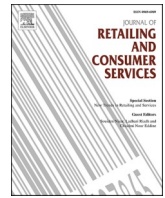




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# Identifying the critical factors of customer behavior: An integration perspective of marketing strategy and components of attitudes

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## ABSTRACT

The purpose of this empirical study is to operationalize the relationship of green marketing's influence on consumer attitudes via the mediating role of marketing mix towards green products to validate the proposed research model in the Taiwanese context of explaining consumers' willingness to be environmentally friendly. The model is based on structural equation modeling (SEM) from data collected from 977 online consumers. The findings revealed that green consumption intention was significantly and indirectly driven by attitude to green products. Additionally, the effect of perceived quality on marketing mix and consumer willingness in environmental concern is both significant and positive. However, when a restaurant has high consumer social responsibility (CnSR) for marketing mix, the consumer attitudes of cognitive, affective, and behavioral model (C-A-B model) is less effective. These findings have contributed to the revival of the theory of planned behavior (TPB) and offer a comprehensive understanding of consumer attitude, consumer social responsibility, marketing mix and perceived quality impact that a restaurant has on the ability to raise consumer willingness to purchase green products or food. We provides valuable suggestions to marketers to design from the perspective of green marketing policies and strategies in order to accommodate Taiwan's indigenous green restaurants.

## 1. Introduction

According to attitude theory, customers may support C-A-B models according to their attitudes to marketing communication, marketing decisions and personal benefits (Ajzen and Fishbein, 1980). Moreover, in green marketing development for the restaurant industry, customers are critical stakeholders who may affect its benefit, performance, marketing strategy planning, and growth (Mele et al., 2019; Trang et al., 2019). Based on the consumer perception of green marketing development, customers may determine willingness based on a cognitive, affective and behavioral model (Jaiswal and Kant, 2018); customers' perceptions of C-A-B models may change over time according to green perception and marketing strategy (Kim et al., 2020). Thus, integrating the insights of customers of C-A-B models and green marketing is

important.

Although hospitality scholars have examined customer attitudes to green marketing (Chan, 2013; Mele et al., 2019; Nimri et al., 2020), several unanswered questions remain. Several studies of green marketing have discussed the drivers, management, and marketing of sustainability (Chabowski et al., 2011; Leonidou and Leonidou, 2011). Thus, determining whether greening assessment will determine customers' attitudes is warranted. According to Cronin et al. (2011) there are few studies of green consumers.

A marketing paradigm is a type of green product in which strategic pricing (Cannon et al., 2008; LaVecchia, 2008), the distribution place (Stern et al., 1996), or the promotion mix (Kotler and Keller, 2006) are classified. Accordingly, we apply the perceptual attitude components in the C-A-B model and discuss how the C-A-B model of consumer

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influences green marketing that combines superior green quality and marketing mix programs.

The theory of planned behavior (TPB) has been applied in many environmental and behavioral studies to capture the consumer willingness to purchase green products in developed and developing countries (Ajzen and Fishbein, 1980; Jaiswal and Kant, 2018). However, the relevance of behavioral measures of TPB to green markets is still questionable. We therefore use the theory of planned behavior to demonstrate strategic consumerism and consumer willingness (Ajzen and Fishbein, 1980; Jaiswal and Kant, 2018; Kwon and Vogt, 2010).

This empirical study operationalizes and validates that green consumer intention was significantly and indirectly driven by attitude to green products. The cognitive, affective, and behavioral model influences consumer willingness via the mediating the role of marketing mix to consumer willingness. Additionally, the effect of perceived quality on the marketing mix and consumer willingness is significant and positive. However, when a restaurant has high consumer social responsibility (CnSR) for marketing mix, its C-A-B model is less effective. In Fig. 1 we predict an integrated green marketing approach through an attitude model to understand consumer willingness and support type.

## 2. Theoretical review and hypotheses

**Sustainability consideration in the marketing mix model.** In the theories of green marketing, the theory of planned behavior (TPB) is often used to explain the relationship between consumer attitude and behaviors (Jaiswal and Kant, 2018; Raab et al., 2018). However, Groening et al.'s (2018) review of green marketing theories notes the straightforward interpretation of TPB may not capture the complexity of green consumer behavior. Wu et al. (2018) and Raab et al. (2018) suggest adopting the cognitive, affective, and behavioral (C-A-B) model to explore the relationship between green attitude and the behavior of tourism and dining consumers.

A cognitive model is an individual's beliefs about the outcomes of green knowledge; an affective model is an emotional evaluation with a preference, and a behavioral component consists of the green actions that are presented in relation to the individuals' determination to consume. The unidimensional C-A-B model is acceptable for all measures of attitudes (Fishbein and Ajzen, 1977; Gigerenzer, 2019).

The C-A-B model is essential to derive a series of perceptual attitudes that can recognize consumers' decision-making and marketing intention (Gursoy et al., 2019; Kwon and Vogt, 2010). However, there are still many unanswered questions about consumer attitudes, green marketing portfolios, and consumer willingness (Chang et al., 2019). Ottman

(2017) mentions that in the past, marketers of sustainable goods and services targeted their products to "environmentally friendly" consumers, and they had little to show for their efforts. Today the green consumers are everywhere because green products are known to be better for the planet (Morel and Kwakye, 2012; Ottman, 2017). Because people's attitudes affect their willingness to consume, it is important to have a better understanding of the factors that affect consumer attitude (Groening et al., 2018).

Recent studies have identified the sustainability proposition for restaurant management practices and strategies, Hoffenson and Soderberg (2015) have shown that sustainability can be a trade-off between economic and environmental objectives by framing an approach to market-based tolerance optimization and showing how sustainability decisions can influence the attributes that are important to consumers: quality, environmental friendliness, and marketing mix.

Consumers are demanding environmentally friendly food and products (Hoffenson and Soderberg, 2015), and it is believed that marketing mix for displaying environmental footprints of product, pricing, price and promotion to consumers can increase the value that consumers place on environmental friendliness (Limnios et al., 2009). In the pursuit of better understanding how consumers and restaurant managers should make decisions about environmental impacts, this study has a novel framework for indicating that the key determinant of consumer willingness is sustainability consideration in marketing mix, which is significantly affected by customer C-A-B model (Menguc et al., 2010) In particular, due to consumer environmental consensus, the rise of sustainability awareness explains consumers' willingness to perform environmentally friendly behavior (Leonidou et al., 2013). Sustainability issues have been observed in consumer attitudes to environmental and social matters (Van Doorn and Verhoef, 2011) and have been implemented in green marketing strategies (Chahal et al., 2014). Consequently, this study investigates the critical factors of consumer willingness linked an adequate method of applying the green marketing strategies, which presents the sustainability consideration in marketing mix model.

