



## The Effect of Attitude in Mediating Environmental Knowledge towards the Purchase Intention of Green Cosmetic Product

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**Abstract**—The existence of public awareness of environmental preservation today, makes many companies, especially cosmetics, try to put forward the ecological aspects and raise environmental issues as one of their marketing strategies. This study aims to explain attitudes and environmental knowledge in determining the purchase intention of a green cosmetic product. This study uses a purposive sampling technique for determining samples. The samples used were 100 people, all consumers who had never bought green cosmetic products domiciled in Denpasar City. The data obtained were analyzed by descriptive analysis and PLS. The results found that environmental knowledge and attitudes had a positive and significant effect on purchase intentions. Furthermore, the attitude mediates a portion of environmental knowledge towards the purchase intention of a green cosmetic product. Therefore, it was expected the consumer who already have knowledge of the environment has the potential to become customers for green cosmetics producers. In addition, the companies need to increase the intention of potential consumers to switch to green cosmetics products by highlighting the added value of consumption of green products and further research can add construct alternatives that affect the purchase intention of green cosmetics products such as environmental awareness and increase references related to this study.

**Keywords:** Attitude; Environmental Knowledge; Green Purchase Intention.

### INTRODUCTION

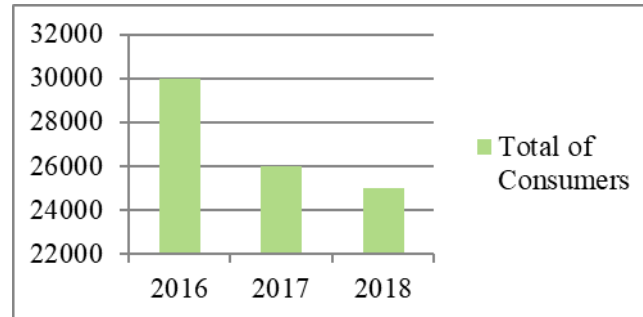
Community life patterns make development and life very exploitative of natural resources so that the resulting impact can threaten the environment. Environmental damage is now getting worse and has provoked concerns that result in global warming. Amid the severe environmental conditions which are indirectly caused by the activities of the manufacturing industry in the world, awareness arises amid society about environmental conservation. One of the phenomenons that show this is the presence of green products. The results of research on environmentally friendly products published by Nielsen (2017) show that as many as 55 percent of global respondents are willing to pay extra for environmentally friendly products. WWF-Indonesia and Nielsen's

Survey in 2017 showed that 63% of Indonesian consumers are willing to consume environmentally friendly products at higher prices.

The emergence of public awareness of environmental conservation has caused companies to consider ecological aspects and raise environmental issues as one of their marketing strategies. The cosmetics industry is no exception, which has shifted to using natural ingredients and implementing a green marketing strategy. The focus of this green marketing strategy is to carry out all marketing activities while protecting the environment (Kinoti, 2011). The Body Shop as a pioneer of environmentally friendly cosmetics and body care products since 1976 offering products that are used personally such as make-up, liquid soap, powder, hair washers and others, These brand products are said to be green cosmetics

because they are made from natural ingredients that are friendly to health. The manufacturing process also prioritizes environmental sustainability, such as packaging from recycled materials, a small amount of waste, and is committed not to use animals as a product trial

media. Even though The Body Shop already has very good strength in the concept of applying the concept of green business, The Body Shop cosmetics sales which dropped during the last two to three years are the reason (L'Oreal CEO, 2017).



**Figure 1**

Number of the Body Shop Consumers in Denpasar

Source: Outlet of The Body Shop in Denpasar City

Figure 1 shows the number of consumers of The Body Shop green products from 2016 to 2018. For 2017, there was a significant decline from 30,000 consumers in 2016 to 26,000 consumers in 2017, as well as in 2018 it dropped to 25,000 consumers.

