

Anti-Aging Cosmetics And Factors Associated With Purchase Behavior In Yogyakarta, Indonesia

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Abstract: Anti-aging cosmetics are among the fastest growing market of the skin-care cosmetic segment. The main objective of this study was to assess the extent of anti-aging cosmetics use pattern and factors associated with purchase behavior among Yogyakarta population, Indonesia. A survey based cross sectional study was used. Customers were conveniently selected and interviewed using structured questionnaires. Cosmetics consumption pattern and market attributes include brand, price, place, and influencer were investigated. The data was analyzed and presented descriptively and Chi-Square test for bivariate analysis. Out of 384 customer surveyed, majority were female (92.44%), average of age 24 years old, bachelor degree level (51%), as a university students (41%) and monthly expense about less than <2 million IDR (42%). The most preferred cosmetic for anti-aging was Wardah (38%), place of purchasing anti-aging cosmetics was the cosmetic stores (49%). Most of respondents spent about 100 thousand IDR for anti-aging cosmetics budget (46%), indicated that anti-aging products is a priority need among customers. Female customers and higher income customers have shown more conscious on buying cosmetics than their counter parts, with OR 1.5 (2.11-4.53) and 2.45 (1.70-3.83) respectively. Market attributes of brand image and influencer associated with decision in buying anti-aging cosmetics with OR 3.21 (1.87-4.21) and 2.13 (1.87-3.29) respectively. In other hand, price and place attributes indicates no significant difference at level of $p < 0.05$. This study concludes that excellent product quality factor plays a key role over other factors. Cosmetic manufactures are required to understand thoroughly the buying behavior before implementing any marketing strategy.

Index Terms: cosmetics, anti-aging product, market, attributes, customers, strategies, Indonesia

1. INTRODUCTION

ANTI-aging cosmetics are among the fastest growing market of the skin-care cosmetic segment [1]. Cosmetics manufacturers investigated consumer's purchase behavior and try to satisfy their unmet needs, what influencing their purchase decisions, and their choices in cosmetic products [2, 3]. A consumer's buying behavior is influenced by several attributes [4]. Attributes are descriptive features that characterized a product or service what a consumer thought with its purchase or consumption. Attributes can be classified into two broad categories that are product related attributes and non-product related attributes [5]. Product related attributes can be ranged from brand image, price, place, and influencer [2, 4]. Consumer preferences on products or services are usually influenced by socio-cultural factors. Hence it is important for marketers to identify the consumers' beliefs and attitudes, their needs and their preferences for a specific type of product that are greatly influenced by society and culture to which they belong [5, 6]. For example, consumers with low income may consider price as the most important factor in their decision to buy a cosmetic product, where as in other counterparts, consumers may consider quality as the most important determinant in their buying decision for a cosmetic product [7, 8]. The other factors that may influence the buying decision process of a consumer includes family members, relatives, salesperson, spouse, siblings, neighbors and even also by the advertisement triggered by the marketers [9, 10]. In spite of all these attributes, various strategies are invested to attract consumers to buy a new product. To meet the specific needs and wants of the consumers and to make them satisfy with their products marketers has to deal with this ongoing process. In the consumption of cosmetics, socio-demographic factors play important role [11].

Anti-aging products more focus on middle age women. However, shifting trend occurred where the younger generation are more opened to the use of anti-aging cosmetic product as considered to the older generation. Female on age range between 15-45 years old want to be more attractive and are more conscious for their looks [9, 12, 13]. In addition, young adults like new experiences and are more open minded toward the innovation of cosmetic industry. Empirical supports have confirmed that brand image does influence satisfaction, which in turn led to loyalty in purchase behavior. However, the impact various attributes on purchase behavior required a more complete validation, since some contradictory results can be observed in existing literature. Therefore, our study is aimed to investigate the factors associated with purchase behavior in anti-aging cosmetics.