**The relationships between the C-A-B model and marketing mix.** Based on green marketing research, we could find out the components of marketing mix, such as products, pricing, place, and promotion, are the key influence factors between consumer attitude with behavior (Hanssens et al., 2014). In terms of green marketing (Leonidou et al., 2013), the marketing mix is being implemented with regard to the likely outcomes of green-friendly marketing (Hanssens et al., 2014). The definition of green marketing in four programs is as follows. LaVecchia (2008) and Chou et al. (2018) indicate that consumers demand more

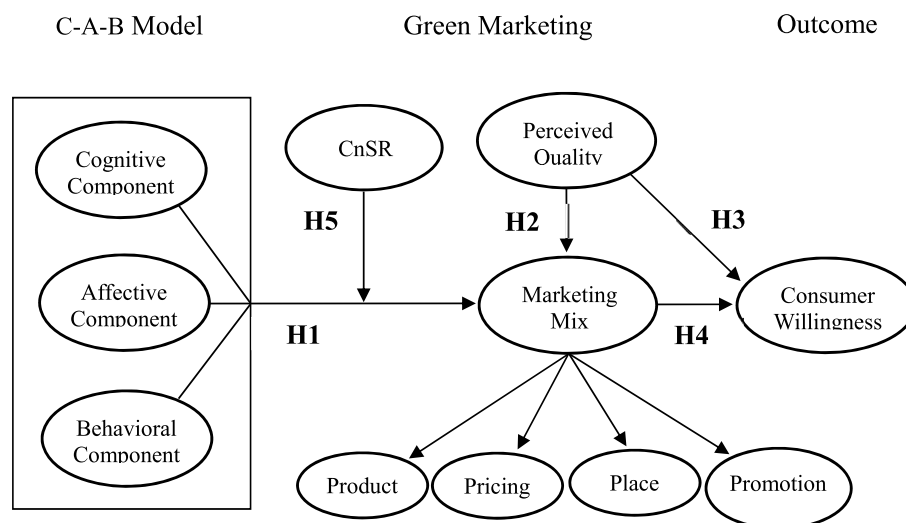


Fig. 1. Research framework.

environmentally friendly restaurants that offer organic, local and sustainable products. Cannon et al. (2008) explain strategic pricing as the idea that the product design should maximize benefits to the customers. This view stresses the importance of marketing objectives such as customer satisfaction. Yoo et al. (2000) describe that the distribution place is making a decision on the channel structure of the member types within the channel, the intensity of the member types and the number of channels in the market. Leonidou et al. (2013) clarify promotion practices as a set of components that interact and integrate to realize the institution's marketing philosophy.

To encourage the purchase of green products, marketers should understand the impact of consumer attitudes on green marketing (Rahman et al., 2017). For example, empirical research indicates that tourism and hospitality consumers' green attitude has a direct impact on corporate marketing.

In a related study, Jeng and Yeh (2016) found that consumers choose green restaurants to improve their interpersonal relationships or protect the environment. Therefore we explore how the perception of the C-A-B model and marketing mix programs affects consumer decisions. We therefore propose Hypothesis 1:

**Hypothesis 1.** The C-A-B model is positively related to marketing mix.

**The relationships between perceived quality and marketing mix.** Perceived quality is one of the most critical aspects of product or food development (Stylidis et al., 2020). The cognitive measure of perceived quality can be conceptualized as one's ability to understand product or sustainability issues, including sanitation, attractiveness, and safety (Yadav and Pathak, 2016). Aaker (2009) defines *perceived quality* as "the customer's perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives." Therefore, perceived quality will lead to customer satisfaction (Stylidis et al., 2020).

The subjective measure of perceived quality is based on one's perception or assessment of what and how much a consumer knows about being greens. Objective measures of quality are based on environmental or food quality. However, subjective measures are more effective in evaluating the marketing mix and consumer willingness (Jaiswal and Kant, 2018). We acknowledge the direct effect of perceived environmental and food quality on consumers' intention to purchase environmentally friendly products, and therefore researchers have suggested that a higher level of perceived quality would lead to higher consumer willingness and positive marketing mix (Yadav and Pathak, 2016).

Within TPB, behavioral perceived beliefs are perceived consequences (Ajzen and Fishbein, 1980; Lee and Chow, 2020). Based on these perceived beliefs and associated subjective evaluations, restaurant consumers presumably developed positive attitudes to a marketing strategy. Ajzen (2006) emphasized that if consumers perceive quality or beneficial attributes for performing the marketing mix, they tend to develop a favorable attribute to marketing activities. The expectancy-value approach asserts that strategic consumerism is a function of value expectancy or perceived quality in which a restaurant has attributes that customers value (Ajzen and Fishbein, 1980; Lee and Chow, 2020).

Perceived quality is a key factor in customers' willingness to repurchase (Konuk, 2018, 2019; Stylidis et al., 2020). Perceived quality has distinct implications for previous studies; they reveal the links between intrinsic attributes and perceived quality, (Rahman and Soesilo, 2018; Stylidis et al., 2020). Considering that perceived quality is different from objective quality, perceived quality has been used extensively to explain green behavior and the adoption of green practices (Chou et al., 2012). Therefore, in the face of market competition and in the early stages of new green products, services, and business models, marketing departments should continue to communicate with customers and respond to market requirements for quality (Hoffenson and Söderberg, 2015; Tollin and Christensen, 2019). In other words,

while considering perceived quality as the consumer's judgment of the superiority of a design, perceived characteristics have been used in adopting green practices to explain the positive effect of marketing mix and consumer willingness (Chou et al., 2012; Garvin, 1983). This study proposes Hypotheses 2 and 3:

**Hypothesis 2.** Perceived quality is positively related to marketing mix.

**Hypothesis 3.** Perceived quality is positively related to consumer willingness.

**The mediating relationships between the C-A-B model and consumer willingness.** The theory of planned behavior explains the cognitive, affective and behavioral processes involved in consumers' purchasing decisions. It has been used to predict a consumer's willingness to behave in a specific manner (Lee and Chow, 2020). Extensive empirical evidence substantiates the claim that a positive attitude to purchasing produces a stronger willingness to consume, as does environmentally friendly behavior (Ajzen and Fishbein, 1980; Lee and Chow, 2020).

To rationalize the mediating effect of the marketing mix of the C-A-B model on consumer willingness, Leonidou et al. (2013) emphasize the causal link between the C-A-B model, organizational marketing mix and consumer willingness; they discuss the value of the C-A-B model. Marketing strategies enhance consumer willingness. In addition, there is enormous value to the consumer, especially in terms of the speed of decision making (Kwon and Vogt, 2010).

Although such studies have contributed to sustainability, marketing research on consumer willingness is limited. Some studies have suggested that the relationship between the two should be better understood so that companies can make more accurate marketing plans and capture market share (Cronin et al., 2011; Leonidou et al., 2013; Wang et al., 2016). This means that the relationships between the C-A-B model and consumer willingness are hypothesized to be indirect. Therefore, marketing mix mediates the relationships between the independent variables of the -A-B model and the dependent variable of consumer willingness. Therefore, we hypothesize:

**Hypothesis 4.** Marketing mix of the product, pricing, place, and promotion positively mediate the effect of the C-A-B model on consumer willingness.

