A Measurement Tool For Purchase Intention And Its Factors In Environmental And Marketing Contexts

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Abstract: *The increasing concern over environmental problems has driven consumer interest in sustainable products. In response to this growing trend, LocknLock, an eco-certified household brand, has taken part in offering sustainable products. Still, there is not much understanding of what influences customers' intention to buy these products. This study aims to design and confirm a reliable measurement tool that explores the major influences on consumer decisions to purchase green products. The study applied a modified version of the Norm Activation Model (NAM) and ABC Theory, studying Environmental Knowledge, Electronic Word-of-Mouth (eWOM), Green Marketing, Environmental Care Attitudes, Green Brand Image, and Purchase Intention. A total of 31 items were made and tested using data from a pilot research study involving 30 respondents. All items exhibited a Corrected Item-Total Correlation higher than 0.3 and a Cronbach's Alpha exceeding 0.7. These results show that the developed instrument we developed is both reliable and valid and can be used for examining green purchase attitude. It is suitable for examining purchase intentions within environmental and marketing contexts and can be confidently used in future studies.*

Keywords: *Environmental knowledge, eWOM, green marketing, purchase intention, environmental care attitudes, green brand image.*

1. INTRODUCTION

Lately, plastic waste and pollution have become major issues for global sustainability. Every year, the world makes more than 400 million tons of plastic, which greatly harms the environment [1]. Most Indonesians (82%) care about the environment daily but dealing with plastic waste is still challenging [2]. Out of all plastic waste, only 10% is recycled through informal means, and 58% ends up being mismanaged [3]. Those concerns have caused a shift to sustainability, which brought a green product to the forefront, one of which is LocknLock products.

As people become more aware of sustainability, it has become important to learn more about green consumer behavior and how things like environmental understanding, information from others, and advertising influence someone's decision to buy. Although experts have studied the relationships, only a few have built a detailed model to check the accuracy of these constructs in an environmentally friendly brand such as LocknLock. The model is an extension of the structure introduced by Simanjuntak et al. [4], revised to better address specific research challenges. No prior studies have linked green brand image with environmental care attitudes to investigate how environmental knowledge, eWOM, and green marketing affect their intention to buy. This research created a model to explore the connection between knowledge about the environment, eWOM experience, and green marketing with environmental actions and attitudes toward specific brands like LocknLock.

LITERATURE REVIEW

In this study, NAM Theory and ABC Theory were selected as the main theories to understand consumer intentions in purchasing LocknLock green-labeled products. Many researchers have used NAM Theory, developed by Schwartz [5], to explain pro-environmental behavior. Following this approach, previous study [4] applied NAM Theory to analyze consumer behavior by examining green marketing and electronic word-of-mouth (eWOM), while also incorporating situational factors described by the ABC model. Specifically, their study examined environmental knowledge (EK), word of mouth (WOM) influence, and green marketing

(GM) with environmental care attitudes (ECA) contributing as the independent variable and purchase intention (PI) as the dependent variable. This study aims to enrich the analysis and model by utilizing information and ideas from previous studies. Indrawati et al. [6] eviewed how electronic word-of-mouth (eWOM) influences purchase plans, while Ha et al. [7] investigated the role of environmental elements mediated by green brand image (GBI) in purchase intention. Wijekoon and Sabri [8] also found that a higher level of environmental awareness has a strong influence on consumer interest in making purchases, implying that those who have a stronger awareness of environmental matters are more prone to choose products that are sustainable. Moreover, Hasbi et al. [9] showed that encountering environmentally focused advertising can improve the green actions and routine buying patterns of consumers. In a similar way, Mansoor and Wijaksana [10] discovered that raising eco-consciousness in people increases the link between exchange of environmental information and eco-friendly ways of acting by increasing their sense of responsibility for the environment.

It is considered that a strong green brand image boosts the likelihood that positive attitudes toward the environment will manifest in actual behaviors. In addition, Prasetio and Yudha [11] emphasized that customer engagement significantly contributes to purchase intention. This indicates that active consumer involvement, such as brand content interaction or participation in the green campaign, is crucial in shaping customers' purchase intention, especially for environmentally friendly brands like LocknLock. While knowledge about green products remains important, Manalu [12] found that it does not directly mediate the connection between social norms and attitudes in influencing purchase intentions, indicating that other factors also influence this process. Therefore, this study focuses specifically on green product brands and incorporates attitudes, social norms, and green brand image as mediators to better understand Indonesian consumers' purchase intentions. Figure 1 shows the proposed model of this study.
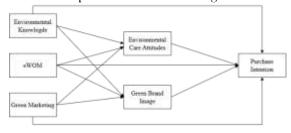

Figure 1 Research Framework

In this study, six different constructs are used. Environmental knowledge refers to the quality of someone's awareness and realization of how certain actions affect the environment. Electronic word-of-mouth (eWOM) refers to content, opinions, or reviews generated by consumers and shared online that influence the attitudes and purchasing decisions of others. Green marketing refers to marketing strategies that highlight the environmental benefits of a product to attract environmentally conscious consumers. Environmental care attitudes refer to how much a person is concerned, values, and takes responsibility for environmental care. Green brand image refers to how a brand is viewed as environmentally friendly, based on the brand's practices, values, and communications. Purchase intention refers to the likelihood of a consumer purchasing goods based on their evaluation of the product's benefits, including its environmental attributes.

