with a higher positive attitude towards green product which is encouraged by GWOM promotion have a higher level of intention to purchase green product ( $F = 24.057, p < 0.000$ ) compared to those with a less positive attitude towards green product and a lower level of involvement by WOM promotion. These results are supported by Blackwell et al. [94], who explained that green word of mouth and environmental advertising permit consumers to be advocated green products; as a result, consumers pay attention, they understand the benefits that products can bring them, and finally, this can lead to purchasing decision, as our results suggested. Furthermore, Pirani and Secondi [95] suggested that “eco-friendly attitudes represent the most consistent predictor of pro-environmental purchasing behavior”. Therefore, H2a and H2b were supported.

**Table 3.** The results of green purchase intention with green marketing moderators.

Name of Factor	Low Attitude towards Green Product		High Attitude towards Green Product		F-Value ( <i>p</i> )	Duncan
	1. Low EAD (n = 14)	2. High EAD (n = 24)	3. Low EAD (n = 30)	4. High EAD (n = 251)		
Green Purchase Intention	21.887	25.990	22.9522	26.186	18.131 (0.000)	12, 34

Name of Factor	Low Attitude towards Green Product		High Attitude towards Green Product		F-Value ( <i>p</i> )	Duncan
	1. Low GWOM (n = 42)	2. High GWOM (n = 100)	3. Low GWOM (n = 48)	4. High GWOM (n = 129)		
Green Purchase Intention	23.6973	24.5271	26.6815	26.9845	24.057 (0.000)	12, 34

Notes: EAD: environmental advertisements, GWOM: green world-of-mouth.

### 5.3. Analyzing the Moderating Effect of Green Psychological Benefit

To evaluate the moderating effects of green psychological benefit, this study used the k-means method to cluster the respondents into four groups for each green psychological benefit variable. For example, when using warm glow (WG) as the moderator, the respondents were divided into four groups using WG and green customers' perceived value (GCP) as the two-categorizing variables. As a result, the respondents were divided into four groups as follows: (1) High GCP/High WG, (2) High GCP/Low WG, (3) Low GCP/High WG, and (4) Low GCP/Low WG.

Hypothesis 3a proposes that the psychological benefit of warm glow positively moderates the positive effect on purchase intention for a green product. Hypothesis 3b proposes that self-expressive benefit strengthens the positive effect on green purchase intention. Hypothesis 3c suggests that the psychological benefit of nature experience positively moderates the positive effect on green purchase intention. As for Hypothesis 3a, the ANOVA results comparing the mean value of green purchase intention are shown in Table 4 and Figures 4–6. These results indicated that those who perceived higher warm glow and higher perceived value tended to have higher green purchase intention ( $F = 64.127$ ,  $p < 0.000$ ) compared to those with a lower warm glow and lower perceived value. Respondents who perceived higher self-expressive benefits and higher perceived value also tended to have a greater intention to purchase green products ( $F = 73.959$ ,  $p < 0.000$ ) as opposed to those who has a lower self-expressive benefit and lower perceived value.

**Table 4.** The results of green psychology benefits moderators.

Name of Factor	Low Green Customer's Perceived Value		High Green Customer's Perceived Value		F-Value ( <i>p</i> )	Duncan
	1. Low WG (n = 22)	2. High WG (n = 40)	3. Low WG (n = 24)	4. High WG (n = 233)		
Green Purchase Intention	20.564	22.957	25.1726	26.759	64.127 (0.000)	1, 2, 3, 4

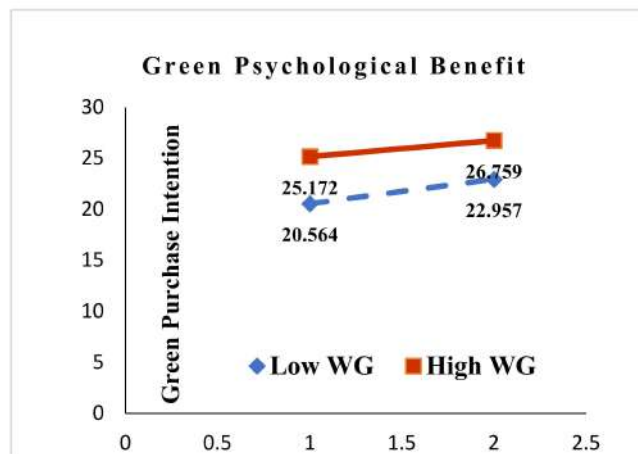
  

Name of Factor	Low Green Customer's Perceived Value		High Green Customer's Perceived Value		F-Value ( <i>p</i> )	Duncan
	1. Low SEB (n = 27)	2. High SEB (n = 41)	3. Low SEB (n = 9)	4. High SEB (n = 242)		
Green Purchase Intention	19.751	24.317	25.571	26.649	73.959 (0.000)	1, 2, 34