There are several related studies on attitudes, environmental knowledge and consumer purchase intentions that have been previously studied by several researchers. [Wulandari, et al. \(2015\)](#) in their study examined the role of attitude in mediating consumer knowledge influence towards the purchase intention of green product Ever-E 250 in Denpasar. The result of this study showed that consumer knowledge has a significant and positive influence on the attitude and purchase intention of green products Ever-E 250. The attitude variable has been proven to be able to mediate consumer knowledge influence towards the purchase intention of green product Ever-E 250 in Denpasar significantly, while the mediation happens is partial, so that the attitude variable functions as a mediator of consumer knowledge influence towards the purchase intention of green product. Meanwhile, a study conducted by [Indriani et al. \(2019\)](#) that examined the relational relationship between environmental knowledge, green brand image, attitude towards green products, and green purchase intention in increasing interest in buying environmentally friendly body care and cosmetic products, showed that Environmental Knowledge has no significant direct effect on consumers' Green Purchase Intention. More important, Attitude is found to have a full mediation effect on the relationship of

Environmental Knowledge and green Purchase Intention. Another related study also conducted by [Onurlubaş \(2019\)](#) that investigate the impact of environmental concern on green product purchase intention, and the mediating role of environmental attitude on the mentioned impact revealed that environmental attitude has a mediating role on the impact of environmental concern on green product purchasing intention. It is also determined that environmental concern has a meaningful impact on environmental attitude and green product purchasing intention, and environmental attitude has a meaningful impact on green product purchasing intention. Based on the previous study, it can be assumed that attitudes and environmental knowledge can have a positive and negative effect on consumer purchase intentions. Therefore, this study aims to explain attitudes and environmental knowledge in determining purchase intention of green cosmetic products.

## CONCEPT AND HYPOTHESIS

### Theory of Planned Behaviour

Based on TPB theory, the most important determinant of a person's behavior is the intention to behave. [Fishbein & Ajzen \(1975\)](#) states that a person's behavior depends on behavioral intention which consists of three components, namely attitude (attitude), subjective norms (subjective norm), and perceived behavioral control (perceived behavioral control).

### Attitude

[Chaplin \(2011\)](#) defines attitude as a relatively stable and continuous predisposition

or tendency to behave or react in a certain way to certain other individuals, objects, institutions or problems.

### **Environmental Knowledge**

Lee (2010) in his research, defines environmental knowledge as a person's basic knowledge of what they can do to help protect the environment that facilitates their behavioral commitment to green purchases.

### **Intention to Buy**

According to Shah et al. (2012) that the intention to buy is a decision that analyzes and studies why consumers want to buy a product in a certain place.

### **The Role of Consumers' Attitudes in Mediating Environmental Knowledge against Intention to Buy Green Cosmetics Products**

Environmental knowledge has been a major influence on consumer attitudes towards environmentally friendly products. A study in Egypt (Mostafa, 2007) concluded that consumer knowledge about environmental issues is an important factor influencing consumers' attitudes to be more environmentally friendly. Previous research by Paladino and Baggiere (in Aman et al., 2012), which involved residential electricity customers, found that attitudes towards the environment mediate the full relationship between knowledge about the environment and the intention to buy green products. Previous research has found that attitude plays an important role in influencing consumer purchase intentions (Chen & Chang, 2016). Attitudes towards green products have succeeded in providing a role in the relationship of Environmental Knowledge and Green Purchase Intentions. That is, a positive attitude is needed to bridge the increase in consumer purchase intentions for The Body Shop products (Rakhmawati, Puspaningrum, & Hadiwidjojo, 2019).

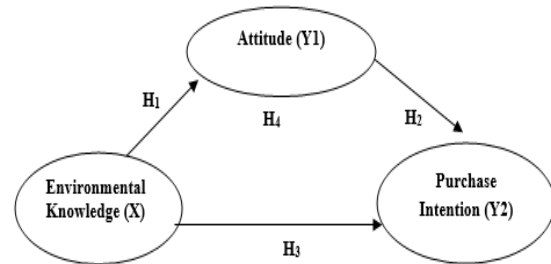
H1: Environmental knowledge has a positive and significant effect on consumer attitudes to buy green cosmetic products.