**Moderating role of consumer social responsibility.** Consumer social responsibility (CnSR) initiatives have often been a source of competitive advantage (Chang et al., 2019). Green initiatives help give caterers a competitive advantage (Singjai et al., 2018). Restaurants have used green marketing to perform CnSR. Although restaurant owners are striving to improve their financial performance by practicing green marketing, gaining consumer trust and meeting their expectations has become more challenging (Chang et al., 2019). Therefore, when consumers think that a restaurant is engaged in a CnSR activity, they demonstrate a cognitive, affective, and behavioral (C-A-B) model to a positive marketing mix.

In other words, when consumers have information that matches their green policy, green education and promotion, they will be more enthusiastic about marketing activities. Thus, consumers are likely to have a positive attitude to a green restaurant when they think that their actions can help the environment (Chang et al., 2019). Menguc et al. (2010) note that public or customer environmental pressures, and the essential role of social responsibility frame those influences as an environmental belief. The moderating variable for social exchange is the interaction effect between the perceptual attitude and marketing decision (Kwon and Vogt, 2010).

In addition, the social influence of consumer responsibility includes a mix of elements with an attitude model in best practices (Chou et al., 2012; Vitell, 2015). The greater the public concern, the greater the probability of social marketing and sustainability (Lécuyer et al., 2019;

Leonidou et al., 2013). In a related study, Rahimah et al. (2018) surveyed 280 Taiwanese people about green consumption. They found that green purchase behavior through their attitude of social responsibility and environmental concern.

However, when there is a high level of CnSR activity, the crowding-out hypothesis holds that the effects of consumer satisfaction might outweigh the stimulating effect of monetary expenditure for consumers and thus reduce a restaurant's propensity to engage in a desired CnSR activity (Chang et al., 2019). In other words, this is a case of making use of an extrinsic value designed to be an incentive to inspire restaurants to do CnSR. If high CnSR activity had a negative effect on marketing mix, when a restaurant has high consumer social responsibility (CnSR), the C-A-B model is less effective for marketing mix. Thus, we propose the following hypothesis.

**Hypothesis 5.** Consumer social responsibility (CnSR) negatively moderates the relationship between C-A-B model and marketing mix.

### 3. Methodology

This research framework consists of a perceptual attitude based on a C-A-B model and green marketing approach. The former part of the mental process has cognitive, affective, and behavioral models. The latter part of marketing aspects includes both perceived quality and marketing mix programs (e.g., product, pricing, place, and promotion). Overall, the study has demonstrated a marketing strategy that leads to strategic consumerism. This study examines the relationships between a C-A-B model of greening perception with marketing mix based on green marketing, in addition to the imperative influences of marketing on consumer willingness.

**Sample and data collections.** An online survey was administered from June 1 to August 31, 2016, posted on the greening community website via a Facebook platform connected to Google. An online questionnaire was sent to potential consumers of green foodservice. To increase the response rate, respondents were entered into a drawing for a tablet PC. Therefore, the formal survey consisted of closed-ended questions. Before the online survey, convenience sampling was used to collect 100 hospitality management trainees for a pretest. This pretest confirmed the wording to ensure that the respondents understood each item on the questionnaire. Finally, the scale of the reliability analysis achieved a Cronbach's  $\alpha$  ( $\alpha > 0.7$ ) coefficient standard for each construct, and the formal survey was initiated.

This study collected questionnaires online from 1053 individuals and selected 977 valid samples from Taiwanese respondents, excluding respondents who refused to answer, did not approve of green action, provided missing or incomplete answers, or comprised invalid samples. The analysis used actual samples, producing an actual response ratio of 92.7%. Table 1 shows the demographics of the respondents.

**Measures.** The study's respondents were green online consumers in Taiwan. The constructs were composed of each factor calculated using reflective indicators (Anderson and Gerbing, 1988; Bagozzi and Yi, 1988). The select of measurement perception (and the use of formative or reflective scales) should be *theoretically* driven, specifying 'the nature and direction of the relationship between constructs and measures (Hair et al., 2019; Theodosiou et al., 2019). As Diamantopoulos and Siguaw (2006) asserted that reflective scales would be more appropriate. This study uses reflective multi-item scales to measure their relationship. The former part of a mental process of a C-A-B model refers to the perceptual attitudes that influence consumer determinations. The measurement items of the C-A-B model with three dimensions of the cognitive component (four items), affective component (four items), and behavioral component (four items) were obtained from Eagly and Chaiken (1993) and Rosenberg and Hovland (1960). The latter part of green marketing (GM) contains two strategic approaches. One approach is perceived quality, which refers to the consumer judgment of the superiority or the excellence of the product design. With one dimension (five

**Table 1**  
Demographics of the Respondents.

Demographics	Frequency	Percentage	Accumulated Percentage
Gender			
Male	320	32.8%	32.8%
Female	657	67.2%	100.0%
Age			
Under 20 years old	218	22.3%	22.3%
21–30 years old	564	57.7%	80.0%
31–40 years old	68	7.0%	87.0%
41–50 years old	84	8.6%	95.6%
51–60 years old	38	3.9%	99.5%
Over 61 years old	5	0.5%	100.0%
Education			
Under senior high school	5	0.5%	0.5%
Junior college	63	6.4%	7.0%
College	828	84.7%	91.7%
Master or above	81	8.3%	100.0%
Occupation			
Student	643	65.8%	65.8%
Government employee	58	5.9%	71.7%
Business industry	53	5.4%	77.1%
Technology industry	25	2.6%	79.7%
Service industry	174	17.8%	97.5%
Agriculture industry	24	2.5%	100.0%
Monthly Income			
Under NTD 20,000	627	64.2%	64.2%
NTD 20,001–30,000	141	14.4%	78.6%
NTD 30,001–50,000	103	10.5%	89.2%
NTD 50,001–80,000	82	8.4%	97.5%
Over NTD 80,001	24	2.5%	100.0%

Note. 1. n = 977

2. NTD = New Taiwan Dollar.

items), the measurement items of perceived quality were obtained from Zeithaml (1988). The constructs of marketing mix were selected from Kotler and Keller (2006), Cannon et al. (2008), LaVecchia (2008) and Stern et al. (1996), which refers to classification programs, including the marketing product (four items), marketing pricing (three items), marketing place (three items), and marketing promotion (three items), which are composed of marketing communication and determine conduct. In addition, the consumer willingness to gather green consumer consensus was estimated. With one dimension (four items), the measurement items of the outcomes of consumer willingness were obtained from Kwon and Vogt (2010). Moreover, the moderator of consumer social responsibility (CnSR), which emphasizes the essential influences of green literacy, was adopted from Vitell (2015). A review of the literature indicates that expanding the number of choice-points of Likert scale 7-points does represent scale reliability, exploit the discriminative capacity and increase scale sensitivity (Cummins and Gullone, 2000). Thus, we adopted a 7-point Likert scale for the questionnaire, with 1 indicating *strongly disagree* and 7 indicating *strongly agree*, and demographic data for gender, age, education, occupation, and monthly income.