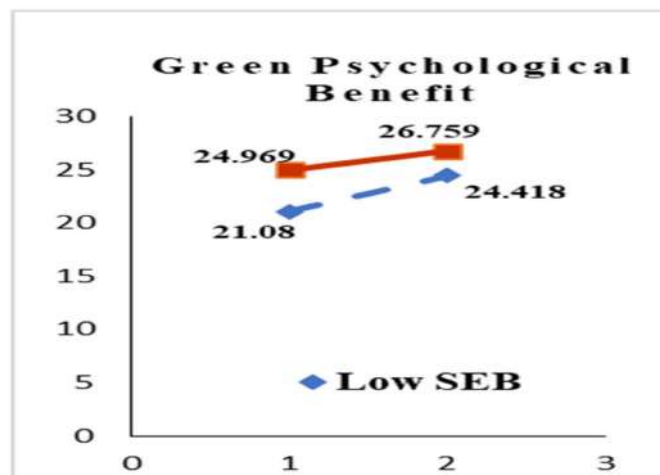
  

Name of Factor	Low Green Perceived Customer Value		High Green Perceived Customer Value		F-Value ( <i>p</i> )	Duncan
	1. Low NE (n = 39)	2. High NE (n = 29)	3. Low NE (n = 28)	4. High NE (n = 223)		
Green Purchase Intention	21.080	24.418	24.969	26.817	66.329 (0.000)	1, 23, 4

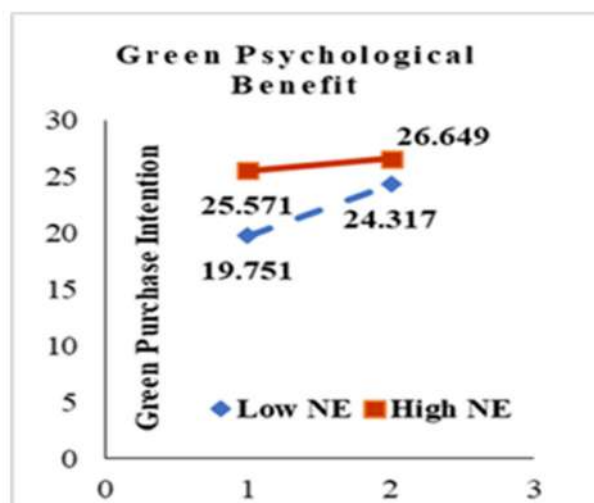
Notes: WG: warm glow; SEB: self-expressive benefits; NE: nature experiences.



**Figure 4.** The role of green psychological benefits (Warm Glow: WG) moderators. Notes: WG: Warm Glow (green line: Low WG, red line: high WG).



**Figure 5.** The role of green psychological benefits (self-expressive benefits: SEB) moderators. Notes: SEB: Self-expressive benefits (green line: Low SEB, red line: high SEB).



**Figure 6.** The role of green psychological benefits (nature experiences: NE) moderators. Notes: NE: Nature experiences (green line: Low NE, red line: high NE).

In addition, compared to those with lower nature experiences, respondents with higher nature experience and higher perceived value tended to have a higher intention to purchase green products ( $F = 66.329, p < 0.000$ ). The results of this study align with those of Hartmann and Apaolaza [19]. The level of nature experiences reminded positively the intention to purchase a green product through the values related to environmental conservation and general concern for the environment. Yet, consumers may also involve in environmentally sound behavior to signal their altruism and thus enhance status and reputation by showing their capacity [96,97]. Hence, H3a, H3b, and H3c were supported.

## 6. Conclusions

Several conclusions may be drawn from the results of the study. First, consumers will perceive a higher purchase intention towards green products if they perceive a higher value with a more positive attitude towards green products. The study revealed that the green customer's perceived value, including environmental value and perceived environmental image, have significant and positive influences on attitude towards the green product. Holbrook [98] suggested that a customer's perceived value can be a relativistic preference and experience depending on the individual, situation, or product. According to the multidimensional approach, the perceived value represents the sum of the different values which have effects in a particular situation. Previous study indicate that customers' perceived green value can result in a high level of environmental consciousness and a pro-environmental attitude [99]. Perceived value also consists of "softer" elements, such as image benefit [37,100,101]. Customers with a positive perceived environmental image not only enhance their level of sustainable green consumption intention, but also provide a good image to the society. Additionally, the study results also align with those of Hänninen and Karjaluoto [55], who suggested that customer perceived environmental values and perceived environmental image are the main dimensions impacting customer attitude towards the green products. Consumers who owned a more positive environmental attitude also rated environmental value and image strongly to the overall values of green purchase intention.

Second, the study examined the effects of moderators for the influence of attitude towards green products on green purchase intention. Particularly, the green purchase intention is moderated by the strong effect of the environmental advertisement on social media. The study results are in line with those of previous studies. Saboo et al. [102] and Kao [103] found that environmental advertising had a positive impact on consumer attitudes towards a green product, the brand advertised, and the intention to buy the product mentioned in the advertisement. The results suggested that a person who showed great emotional attachment to environmental well-being would be more likely to perform more positive environmental actions. Chekima et al. [45] demonstrated that environmental advertising tends to perform a high level of environmental responsibility by encouraging consumers to form a stronger intention to buy green products. Furthermore, this study demonstrated that GWOM had a significant moderating influence on green purchase intention. The more positive information customers gained about the product from peers, the more likely they will hold to make a better product choice. This proves to be a true and effective marketing strategy; for example, "80% of all buying decisions are influenced by someone's direct recommendations" [104]. Therefore, it is important for marketers to pay more attention to GWOM to promote green purchase intention.