2 METHODS

This study was a cross sectional survey. Respondent was recruited from the metropolitan city of Yogyakarta. The main criteria for sample selection were individual who experiencing in anti-aging cosmetics usage. Participants should be able to speak in Bahasa Indonesia so as to communicative to answer self-administered questionnaire. The survey was given to 400 people in Yogyakarta city, but 16 responses were not taken into consideration as they did not complete the questionnaire. For piloting purpose, the questionnaire was first sent out to 5 respondents as a test in an attempt to reduce all types of error associated with questionnaire drafting. The questionnaire consisted of three parts i.e. sociodemographic, marketing attributes and purchase behavior of anti-aging products. The market attributes considered in this study to determine customers' anti-aging product preferences were based on literature review, including brand image, price, place, and influencer. These sixteen statements of market attributes were measured in 4-point Likert scale. Data were analyzed descriptively and chi-square test for estimating the significant factors related to customers' preference in purchasing anti-aging cosmetics.

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3 RESULTS

Majority of study population were female (92.44%), average of age 24 years old, bachelor degree level (51%), as university students (41%) and monthly expense about less than <2 million IDR (42%) (Table 1).

Table 1. Characteristics of customers

Sociodemographic characteristics (384)	N	%
Gender		
Female	355	92.44
Male	29	7.66
Age (mean, SD)	24.35 (8.38)	
Education		
< high school	120	31.25
Bachelor degree	198	51.56
Master degree	66	17.18
Working status		
University student	158	41.14
employee	86	22.39
entrepreneur	54	14.06
Others	18	4.68
Monthly expense (IDR)		
< 2 million	164	42.71
2-<5 million	78	20.31
5-10 million	80	20.83
>10 million	62	16.14

From the survey conducted, it is seen that Wardah was the most used brand (38%) followed by Ponds and Olay, 20% and 16% respectively. Wardah is a new brand brought the halal label in the market and captured a considerable amount of market share in the anti-aging category. Ponds and Olay being mainly associated brand for middle age women thus have seen to lose its share to the competitors (Table 2). From the Table 2, the most preferred place of purchasing anti-aging cosmetics was the cosmetic stores (49%). It means that customers are more comfortable and satisfied by cosmetic stores. Here we also observed that customers bought anti-aging cosmetic product from beauty clinics (32%). This might be due to the influence of the doctors working in beauty clinics to ensure customer in choosing their cosmetic product. Most of respondents spent about 100 thousand IDR for anti-aging cosmetics budget (46%), indicated that anti-aging products is a priority need among customers.

Table 2. Anti-aging cosmetic' purchase behavior

Variables (n=384)	N	%
Brand chosen		
Wardah anti-aging cream	145	37.76
Ponds Flawless white	78	20.31
Olay Total Effect	65	16.92
Loreal	55	14.32
others	41	10.67
Channel		
Cosmetic stores	189	49.22
Beauty clinics	124	32.29
Online stores	71	18.49
Expense for cosmetics (thousand IDR)		
<100	178	46.35
100-300	90	23.43
>300	116	30.21

Table 3 describes that brand image was the highest mean score (3.54, SD 1.82) followed by place and influencer, with

mean score 3.47 and 3.36 respectively. The price is the lowest mean score (3.0, SD 1.97) indicated that customers were not considered that price is important factor.

Table 3. Market attributes toward purchase behavior

Market attributes	Mean	SD
Brand Image	3.54	1.82
Brand is well known	3.56	1.23
Ingredients are good in quality	3.81	2.29
Halal proven	3.75	1.98
High quality	3.50	2.19
Packaging	3.31	1.92
innovative	2.43	1.34
Price	3.0	1.97
Affordable	3.21	1.56
High price for high quality products	2.34	2.14
Low price from other alternatives (<i>competitor</i>)	3.45	2.21
Place	3.47	1.52
Cosmetics stores	3.76	0.97
Beauty clinics	3.62	1.31
Mall or super stores	3.37	1.45
Online stores	3.12	2.35
Influencer	3.36	2.14
Friend or family recommendation	3.71	2.18
Product advertisement	3.13	2.11
Health professionals	3.24	2.15