**One-way analysis of variance.** The results from the potential customers confirmed a significant difference between respondents with demographics of diverse lifestyles (7-point Likert scale). The one-way analysis of variance (ANOVA) model with post hoc tests indicated demographics (age, education, income) from three lifestyles (shopping, gourmet, family) with a different willingness to support type. Table 2 shows the one-way analysis of variance with post hoc tests for examining lifestyles among the demographics.

Overall, for customers with the shopping lifestyle, (1) the respondents aged 31 and above have a better willingness than those under 20; (2) the respondents with a master's degree have a better willingness than those with a college degree; and (3) the respondents with a monthly income of 30,001 NT dollars and above have a better willingness than those with an income of 20,000NT dollars. Next, for customers with the gourmet lifestyle, (1) the respondents aged 41 and above have stronger willingness to go green than those under 20; and (2) the respondents



**Table 2**  
One-way Analysis of Variance with Post Hoc Test for Examining Lifestyles among Demographics.

Demographics (n = 977)		Life style for shopping			Life style for gourmet			Life style for family		
(I)	(J)	Difference (I)-(J)	Standard Error	p Value	Difference (I)-(J)	Standard Error	p Value	Difference (I)-(J)	Standard Error	p Value
Age										
Under 20	31–40	-0.521	0.118	0.01	-	-	-	-	-	-
	41–50	-0.573	0.109	0.001	-0.565	0.125	0.001	-	-	-
	51–60	-0.684	0.149	0.001	-0.690	0.171	0.01	-	-	-
21–30	41–50	-0.373	0.099	0.05	-0.393	0.114	0.05	-	-	-
	51–60	-0.483	0.142	0.05	-	-	-	-	-	-
Education										
College	Master	-0.338	0.099	0.01	-	-	-	-0.443	0.148	0.05
Income										
20,000	30,001–50,000	-0.353	0.090	0.01	-	-	-	-	-	-
	50,001–80,000	-0.586	0.099	0.001	-0.455	0.114	0.01	-0.513	0.149	0.05

Note. Scheffé method

with a monthly income of 50,001–80,000 have much more willingness than those with an income of 20,000. Finally, for customers with the family lifestyle, (1) the respondents with a master’s educational level have a better willingness than those with a college education; and (2) the respondents with a monthly income of 50,001–80,000 have a better willingness than those with an income of 20,000.

Accordingly, the results indicate that the shopping, gourmet, and family respondent lifestyles were significantly different, depending on the monthly income among potential customers. For the education demographic, shopping lifestyle and family lifestyle show that the respondents with a master’s degree have a better willingness than those with a college education. The senior consumers with the shopping lifestyle and the gourmet lifestyle are found to have a better willingness than junior consumers.

**Common method variance.** This study extracted six factors using the exploratory factor analysis (EFA) of Harman’s factor test for all 33 items. The first factor explained 40.942% of the variance (less than 50%). Additionally, a confirmatory factor analysis (CFA) was performed for all items in the study. The factor loadings were not significant for all items. Moreover, the model fit of the single-factor test was worse ( $\chi^2 = 975.996$ ,  $df = 98$ ,  $\chi^2/df = 9.959$ ,  $GFI = 0.872$ ,  $AGFI = 0.823$ ,  $NFI = 0.896$ ,  $CFI = 0.906$ ,  $IFI = 0.906$  and  $RMSEA = 0.096$ ) than the fit of the proposed model ( $\chi^2 = 695.253$ ,  $df = 92$ ,  $\chi^2/df = 7.557$ ,  $GFI = 0.912$ ,  $AGFI = 0.871$ ,  $NFI = 0.926$ ,  $CFI = 0.935$ ,  $IFI = 0.935$  and  $RMSEA = 0.082$ ). The results show that common method variance (CMV) is not a substantial problem in this study.

#### 4. Results

This study’s validity measurement refers to the theoretical foundation of the existing literature. This study was reviewed via practical and academic experts, and a pretest was used to revise the measurement; thus, the study indicated content validity. With respect to the procedures recommended by Anderson and Gerbing (1988), the analysis consisted of two steps. First, the study used confirmatory factor analysis (CFA) to estimate the measurement model for the reliabilities and validities of each construct. Second, the use of structural equation modeling (SEM) provided evidence of its robustness and the correlation of the hypothesized model for each construct.

**Measurement model.** The CFA method is used to estimate the measurement model for reliability and validity using reflective indicators to evaluate the variables’ factor loadings (Anderson and Gerbing, 1988; Bagozzi and Yi, 1988). Accordingly, the measurement of the convergent validity was tested according to composite reliability (CR) (standard value beyond 0.70) and the average variances extracted (AVE) (standard value beyond 0.50) (Hair Jr. et al., 2010). Table 3 shows that all CR values exceed 0.70, which indicates acceptable reliability for each

construct. All AVE values exceed 0.50. Thus, the results show that each construct has suitable convergent validity (Fornell and Larcker, 1981). Regarding the results of discriminant validity, Gaski and Nevin (1985) propose inspecting the association coefficient between any two dimensions lower than 1, then inspecting the association coefficient of any two dimensions lower than the Cronbach’s  $\alpha$  coefficient. Table 4 indicates the results of acceptable discriminant validity determination.

The robust construct recommended fit the criteria for reliability. A squared multiple correlation (SMC) above 0.20 is recommended (Bentler and Wu, 1993; Jöreskog and Sörbom, 1993), and each of the Cronbach’s  $\alpha$  coefficients exceeds the standard value of 0.70, which is a rational level of internal consistency with consistent indicators for each construct. The results show that the SMC is between 0.625 and 0.976 and that the Cronbach’s  $\alpha$  coefficients exceed 0.711. Thus, the acceptable reliability of this study is indicated.