Lastly, green psychological benefits including warm glow, self-expressive benefit, and nature experience are shown to have significant moderating effects on green purchasing behavior. Specifically, respondents who perceived higher warm glow, self-expressive benefits, and nature experience tended to have higher green purchase intention. The results aligned with Hartmann and Apaolaza [19] in that warm glow arising from contribution to the improvement of the environmental common good increases intention to purchase green products. Moreover, the higher level of nature experiences, the greater the positive effects of customer's values and attitudes on intention to purchase green products. Marketers need to focus on values of customers, such as value related to environmental conservation and general concern for the environment. Vlachos et al. [105] suggested that consumers who are emotionally

attached to a specific brand (brand love and brand attachment) tended to be more committed to repurchase and to recommend it to others. Individuals may also engage in environmentally sound behavior to signal their altruism and thus enhance status and reputation by showing their capacity and willingness to contribute to the common good [96]. Griskevicius et al. [97] demonstrated that status motives lead consumers to choose green products over non-green alternatives. Similarly, Ahmad and Thyagaraj [20] suggested that the greater the consumer's desire for status and reputation, the higher their intention to purchase a green product. Thus, consumers who have a higher self-expressive benefit tended to focus more on the value of the green product, so when the value of the green product is high, they will have higher green purchase intention [74,106].

## 7. Theoretical Implications

This study provided evidence that customer's perceived environmental value and perceived environmental image should be taken into consideration when conducting a targeted advertising campaign. In addition, product types and perceived value were revealed to affect respondent's attitude towards green products and purchase intention. This result verified the signaling theory approach to green marketing. This study aimed to apply the signaling theory to explain how green advertising can reduce customer ambiguity. Based on the theory, green products can have a signaling advantage. This advantage acts as an incentive for customers to pay a premium for environmentally friendly products that can leave even out their price disadvantage [107]. Environmental advertising plays an important role in marketing, and it carries the potential to influence consumers due to emotional arousal, which can lead to green purchase intention. This study also utilized the GWOM model [108,109] to explain the effects of the green brand product on purchase intention. As mentioned by Chen et al. [12], previous research regarding consumer green purchase intention has focused on verbal communication through WOM channels. Hence, GWOM can convey a consumer's pleasant experience through criticisms and gossip, such that when a consumer has a good experience with green products, then they are willing to spread the word and recommend them to others. In addition, this study found evidence that a high level of warm glow, self-expressive benefit, and nature experience affects consumer purchase intention, as they engage in environmentally sound behavior to signal their status motives, which lead consumers to choose green products over non-green alternatives.

## 8. Managerial Implications

Several managerial implications can be drawn from the results of this study. First, the findings suggest that marketers should try to attract consumers' attention towards green products using infomercials and promotions as this could increase the consumer's purchase intention for green products, leading to green behavior performance. Such promotional advertisements could also positively impact the level of environmental concern among Cambodian consumers, encouraging them towards eco-friendly living. To increase consumers' perceived value of green products, marketers must highlight the function of such products, create a positive environmental image, and communicate ecological value to the customers. Furthermore, the findings can enhance the understanding of Cambodia customers' green purchasing behaviors. Besides, the findings can help the marketers to understand customers' attitudes about environmental factors and their psychological benefits, which in the future will help them to make better marketing plans and strategies according to customer needs.

Also, the study results indicated that self-expressive benefit is one of the most critical factors to moderate the relationship between customer perceived value and purchase intention of green products. Higher self-expressive benefit will strengthen the positive effect of the perceived value of the green product on green purchase intention. Still, customers who identify a higher brand social responsibility tended to focus on a higher level of green product branding. Thus, when the green brand positioning is more focused, customers will have higher purchase intentions towards green products. Companies also must pay greater attention to how to improve customers' self-expressive benefits, as well as to



enrich their environmental, social responsibility to customers which can further increase the influence of attitude and perceived value on customer behavioral intentions.

The research model, as developed in this study, should provide an essential reference for practitioners to develop a green marketing strategy. Specifically, marketers or managers should design effective environmental advertising to increase the environmental image from the customer side and to create a sense of the value of environmentally friendly consumption as part of their responsibility to their environment. Furthermore, managers should have a better understanding of the moderating effects of green marketing and psychological benefit and using that for designing marketing plans and promotion strategies to achieve better performance. The findings also carry implications for policymakers, who could develop marketing programs to enhance green purchase intention. With the help of policy makers consumers will increase green purchase due to their worry about the deterioration of the environment. Executives must pay attention to the influence of policy makers to elicit consumer's environmental concerns. To do so, firms may focus on public communication about environmental issues. For example, government officials can make documentary films to convince consumers of the importance and confront them with the practical problems of environmental issues, as well as providing relevant recommendations and guidelines to follow. When consumers perceive a higher degree of environmental concern, they will take a more positive attitude towards green products and increase their intention to purchase green products.

