Analysis of Factors Influencing Intention to Purchase Natural And Environmentally Friendly Cosmetic Products

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Abstract: The popular trend in the global beauty industry has reshaped consumer consumption patterns, including in Indonesia. However, the unsustainable consumption of cosmetic products poses risks to environmental and social sustainability. With the phenomenal growth of the rapidly expanding cosmetic industry, the consumption of cosmetic products has also increased significantly. Unfortunately, this increase has negative environmental impacts and can harm consumer health. This is due to waste from raw materials used in production, product packaging, and chemicals that may pose health risks to consumers. Alternatively, green products have been widely developed and are available in the market. This study aims to examine the factors influencing the purchase intention of natural and eco-friendly cosmetic products among Indonesian consumers. To establish a hypothesis framework, 161 valid questionnaires were collected through purposive sampling in several cities in Indonesia. Data analysis and hypothesis testing were conducted using SmartPLS statistical software. The study results indicate that Indonesian consumers' purchase intentions for natural and eco-friendly cosmetic products tend to be positively influenced by consumers' attitudes toward environmental concern, health consciousness, and perceived behavioral control. Additionally, purchase intention positively impacts behavioral intention. These findings provide insights into Indonesian consumers' habits and awareness in choosing natural and eco-friendly cosmetic products.

Keywords: Green Product, Environmental Concern, Health Consciousness, Green Cosmetic Purchase Intention, Behavioral Intention.

INTRODUCTION

Currently, global beauty industry trends are popular across various categories. In Indonesia, the phenomenal growth of the cosmetics industry is marked by the growth in the number of cosmetics industries in Indonesia which reached 21.9%, from 913 companies in 2022 to 1,010 companies in mid-2023. The national cosmetics industry is also able to penetrate the export market, which is cumulative for the January-November period. In 2023, the export value for cosmetic products, fragrances and essential oils was recorded at USD 770.8 million (Limannseto, 2024).

Using skin care products provides benefits for health and appearance. Consumers who use beauty products and services not only want to look attractive but also feel comfortable. Therefore, skin care ingredients must be safe and high quality. The products consumed certainly need to meet standard and safe requirements that are intensively monitored. Challenges regarding product safety will continue to grow if consumers do not know product material knowledge. Therefore, it is important for consumers to have awareness of healthy skin care products and be careful in choosing skincare products.

According to Parashar et al., (2023) consumers who are health conscious can be identified based on their lifestyle in using products that take their health into consideration. Consumers who are health conscious will tend to use natural ingredients, avoid chemicals and be free from products with synthetic fragrances. They will also tend to buy products from brands that consider their impact on the environment. Trends in environmental and health problems such as degradation of natural resources and the serious threat of global warming have made companies and business actors direct their businesses to implement green marketing business concepts related to environmental sustainability (Kusumawati, 2019).

Green products or environmentally friendly products are industrial products that are produced using environmentally friendly technology and do not cause harm to the environment. According to Kumar, et al (2014) green products or environmentally friendly products are alternative products that use organic materials, eliminate toxic products and reduce pollution and save energy use. The large number of cosmetic products resulting from waste and product packaging is detrimental to the environment and health, encouraging companies in the cosmetics industry to develop environmentally friendly cosmetic products as well as issues about environmental problems and threats to the environment changing consumer consumption patterns and consumer views so that this opportunity is starting to be noticed by consumers. business actors by changing business approach patterns that lead to business activities based on environmental sustainability.

Companies are starting to implement green marketing which aims to fulfill consumers' needs and desires without causing harm to the surrounding environment, both from the product itself, the production process and the product packaging (Pratama, et al 2017). In Asha's research, (2017) stated that consumer awareness of the use of environmentally friendly products (green products) in society is still very limited. In this case, the need to provide good knowledge in the use of environmentally friendly products for consumers is very necessary. Of course, with educational knowledge, this influences their behavioral control before using a product.

This research aims to find out how much interest consumers have in cosmetic products made from natural and environmentally friendly ingredients. If consumers already know the impact that will arise from cosmetic products that are not environmentally friendly, will consumers continue to consume these products continuously or will they limit their choices. Apart from that, the phenomenon of green products starting to develop and the interest in purchasing these products has encouraged researchers to analyze the factors that influence consumers' intention to purchase cosmetic products made from natural and environmentally friendly ingredients.