**Structural model.** Because multiple independent variables (IV) and dependent variables (DV) were used in this study, previous studies suggested that structural equation modeling (SEM) would be more suitable because of advantage of estimate of consequences of measurement errors, to integrate measurement model, and to a simultaneous assessment the hypothesized causal relationships and better than only

**Table 3**  
The Reliability of the Constructs.

Constructs	Items	Ranks	Mean	SMC	A	CR	AVE
C-A-B Model							
Cognitive component	4	1–7	6.0	0.528	0.822	0.824	0.543
Affective component	4	1–7	5.3	0.464	0.735	0.780	0.514
Behavioral component	3	1–7	5.8	0.736	0.814	0.744	0.500
Green marketing							
Perceived quality	5	1–7	5.7	-	0.890	0.876	0.587
Product	4	1–7	5.8	0.596	0.822	0.862	0.613
Pricing	3	1–7	5.8	0.426	0.711	0.808	0.596
Place	3	1–7	5.9	0.589	0.808	0.788	0.554
Promotion	3	1–7	5.7	0.668	0.815	0.782	0.546
Outcome							
Consumer willingness	4	1–7	5.2	0.625	0.712	0.795	0.517
CnSR							
Green policy	11	1–7	5.7	-	0.816	0.842	0.641
Green policy	4	1–7	5.7	-	0.763	0.751	0.439
Green education	4	1–7	5.8	-	0.695	0.765	0.451
Green promotion	3	1–7	5.8	-	0.802	0.770	0.531

Note. C-A-B Model = Cognition-Affection-Behavior Model, CnSR = Consumer Social Responsibility, SMC=Squared Multiple Correlation,  $\alpha$  = Cronbach’s  $\alpha$ , CR=Composite Reliability, AVE = Average Variance Extracted.

**Table 4**  
Correlation Matrix for Measurement Scales.

Dimensions	CC	AC	BC	PQ	PT	PR	PL	PO	WP
CC	(0.822)								
AC	0.514	(0.735)							
BC	0.616	0.585	(0.814)						
PQ	0.640	0.512	0.596	(0.890)					
PT	0.567	0.534	0.676	0.542	(0.822)				
PR	0.559	0.406	0.538	0.482	0.568	(0.711)			
PL	0.615	0.506	0.650	0.525	0.615	0.562	(0.808)		
PO	0.576	0.530	0.735	0.557	0.657	0.540	0.692	(0.815)	
CW	0.517	0.636	0.622	0.562	0.541	0.473	0.491	0.563	(0.712)

Note. N = 917 (two-tailed test). CC=Cognitive Component, AC = Affective Component, BC=Behavioral Component, PQ=Perceived Quality, PT=Product, PR=Pricing, PL=Place, PO=Promotion, CW=Consumer Willingness, Number in brackets is the value of Cronbach’s  $\alpha$ , Correlations with absolute value greater than 0.406 are significant at \*\*\* $p < 0.001$ .

estimate by linear regression (Chamsuk et al., 2017; Preacher et al., 2011). Therefore, we constructed a structural model using maximum likelihood estimation (MLE) with AMOS 18.0 software to estimate causal relationships (Hair et al., 2010). The overall fit statistics ( $\chi^2 = 695.253$ ,  $df = 92$ ,  $\chi^2/df = 7.557$ ,  $GFI = 0.912$ ,  $AGFI = 0.871$ ,  $NFI = 0.926$ ,  $CFI = 0.935$ ,  $IFI = 0.935$  and  $RMSEA = 0.082$ ) indicate a suitable level of fit. Byrne (2013) suggested the values of RSMEA should be  $< 0.08$ . However, given the data constraints, some studies suggested that RSMEA values close to 0.08 also represent good model fit Chung and Leung (2019); Sun and Huang (2019) (RMSEA = 0.082).

Table 5 displays the results of the hypothesized tests. Fig. 2 provides the graphic evaluations in the path drawing. Consequently, the findings indicate the C-A-B model (cognitive, affective, and behavioral models) has a significant and positive impact on the marketing mix ( $\gamma = 0.981$ ,  $t = 28.402$ ,  $p < 0.001$ ), supporting Hypothesis 1. Next, perceived quality has a significant and positive impact on marketing mix ( $\gamma = 0.115$ ,  $t = 5.527$ ,  $p < 0.001$ ), supporting Hypothesis 2. In addition, perceived quality has a significant and positive impact on consumer willingness ( $\gamma = 0.187$ ,  $t = 5.343$ ,  $p < 0.001$ ), supporting Hypothesis 3. Finally, marketing mix has a positive and significant impact on consumer willingness ( $\beta = 0.747$ ,  $t = 12.716$ ,  $p < 0.001$ ), supporting Hypothesis 4. Otherwise, marketing mix programs of the product, pricing, place, and promotion have a positive and significant impact on consumer willingness ( $\beta = 0.121$ ,  $t = 3.055$ ,  $p < 0.002$ ;  $\beta = 0.291$ ,  $t = 6.330$ ,  $p < 0.001$ ;  $\beta = 0.179$ ,  $t = 4.237$ ,  $p < 0.001$ ; and  $\beta = 0.493$ ,  $t = 8.833$ ,  $p < 0.001$ , respectively).

Moreover, the study examines the mediating effects of perceived quality, marketing mix and consumer willingness on green marketing.

**The mediating effect of marketing mix.** To investigate the mediation of the marketing mix effects of the C-A-B model (or perceived quality) on consumer willingness, according to Baron and Kenny (1986), this study adopted a C-A-B model as a predictor of consumer willingness. Regression analysis was used to verify the mediating effect of the marketing mix on the relationships between the C-A-B model (or perceived

quality) and consumer willingness. We obtained data on consumers’ age, education, occupation, and income. These independent variables were then incorporated into the regression model to control the possible effects of the corresponding variables. When the dependent variable was consumer willingness (Table 6), the results showed that age, education and income were not significant and that explanatory power was low ( $R^2 = 2.7\%$ ) in model 1.

The independent variable of a C-A-B model was incorporated in model 2, increasing its explanatory power to 50.0%. The C-A-B model had a significant effect on consumer willingness ( $\gamma = 0.699$ ,  $t = 30.307$ ,  $p < 0.001$ ). The independent variable of “perceived quality” was incorporated in model 3, increasing its explanatory power to 33.1%. Perceived quality had a significant effect on consumer willingness ( $\gamma = 0.553$ ,  $t = 20.978$ ,  $p < 0.001$ ). The independent variable of the “marketing mix” was incorporated in model 4, increasing the explanatory power to 38.8%. The marketing mix had a significant effect on consumer willingness ( $\beta = 0.606$ ,  $t = 23.943$ ,  $p < 0.001$ ).

