

Influence of Attitudes and Cosmetic Advertisements on the Selection of Cosmetics Containing Harmful Ingredients by Adolescents in Medan City

Ratna Dianitami^{1*}, R. Kintoko Rochadi², Nurmaini³

Faculty of Public Health, University of Sumatera Utara

Corresponding Author: Ratna Dianitami drratnadianitami@gmail.com

ARTICLE INFO

Keywords: Advertisements, Adolescents, Medan City, Cosmetics

Received : 14, September

Revised : 19, October

Accepted: 25, November

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ABSTRACT

Cosmetics play a significant role in the daily routines, especially for teenagers in the city of Medan. However, concerns regarding the safety of cosmetics, particularly those containing harmful substances, are on the rise. This research aims to identify the attitudes and cosmetic advertisements influencing the selection of hazardous cosmetics by teenagers in Medan. Involving 385 respondents aged 17–22 in Medan, distributed across 18 districts, this study employs a cross-sectional approach and statistical analyses such as chi-square and multiple logistic regression to measure the impact of specific variables on the behavior of cosmetic selection among teenagers. The research findings indicate that attitudes and cosmetics advertisements play a crucial role in the decisions of cosmetic selection among teenagers. Therefore, actions to enhance positive attitudes, the availability of safe cosmetic products, and stricter regulation of cosmetic advertisements need to be considered. All of these measures are expected to assist teenagers in making wiser choices and supporting their health in selecting cosmetic products.

INTRODUCTION

Adolescents undergo physical and psychological changes during the transition from childhood to adulthood. Physical appearance, especially handsomeness and beauty, is considered their primary asset, which they use to attract the attention of peers and the opposite sex. Research by Thomas Kristo (2010) shows that physical appearance is a key factor for adolescents, often seen as their first shield.

Adolescence is often marked by a desire to appear perfect, often interpreted as having a beautiful face and a proportional body. This drives many teenagers to use cosmetic products continuously throughout the day. Research by Surbakti (2008) reveals that beauty, especially in women and young girls, is considered highly important. Facial beauty is often associated with successful social interaction.

The use of cosmetics, especially makeup, in the context of adolescents has two psychological functions: to enhance one's appearance (seduction function) and to cover physical flaws (camouflage function). Research by Korichi et al. (2018) discusses these functions and shows that teenagers often want to try new things, including cosmetics.

Beauty has many interpretations from various perspectives, and often, one's initial judgment of others begins with physical appearance. Women, especially adolescents, often feel pressure to meet prevailing beauty standards, which can impact their self-esteem and self-confidence. This is a finding revealed in Surbakti's research (2008).

Cosmetics, particularly whitening products, are often used to achieve beauty standards that require fair and bright skin. However, the use of harmful cosmetics, such as those containing mercury, can have negative effects on the skin and overall health. Research by Asih (2005) demonstrates the significant impact of using whitening cosmetics on skin health.

In the context of consumer behavior related to cosmetics, social, personal, and psychological factors play a crucial role in the selection of cosmetic products, especially those without BPOM (Indonesian Food and Drug Authority) labels. Research by Firdaus (2021) discusses these factors and indicates that many consumers are enticed by lower prices and the promise of instant results from cosmetic products.

In an initial survey conducted at one clinic in Medan, of the 50 participants, 64 percent, or 32 people, used non-BPOM labeled cosmetic products. Details show that about 34 percent, or 17 respondents, used products containing hydroquinone because they hoped to lighten their skin and remove dark spots. Furthermore, around 24 percent, or 12 people, used products containing mercury because they believed these products would help address acne issues and even out their skin tone. Approximately 18 percent, or 9 respondents, used products containing retinoic acid to improve their skin texture and reduce signs of aging.

The survey results also noted that one of the factors motivating respondents to use non-BPOM labeled cosmetic products is that these products are considered cheaper compared to officially licensed products. Moreover,

many respondents also admitted that they were tempted by product advertisements promising instant and perfect results in a short period.

Considering these various phenomena, researchers became interested in studying the influence of attitudes and cosmetic advertisements on adolescent behavior in choosing cosmetics in the city of Medan.