2. METHOD

To build a reliable measurement tool demands a thorough systematic validation. Some important steps were taken in this study to make sure the questionnaire was both clear and accurate. The validity testing consists of content validity, face validity, readability, and a pilot test [13]. Content validity was established through reviewed established research and selected and improved items to use in this study. Next, face validity was assessed through expert consultation to evaluate its clarity and suggest improvements. In addition, a readability test was carried out by giving it to a small sample of participants to identify and address any unclear

questions. These steps ensured the measurement tool's reliability and validity in capturing the targeted construct under study. Table 1 shows the items of the questionnaire of this study.

Table 1: Items of the Questionnaire

Variable	Items in Research	Item Code
Environmental Knowledge	I know the global warming	EK1
	I know the green products.	EK2
	I know the climate change.	EK3
	I know the term greenhouse gas.	EK4
	I know about recycling.	EK5
	I know the environmental issues.	EK6
	I know how to choose products that reduce waste	EK7
	I understood the symbols or signs of green products on product packaging	EK8
	I know that green products cause less damage than other products	EK9
Electronic Word of Mouth (eWOM)	The amount of information other customers have shared about LocknLock can help me understand the product's performance.	eWOM1
	The information shared by other customers of LocknLock products is convincing.	eWOM2
	I think the information	eWOM3

	shared by other customers of LocknLock is useful	
	The information shared by other customers of LocknLock is helpful for me to evaluate the product	eWOM4
	I accept the recommendation shared by other customers of LocknLock.	eWOM5
Green Marketing	I believe that LocknLock uses environmentally friendly packaging	GM1
	I believe that LocknLock recycles, reuses, and recycles product packaging materials.	GM2
	I believe that LocknLock conducts product promotions that explain the positive impact they will have on the environment.	GM3
Green Brand Image	LocknLock is regarded as the gold standard in terms of environmental commitments.	GBI1
	When it comes to environmental credibility, LocknLock is serious	GBI2

	In terms of environmental sustainability, LocknLock is a success	GBI3
	When it comes to environmental concerns, LocknLock is well known	GBI4
	LocknLock can be trusted when it comes to environmental commitments.	GBI5
Environmental Care Attitudes	I feel responsible for environmental pollution	ECA1
	I feel responsible for the greenhouse effect	ECA2
	I feel responsible for the air conditioning.	ECA3
	I think purchasing green products like LocknLock is a smart choice	ECA4
	I think switching to green products like LocknLock brings many benefits	ECA5
Purchase Intentions	I would consider buying LocknLock products	PI1
	I would consider switching from regular products to LocknLock products	PI2
	I plan to consume LocknLock products.	PI3
	I will keep buying Lock'n Lock, even	PI4

	though Lock'n Lock tends to be expensive.	

3. FINDINGS AND DISCUSSIONS

A pilot test was held by distributing the questionnaire to 30 respondents through Google Forms online. The sample consists of Indonesian citizens who have used, are familiar with, or have an interest in LocknLock products. Subsequently, the data collected was analyzed with SPSS software. Each item's validity was verified by the Corrected Item-Total Correlation (CITC) method [13]. A CITC value above 0.3 means that the item's validity is confirmed. Therefore, all the items under the six constructs met the requirement. Reliability was also checked using Cronbach's Alpha, and the benchmark for the items being reliable was set at 0.7. The reliability of the instrument was confirmed because all construct scores were above the suggested cut-off point. Environmental Knowledge construct demonstrated the highest reliability (0.949), followed by eWOM (0.935) and Purchase Intention (0.897). These findings imply that there is high consistency in the perception of respondents on environmental knowledge and digital peer influence. Green Marketing (0.895) and Green Brand Image (0.868) also showed reasonable reliability, which allowed their contribution to the formation of consumer attitudes. The lowest, but acceptable reliability was with Environmental Care Attitudes (0.753). It indicates a certain inconsistency in answers, which might be caused by the discrepancies in the personal understanding of the items measuring environmental responsibility. Those findings provide confirmation of the theoretical foundations of the measurement model, which combines aspects of the Norm Activation Model (NAM) and ABC Theory. The fact that constructs like Environmental Knowledge, eWOM, and Green Brand Image were successfully validated implies that the model can be used in further studying consumer attitudes towards environmentally friendly brands. The high reliability coefficient of the tool indicates that the questionnaire is reliable and can be utilized with a reasonable amount of certainty in wider empirical studies to investigate the green consumer behaviour. Table 2 shows the result of the pilot test.

Table 2: Pilot Test Result

Item	Corrected Item-Total Correlation	Cronbach's Alpha
EK1	0.835	0.949
EK2	0.856	
EK3	0.790	
EK4	0.729	
EK5	0.769	
EK6	0.820	
EK7	0.815	
EK8	0.709	
EK9	0.865	
eWOM1	0.820	0.935
eWOM2	0.875	
eWOM3	0.780	
eWOM4	0.779	
eWOM5	0.877	
GM1	0.850	0.895
GM2	0.889	
GM3	0.658	
GBI1	0.670	0.868
GBI2	0.633	

GBI3	0.779	
GBI4	0.802	
GBI5	0.597	
ECA1	0.657	
ECA2	0.571	
ECA3	0.543	0.753
ECA4	0.336	
ECA5	0.525	
PI1	0.782	
PI2	0.761	
PI3	0.795	0.897
PI4	0.799	

4. CONCLUSION

In conclusion, the pilot test found that six different constructs, with a total of 31 items, were suitable for use and could be trusted. It shows that the questionnaire is valid for measuring purchase intentions and the factors that affect them, meaning that this measurement tool is acceptable for further studies regarding this topic.

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