H2: The attitude of consumers has a positive and significant effect on the intention to buy green cosmetics products.

H3: Environmental knowledge has a positive and significant influence on the intention to buy green cosmetic products

H4: Attitudes significantly mediate environmental knowledge on intentions to buy green cosmetic products.

Based on the results of several previous studies found that the variables of attitude, environmental knowledge and purchase intention.



**Figure 2**

Research Model Framework

Source: Data processed, 2020

### **METHOD**

The research design of this study is a causality research design because there is a relationship between two or more variables. The approach used is a quantitative approach in the form of associative. Data analysis was performed using quantitative analysis techniques using PLS (Partial Least Square) techniques. To find out the relationship between the independent variable and the dependent variable, after testing the hypothesis, then proceed with the mediation test. This study was conducted in the city of Denpasar, such as: in the hotel environment, campus environment, office environment, and public places that are considered to be able to contribute in this study. The data collection method used in this study was a survey method, namely by conducting interviews using a questionnaire distributed to the people of Denpasar. The sample used in this study was 100 observations. The instrument used in collecting the data of this study was a questionnaire. The questionnaire in this study consisted of two parts, the first part containing questions about the demographic profile of the respondents namely, gender, age, education and income. The second part contains a list of questions based on constructs or variables in the conceptual framework of this study. This study uses Likert scale to measure each item statement, ranging from point 1 which means strongly disagree to point 5 which states agree.

### **RESULT AND DISCUSSION**

#### **Validity Test Result**

The validity test is performed on instrument items, using the Pearson product-moment correlation method, i.e. the item/indicator is said to be valid if it has a

correlation coefficient  $\geq 0.30$  and is statistically significant at the 0.05 or 0.10 level. The results of the validity test recapitulation in this study are presented in Table 1 as follows.

**Tabel 1**  
Research Variable Indicator

Construct	Indicator	Correlation	Description
<b>Environmental Knowledge (X)</b>	Knowledge about environmental pollution that occurs comes from factory waste (X1)	0,661	Valid
	Knowledge of waste pollution in the air caused by motorized vehicles (X2)	0,644	Valid
	Knowledge of chemical overuse (X3)	0,572	Valid
	Knowledge of chemical waste from conventional product production processes (X4)	0,552	Valid
<b>Attitude (Y1)</b>	Loving green cosmetic products (Y1.1)	0,631	Valid
	Buying eco-friendly products is a good thing (Y1.2)	0,429	Valid
	Using green cosmetics is one way to contribute to protecting the environment (Y1.3)	0,611	Valid
	Considering green cosmetic products are healthier than ordinary cosmetic products (Y1.4)	0,579	Valid
<b>Purchase Intention (Y2)</b>	Interested in trying green cosmetics (Y2.1)	0,446	Valid
	Considering buying Green cosmetics (Y2.2)	0,710	Valid
	Intending to use green cosmetic products (Y2.3)	0,706	Valid
	Intending to switch to green cosmetic products. (Y2.4)	0,569	Valid

Source: Processed Data Results, 2020

The explanation of the results of the validity test in Table 1 shows that all indicators used to reflect the construct have a correlation value greater than 0.30 and significant at the level of significance of 0.05, the items in the instrument are declared valid.

**Reliability Test Result**

The reliability test of this research

instrument uses the Cronbach Alpha value, which is to find out the unidimensionality of the statement items on the latent variables studied (organizational culture, employee satisfaction and performance). The Cronbach Alpha value is declared reliable if the value is greater or equal to 0.70. Recapitulation of the results of the research instrument reliability test can be seen in Table 2.