Table 4 indicates the influence of sociodemographic factors and market attributes on the purchase behavior of anti-aging cosmetic products. Female customers and higher income customers have shown more conscious on buying cosmetics than their counter parts, with OR 1.5 CI 2.11-4.53 and 2.45 CI 1.70-3.83 respectively. Market attributes of brand image and influencer associated with decision in buying anti-aging cosmetics with OR 3.21 CI 1.87-4.21 and 2.13 CI 1.87-3.29 respectively. In other hand, price and place attributes indicates no significant difference at level $p < 0.05$.

Table 4. Association between sociodemographic factors and market factors with purchase behavior of anti-aging cosmetics

Factors	Purchase behavior OR (Confidence interval)
Sociodemographic variables	
Gender	1.5 (2.11-4.53)*
Age	0.95 (0.21-3.89)
Education	0.89 (0.33-2.78)
Monthly expense	2.45 (1.70-3.83)*
Market attributes	
Brand image	3.21 (1.87-4.21)*
Price	1.05 (0.95-2.34)
Place	1.29 (0.97-2.81)
Influencer	2.13 (1.87-3.29)*

4 DISCUSSION

The study is carried out to find out the various factors associated with the consumption pattern of anti-aging cosmetic products. The results provide us an insight of the anti-aging cosmetic market and help us in finding out how customers bought the cosmetic products. We found that as the income level of female consumers is increasing, their

expenditure for cosmetic product is also increasing. We also found that there is an increase in the awareness among male to use anti-aging cosmetic products. One major finding in our study tells us that Indonesian consumers prefer more of anti-aging cosmetic products which are labeled with halal logo. Many researchers have explored that religion plays important role in consumer purchasing behavior. Their consumption patterns are affected by their level of religiosity [14, 15]. In addition, increased level of education and awareness, increased the need to establish and develop general standards for halal products [16, 17]. This will provide the moslem's cosmetic industry a great opportunity to grab the Indonesian cosmetic market by providing more and more new halal cosmetic brands. Our study found that brand image and influencer have significant association with decision to purchase an anti-aging cosmetic product. The cosmetic buying capacity of the person increases when his/her associates gives value to them and perceive those product as interesting. On the other hand if the group does not accept the product, the use of cosmetic product can become a threat to the group belonging. According to Craig and Alan (2000), brand awareness precedes all other steps in the buying process. In memory theory, brand awareness is positioned as a vital first step in building the bundle of associations which are attached to the brand in memory [18]. Influencer is environmental factors serve as the evaluation of product quality based on friends' previous experience or recommendation from health practitioner. In response to this, companies to maximize their efforts in formulating strategies to grab consumer's mind [10]. Companies nowadays are more to use third party endorser, to promote their brands and products. By having endorsement from a third party, the brand or product can be more visible to consumer's mind because the endorser has a high appeal to some target market. The other market attribute is price. Our study shows that price is not associated with purchase behavior of anti-aging behavior. It seems that our customer is not considered price as important aspect of choosing cosmetics. When customers are buying an anti-aging cosmetic product, they look for a product which is similar in price range, instead of lower price. According to Grewal et al (1998), the price set is depends on positioning selected for the product and the value of the product that is perceived by the price [19]. The price of the product gives a distinction image for which customer thought the product is for. However, this study is limited to be generalized. As only one city was surveyed, the findings obtained or conclusions reached may not be generalized to consumers in other areas or cities. It does not represent the overall view of the Indonesian market. In addition, this study is limited to only capture the anti-aging products.

5 CONCLUSION

This study concludes that excellent product quality factor plays a key role over other factors. Besides this, cosmetic manufactures are required to understand thoroughly the buying behavior before implementing any marketing strategy.

ACKNOWLEDGMENT

The authors wish to thank pharmacy students as surveyors for helping administer the questionnaire. This work was supported in part by a grant from Faculty of Pharmacy, Universitas Gadjah Mada.

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