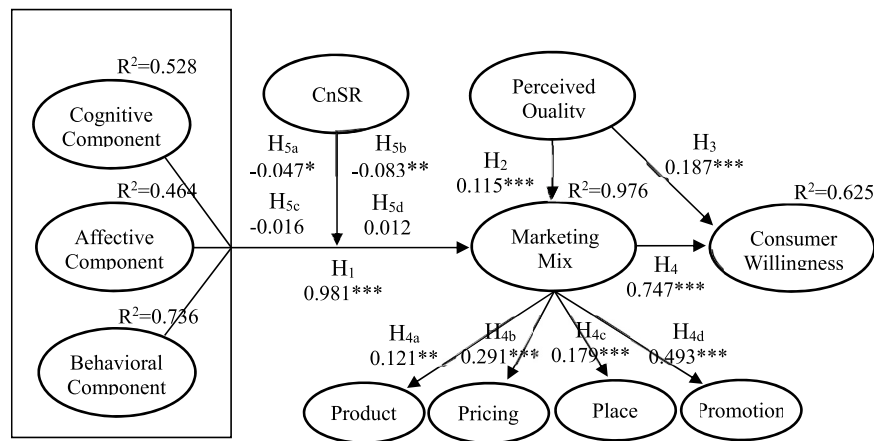
Model 5 shows that both the C-A-B model and marketing mix significantly influence consumer willingness. The C-A-B model was reduced from  $\gamma = 0.699$  to  $\gamma = 0.588$  (a coefficient reduction of 0.111), and its explanatory power increased to 50.7%. This result shows that the marketing mix has a partially mediating effect on the relationship between the C-A-B model and consumer willingness. Model 6 shows that both perceived quality and the marketing mix significantly influence consumer willingness. Perceived quality was reduced from  $\gamma = 0.553$  to  $\gamma = 0.289$  (a coefficient reduction of 0.264), and its explanatory power increased to 43.9%. This finding shows that the marketing mix has a partially mediating effect on the relationship between perceived quality and consumer willingness.

**The moderating effect of consumer social responsibility.** A hierarchical regression analysis based on Baron and Kenny (1986) was conducted to examine the interaction between the green marketing approach and the outcome. Age, education, occupation and income

**Table 5**  
Results of Hypothesized Model.

Hypotheses	Relationship	Path	t-value	Results	
H1	C-A-B model	→ Marketing mix	0.981	28.402	Supported
H2	Perceived quality	→ Marketing mix	0.115	5.527	Supported
H3	Perceived quality	→ Consumer willingness	0.187	5.343	Supported
H4	Marketing mix	→ Consumer willingness	0.747	12.716	Supported
H4a	Product	→ Consumer willingness	0.121	3.055	Supported
H4b	Pricing	→ Consumer willingness	0.291	6.330	Supported
H4c	Place	→ Consumer willingness	0.179	4.237	Supported
H4d	Promotion	→ Consumer willingness	0.493	8.833	Supported
H5a	C-A-B model	→ CnSR → Product	-0.047	-1.996	Supported
H5b	C-A-B model	→ CnSR → Pricing	-0.083	-3.155	Supported
H5c	C-A-B model	→ CnSR → Place	-0.016	-1.210	Not supported
H5d	C-A-B model	→ CnSR → Promotion	0.012	0.929	Not supported

Note. C-A-B=Cognition-Affection-Behavior, CnSR (Consumer Social Responsibility) as a moderator.



Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , Two-tailed test.  
The mediating effect of marketing mix.

Fig. 2. Proposed model.

Table 6  
Regression analysis of Mediation Effects for Marketing Mix.

Model (Independent)	Consumer willingness					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Main Effect						
C-A-B model		.699*** (30.307)			.588*** (15.254)	
Perceived quality			.553*** (20.978)			.289*** (9.337)
Marketing mix				.606*** (23.943)	.137*** (3.597)	.425*** (13.674)
R <sup>2</sup>	.027	.500	.331	.388	.507	.439
ΔR <sup>2</sup>		.497	.327	.385	.504	.435
F	6.774	194.237***	95.878***	123.267***	166.011***	126.368***
Control Variables						
Constant	4.651*** (20.720)	0.380 (1.777)	1.588*** (6.706)	0.770*** (3.199)	0.180 (0.820)	0.331*** (1.405)
Age	.046 (1.161)	-.012 (-0.419)	.061 (1.864)	.025 (0.786)	-.007 (-0.266)	.039 (1.295)
Education	.127 (1.725)	.029 (0.546)	.058 (0.939)	.033 (0.561)	.023 (0.440)	.025 (0.440)
Occupation	.081* (2.028)	.004 (0.311)	.020 (1.350)	.015 (1.091)	.004 (0.346)	.013 (0.973)
Income	.040 (0.999)	.039 (1.364)	.022 (0.659)	.037 (1.172)	.038 (1.355)	.028 (0.940)

Note. Number in brackets are t-values; \*\*\* $p < 0.001$ , Two-tailed test.

were entered in the first stage. The dimension of the C-A-B model was entered in the second stage. The C-A-B model and CnSR were entered in the third stage. The interaction term of C-A-B × CnSR was entered in the fourth stage. In addition, the independent variables with interaction

terms were standardized on divided means both to decrease the multi-collinearity between the main effect and the interaction term and then to increase the explanatory level of the beta-weights for the interaction term (Aiken and West, 1991). The linear shift had no

Table 7  
Hierarchical Regression Analysis of Moderation Analysis for CnSR.

Model (Independent)	Marketing mix	Product	Pricing	Place	Promotion
	Model 1	Model 2	Model 3	Model 4	Model 5
Main Effect					
C-A-B model		.588*** (21.699)	.450*** (14.871)	.601*** (21.840)	.654*** (24.753)
Moderating Variable					
CnSR		.183*** (6.897)	.238*** (8.053)	.159*** (5.904)	.150*** (5.821)
Interaction Effect					
C-A-B × CnSR		-.047* (-1.996)	-.083** (-3.155)	-.016 (-1.210)	.012 (0.929)
R <sup>2</sup>	.016	.518	.401	.503	.542
ΔR <sup>2</sup>	.012	.515	.396	.500	.539
F	3.934**	148.991***	92.525***	140.256***	164.121***
Control Variables					
Constant	5.323*** (28.374)	0.508* (2.167)	1.584*** (6.146)	0.677** (2.835)	0.034 (0.145)
Age	.029 (0.881)	.001 (0.021)	-.045 (-1.495)	-.026 (-0.940)	-.009 (-0.308)
Education	.069* (2.098)	.067 (1.298)	-.035 (-0.626)	.058 (1.102)	.043 (0.823)
Occupation	.028 (1.906)	.004 (0.287)	-.022 (-1.612)	.022 (1.767)	-.002 (-0.126)
Income	.004 (0.910)	-.013 (-0.468)	.013 (0.418)	-.030 (-1.058)	-.010 (-0.362)

Note. C-A-B=Cognition-Affection-Behavior, CnSR = Consumer Social Responsibility, Number in brackets are t-values, \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . Two-tailed test.

influence on the multiple R coefficients or beta-weights for the main effect.

Table 7 shows that age, education, occupation and income were not significant and that the explanatory power in model 1 was low ( $R^2 = 1.6\%$ ). Model 2 shows that the interaction term resulted in a significant increase in explanatory power ( $R^2 = 51.8\%$ ). The interaction term of C-A-B  $\times$  CnSR ( $\beta = -0.047, t = -1.996, p < 0.05$ ) significantly interacted with the C-A-B model and CnSR ( $\beta = 0.588, t = 21.699, p < 0.001; \beta = 0.183, t = 6.897, p < 0.001$ ) to influence the marketing product. Model 3 shows that the interaction term resulted in a significant increase in explanatory power ( $R^2 = 40.1\%$ ). The interaction term of C-A-B  $\times$  CnSR ( $\beta = -0.083, t = -3.155, p < 0.01$ ) significantly interacted with the C-A-B model and CnSR ( $\beta = 0.450, t = 14.871, p < 0.001; \beta = 0.238, t = 8.053, p < 0.001$ ) to influence marketing pricing. Thus, hypotheses 5a and 5b are supported.