## 9. Limitation and Future Research Directions

Although the study results are abundant, they also suffer from several limitations, which may encourage further validation. First, as an empirical study purposive sampling is appropriate however, the authors cannot refute the fact that 319 respondents are insufficient to represent the whole population in Cambodia. Thus, the generalization of the study results should be cautious. Future research with a more extensive and more diversified sample is needed. In addition, the research framework of this study has integrated some different constructs and most of the measurement items are adopted from previous literature, further studies can investigate this research issue using the same model as developed in this study or with some extensions. Furthermore, the research samples in this paper included the customers who had green product purchasing experience at least a year, online and offline. However, the current research did not test the differences between the two groups of customers. Future research can exploit this model and check the results for more motivating suggestions. A final limitation of this study is that it considered green products in general rather than a specific green product brand; thus, the conclusions could be different for diverse products. In consequence, further research should propose and test models for numerous specific green products, such as green hotels, green restaurants, green energy consumption, etc.

**Author Contributions:** Conceptualization, Y.-K.L.; methodology, W.-Y.W. and T.-T.P.; software, W.-Y.W. and T.-T.P.; validation, Y.-K.L. and T.-T.P.; resources, Y.-K.L.; writing—original draft preparation, Y.-K.L. and T.-T.P.; writing—review and editing, Y.-K.L. All authors have read and agreed to the published version of the manuscript.

**Funding:** The authors received no specific funding for this work.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Sugandini, D.; El Qadri, Z.M.; Kustiyadi, G.; Muafi, M. Employee Engagement in Entrepreneurship Management: SMEs Cases. *Acad. Entrep. J.* **2018**, *24*, 1–8. [[CrossRef](#)]
2. Lai, K.H.; Cheng, T.E. *Just-in-Time Logistics*; Routledge: Abington, UK, 2016.
3. Jaiswal, D.; Kant, R. Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *J. Retail. Consum. Serv.* **2018**, *41*, 60–69. [[CrossRef](#)]
4. Calkins, M. *Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection, and Use of Sustainable Construction Materials*; John Wiley & Sons: Hoboken, NJ, USA, 2008.

5. Vazifehdoust, H.; Taleghani, M.; Esmaeilpour, F.; Nazari, K.; Khadang, M. Purchasing green to become greener: Factors influence consumers' green purchasing behavior. *Manag. Sci. Lett.* **2013**, *2489–2500*. [[CrossRef](#)]
6. Paul, J.; Modi, A.; Patel, J. Predicting green product consumption using theory of planned behavior and reasoned action. *J. Retail. Consum. Serv.* **2016**, *29*, 123–134. [[CrossRef](#)]
7. Yadav, R.; Pathak, G.S. Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *J. Clean. Prod.* **2016**, *135*, 732–739. [[CrossRef](#)]
8. Kim, H.-W.; Chan, H.C.; Gupta, S. Value-based Adoption of Mobile Internet: An empirical investigation. *Decis. Support Syst.* **2007**, *43*, 111–126. [[CrossRef](#)]
9. Schena, R.; Netti, G.; Russo, A. Consumers' Behavior toward Green Products: A Signalling Theory Approach. *Int. J. Bus.* **2015**, *6*, 6. [[CrossRef](#)]