METHOD

This research was conducted using a quantitative method approach. Quantitative research methods are used to test certain theories by analyzing the relationships between the variables involved. The reason for choosing a quantitative approach is because researchers want to test theories and models to explain the relationship between the variables forming the model. This approach involves the use of research tools for data collection, quantitative or statistical data processing, and description and testing of predetermined hypotheses. It is

applied to a specific population or sample. The questionnaire is one of the instruments used in this research to collect data.

The sample studied focused on a sample population that had experience with environmentally friendly cosmetic products. The population used was Indonesian people and used the theory of Hair Jr, (2010) in determining the sample size. Based on calculations, the minimum sample size required is 160 respondents. Because the number of indicators in this study is 32, so 32 times 5 equals 160 samples. Therefore, the number of samples determined for this research was 161 respondents collected through distributing questionnaires.

RESULTS AND DISCUSSION

Data collection from 161 respondents in this study obtained the characteristics shown in Table 1. Respondents in this study were dominated by men (53.4%), aged between 18-30 (75.5%) and had entrepreneurial jobs (34.8%) , The last education is SMA/SMK (63.4%) and is dominated by monthly income of Rp. 3,000,000-5,000,000 (45%). Complete details can be seen in Table 1 below.

Tabel 1. Data Responden

Keterangan		Frekuensi	Persen
Jenis Kelamin	Laki-Laki	86	53,4%
	Perempuan	75	46,6%
Usia	18-30	120	75,5%
	31-40	39	24,2%
	41-50	2	1,2%
Pendidikan Terakhir	SMA/SMK	120	63,4%
	Diploma	27	16,8%
	Sarjana	31	19,3%
	Magister	1	0,6%
Pekerjaan	Wirausaha	56	34,8%
	Pegawai Negeri Sipil	15	9,3%
	Pelajar	30	18,6%
	Karyawan Swasta	52	32.3%
	Ibu Rumah Tangga	5	3,1%
	Lainya	3	1,9%
Pendapatan Per Bulan	Kurang dari 1 juta	24	15%
	1-3 Juta	52	32,5%
	3-5 Juta	72	45%
	5-10 Juta	9	5,6%
	Lebih dari 10 Juta	3	1,9%

The results of testing the outer model used for the validity and reliability of this research instrument are presented in Table 3. Based on Table 2, each indicator of this research variable has an outer loading value of > 0.5. These results show that all indicators have met the minimum outer loading criteria. So it can be concluded that all indicators have good loading factor values.

Tabel 2. Outer Loading

	Attitude	Behavioral Intention	Environmental Concern	Green Cosmetics Purchase Intention	Health Consciousness	Perceived Behavioral of Control
ATT1	0,792					
ATT2	0,711					
ATT3	0,725					
ATT4	0,739					
ATT5	0,743					
ATT6	0,775					
ATT7	0,730					
BI1		0,715				
BI2		0,717				
BI3		0,695				
BI4		0,749				
BI5		0,734				
EC1			0,686			
EC2			0,754			
EC3			0,713			
EC4			0,749			
EC5			0,750			
GCPI1				0,774		
GCPI2				0,707		
GCPI3				0,747		
GCPI4				0,750		
GCPI5				0,744		
HC1					0,728	
HC2.					0,728	
HC3					0,770	
HC4					0,759	
HC5					0,735	
PBC1						0,728
PBC2						0,724
PBC3						0,786
PBC4						0,713
PBC5						0,787

Based on Table 3, the R-Square value shows that attitude is described by its antecedent variables as 87.5%. This means that there is still an influence of 12.5% of other variables outside the Attitude variable. Then, Behavioral Intention is described by the antecedent variable at 77.1%. This means that there is still an influence of 22.9% of other variables outside the Behavioral Intention variable. Meanwhile, Green Cosmetics Purchase Intention is described by its antecedent variable of 81.9% and there is still 18.1% remaining for other variables outside the Green Cosmetics Purchase Intention variable.

Tabel 3. Indeks Pengujian Model

	R Square	R Square Adjusted
Attitude	0,878	0,875
Behavioral Intention	0,773	0,771
Green Cosmetics Purchase Intention	0,820	0,819