Model 4 shows that the interaction term resulted in a significant increase of explanatory power ( $R^2 = 50.3\%$ ). The interaction term of C-A-B  $\times$  CnSR ( $B = -0.016, t = -1.210, p > 0.05$ ) did not significantly interact with the C-A-B model and CnSR ( $\beta = 0.601, t = 21.840, p < 0.001; \beta = 0.159, t = 5.904, p < 0.001$ ) to influence the marketing place. Model 5 shows that the interaction term resulted in a significant increase in explanatory power ( $R^2 = 54.2\%$ ). The interaction term of C-A-B  $\times$  CnSR ( $B = 0.012, t = 0.929, p > 0.05$ ) did not significantly interact with the C-A-B model and CnSR ( $\beta = 0.654, t = 24.753, p < 0.001; \beta = 0.150, t = 5.821, p < 0.001$ ) to influence marketing promotion. Thus, hypotheses 5c and 5d are not supported.

## 5. Discussion and implications

### 5.1. Discussion

This study advances our understanding of how the C-A-B model of green marketing strategy increases consumer willingness. This study reveals that, if sustainability improves quality, then consumers' willingness to support green marketing will increase significantly. Further, the moderation effect shows that consumer social responsibility (CnSR) has a negative effect on the formation of C-A-B models. Moreover, green products, strategic pricing, distribution places, and promotion mix all affect consumer support. These findings provide empirical evidence that the effects of green marketing predict consumers' attitudes to sustainability.

According to Garvin (date), the subjective impression on which a customer bases an evaluation affects all objective quality dimensions. Perceived quality can be seen as the customer's view of other dimensions, and indicates the conformity of the target group's requirements and expectations with the product features (Falk et al., 2017). From the engineering point of view, perceived quality highlights the interdependencies between the product's technical characteristics and customers' perceptions. On the development side, perceived quality connects product attributes with customer evaluations (Falk et al., 2017). In sum, perceived quality is often based on the comparison of quality characteristics according to usage, aesthetics, environmental influences and expectations. For this reason, perceived quality affects a company's marketing decisions and customer willingness.

In sum, protecting the environment impacts is one of society's greatest challenges. In retail and consumer services, studies of consumer studies have revealed how consumers value environmental friendliness, allowing researchers to build sustainability into marketing models that simulate consumer behavior. One study has shown that consumers adjust their decision-making when information on environmental impact is added (Hoffenson and Soderberg, 2015). Based on recent trends in policy-making that reveal an increased interest in the green environment, this paper presents and demonstrates the use of the theory of planned behavior (TPB), and a framework for modeling to demonstrate the tendency of strategic consumerism that precisely identifies consumer willingness (Kwon and Vogt, 2010).

### 5.2. Implications

**Theoretical implications.** We introduce a model of consumers' green attitude, green marketing mix and consumer willingness. The findings could add to the literature on the impact of the C-A-B model, marketing mix, perceived quality, and CnSR on consumer willingness.

Our results are consistent with Brundage et al. (2018) and Hoffenson et al. (2015). Product design should strengthen environmental sustainability. Therefore, when green restaurant companies design new menus or services, restaurant operators should consider consumers' opinions on restaurant service quality and environmental friendliness. In this study, understanding green restaurant consumers' green cognition, effectiveness, and behavioral are attributes of TPB. Ottman (2017) notes that green products are better for the planet (Morel and Kwakye, 2012; Ottman, 2017). This may be because personal attitude affects the perception of marketing and consumer willingness (Groening et al., 2018). Therefore, the results of this study strengthen TPB. The marketing mix mediates the relationship between the C-A-B model and consumer willingness.

In addition, perceived quality affects consumers' evaluation of the marketing mix. For green restaurant consumers, higher perceived quality will cause higher evaluation of the marketing mix and consumer willingness. This result reiterates the findings of Chou et al. (2018) and Konuk (2019) that providing more eco-friendly and deep green meals is more important for consumer's evaluation than financial performance.

The result of the marketing mix showed a positive correlation with consumer willingness, consistent with Chang et al.'s (2019) and Wang et al.'s (2016) findings that marketing mix had a direct impact on consumer willingness. Therefore, the operators of green restaurants must not ignore the influence of marketing on consumers.

Finally, this study explores the positive moderating effect of consumer social responsibility (CnSR) on C-A-B model and marketing mix. This result is similar to Groening et al.'s (2018) view that the value of products (dishes) should be strengthened in the information passed to consumers by green restaurants. Restaurant customers care about the quality and value of meals. Our study verifies the relationship among the C-A-B model, perceived quality, CnSR, marketing mix, and consumer willingness in green restaurants.

**Management implications.** Green marketing is a common way of encouraging sustainable behavior. The proposed market systems framework should be used to guide policymakers in estimating the impact of such policies before they are implemented. This requires a full model of the decision-making process of consumer willingness. According to consumers' sustainable demand, marketing managers would be best served by supporting the assessment of the effect of green marketing on C-A-B models and marketing strategy for consumer willingness. While green marketing policy recommendations are expected to differ greatly from CnSR and consumers' perceived quality, this approach can be applied to a market-competitive strategy so long as the consumer decision-making process can be modeled. It may be easier to gain a more complete picture of the green marketing strategy impact on consumer willingness for environmental protection initiatives.

The results of this study confirm that the C-A-B model has a significant and positive impact on marketing mix (Kwon and Vogt, 2010). Both Brundage et al. (2018) and Hoffenson et al. (2015) state that early in the product design phase, green restaurants, especially those that are the most green, should learn more about consumer attitudes and plan green marketing strategies. In terms of marketing management, there will generally be a more positive green attitude. Restaurant managers should plan the marketing mix to attract these consumers. It is precisely because these consumers with higher C-A-B outcomes are more willing to spend more money in green restaurants. Therefore, the planning elements of the marketing mix of these restaurants should be based on consumer attitudes, incorporating more environmental protection elements and passing them on to customers. Green restaurants can formulate such a strategy in the early stages of the marketing mix.



For a green marketing approach, the empirical results indicate that perceived quality has a significant and positive impact on marketing mix programs and consumer willingness. Marketing mix also has a significant and positive impact on consumer willingness. Based on this finding, we recommend that green restaurant managers give consumers a sustainable dining experience that is healthier, safer, and more delicious than that offered by their competitors.

The factor loading of perceived quality is at its highest in the composition of the sustainable marketing approach. This finding reveals that, if the sustainability practices improve quality, then the consumer willingness to support these marketing approaches will increase significantly. Wang et al. (2016) and Chou et al. (2018) believe that environmental concern on consumer consumption in restaurants is significant. Consumers should protect the environment by choosing environmentally friendly restaurants.

