

# Effect of Environmental Concern and Consumption Values on Satisfaction of Green Restaurant

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Abstract– This study explores the relationship between consumption values (i.e., functional, social, and emotional values) and environmental concern toward satisfaction and loyalty in green restaurants. A sample of 394 data points was gathered through online questionnaires from green restaurant customers in West Java, Indonesia. Using partial least squares to analyze the data, this study revealed that environmental concern and the value of functional, social, and emotional are significant predictors of satisfaction and behavioral intention. These findings provide guidance for green restaurant business managers to improve business competitiveness and simultaneously contribute to developing a sustainable environment.

Keywords: Green Restaurant, Environment Concern, Consumption Value, Satisfaction, Loyalty.

## I. INTRODUCTION

The degradation quality of the environment is one of the issues that has received attention from many parties recently[1]. The large negative impact resulting from this has forced many parties to become more concerned about the environment in their activities. These environmental changes also influence people's behavior in consuming goods and services; green consumption behavior continues to increase people are starting to pay attention to environmental sustainability in their lifestyle [2], and people who are concerned about the environment are willing to pay extra the cost of consuming goods or services that they consider friendlier to the environment [3], [4], [5], .

The food industry is a sector that contributes around 30% of greenhouse gas emissions [6], this sector is not the largest contributor to pollutant emissions, but due to rapid development, this sector must change to be more environmentally friendly. Changes in consumer behavior that are more aware of the environment and the continuing increase in the number of people consuming environmentally friendly culinary delights [7], are both opportunities and challenges for the food industry, green food providers must be able to define things related to consumption behavior so that food providers are able to meet the needs and provide satisfaction to consumers.

In consuming environmentally friendly products, consumption value and environmental concern are factors that influence someone to consume environmentally friendly products, however research involving this in the context of green restaurants is still rare, in the context of green restaurants it is dominated by motivation and perceived cost [8]–[10].

This research was conducted based on existing gapsis research was carried out.

# II. LITERATURE REVIEW Theory of Consumption Value

The theory of consumption values (TCV) is one of the most widely used models to explain consumer choices [11]. At its core, the TCV posits that an individual's final choice is influenced by five values: functional, emotional, social, epistemic, and conditional [11]. TCV explains how these five consumption values predict consumer preferences for buying a product or service.

#### **Functional value**

Functional value is related to the perceived utility acquired from an alternative's capacity for functional, utilitarian, or physical performance and was thought to be generated by a product's salient attributes [12], which refers to the practical benefits and usefulness that consumers derive from a product or service. In green restaurants, functional value encompasses factors such as food quality, service efficiency, and convenience [7]. The relationship between functional value and green restaurants is an important aspect to consider in understanding consumer behavior. The empirical studies in green product that product performance (functional value) have effect on

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consumer satisfaction [13], [14]. In green restaurant, we hypothesize:

H1: Functional value has a positively effect on satisfaction.

## **Emotional Value**

According to Sheth et al. [12], emotional value refers to the value associated with particular feelings, or when it enables or sustains feelings. Emotional value is a product's ability to connect with users and elicit positive emotions. According to Sheth et al. [11], consumer choice behavior differs depending on the consuming scenarios that consumers are in since various circumstances present various emotional values. In green product, Research has shown that emotional value plays a significant role in influencing satisfaction [15], [16]. we hypothesize that:

H2: emotional value has a positively effect on satisfaction

## **Social Value**

Social value is the perceived utility acquired from an alternative's association with one or more specific groups [11] and assists a customer in representing himself/herself as a member of a particular social group. In green products, it refers to the perceived utility and benefits that consumers derive from the social aspects of choosing environmentally friendly options. Past studies indicate that social value plays a significant role in influencing consumer behavior and satisfaction with green products [17], [18]. Thus, following hypothesis is stated.

H3: Social value has a positively effect on satisfaction

## **Environment Concern**

Environmental concern refers to an individual's emotional involvement and level of concern about environmental issues [13], [19]. It encompasses beliefs, attitudes, and stances towards the environment and serves as a predictor of pro-environmental behavior [19]. Environmental concerns play a crucial role in shaping individuals' actions and decisions related to sustainability, conservation. and environmental protection [20]. This influences their willingness to adopt eco-friendly practices, support environmental initiatives, and engage in behaviors that promote environmental sustainability [21]. people with higher environmental concern would have stronger intention to engage in pro-environmental behavior.