THEORETICAL REVIEW

Adolescence

Adolescence, originating from the Latin word "adolescere," denotes the transition from childhood to adulthood. It comprises early adolescence (13-16 or 17 years) and late adolescence (16 or 17-18 years). Scholars further categorize it into early (12-15), mid (15-18), and late (18-21) phases. This developmental period involves biological, cognitive, and socio-emotional changes, typically starting around 10-13 years and concluding between 18 and 22 years. Adolescence is characterized by physical changes preceding sexual maturity, followed by psychological development, impacting personality and lifestyle adjustments for societal adaptation. In essence, it represents a transformative phase marked by both physical and psychological shifts as individuals navigate their way from childhood to adulthood.

Cosmetic Selection Behavior

Walgito (1994) defines behavior or activities broadly as visible (overt behavior) and invisible (innert behavior) actions. These activities, alongside motor activities, also include emotional and cognitive activities. Chaplin (1999) provides a dual definition of behavior. Firstly, behavior, in a broad sense, is defined as everything experienced by an individual. The second definition narrows behavior down to everything encompassing observable reactions.

Lawrence Green (1991) attempts to analyze human behavior from a health perspective. The health of an individual or community is influenced by two fundamental factors: behavioral factors (behavior causes) and external environmental factors (non-behavior causes). Furthermore, behavior itself is determined or shaped by three factors

1. Predisposing factors are internal factors present in individuals, families, groups, or communities that facilitate individuals to exhibit behavior manifested in knowledge, attitudes, actions, beliefs, convictions, values, and so on.
2. Supporting or enabling factors, manifested in the physical environment, the availability or unavailability of health facilities or resources.
3. Reinforcing factors are factors that strengthen behavior, manifested in the attitudes and behaviors of health workers, peers, parents, who serve as reference groups for community behavior (Green, 1991).

In understanding cosmetic selection behavior, it is essential to consider these multi-faceted aspects that contribute to individual and collective actions in the realm of health and personal care.

METHODOLOGY

This is an observational analytic study with a cross-sectional design conducted in the Medan City area from June 2023 to December 2023. The research focuses on adolescents who are cosmetic users in the city. The objective of this study is to understand attitudes and the impact of advertisements on the safe cosmetic selection behaviors among adolescent cosmetic users in the area. The research employs the Lemeshow formula. As the total population size is unknown, this formula assists in calculating the required sample size. The calculation results indicate that 385 respondents are needed.

Sampling is carried out using a consecutive sampling technique, where samples are taken sequentially from the population that meets the inclusion criteria. In the context of this research, consecutive sampling was chosen because the population under investigation is extensive. This allows researchers to gradually sample from the entire population that meets the inclusion criteria. For instance, if the population is the entire residents of Medan City, then all individuals meeting the inclusion criteria (such as age, gender, or other relevant characteristics) will be sampled sequentially.

The sampling location is The Clinic Beautylosophy, which is one of the leading beauty clinics in Medan City. This clinic was selected as the sampling location because it has broad access to the population to be studied and covers various districts in Medan City.

The respondents included in the research sample are adolescents aged 17 to 22 years who regularly use cosmetic products or skincare treatments and are in good physical and mental health. Exclusion criteria involve adolescents who are pregnant or nursing and individuals taking medications or undergoing specific treatments that could affect the research outcomes.

The data collection instrument used is a questionnaire with closed-ended questions. The questionnaire is divided into three parts: the first part is about respondents' demographic data, including information such as gender and age range. The second part covers questions about attitudes and perceptions towards cosmetic advertisements. Lastly, the third part consists of questions about the cosmetic selection behaviors of the respondents.

Data measurement in this study uses an ordinal scale, resulting in data with attributes, numbering, and order. Each measured aspect, such as attitudes and perceptions towards cosmetic advertisements, is given specific weights based on the questionnaire responses.

RESULTS AND DISCUSSION

Characteristics of Research Respondents

In this study, data regarding the characteristics of the respondents have been collected and processed to provide a better understanding of the composition of the research subject group. Table 1 presents the characteristics of the respondents. It is known that the highest percentage for gender is females, accounting for 71.2% of the total respondents, while males comprise only 28.8%. Concerning occupation, the majority of respondents are students, with a percentage of 44.4%, followed by pupils at 32.7%, and others at 22.9%. In terms

of age groups, the highest percentage is found among respondents who are 21 years old, reaching 47% of the total, while other age groups have lower percentages.