10. Kasliwal, N.; Agarwal, S. Green Marketing Initiatives and Sustainable Issues in Hotel Industry. In *Green Business: Concepts, Methodologies, Tools, and Applications*; Management Association, I., Ed.; IGI Global: Harrisburg, PA, USA, 2019; pp. 512–529. [[CrossRef](#)]
11. Zhao, M.; Xie, J. Effects of Social and Temporal Distance on Consumers' Responses to Peer Recommendations. *J. Mark. Res.* **2011**, *48*, 486–496. [[CrossRef](#)]
12. Chen, Y.-S.; Chang, C.-H.; Yeh, S.-L.; Cheng, H.-I. Green shared vision and green creativity: The mediation roles of green mindfulness and green self-efficacy. *Qual. Quant.* **2015**, *49*, 1169–1184. [[CrossRef](#)]
13. Keller, E.; Fay, B. Word-of-Mouth Advocacy. *J. Advert. Res.* **2012**, *52*, 459–464. [[CrossRef](#)]
14. Kottler, P.; Armstrong, G. *Principles of Marketing*, 14th ed.; Pearson Education Limited: New York, NY, USA, 2012.
15. Kontic, I.; Biljeskovic, J. Greening the Marketing Mix. 2010. Available online: <http://www.diva-portal.org/smash/get/diva2:329044/fulltext01.pdf> (accessed on 24 May 2010).
16. Aaker, D.A. *Building Strong Brands*; Free Press: New York, NY, USA, 2002.
17. Nunes, P.A.L.; Schokkaert, E. Identifying the warm glow effect in contingent valuation. *J. Environ. Econ. Manag.* **2003**, *45*, 231–245. [[CrossRef](#)]
18. Allison, T.H.; McKenny, A.F.; Short, J.C. The effect of entrepreneurial rhetoric on microlending investment: An examination of the warm-glow effect. *J. Bus. Ventur.* **2013**, *28*, 690–707. [[CrossRef](#)]
19. Hartmann, P.; Apaolaza-Ibañez, V. Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *J. Bus. Res.* **2012**, *65*, 1254–1263. [[CrossRef](#)]
20. Ahmad, A.; Thyagaraj, K.S. Consumer's Intention to Purchase Green Brands: The Roles of Environmental Concern, Environmental Knowledge and Self Expressive Benefits. *Curr. World Environ.* **2015**, *10*, 879–889. [[CrossRef](#)]
21. Hartmann, P.; Apaolaza-Ibañez, V. Green advertising revisited. *Int. J. Advert.* **2009**, *28*, 715–739. [[CrossRef](#)]
22. Mayer, F.S.; Frantz, C.M.; Bruehlman-Senecal, E.; Dolliver, K. Why Is Nature Beneficial? *Environ. Behav.* **2009**, *41*, 607–643. [[CrossRef](#)]
23. Batra, R.; Ray, M.L. Affective Responses Mediating Acceptance of Advertising. *J. Consum. Res.* **1986**, *13*, 234. [[CrossRef](#)]
24. Connelly, B.L.; Certo, S.T.; Ireland, R.D.; Reutzel, C.R. *Signaling Theory: A Review and Assessment*; SAGE Publications: Los Angeles, CA, USA, 2011.
25. Stiglitz, J.E. Capital Market Liberalization, Economic Growth, and Instability. *World Dev.* **2000**, *28*, 1075–1086. [[CrossRef](#)]
26. Hussaina, S.; Melewar, T.C.; Priporas, C.-V.; Foroudi, P.; Dennis, C. Examining the effects of celebrity trust on advertising credibility, brand credibility and corporate credibility. *J. Bus. Res.* **2020**, *109*, 472–488. [[CrossRef](#)]
27. Guagnano, G.A.; Stern, P.C.; Dietz, T. Influences on Attitude-Behavior Relationships. *Environ. Behav.* **1995**, *27*, 699–718. [[CrossRef](#)]
28. Feldmann, C.; Hamm, U. Consumers' perceptions and preferences for local food: A review. *Food Qual. Prefer.* **2015**, *40*, 152–164. [[CrossRef](#)]
29. Goh, S.K.; Balaji, M.S. Linking green skepticism to green purchase behavior. *J. Clean. Prod.* **2016**, *131*, 629–638. [[CrossRef](#)]
30. Eggert, A.; Ulaga, W. Customer perceived value: A substitute for satisfaction in business markets? *J. Bus. Ind. Mark.* **2002**, *17*, 107–118. [[CrossRef](#)]