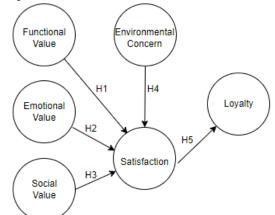
Previous studies explored the relationship between environmental concerns and satisfaction in the context of green products. Kumar [18] reports that environmental concern plays a significant role in shaping individuals' satisfaction with green products, higher levels of environmental concern are associated with greater satisfaction with green products [22]. The hypothesize on green restaurant is formulated.

H4: environmental concern has a positively effect on satisfaction.

#### Satisfaction

Satisfaction in the context of green products refers to the overall pleasure, contentment, or fulfillment that consumers experience when using or consuming environmentally friendly products [13]. It is the result of meeting or exceeding customer expectations and fulfilling their environmental desires and sustainable expectations [23]. Higher levels of green satisfaction are associated with positive attitudes towards green products, increased trust in their environmental claims, and higher purchase intentions [24]. Green satisfaction plays a crucial role in fostering customer loyalty and repeat purchases of green products [25]. The hypothesize is formulated.

H5: Satisfaction has a positively effect on satisfaction



**Figure 1.** Summaries The Hypothesized Relationships of The Construct Variables.

# **III. RESEARCH METHODS**

As past studies have evaluated the construct variables employed in this research, the measurement of the construct variables in this research was adopted

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from the existing literature. The consumption value (functional, emotional, and social) was measured with 4 items. Modified from [26] and [27]. five items employed assessing environmental concern [28], [29], to evaluate satisfaction and loyalty, three items were used [30] each. All construct indicators are assessed using a 5-point Likert scale consisting of 1 to 5: strongly disagree to strongly agree. An offline questionnaire was distributed to customers in the city of Bandung who had experience consuming food at a green restaurant in the last five months. Data was collected from July to August 2023, resulting in 391 valid responses for further analysis.

To achieve the research objective, the SEM-PLS approach was used. The analysis was carried out in three stages; firstly, outer model analysis, secondly, inner model analysis, and thirdly, hypotheses testing. The outer model analysis was conducted by observing the factor loading, Cronbach's Alpha, and AVE values in order to ensure the validity and reliability of variables and indicators. Meanwhile, the inner model analysis or structural model analysis was carried out to ensure that the structural model is accurate and robust. The evaluation was conducted on several indicators which included: coefficient of determination (R2), predictive relevance (Q2), and Goodness of Fit Index (GoF).

## **IV. RESULT AND DISCUSSION**

Table 1 exhibits the demographic profiles of the sample. It shows that most of the respondents have a high school and university.

D	escription	Frequency	Percentage
Gender	Male	199	50,90
	Femal	192	49,10
Age	17-25 years	210	53,71
	26-34 years	107	27,37
	35-43 years	27	6,91
	44-50 years	23	5,88
	> 50 years	24	6,14
Education	< High school	32	8,18
	High school	166	42,46
	Diploma	54	13,81
	University	126	32,23
	Master	13	3,32

 Table 1. Demographic profiles

The evaluation of the outer model was carried out by checking the validity and reliability of all constructs, measured using the loading factor, Cronbach's Alpha (CRA), composite reliability (CR), and average variance extracted (AVE). Table 1 describes that the loading factors of all items are higher than 0.6, both values of CRA and CR are higher than 0.7, and values of AVE are above 0.5 [31].