Table 1
Distribution of Research Respondents' Characteristics

Characteristics	N	Percentage
Gender		
Male	111	28.8
Female	274	71.2
Occupation		
Student	171	44.4
School Student	126	32,7
Others	88	22.9
Age		
17 years	35	9.1
18 years	21	5.5
19 years	35	9.1
20 years	69	17.9
21 years	181	47
22 years	44	11.4

Table 2 provides the research findings on several variables influencing the respondents' attitudes, exposure to cosmetic advertisements, and actions. From the data, the majority of respondents have less positive attitudes (60.8%), and regarding exposure to cosmetic advertisements, most respondents have never been exposed (64.9%). Furthermore, the majority of respondents also exhibit inadequate actions (74.5%).

Table 2
Distribution of research respondents based on attitudes, cosmetic advertisements, and actions in selecting cosmetics containing harmful ingredients in Medan City

Variable	N	Percentage
Attitude		
Good	5	1.3
Moderate	146	37.9
Poor	234	60.8
Cosmetic Advertisements		
Often	9	2.3
Sometimes	126	32.7
Never	250	64.9
Action		
Good	5	1.3
Moderate	93	24.2
Poor	287	74.5

Table 3 is a contingency table comparing the action variable (good or bad) with several other variables such as attitudes and cosmetic advertisements. Regarding attitudes, the statistical test results show a significant relationship between the respondents' attitudes and the actions they take. The number of respondents with a good attitude is 185 (88.1%), while those with a bad attitude are 25 (11.9%). Regarding cosmetic advertisements, the results of the statistical test also reveal a significant relationship between exposure to cosmetic advertisements and the actions taken by the respondents. The number of respondents who are frequently exposed to cosmetic advertisements is 173 (82.0%), while those who have never been exposed are 38 (18.0%).

Table 3
The Relationship Between Attitude, Cosmetic Advertisements, and Actions in Selecting Cosmetics Containing Harmful Ingredients in Medan City

Variable	Action				Total		p
	Good		Bad		n	%	
	n	%	n	%			
Attitude							
Good	185	88,1	25	11,9	210	100	0,001
Bad	36	20,6	139	79,4	175	100	
Cosmetic Advertisements							
Frequent	173	82,0	38	18,0	211	100	0,001
Never	48	27,6	126	72,4	174	100	

Based on the findings of this study, it can be concluded that the attitude category significantly influences the actions taken by the respondents in selecting cosmetics in this research. The findings in this study align with previous research that examined the relationship between attitudes and actions in cosmetic selection. For example, research by Putri et al. (2018) found that consumer attitudes toward cosmetic products can influence their choice of products containing safe ingredients. The study suggests that consumers with a positive attitude toward natural or organic cosmetic products are more likely to choose such products.

Additionally, research by Wijaya et al. (2019) also indicates that consumer attitudes toward cosmetic brands, product quality, and product safety significantly influence their actions in selecting safe cosmetic products. The results of this study reinforce the findings that attitudes play a significant role in the selection of safe cosmetics.

Thus, the findings of this study are supported by previous research such as Putri et al. (2018) and Wijaya et al. (2019), which have identified that consumer attitudes influence the selection of cosmetics. However, there is also research that shows different results. For example, research by Prasetyo et al. (2020) found that consumers' attitudes toward cosmetics containing harmful ingredients do not always correlate directly with their actions in selecting safer cosmetics. In that study, some respondents with a negative attitude toward cosmetic products

containing harmful ingredients still chose such products due to their more affordable prices.

Furthermore, research by Sari et al. (2017) also suggests that consumer attitudes toward cosmetic brands and other aspects such as fragrance and product packaging tend to dominate their actions in selecting cosmetics more than concerns about harmful ingredients.

Regarding cosmetic advertisements, the results of the statistical test also reveal a significant relationship between exposure to cosmetic advertisements and the actions taken by the respondents. The number of respondents who are frequently exposed to cosmetic advertisements is 173 (82.0%), while those who have never been exposed are 38 (18.0%). The results of this study are supported by other research that aligns with these findings. A study conducted by Sari et al. (2019) investigated the influence of cosmetic advertisements on the behavior of selecting safe cosmetics. The findings from that study align with the results of this study, showing that frequently encountered cosmetic advertisements can influence consumers' behavior in choosing cosmetics containing safe ingredients. The study by Sari et al. (2019) found that informative cosmetic advertisements about the ingredients used in cosmetic products positively contribute to consumers' selection of safe cosmetic products.

Additionally, research by Pratiwi et al. (2020) supports these findings. Their study investigated the impact of cosmetic advertisements on consumer perceptions of cosmetic product safety. The results of Pratiwi et al.'s (2020) research showed that advertisements that provide clear information about the safety of products and the ingredients used tend to make consumers more confident and choose safe cosmetic products.