Finally, with attention to raising environmental concern, the emergence of global warming and the greenhouse effect have made it our responsibility to take action. With customers as key stakeholders in strategic consumerism, perceptions of green marketing have been factored into theories of sustainability.

**Limitations and suggestion for future research.** Academics and practitioners may expand the use of the findings, questionnaires and metrics of this study in future research. This study has verified that factors associated with green marketing, such as marketing mix, perceived quality, and consumer social responsibility (CnSR) affect the relationship between consumer attitudes and willingness. It also complements the implications of TPB. Based on research findings, the C-A-B model has been shown to test the attitude of consumers in green restaurants. Perceived quality has been shown to have a direct impact on consumer perception of marketing mix and willingness to consume. This study makes recommendations to green restaurant operators based not only on environmental protection but also on consumers' perception of product quality and value, in order to earn a better evaluation of green marketing.

This study also suggests that future researchers extend the metrics of this study. For example, researchers can use the questionnaires and metrics of this study to analyze consumers in other industries, and understand whether those consumers have different experiences with the marketing mix in green restaurants. We use the four P's (product, price, place and promotion) to measure marketing mix. Future researchers can expand other variables in the marketing mix, such as people, physical evidence and process. Future research could allow experts in green restaurant management to create customer value in products or services, not just by being "greener."

A limitation of this study is its use of cross-sectional empirical data to measure the consumer tendency and willingness to support. We suggest that future researchers, given sufficient funding and the right virtual environments, collect empirical longitudinal data to verify the relations among variables; and conduct a longitudinal study to observe and generalize the long-term relationships among constructs for use in other industries.

We administered an online survey to collect empirical data. Although all of the respondents were potential customers willing to support green foodservice, the online questionnaire is limited by the virtual channel and approval of green action. Thus, this survey might not collect information from all types of consumers, resulting in measurement bias. This study was founded on attitude theory and developed a sustainable attitude model of green marketing, considering whether the inverse causal model can interpret consumer tendencies related to social marketing.

It is postulated that a restaurant acquires most of its sustainability characteristics during the early design and investment stage (Brundage et al., 2018). Such product and design characteristics greatly influence the effect of market mix on consumer willingness from a green environmental perspective. In a future study, we could analyze widely used sustainability assessment methods applied in different stages in the

restaurant lifecycle to discover opportunities to raise consumer willingness. While many research articles discuss sustainability methods and techniques for each stage of the lifecycle (Brundage et al., 2018), future work could analyze these methods and techniques throughout the restaurant or company lifecycle. This enables a more holistic view of the marketing strategy of green restaurant or company and can lead to increased consumer willingness to support environmental sustainability.

This study used sustainability in the marketing mix model and conducted several alternative models in interpret consumer tendencies via the strategy of green marketing in decision-making cues. Moreover, we observed that some of the values of measuring model fit may be adjusted for advanced statistical analysis. For example, studies suggested that RSMEA close 0.08 (Chung and Leung, 2019; Sun and Huang, 2019) or AVE close 0.5 or  $\geq 0.4$  (Saleh et al., 2018, p.751) also represent the good model fit and suitable for advanced statistics. Therefore, future studies may extend our findings by creating a sustainable attitude model.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jretconser.2020.102113>.

## Appendix Measuring items for all variables

### Cognitive Component

- ✓ I think we should save energy in food consumption.
- ✓ We have the responsibility to avoid harmful foods.
- ✓ I think the restaurant should avoid using ingredients that harm the environment.
- ✓ I think sustainable restaurants and general restaurants have very different environmental impact.

### Affective Component

- ✓ I will bring green tableware to the restaurant.
- ✓ I prefer a restaurant with a green certification.
- ✓ When I go to a restaurant, I try not to waste food.
- ✓ I would like to go to the sustainable restaurant for environmental protection.

### Behavioral component

- ✓ I would encourage friends and family to go to a sustainable restaurant.
- ✓ I would choose a sustainable restaurant if someone asked me.
- ✓ I have a positive assessment of the restaurant.

### Perceived Quality

- ✓ I think the sustainable restaurant should have a sanitary and attractive dining space.
- ✓ I think the sustainable restaurant should provide fresh and healthy food.
- ✓ I think the sustainable restaurant should provide healthy environmental protection facilities.
- ✓ I think it is safe to spend inn a sustainable restaurant.

- ✓ I think the sustainable food and service meet my needs.

#### Product

- ✓ I would like to go to the restaurant with eco-friendly ingredients.
- ✓ I would like to go to the restaurant with eco-friendly products on the menu.
- ✓ I would like to go to the restaurant with sustainable space design.
- ✓ I would like to go to the restaurant with use eco-friendly ways of cooking (e.g., steaming and boiled)

#### Pricing

- ✓ I would like to go to the restaurant who show environmental protection costs on the menu.
- ✓ It will be more attractive to me if the restaurant show environmental protection cost on the price.
- ✓ The restaurant should implement environmental protection to save costs of attracting guests.

#### Place

- ✓ I prefer the restaurant that encourages suppliers to be socially responsible.
- ✓ I prefer to go to the restaurant has adopted a socially responsible policy.
- ✓ I prefer to go to the restaurant that purchases environmentally friendly materials.

#### Promotion

- ✓ I prefer to go to the restaurant who show us environmental promise in their advertising, sponsorship and promotion.
- ✓ I would like to go to the restaurant that show customers how are engage in environmental protection.
- ✓ A restaurant that uses environmental sustainability as a theme in its marketing activities will attract me.

#### Consumer Willingness

- ✓ It is worth it to me to patronize a sustainable restaurant.
- ✓ I think the price of food in a sustainable restaurant is reasonable.
- ✓ I think that sustainable restaurants use higher-quality ingredients.
- ✓ I think the restaurant meals are healthy.

#### Green Policy

- ✓ Every year the sustainable restaurants should have training programs to improve staff's environmental protection.
- ✓ The sustainable restaurants should post posters to promote sustainability.
- ✓ The sustainable restaurant should inform the staff of the company's green management policy.
- ✓ Sustainable restaurants should establish energy monitoring systems.

#### Green Education

- ✓ The sustainable restaurant should give discounts to customer who bring their own utensils.
- ✓ The sustainable restaurants should encourage customers to take unfinished food home.
- ✓ The sustainable restaurants should produce advertising pamphlet to encourage customer toward green consumption.
- ✓ The sustainable restaurant should list its product carbon emissions to enhance customer environmental protection.

#### Green Promotion

- ✓ The sustainable restaurants should promote sustainable consumption activities more than once a year.
- ✓ The sustainable restaurants should participate in community environmental activities more than once a year.
- ✓ The sustainable restaurants should promote sustainable concepts to their employees, customers and other stakeholders.

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