 Table 2. AVE and CRA

Variables and Indicators	Loading	CRA	AVE
Functional Value		0.807	0.517
Healtiness	0.603		
Nutritious	0.701		
Fulfilment	0.835		
Service	0.774		
Emonatonal Value		0.823	0.537
Нарру	0.772		
Comfortable	0.746		
Felling better	0.728		
Enjoy	0.683		
Social Value		0.815	0.527
Positive impression	0.607		
enable to show	0.775		
Sharing	0.815		
positive image	0.690		
Enviromental Concern		0.823	0.545
Effort to protect	0.744		
Better environment	0.663		
Practice eco-friendly	0.761		
Concern for future generatio	r 0.761		
Participation	0.757		
Satisfaction		0.821	0.604
Enjoy	0.762		,
Met my expectations	0.803		
Satisfied	0.765		
Loyalty		0.841	0.639
Bevisit	0.810	2.2.1	2.000
Positive Comment	0.835		
Recommend	0.750		

Further, the Heterotrait-Monotrait method is recommended to assess the discriminant validity of the construct [32]. Table 2 shows that all of the values are lower than 0.9, which indicates that the construct discriminant validity is met

# . Table 3. Heterotrait-Monotrait Ratio (HTMT)

				<b>`</b>	/
Construct	1	2	3	4	5
Enviromental Concern					
Functional Value	0.670				
Emonatonal Value		0.625			
Social Value			0.372		
Satisfaction				0.510	
Loyalty					0.224

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Next, the evaluation of the inner model was carried out by looking at the values of R2, Q2, and GoF. The results are presented in Table 4.

Table 4. GoF value	e <b>4.</b> GoF value
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Variable	Q <sup>2</sup>	AVE	R <sup>2</sup>	
Functional Value		0,517		
Emonatonal Value		0.537		
Social Value		0,527		
Enviromental Concern		0,545		
Satisfaction	0.166	0.604	0,288	
Loyalty	0.079	0.639	0.130	
Average score		0,530	0,288	
AVE x R <sup>2</sup>				0,153
$GoF = \sqrt{(AVE \times R^2)}$				0,391

The value of GoF is 0.391, which explains that the model fitness is large [33]. In addition, Q2 describes that all construct values are positive, which makes them have a good predictive of relevance [34].

Table 4 shows the results of hypotheses testing. The t-values describe that both food quality and eservice quality have a positive and significant influence on trust; thus, both H1 and H2 are supported. Meanwhile, trust has a positive and significant effect on loyalty; thus, H3 is also supported.

Table 5. Path Analysis

		2		
Path (hypothesis)	β	t-value	Decision	
Functional Value>	0.128	2,443	Supported*	
Satisfaction	0.120	2.443	Supported*	
Emonatonal Value>	0.255	4 357	Comparts d*	
Satisfaction	0.235	4.337	Supported*	
Social Value>	0 104	2,350	Sumported*	
Satisfaction	0.104	2.350	Supported*	
Enviromental Concern>	0.210	4 012	Companya da	
Satisfaction	0.219	4.012	Supported*	
Satisfaction>Loyalty	0.360	7.048	Supported*	

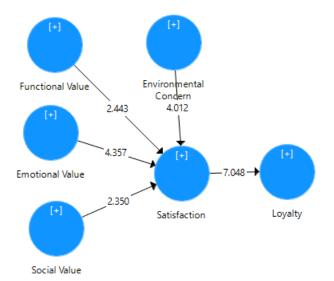
# Figure 2. Path Graphic

# V. DISCUSSION

This section must be written in well-composed paragraphs. The conclusion must be concise, providing a description of the contribution of the findings to existing knowledge. This section should also provide suggestions for further studies. The conclusion should not be a restatement of the findings, but what could be inferred from the findings.

#### VI. RECOMMENDATION

The results of this study can be used to assist green restaurant in producing green products that are attractive to consumers. The finding confirms that social value and environmental concern has the greatest effect on consumer satisfaction regarding green restaurant. Hence, peer opinion is important in the formation of attitudes towards the purchase of green products. Ganapathy [35] and Thongplew [2]



find that consumers want to receive reliable information about environmental issues. Hence, businesses and organizations must focus on providing a continuous stream of truthful environmental information [2], [35] and accentuates how their products align with consumers' social values. This requires them to mount attractive and informative advertising campaigns utilizing social media channels such as Facebook and Twitter to boost consumer environmental concerns related to green products. Such a strategy would facilitate green product purchases [36].

