



Will Customers Pay More for Green Products?

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Abstract. This study addresses how environmental concerns affect the willingness of customers to pay more for green products. A quantitative approach with a survey was used to gather the data. This study results show that only loyal customers with environmental concerns have the willingness to pay more for green products.

Keywords: environmental concerns · eco-literacy · perceived customer effectiveness · customer loyalty · willingness to pay more

1 Introduction

Consumers interested in the green industry are called “green consumers” [1]. The more significant impact of global warming has led green consumers to become more aware of the sustainability of the ecosystem. For instance, they become more concerned about their consumption by purchasing eco-friendly labeled or “green” products [2].

Green products are made of toxic-free materials, proceed with environmentally-friendly procedures across their life cycles, and have certifications from a recognized organization [3]. Therefore, it seems to have the characteristics of green products, which are said to be environmental makeup or green-washing products [4].

The pro-environmental consumption behavior, which aims to minimize the hazardous damage to the natural environment [5], has forced companies to behave environmentally favorably [3]. Thus, companies are willing to pay more for product development and production of green products [6] to survive in the very competitive market [4].

Increasing consumers’ green consumption is an important aspect. Even though it is hurting in the short run because of the differences in quality and prices, it will benefit society in the long run [7]. In some countries, customers are willing to pay more for green products, but in others, they are unwilling. The willingness to pay more consumption pattern will only be relevant when consumers have an environmental concern-literacy act, perceived customer effectiveness, and loyalty toward the brand [6]. Research addressing

the willingness to pay more for green products is still rare, and the results are mixed [6]. Therefore, this study intends to explore whether environmental concern affects customers' willingness to pay more for green products.

2 Literature Review

A. Environmental Concern

Environmental concern is the attitude toward preserving the environment [6]. It also describes the degree of consumers awareness of contributing toward giving solutions for environmental problems [8] or the degree of consumer worry about the damage to the environment as the result of human activities due to the realization of the existing environmental problems and the willingness to get involved in the attempt to preserve the environment. The level of environmental concern is different depending on the existing environmental issues.

B. Eco-Literacy

Eco-literacy is the extent to which consumers know the green products and surrounding environmental issues. Eco-literacy consists of objective and subjective knowledge. Objective knowledge describes the knowledge about the environment and how consumers can identify ecological-related issues. Self-subjective knowledge is defined as the adequacy or the level of customers' knowledge [9]. Gain knowledge; there are two ways: educate consumers to be more aware of environmental issues and produce environmentally friendly products [10].

C. Perceived Customer Effectiveness

Refers to the degree to which consumers are involved in an action to solve environmental issues [9]. Consumers' confidentiality influences this attitude that by taking action, they can make changes toward a particular outcome, usually triggered by environmental concerns.

D. Customer Brand Loyalty

Customer brand loyalty identifies as the customer's loyalty toward the brand in a deeply held commitment to rebuy the preferred brand [11]. Customer brand loyalty is vital to the company because it can lead to long-term financial health. After all, future consumers will directly impact future sales revenue [12].

E. Willingness To Pay More

The willingness to pay more is the customer's intention to pay premium prices [9]. The willingness to pay more for certain products can be reached when the total number of consumers is ready to pay higher prices [13]. The willingness to pay more for green

products will only occur when consumers do not undervalue the benefits of preserving the environment. Therefore, even though green product has lower quality than regular one and is high in price because of lower demand than the actual one, consumers will still be willing to pay more for the products.

3 Hypothesis Development

Environmental consciousness can lead to pro-environmental behavior, significantly increasing environmental deterioration. Individuals with a negative attitude toward preserving the environment are less likely to engage in pro-environmental behaviors [9]; in reverse, consumers with a positive attitude will have tendencies to be environmentally concerned and have the willingness to pay more for green products. Research conducted by Wei et al. (2018) [9] demonstrate that a lack of environmental concern leads to less likely to be a willingness to pay more for green products; in reverse, this study is intended to seek the relationship whether environmentally concerned consumers will have the willingness to pay more for green products. Therefore, the hypothesis is formulated as follows:

H1. Environmental concerns significantly positively affect willingness to pay more.