Table 4 and Figure 2 show that all hypotheses are supported. This is because it is in line with the principles of Hair et al. (2016), who says that the T-statistics value must be more than 1.96: and the P-value must be less than 0.05
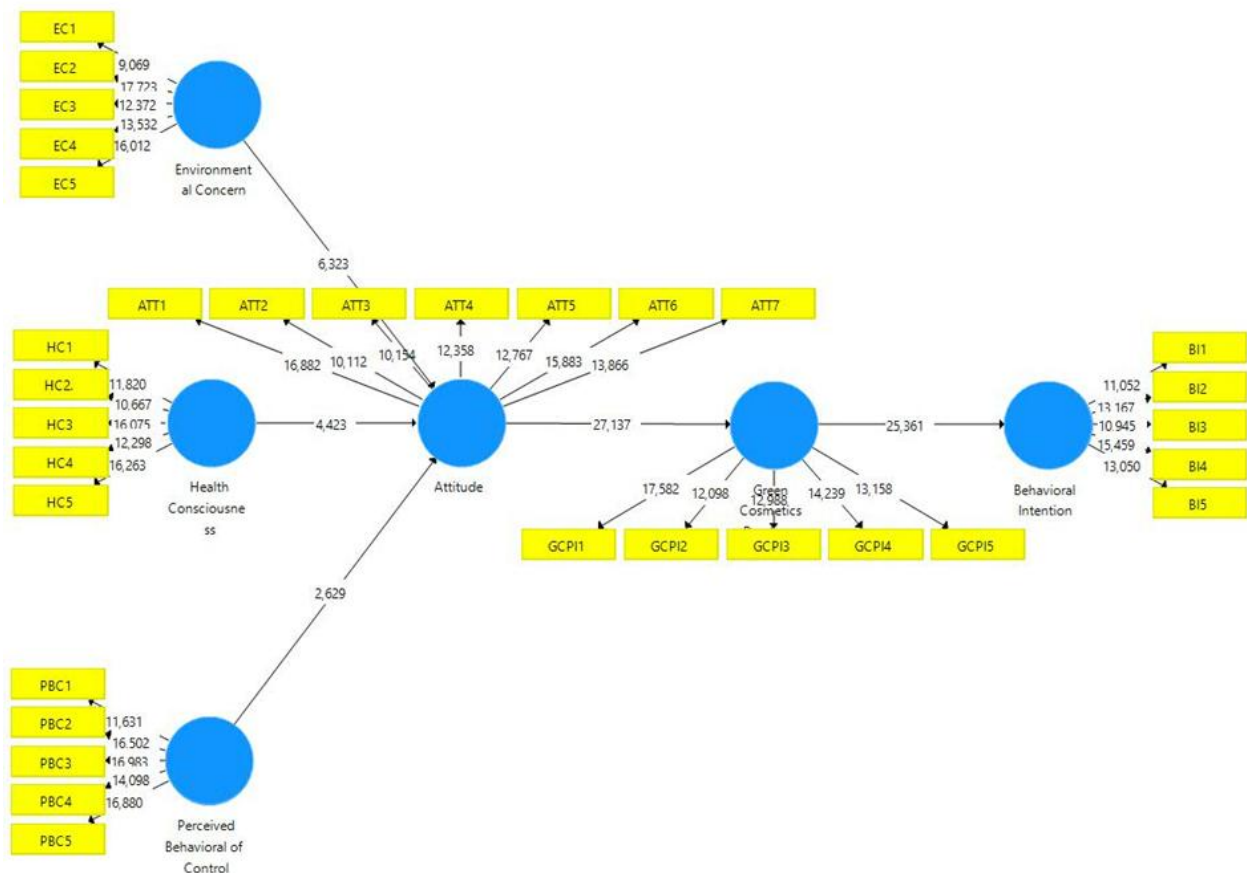
Gambar 2. Hasil Bootstrapping

Tabel 4 Hasil Pengujian Hipotesis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Attitude -> Green Cosmetics Purchase Intention	0,905	0,903	0,033	27,137	**0,000**
Environmental Concern -> Attitude	0,395	0,396	0,062	6,323	**0,000**
Green Cosmetics Purchase Intention -> Behavioral Intention	0,879	0,877	0,035	25,361	**0,000**

Health Consciousness -> Attitude	0,361	0,351	0,082	4,423	**0,000**
Perceived Behavioral of Control -> Attitude	0,216	0,223	0,082	2,629	**0,009**

The Influence of Environmental Concern on Attitude

This research shows that Environmental Concern has a positive and significant influence on attitude. Someone who cares about the environment tends to develop a positive attitude towards environmental preservation or protection. This happens because they are aware of the importance of protecting the environment, so they more easily accept ideas or policies that support sustainability. In the context of this research, cosmetic products are environmentally friendly. The results of this research are also in line with research by Pagialis and Krontalis (2014) which states that Environmental Concern has a positive effect on a person's attitude towards consuming environmentally friendly products. Their research studies green consumer habits.