**Table 2**  
Recapitulation of Research Instrument Reliability Test Results

No	Variable	Cronbach's Alpha	Description
1	Environmental Knowledge (X)	0,746	Reliable
2	Attitude (Y1)	0,724	Reliable
3	Purchase Intention (Y2)	0,805	Reliable

The reliability test results presented in Table 2 show that all research instruments had a Cronbach's Alpha coefficient of more than 0.70. So it can be stated that all variables meet the reliability or reliability requirements so that they can be used to conduct research.

Furthermore, to determine the strengths and weaknesses of the influence caused by the

dependent variable on the independent variable used Evaluation of Structural Models Through R-Square (R<sup>2</sup>).

**Table 3**  
Evaluation of the Inner Structural Model

CONSTRUCT	R Square
PURCHASE INTENTION	0,59
ENVIRONMENTAL KNOWLEDGE	
ATTITUDE	0,36

Source: Data processed in 2020

Table 3 shows that the value of R2 of purchase intention is 0.59; based on Chin criteria (Ghozali & Latan, 2012:85), then the model including the criteria of the model is close to strong, the meaning is the variation of environmental knowledge and attitudes capable of explaining attitude variation by 59% percent, the remaining 41% percent is

explained by variations of other variables outside the model analyzed. While attitudes have an R-square value of 0.36 or include a moderate model, meaning that variations in environmental knowledge are able to explain variations in attitude that is 36% percent, the remaining 64% is explained by variations outside the model.

**Table 4**  
Path Analysis and Testing Statistics

CONSTRUCT	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
ENVIRONMENTAL KNOWLEDGE - > PURCHASE INTENTION	0,46	0,45	0,10	0,10	4,50
ENVIRONMENTAL KNOWLEDGE - > ATTITUDE	0,60	0,60	0,08	0,08	7,49
ATTITUDE -> PURCHASE INTENTION	0,40	0,41	0,12	0,12	3,41

Source: Data processed in 2020

Table 4 shows that:

Environmental knowledge has a positive effect of 0.46 on purchase intentions, and the relationship is significant at the 0.05 level because the T-Statistics value is greater than 1.96 which is 4.50.

Environmental knowledge has a positive effect on attitudes of 0.60, and the relationship is significant at the 0.05 level with a t value of 7.49.

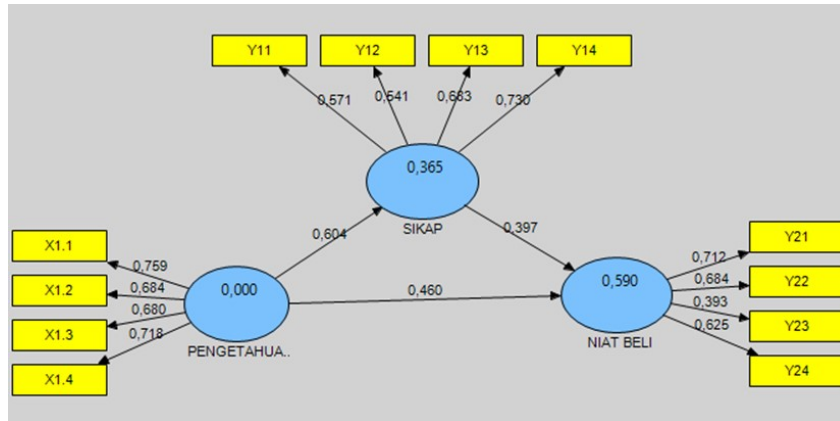
The attitude of the positive influence of 0.40 on purchase intention, and the relationship is significant at the 0.05 level with a t value of 3.41 greater than the T-table value of 1.96.