Being aware of environmental issues is not enough, consumers need to be educated and exposed to environmentally friendly products [10], to have the willingness to not only buy but pay more for green products. This notion is in line with the research conducted by Wei et al. (2018) [9], that environmental concern and eco-literacy affect the willingness to pay more for green products. Furthermore, this study formulates a hypothesis as followed:

H2. Eco-literacy mediating the effect of environmental concern on willingness to pay more

Consumers who have concerns and perceive the danger of environmental damage will tend to have their action to bring about change [9]. Consumers with common practices for preserving the environment will be more likely to buy and pay more for green products [14]. Research conducted by Wei et al. (2018) shows that perceived consumer effectiveness affects willingness to pay more [9]. Furthermore, this study formulates a hypothesis as follows:

H3. Perceived consumer effectiveness mediating the effect of environmental concern on the willingness to pay more

Intention and commitment to repurchase a specific brand over other brands have a direct relationship with the willingness of customers to pay a premium for certain products [13], especially when consumers are aware of the brand, whether by education or by the positive impact that product or brand has toward the environmental sustainability. Research conducted by Malarvizhi et al. (2022) shows that brand loyalty positively

affects willingness to pay a premium price [13]. Thus, the hypothesis was formulated as follows:

H4. Customer brand loyalty mediates the effect of environmental concern on the willingness to pay more.

4 Method

This research aims to examine the effect of environmental concern on the willingness to pay more mediated by eco-literacy, perceived consumer effectiveness, and brand loyalty. The object of this research is the Body Shop and Starbucks. The data was gathered through a survey. The questionnaire items adapted from Wei et al. (2018) [9] for environmental concern, willingness to pay more, eco-literacy, perceived consumer effectiveness, and for brand loyalty adopted from Dwivedi (2015) [12].

5 Results

In this study, we assessed two green brands with a total sample of 138 respondents. The respondents' characteristics are based on Gender: Male (37,42%), Female (62,58%). Based on age: 13–19 years old (6,12%), 20–29 years old (57,82%), 30–39 years old (25,7%), 40–49 (9,52), >50 (1,36%). Based on occupation: Students (49,66%), State Employees (6,80%), Private employees (23,81%), Entrepreneurs (2,72), and not available (17,01). Based on education, High-school (16,33%), Diploma (6,12%), Bachelor (56,46%), Master (19,05), and Doctor (2,04%). Based on expenses in rupiah <1mio (30,61%), 1,1-2mio (23,13%), 2,1-3mio (23,81%), 3,1-4mio (5,44%), 4,1-5mio, and >5mio (11,56%). Those who are members are 26%, and non-members are 74%. The customers bought the products 1-2X (31,97%), 3-5X (10,88%), and >5X (29,25%). Therefore, this study is dominated by females aged 20 to 29, bachelor graduates, and less than one million in expense. In addition, only around 30% of the respondents are members of the brand and only 1 to 2 times using the brand.

The data of this research are valid and reliable (Table 1). The standardized factor loading is higher than 0,5. The construct reliability is higher than 0,7, and the variance extracted is higher than 0,5 (Figs. 1 and 2).

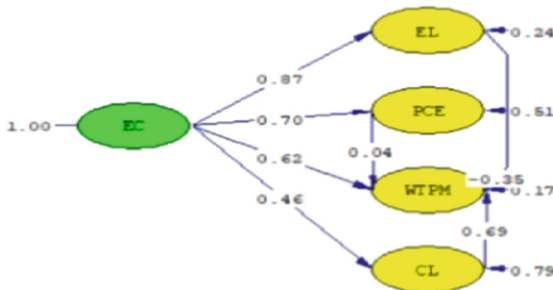


Fig. 1. Standardized Factor Loading

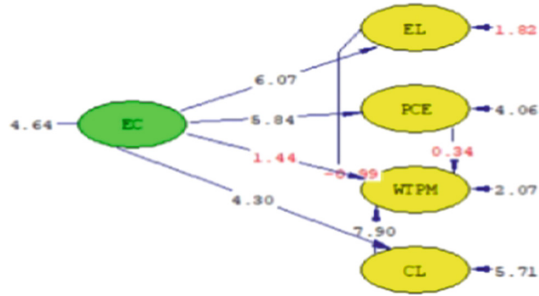


Fig. 2. T-value

The structural model shows that H1 is not supported, H2 is not supported, H3 is not supported, and H4 is supported; brand loyalty fully mediates the effect of environmental concern on willingness to pay more for green products (Table 2). Furthermore, the goodness of fit index shows a medium fit for the model (Table 3).