#### VII. ACKNOWLEDGMENT

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#### VIII. REFERENCES

- N. A. Hamdani, S. Nugraha, and P. Purnamasari, "Conceptual Framework of Innovation Strategy in SMEs," *BIEJ*, vol. 2, no. 2, pp. 115–119, 2020.
- [2] N. Thongplew, G. Spaargaren, and C. S. A. Van Koppen, "Greening consumption at the retail outlet: the case of the Thai appliance industry," *Int. J. Sustain. Dev. World Ecol.*, vol. 21, no. 2, pp. 99–110, 2014.
- [3] Y. J. Jang, W. G. Kim, and M. A. Bonn,

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"Generation Y consumers' selection attributes and behavioral intentions concerning green restaurants," *Int. J. Hosp. Manag.*, vol. 30, no. 4, pp. 803–811, 2011.

- [4] S. Ham and H. Han, "Role of perceived fit with hotels' green practices in the formation of customer loyalty: Impact of environmental concerns," *Asia Pacific J. Tour. Res.*, vol. 18, no. 7, pp. 731–748, 2013.
- [5] M. R. González-Rodríguez, M. C. Díaz-Fernández, and X. Font, "Factors influencing willingness of customers of environmentally friendly hotels to pay a price premium," *Int. J. Contemp. Hosp. Manag.*, vol. 32, no. 1, pp. 60– 80, 2020.
- [6] C. Baldwin, N. Wilberforce, and A. Kapur, "Restaurant and food service life cycle assessment and development of a sustainability standard," *Int. J. Life Cycle Assess.*, vol. 16, pp. 40–49, 2011.
- [7] H.-H. Hu, H. G. Parsa, and J. Self, "The dynamics of green restaurant patronage," *Cornell Hosp. Q.*, vol. 51, no. 3, pp. 344–362, 2010.
- [8] K. H. Hanzaee and Y. Khonsari, "A review of the role of hedonic and utilitarian values on customer's satisfaction and behavioral intentions," *Interdiscip. J. Res. Bus.*, vol. 1, no. 5, pp. 34–45, 2011.
- [9] D. Gursoy, E. R. Spangenberg, and D. G. Rutherford, "The hedonic and utilitarian dimensions of attendees' attitudes toward festivals," *J. Hosp. Tour. Res.*, vol. 30, no. 3, pp. 279–294, 2006.
- [10] J. W. Overby and E.-J. Lee, "The effects of utilitarian and hedonic online shopping value on consumer preference and intentions," *J. Bus. Res.*, vol. 59, no. 10–11, pp. 1160–1166, 2006.
- [11] J. N. Sheth, B. I. Newman, and B. L. Gross, "Why we buy what we buy: A theory of consumption values," *J. Bus. Res.*, vol. 22, no. 2, pp. 159–170, 1991.
- [12] J. N. Sheth, B. I. Newman, and B. L. Gross, "Consumption values and market choices: Theory and applications," (*No Title*), 1991.
- [13] Y.-S. Chen, C.-Y. Lin, and C.-S. Weng, "The influence of environmental friendliness on green trust: The mediation effects of green satisfaction and green perceived quality," *Sustainability*, vol. 7, no. 8, pp. 10135–10152, 2015.
- [14] W. Hur, Y. Kim, and K. Park, "Assessing the

effects of perceived value and satisfaction on customer loyalty: a 'green'perspective," *Corp. Soc. Responsib. Environ. Manag.*, vol. 20, no. 3, pp. 146–156, 2013.