31. Tam, J.L.M. Customer Satisfaction, Service Quality and Perceived Value: An Integrative Model. *J. Mark. Manag.* **2004**, *20*, 897–917. [[CrossRef](#)]
32. Chen, Y.; Chang, C. Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Manag. Decis.* **2012**, *50*, 502–520. [[CrossRef](#)]
33. Schwartz, S.H. Are there universal aspects in the structure and contents of human values. *J. Soc. Issues* **1994**, *50*, 19–45. [[CrossRef](#)]
34. Zsoka, A.; Szerenyi, Z.M.; Szechy, A.; Kocsis, T. Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students. *J. Clean Prod.* **2013**, *48*, 126–138. [[CrossRef](#)]
35. Liobikiene, G.; Juknys, R. The role of values, environmental risk perception, awareness of consequences, and willingness to assume responsibility for environmentally-friendly behaviour: The Lithuanian case. *J. Clean. Prod.* **2016**, *112*, 3413–3422. [[CrossRef](#)]
36. Björklund, M. Influence from the business environment on environmental purchasing -Drivers and hinders of purchasing green transportation services. *J. Purch. Supply Manag.* **2011**, *17*, 11–22. [[CrossRef](#)]
37. Ledden, L.; Kalafatis, S.P.; Samouel, P. The relationship between personal values and perceived value of education. *J. Bus. Res.* **2007**, *60*, 965–974. [[CrossRef](#)]
38. Appolloni, A.; Sun, H.; Jia, F.; Li, X. Green Procurement in the private sector: A state-of-the-art review between 1996 and 2013. *J. Clean. Prod.* **2014**, *85*, 122–133. [[CrossRef](#)]
39. Saputra, M.H.; Kristiyassari, B.; Farida, N.; Ardyan, E. An Investigation of Green Product Innovation on Consumer Repurchase Intention: The Mediating Role of Green Customer Value. *J. Environ. Manag. Tour.* **2020**, *11*, 622–633. [[CrossRef](#)]
40. Ha, H.Y.; Janda, S. Predicting consumer intentions to purchase energy-efficient products. *J. Consum. Mark.* **2012**, *29*, 461–469. [[CrossRef](#)]
41. Klöckner, C.A. A comprehensive model of the psychology of environmental behaviour—A meta-analysis. *Global Environ. Chang.* **2013**, *23*, 1028–1038. [[CrossRef](#)]
42. Panda, T.K.; Kumar, A.; Jakhar, S.; Luthra, S.; Garza-Reyes, J.A.; Kazancoglu, I.; Nayak, S.S. Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *J. Clean. Prod.* **2019**, 118575. [[CrossRef](#)]
43. Tsen, C.H.; Phang, G.; Hasan, H.; Buncha, M.R. Going green: A study of consumers' willingness to pay for green products in Kota Kinabalu. *Int. J. Bus. Soc.* **2006**, *7*, 40–54.
44. Huang, Y.-C.; Yang, M.; Wang, Y.-C. Effects of green brand on green purchase intention. *Mark. Intell. Plan.* **2014**, *32*, 250–268. [[CrossRef](#)]
45. Chekima, B.; Wafa, S.A.W.S.K.; Igau, O.A.; Chekima, S.; dan Sondoh, S.L., Jr. Examining Green Consumerism Motivational Drivers: Does Premium Price and Demographics matter to Green Purchasing? *J. Clean. Prod.* **2016**, *112*, 3436–3450. [[CrossRef](#)]
46. Michaelidou, N.; Hassan, L.M. Modelling the Factors Affecting Rural Consumers' Purchase of Organic and Free-Range Produce: A Case Study of Consumers' from the Island of Arran in Scotland, UK. *Food Policy* **2010**, *35*, 130–139. [[CrossRef](#)]
47. Fauzan, N.; Azhar, F.N. The Influence of Environmental Concern and Environmental Attitude on Purchase Intention towards Green Products: A Case Study of Students College in Universitas Muhammadiyah Yogyakarta. Available online: <https://ssrn.com/abstract=3525917> (accessed on 27 January 2020).
48. Amoako, G.K.; Dzugbenuku, R.K.; Abubakari, A. Do green knowledge and attitude influence the youth's green purchasing? Theory of planned behavior. *Int. J. Product. Perform. Manag.* **2020**. [[CrossRef](#)]
49. Lee, K. Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *J. Consum. Mark.* **2009**, *26*, 87–96. [[CrossRef](#)]
50. Mostafa, M.M. A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychol. Mark.* **2007**, *24*, 445–473. [[CrossRef](#)]
51. Li, M.; Cai, L.A. The effects of personal values on travel motivation and behavioral intention. *J. Travel Res.* **2012**, *51*, 473–487. [[CrossRef](#)]
52. Hanaysha, J.R. An examination of the factors affecting consumer's purchase decision in the Malaysian retail market. *PSU Res. Rev.* **2018**, *2*, 7–23. [[CrossRef](#)]