Table 1. Measurement Model

Observed Variables	Standardized Loading Factor (≥ 0.5)	R ²	Error Variance	t-Value (≥ 1.96)	Conclusion
Environmental Concern					
EC04	0,79	0,62	0,38	**	Valid
∑	0,79	0,62	0,38		
Construct Reliability (≥ 0.7)		0,62			Reliable
Variance Extracted (≥ 0.5)		0,62			
Eco Literacy					
EL4	0,74	0,55	0,45	**	Valid
EL5	0,76	0,58	0,42	7,04	
∑	1,50	1,13	0,87		
Construct Reliability (≥ 0.7)		0,72			Reliable
Variance Extracted (≥ 0.5)		0,56			

(continued)

Table 1. (continued)

<i>Observed Variables</i>	<i>Standardized Loading Factor (≥ 0.5)</i>	<i>R²</i>	<i>Error Variance</i>	<i>t-Value (≥ 1.96)</i>	<i>Conclusion</i>
Perceived Customer Effectiveness (PCE)					
PCE02	0,77	0,59	0,41	**	<i>Valid</i>
PCE03	0,81	0,66	0,34	9,22	
PCE04	0,64	0,41	0,59	7,22	
PCE05	0,67	0,45	0,55	7,65	
PCE06	0,66	0,44	0,57	7,43	
Σ	3,55	2,54	2,46		
<i>Construct Reliability (≥ 0.7)</i>		0,84			<i>Reliable</i>
<i>Variance Extracted (≥ 0.5)</i>		0,51			
Customer Loyalty (CL)					
CL01	0,87	0,76	0,24	**	<i>Valid</i>
CL02	0,86	0,74	0,26	12,19	
CL03	0,67	0,45	0,56	8,59	
Σ	3,49	1,95	0,93		
<i>Construct Reliability (≥ 0.7)</i>		0,93			<i>Reliable</i>
<i>Variance Extracted (≥ 0.5)</i>		0,68			
Willingness to Pay More (WTPM)					
WTPM01	0,82	0,67	0,32	**	<i>Valid</i>
WTPM02	0,89	0,79	0,20	13,08	
WTPM03	0,89	0,79	0,20	13,13	
WTPM04	0,89	0,79	0,21	12,97	
Σ	3,49	3,05	0,93		
<i>Construct Reliability (≥ 0.7)</i>		0,93			<i>Reliable</i>
<i>Variance Extracted (≥ 0.5)</i>		0,77			
<i>**) Default Program</i>					

Table 2. Structural Model

	<i>Hypotheses</i>	<i>Conclusion (Ha)</i>
H1	EC-WTPM	<i>Not Supported</i>
H2	EC-EL-WTPM	<i>No Mediation</i>
H3	EC-PCE-WTPM	<i>No Mediation</i>
H4	EC-CL-WTPM	<i>Fully Mediated</i>

Table 3. Goodness of Fit Index

<i>Degree of Freedom</i>	<i>Chi-Square (X²)</i>	<i>Sig. ρ (> 0.05)</i>	<i>(0.08 \geq RMSEA \geq 0.05)</i>	<i>CFI (\geq0.90)</i>	<i>GFI (\geq0.90)</i>	<i>Conclusion</i>
83	158,74	0,00	0,082	0,97	0,87	<i>Medium Fit</i>

6 Discussion

This study's findings show that environmental concerns alone will not encourage the customer to pay more for green products, even though environmental concerns would encourage customers to be willing to do real action to save the environment and enhance their curiosity to know more about environmental preservation. Based on this study's findings, only brand loyalty can lead customers to be willing to pay more for green products, which means perceived customer effectiveness and eco-literacy have no direct effect on the willingness of the customer to pay more for green products and only customer that have brand loyalty that will be eager to pay more for green products.

7 Conclusion

Based on the theory of planned behavior, the consumer's attitude in this context of environmental concern affects behavior, which is a willingness to pay more for green products. The findings show that only customer brand loyalty that can mediate the effect of environmental concern on the willingness of customers to pay more for green products. This implies that more than environmental concern is needed; the company should build customer brand loyalty to make customers willing to pay more for green products. The limitation of this research is that few green consumers are willing to pay more for green products because most of them are costly. For future research, this research suggests specifying the research in one product in one industry to see the differences between green products' performance in the market and the industry.

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