- [15] B. Luo, L. Li, and Y. Sun, "Understanding the influence of consumers' perceived value on energy-saving products purchase intention," *Front. Psychol.*, vol. 12, p. 640376, 2022.
- [16] B. Leisen Pollack, "Green service attributes and amplifiers of the warm emotions evoked by them," *J. Serv. Theory Pract.*, vol. 31, no. 4, pp. 512–533, 2021.
- [17] N. Peng, A. Chen, and K.-P. Hung, "Dining at luxury restaurants when traveling abroad: incorporating destination attitude into a luxury consumption value model," in *Travel and Lifestyle*, Routledge, 2021, pp. 30–44.
- [18] P. Kumar and B. M. Ghodeswar, "Factors affecting consumers' green product purchase decisions," *Mark. Intell. Plan.*, vol. 33, no. 3, pp. 330–347, 2015.
- [19] J. Berenguer, J. A. Corraliza, and R. Martin, "Rural-urban differences in environmental concern, attitudes, and actions," *Eur. J. Psychol. Assess.*, vol. 21, no. 2, pp. 128–138, 2005.
- [20] S. Lele, O. Springate-Baginski, R. Lakerveld, D. Deb, and P. Dash, "Ecosystem services: origins, contributions, pitfalls, and alternatives," *Conserv. Soc.*, vol. 11, no. 4, pp. 343–358, 2013.
- [21] S. van Ewijk and J. A. Stegemann, "Recognising waste use potential to achieve a circular economy," *Waste Manag.*, vol. 105, pp. 1–7, 2020.
- [22] S. S. B. Junior, D. da Silva, M. L. D. S. Gabriel, and W. R. de Oliveira Braga, "The effects of environmental concern on purchase of green products in retail," *Procedia-Social Behav. Sci.*, vol. 170, pp. 99–108, 2015.
- [23] Y. Chen and C. Chang, "Towards green trust: The influences of green perceived quality, green perceived risk, and green satisfaction," *Manag. Decis.*, vol. 51, no. 1, pp. 63–82, 2013.
- [24] M. Ha, V. T. K. Ngan, and P. N. D. Nguyen, "Greenwash and green brand equity: The mediating role of green brand image, green satisfaction and green trust and the moderating role of information and knowledge," *Bus. Ethics, Environ. Responsib.*, vol. 31, no. 4, pp. 904–922, 2022.
- [25] H.-C. Wu, C.-F. Wei, L.-Y. Tseng, and C.-C.

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Cheng, "What drives green brand switching behavior?," *Mark. Intell. Plan.*, vol. 36, no. 6, pp. 694–708, 2018.

- [26] H. Liu, Y. Meng-Lewis, F. Ibrahim, and X. Zhu, "Superfoods, super healthy: Myth or reality? Examining consumers' repurchase and WOM intention regarding superfoods: A theory of consumption values perspective," *J. Bus. Res.*, vol. 137, pp. 69–88, 2021.
- [27] N. Mohd Suki and N. Mohd Suki, "Consumption values and consumer environmental concern regarding green products," *Int. J. Sustain. Dev. World Ecol.*, vol. 22, no. 3, pp. 269–278, 2015.
- [28] A. Tandon, A. Dhir, P. Kaur, S. Kushwah, and J. Salo, "Why do people buy organic food? The moderating role of environmental concerns and trust," *J. Retail. Consum. Serv.*, vol. 57, p. 102247, 2020.
- [29] M. N. Khan and M. D. Kirmani, "Role of religiosity in purchase of green products by Muslim students: Empirical evidences from India," J. Islam. Mark., vol. 9, no. 3, pp. 504– 526, 2018.
- [30] M. R. Pahlevi and D. Suhartanto, "The integrated model of green loyalty: Evidence from eco-friendly plastic products," *J. Clean. Prod.*, vol. 257, p. 120844, 2020.
- [31] J. F. Hair Jr, G. T. M. Hult, C. M. Ringle, M.

Sarstedt, N. P. Danks, and S. Ray, *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook.* Springer Nature, 2021.

- [32] A. Zaiţ and P. Bertea, "Methods for testing discriminant validity," *Manag. Mark. J.*, vol. 9, no. 2, pp. 217–224, 2011.
- [33] F. Ali, M. Amin, and C. Cobanoglu, "An integrated model of service experience, emotions, satisfaction, and price acceptance: an empirical analysis in the Chinese hospitality industry," *J. Hosp. Mark. Manag.*, vol. 25, no. 4, pp. 449–475, 2016.
- [34] W. W. Chin, R. A. Peterson, and S. P. Brown,
   "Structural equation modeling in marketing: Some practical reminders," *J. Mark. theory Pract.*, vol. 16, no. 4, pp. 287–298, 2008.
- [35] S. P. Ganapathy, J. Natarajan, A. Gunasekaran, and N. Subramanian, "Influence of ecoinnovation on Indian manufacturing sector sustainable performance," in *Managing Organizations for Sustainable Development in Emerging Countries*, Routledge, 2017, pp. 4– 15.
- [36] E. Geyer-Allely and A. Zacarias-Farah, "Policies and instruments for promoting sustainable household consumption," *J. Clean. Prod.*, vol. 8, no. 11, pp. 923–926, 2003.

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