The influence of mediation analyzed includes direct analysis and indirect effect analysis in this study using the examination method. Examination method by conducting two analyzes, namely analysis involving

mediation variables and analysis without involving mediation variables. The method of checking mediation variables with the coefficient difference approach is carried out as follows: (a) checking the direct effect of the Independent Variable on Dependent Variables in the model by involving mediating variables, (b) examining the effect of the Independent Variables on Dependent Variables on the model without involving mediating variables, (c) examine the effect of Independent Variables on Mediation Variables, and (d) examine the effect of Mediation variables on Dependent variables. If (c) and (d) are significant, and (a) not significant, then the intervening variable is said to be a complete mediation variable. If (c) and (d) are significant and (a) also significant, where the coefficient of (a) is smaller (down) than (b) then the intervening variable is said to be a partial mediation variable. If (c) and (d) are significant and (a) also significant, where the

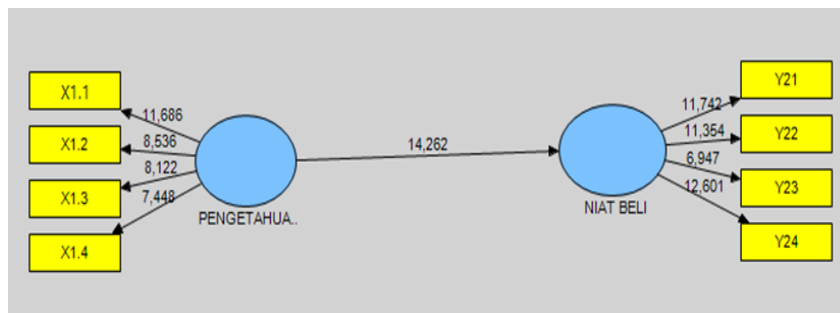
coefficient of (a) is almost the same as (b) then the intervening variable is said not to be a mediating variable. If either (c) or (d) or both

are insignificant then it is not said to be a mediating variable (Solimun, 2011; Hair et al., 2010).



**Figure 3**

Mediation Test of Job Satisfaction on Culture on Performance (Indirect Effect)



**Figure 4**

Statistical Test of Direct Relationship between Culture and Performance

Based on Figures 3 and 4, it turns out that attitude is a partial mediation between environmental knowledge and purchase intention.

**CONCLUSIONS**

Based on the results of the data analysis described in the previous section, several conclusions can be drawn as a result of this study: 1) Environmental knowledge has a positive and significant effect on purchase intentions for The Body Shop's green cosmetic products in the city of Denpasar. This means that environmental knowledge can influence buying intentions. The better the environmental knowledge of potential customers, the higher the purchase intention. 2) That environmental knowledge has a positive and significant effect on attitudes towards The Body Shop's green cosmetic products. This means that the higher the consumer's environmental knowledge, the better their attitude towards green products. 3) Attitudes towards green cosmetic products have a positive and significant effect on purchase intentions. This means that the better

the attitude of consumers towards green cosmetics products, the higher their buying intention. 4) Attitudes towards green cosmetic products mediate some of the influence of environmental knowledge on purchase intentions. This can be seen from the relationship of attitude that has not been able to perfectly explain the relationship between environmental knowledge with the intention to buy green cosmetics products. This can be caused because there are still other variables that also affect the purchase intention of green cosmetics products such as environmental awareness. Based on the conclusion above, it can be stated that organizational culture has a positive and significant effect on employee job satisfaction, organizational culture has a positive and significant effect on employee performance, job satisfaction has a positive and not significant effect on employee performance, job satisfaction is not a variable that mediates work culture on performance. Hence, there are some suggestions given that: the increasing community knowledge in Denpasar about waste pollution in the air is caused by motor vehicles because cosmetics consumers who already have knowledge of the

environment have the potential to become customers for green cosmetics producers. Furthermore, it was expected that this study makes people prefer, think buying environmentally friendly products is good and so people consider green cosmetics products healthier than other products. In addition, companies need to increase the intention of potential consumers to switch to green cosmetics products by highlighting the added value of consumption of green products and further research can add construct alternatives that affect the purchase intention of green cosmetics products such as environmental awareness and increase references related to this study and also added other cities in Bali to be able to produce more valid data.

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