53. Sharma, V.M.; Klein, A. Consumer perceived value, involvement, trust, susceptibility to interpersonal influence, and intention to participate in online group buying. *J. Retail. Consum. Serv.* **2020**, *52*, 101946. [CrossRef]
54. Ashton, A.S.; Scott, N.; Solnet, D.; Breakey, N. Hotel restaurant dining: The relationship between perceived value and intention to purchase. *Tour. Hosp. Res.* **2010**, *10*, 206–218. [CrossRef]
55. Hänninen, N.; Karjaluoto, H. Environmental values and customer-perceived value in industrial supplier relationships. *J. Clean. Prod.* **2017**, *156*, 604–613. [CrossRef]
56. Song, Y.; Guo, S.; Zhang, M. Assessing customers' perceived value of the anti-haze cosmetics under haze pollution. *Sci. Total Environ.* **2019**, *685*, 753–762. [CrossRef]
57. Koller, M.; Floh, A.; Zauner, A. Further insights into perceived value and consumer loyalty: A “Green” perspective. *Psychol. Mark.* **2011**, *28*, 1154–1176. [CrossRef]
58. Al-Gasawneh, J.; Al-Adamat, A. The mediating role of e-word of mouth on the relationship between content marketing and green purchase intention. *Manag. Sci. Lett.* **2020**, *10*, 1701–1708. [CrossRef]
59. Suki, M.N.; Suki, M.N. Examination of peer influence as a moderator and predictor in explaining green purchase behaviour in a developing country. *J. Clean. Prod.* **2019**. [CrossRef]
60. Ahmed, W.; Zhang, Q. Green purchase intention: Effects of electronic service quality and customer green psychology. *J. Clean. Prod.* **2020**, 122053. [CrossRef]
61. Robinot, E.; Giannelloni, J.L. Do hotels' “green” attributes contribute to customer satisfaction? *J. Serv. Mark.* **2010**, *24*, 157–169. [CrossRef]
62. Ahmad, Y.Y.; Ilkay, K. The impact of content marketing on consumers' purchase intention for home appliances: A study in Afghanistan. *Int. J. Bus. Manag. Invent.* **2019**, *2319*, 38–47.
63. Fong, K.F. The Moderator Role of Advertisement in Influencing the Purchasing Intention of Recyclable Product. 2015. Available online: [http://eprints.utar.edu.my/1620/1/The\\_Moderator\\_Role\\_of\\_Advertisement\\_in\\_Influencing\\_the\\_Purchasing\\_Intention\\_of\\_Recyclable\\_Product.pdf](http://eprints.utar.edu.my/1620/1/The_Moderator_Role_of_Advertisement_in_Influencing_the_Purchasing_Intention_of_Recyclable_Product.pdf) (accessed on 15 January 2015).
64. Jaini, A.; Quoquab, F.; Mohammad, J.; Hussin, N. I buy green products, do you ... ? *Int. J. Phar. Health Mar.* **2019**, *14*, 89–112. [CrossRef]
65. Haytko, D.L.; Matulich, E. Green Advertising and Environmentally Responsible Consumer Behaviors: Linkages Examined. *J. Manag. Mark. Res.* **2008**, *1*, 1–11.
66. Kotler, P.; Keller, K.L.; Ancarani, F.; Costabile, M. *Marketing Management*, 14th ed.; Pearson: New York, NY, USA, 2014.
67. Lang, B.; Hyde, K.F. Word of mouth: What we know and what we have yet to learn. *J. Consum. Satisf. Dissatisf. Complain. Behav.* **2013**, *26*, 3–18.
68. Herr, P.M.; Kardes, F.R.; Kim, J. Effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnostics perspective. *J. Consum. Res.* **1991**, *17*, 454–462. [CrossRef]
69. Sweeney, J.C.; Webb, D.A. How functional, psychological, and social relationship benefits influence individual and firm commitment to the relationship. *J. Bus. Ind. Mark.* **2007**, *22*, 474–488. [CrossRef]
70. Oskamp, S.; Harrington, M.J.; Edwards, T.C.; Sherwood, D.L.; Okuda, S.M.; Swanson, D.C. Factors influencing household recycling behavior. *Environ. Behav.* **1991**, *23*, 494–519. [CrossRef]
71. Andreoni, J. An experimental test of the public-goods crowding-out hypothesis. *Am. Econ. Rev.* **1993**, *83*, 1317–1327.
72. Van der Linden, S. Warm glow is associated with low- but not high-cost sustainable behavior. *Nat. Sustain.* **2018**, *1*, 28–30. [CrossRef]
73. Hartmann, P.; Eisend, M.; Apaolaza, V.; D'Souza, C. Warm glow vs. altruistic values: How important is intrinsic emotional reward in pro-environmental behavior? *J. Environ. Psy.* **2017**, *52*, 43–55. [CrossRef]
74. Hwang, J.; Choi, J. An Investigation of Passengers' Psychological Benefits from Green Brands in an Environmentally Friendly Airline Context: The Moderating Role of Gender. *Sustainability* **2017**, *10*, 80. [CrossRef]
75. Bögeholz, S. Nature experience and its importance for environmental knowledge, values and action: Recent German empirical contributions. *Environ. Educ. Res.* **2006**, *12*, 65–84. [CrossRef]
76. Andereck, K.L.; Nyaupane, G.P. Exploring the nature of tourism and quality of life perceptions among residents. *J. Travel Res.* **2011**, *50*, 248–260. [CrossRef]
77. Edell, J.A.; Burke, M.C. The Power of Feelings in Understanding Advertising Effects. *J. Consum. Res.* **1987**, *14*, 421. [CrossRef]