H1: "Environmental Concern has a positive and significant effect on attitude" is supported and acceptable.Pengaruh *Health consciousness* terhadap *Attitude*

This research shows that health consciousness has a positive and significant influence on attitude. People who are more health conscious are more likely to have positive attitudes toward products or services that support their personal well-being. In the context of this research, cosmetic products are made from natural and environmentally friendly ingredients. Individuals with high health consciousness tend to act through information that supports healthy lifestyle choices. The results of this research are also in line with research by Kusumaningsih et al (2019) which states that Health consciousness has a positive and significant influence on attitude. Their research uses organic food.

H2: "Health consciousness has a positive and significant influence on attitude" is supported and acceptable.

The Influence of Perceived behavioral control on Attitude

This research shows that perceived behavioral control has a positive and significant influence on attitude. A person with beliefs about his ability to control a behavior can form a positive attitude towards that behavior. The more control an individual has, the more positive their attitude will be towards the behavior, which ultimately increases their intention and even involvement in the behavior. In the context of this research, cosmetic products are made from natural and environmentally friendly ingredients. This research is in line with research by Sreen et al., (2018) which states that perceived behavioral control has a positive and significant influence on attitude. Their research was conducted in India regarding purchasing interest in green products.

H3: "Perceived behavioral control has a positive and significant influence on attitude" is supported and acceptable.

The Influence of Attitude on Green Cosmetics Purchase Intention

This research shows that Attitude has a positive and significant effect on Green Cosmetics Purchase Intention. When consumers have a positive view of the quality, safety and environmental impact of natural and environmentally friendly cosmetic products they are more likely to purchase the product. This positive attitude is also strengthened by knowledge, experience and values that support a sustainable lifestyle. The results of this research are in line with research by Zulfikar et al, (2022) which shows that attitude has a positive and significant effect on Green Purchase Intention.

H4: "Attitude has a positive and significant effect on Green Cosmetics Purchase Intention" is supported and acceptable Pengaruh *Green Cosmetics Purchase Intention* terhadap *Behavioral Intention*

This research shows that Green Cosmetics Purchase Intention has a positive and significant effect on Behavioral Intention. Consumers who have the intention to purchase natural and environmentally friendly cosmetic products usually also have the intention to engage in pro-environmental actions and care about their own health. In other words, consumers reflect their commitment to environmental sustainability and responsibility for personal health by integrating their consumption behavior and daily behavior. This research is in line with research by Nguyen et al. (2019) who discussed Green Consumption in Vietnamese society showed the results that Green Purchase Intention had a positive and significant effect on Behavioral Intention.

H5: "Green Cosmetics Purchase Intention has a positive and significant effect on Behavioral Intention" is supported and acceptable.

CONCLUSION

Based on the results of this research, there is a positive correlation between Environmental Concern and attitude. In the context of this research, someone will tend to use cosmetic products whose packaging and raw materials do not pollute the environment, so H1 is accepted. Furthermore, there is a positive correlation between Health consciousness and attitude. This means that the higher the Health consciousness a person has, the more likely they are to have a positive attitude towards cosmetic products made from natural and environmentally friendly ingredients whose ingredient composition is safe for the individual's health, so that H2 is accepted. Furthermore, there was a positive correlation between perceived behavioral control and attitude. The higher a person's confidence about their ability to do something, the greater their intention and even involvement in the behavior. In the context of this research, it is the intention to use cosmetic products made from natural and environmentally friendly ingredients, so that H3 is accepted. Next, there is a positive correlation between attitude and Green Cosmetics Purchase Intention. This means, when an individual has a positive view of the quality and safety of cosmetic products for themselves and the impact of these cosmetic products on the environment. So, it will be more likely for them to buy cosmetic products made from natural and environmentally friendly ingredients, so H4 is accepted. Next, there is a positive correlation between Green Cosmetics Purchase Intention and Behavioral Intention. This means that consumers who have the intention to purchase cosmetic products made from natural and environmentally friendly materials usually also reflect their commitment to environmental sustainability and their responsibility for their own health in their daily behavior, so that H5 is accepted.

This research has limitations in that the respondent sample lacks variation in respondent characteristics which limits generalizing the research results and this research has limited respondent bias because natural and environmentally friendly cosmetic products are considered a socially positive choice, respondents may give answers that they think will be more socially acceptable, not what actually reflects their intentions or behavior. This can affect the validity of the research. For further research, you can expand the scope of research to include the characteristics of respondents and can use qualitative methods as an addition to obtain in-depth data through interviews or group discussions to support more comprehensive and accurate insight into the issues being researched.

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