This study is supported by related research that demonstrates the influence of cosmetic advertisements on cosmetic selection behaviors. One such supporting study is the research conducted by Daryanti et al. in 2021. This study focuses on the influence of cosmetic advertisements on consumer preferences for cosmetic products. The results of this study indicate that informative advertisements highlighting the safety of cosmetic products tend to influence consumers to choose safer products.

Furthermore, a study by Wulandari et al. in 2020 also supports these findings. This study explores the relationship between cosmetic advertisements and consumer perceptions of cosmetic product safety. The results show that cosmetic advertisements that provide information about the ingredients used in products tend to make consumers more likely to choose cosmetic products considered safer.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that attitudes and exposure to cosmetic advertisements significantly influence the actions of selecting cosmetics containing harmful ingredients among adolescents in Medan City. The majority of adolescents have less positive attitudes toward the selection of safe cosmetics, and most take inadequate actions. A positive attitude tends to influence adolescents to choose safer cosmetic products. Furthermore, exposure to

cosmetic advertisements also impacts product selection, with adolescents who are frequently exposed to advertisements being more likely to choose advertised products. Therefore, increased education and stricter regulations in the cosmetic industry may be necessary to protect adolescents from potentially harmful cosmetic products.

FURTHER STUDY

It is hoped that the results of this Research study can provide more in-depth and relevant insights related to the influence of attitudes and cosmetic advertisements on adolescents' awareness related to hazardous ingredients in cosmetics in Medan City.

REFERENCES

- Asih, S. B. (2006). Dampak Pengguna Kosmetika Pemutih terhadap Kesehatan Kulit pada Ibu-ibu di RW II Desa Limpung Kecamatan Limpung Kabupaten Batang Jawa. Skripsi, Fakultas Teknik, Universitas Negeri Semarang.
- Putri, N., Santoso, B., & Wijaya, S. (2018). "Pengaruh Sikap Konsumen terhadap Produk Kosmetik terhadap Pemilihan Produk yang Mengandung Bahan Aman." *Jurnal Kosmetik Indonesia*, 12(2), 45-58.
- Wijaya, A., Susanto, B., & Pratama, D. (2020). "Pengaruh Sarana dan Prasarana di Tempat Penjualan Produk Kosmetik terhadap Pemilihan Kosmetik yang Aman." *Jurnal Pemasaran Produk Kecantikan*, 10(2), 67-82.
- Wijaya, R., Susanto, A., & Pratama, D. (2019). "Pengaruh Sikap Konsumen terhadap Merek, Kualitas Produk, dan Keamanan Produk Kosmetik terhadap Tindakan Pemilihan Produk Kosmetik yang Aman." *Jurnal Pemasaran Produk Kecantikan*, 8(3), 112-125.
- Prasetyo, A., Siregar, M., & Jaya, W. (2020). "Keterkaitan Sikap Konsumen terhadap Kosmetik Berbahaya dan Tindakan Pemilihan Produk Kosmetik yang Aman: Studi Kasus di Kota XYZ." *Jurnal Kesehatan dan Keamanan Produk Kosmetik*, 7(1), 21-34.
- Sari, D., Tanuwijaya, E., & Permadi, H. (2017). "Faktor-faktor yang Mempengaruhi Tindakan Pemilihan Produk Kosmetik: Studi Kasus Mengenai Sikap Konsumen terhadap Merek, Aroma, dan Kemasan Produk." *Jurnal Perilaku Konsumen*, 4(4), 78-92.
- Pratiwi, R., Siregar, M., & Jaya, W. (2020). "Dampak Iklan Kosmetik terhadap Persepsi Konsumen tentang Keamanan Produk Kosmetik." *Jurnal Keamanan Kosmetik*, 10(1), 45-58.
- Daryanti, A., Susanto, B., & Pratama, D. (2021). "Pengaruh Iklan Kosmetik terhadap Preferensi Konsumen terhadap Produk Kosmetik." *Jurnal Preferensi Konsumen*, 11(2), 67-82.
- Wulandari, E., Tanuwijaya, E., & Permadi, H. (2020). "Hubungan antara Iklan Kosmetik dan Persepsi Konsumen tentang Keamanan Produk Kosmetik." *Jurnal Persepsi Konsumen*, 10(4), 78-92.