78. Ajzen, I. The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* **1991**, *50*, 179–211. [[CrossRef](#)]
79. Ivancevich, S.H.; Ivancevich, D.M.; Elikai, F. Accounting software selection and satisfaction. *CPA J.* **2010**, *80*, 66.
80. Clark, C.F.; Kotchen, M.J.; Moore, M.R. Internal and external influences on pro-environmental behavior: Participation in a green electricity program. *J. Environ. Psychol.* **2003**, *23*, 237–246. [[CrossRef](#)]
81. Andreoni, J. Giving with impure altruism: Applications to charity and Ricardian equivalence. *J. Political Econ.* **1989**, *97*, 1447–1458. [[CrossRef](#)]
82. Menges, R.; Schroeder, C.; Traub, S. Altruism, Warm Glow and the Willingness-to-Donate for Green Electricity: An Artefactual Field Experiment. *Environ. Resour. Econ.* **2005**, *31*, 431–458. [[CrossRef](#)]
83. Glazer, A.; Konrad, K. A signaling explanation for charity. *Am. Econ. Rev.* **1996**, *86*, 1019–1028.
84. Leather, P.; Pyrgas, M.; Beale, D.; Lawrence, C. Windows in the workplace. *Environ. Behav.* **1998**, *30*, 739–763. [[CrossRef](#)]
85. Maller, C.; Townsend, M.; Pryor, A.; Brown, P.; St Leger, L. Healthy nature healthy people: “contact with nature” as an upstream health promotion intervention for populations. *Health Promot. Int.* **2006**, *21*, 45–54. [[CrossRef](#)]
86. Chan, R. Determinants of Chinese consumers’ green purchasing behavior. *Psychol. Mark.* **2001**, *18*, 389–413. [[CrossRef](#)]
87. Schroer, J.; Hertel, G. Voluntary Engagement in an Open Web-Based Encyclopedia: Wikipedians and Why They Do It. *Media Psychol.* **2009**, *12*, 96–120. [[CrossRef](#)]
88. Hair, J.F.; Ringle, C.M.; Sarstedt, M. PLS-SEM: Indeed, a Silver Bullet. *J. Mark. Theory Pract.* **2011**, *19*, 139–152. [[CrossRef](#)]
89. Podsakoff, P.M.; MacKenzie, S.B.; Podsakoff, N.P. Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annu. Rev. Psychol.* **2012**, *63*, 539–569. [[CrossRef](#)]
90. Harman, H.H. *Modern Factor Analysis*, 3rd ed.; Revised; The University of Chicago Press: Chicago, IL, USA, 1976.
91. Hair, J.F.; Sarstedt, M.; Hopkins, L.; Kuppelwieser, V.G. Partial least squares structural equation modeling (PLS-SEM). *Eur. Bus. Rev.* **2014**, *26*, 106–121. [[CrossRef](#)]
92. Maichum, K.; Parichatnon, S.; Peng, K.-C. Application of the Extended Theory of Planned Behavior Model to Investigate Purchase Intention of Green Products among Thai Consumers. *Sustainability* **2016**, *8*, 1077. [[CrossRef](#)]
93. Ciavolino, E.; Dahlgaard, J.J. ECSI—Customer Satisfaction Modelling and Analysis: A Case Study. *Total Qual. Manag. Bus. Excell.* **2007**, *18*, 545–554. [[CrossRef](#)]
94. Blackwell, R.D.; Miniard, P.W.; Engel, J.E. *Consumer Behaviour*, 10th ed.; Thompson: South-Western, SW, Canada, 2006.
95. Pirani, E.; Secondi, L. Eco-friendly Attitudes: What European Citizens Say and What They Do. *Int. J. Environ. Res.* **2011**, *5*, 67–84.
96. Van Vugt, M.; Roberts, G.; Hardy, C. Competitive altruism: Development of reputation-based cooperation in groups. In *Handbook of Evolutionary Psychology*; R. Dunbar & Status, Reputation, and Altruism 403 L. Barrett; Oxford University Press: Oxford, UK, 2007; pp. 531–540.
97. Griskevicius, V.; Cantú, S.M.; Van Vugt, M. The Evolutionary Bases for Sustainable Behavior: Implications for Marketing, Policy, and Social Entrepreneurship. *J. Public Policy Mark.* **2012**, *31*, 115–128. [[CrossRef](#)]
98. Holbrook, M.B. Consumption experience, customer value, and subjective personal introspection: An illustrative photographic essay. *J. Bus. Res.* **2006**, *28*, 714–725. [[CrossRef](#)]
99. Kärnä, J.; Juslin, H.; Ahonen, V.; Hansen, E. Green Advertising: Greenwash or a True Reflection of Marketing Strategies? *Greener Manag. Int.* **2001**, *33*, 59–70. [[CrossRef](#)]
100. Anderson, J.C.; Thomson, J.B.; Wynstra, F. Combining value and price to make purchase decisions in business markets. *Int. J. Res. Mark.* **2000**, *17*, 307–329. [[CrossRef](#)]
101. Andreassen, T.W.; Lindestad, B. The effect of corporate image in the formation of customer loyalty. *J. Res.* **1998**, *1*, 82–92. [[CrossRef](#)]
102. Saboo, A.R.; Kumar, V.; Ramani, G. Evaluating the impact of social media activities on human brand sales. *Int. J. Re. Mark.* **2016**, *33*, 524–541. [[CrossRef](#)]
103. Kao, T.-F. A Study on the Influence of Green Advertising Design and Environmental Emotion on Advertising Effect. *J. Clean. Prod.* **2019**, 118294. [[CrossRef](#)]



104. De Medeiros, J.F.; Duarte Ribeiro, J.L.; Nogueira Cortimiglia, M. Influence of perceived value on purchasing decisions of green products in Brazil. *J. Clean. Prod.* **2016**, *110*, 158–169. [[CrossRef](#)]
105. Vlachos, P.A.; Theotokis, A.; Pramadari, K.; Vrechopoulos, A. Consumer-retailer emotional attachment. *Eur. J. Mark.* **2010**, *44*, 1478–1499. [[CrossRef](#)]
106. Baek, T.H.; Kim, J.; Yu, J.H. The differential roles of brand credibility and brand prestige in consumer brand choice. *Psychol. Mark.* **2010**, *27*, 662–678. [[CrossRef](#)]
107. Berger, J. Signaling can increase consumers' willingness to pay for green products. Theoretical model and experimental evidence. *J. Consum. Behav.* **2019**. [[CrossRef](#)]
108. Anderson, J.C.; Gerbing, D.W. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol. Bull.* **1988**, *103*, 411. [[CrossRef](#)]
109. Söderlund, M. Customer satisfaction and its consequences on customer behavior revisited. *Int. J. Serv. Ind. Manag.* **1998**, *9*, 169–188. [[CrossRef](#)]



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).