

A STUDY ON CONSUMER ATTITUDE TOWARDS GREEN COSMETICS

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Abstract

People's health awareness has extended from the food industry to the personal beauty industry. Consumers have increased their interest in natural ingredients, sustainable packaging, and other green elements of cosmetics. This research explores consumer attitudes toward green cosmetics. Data were collected through qualitative research instruments (focus groups) since the research aimed to discover in-depth consumer attitudes and feelings. The key findings of this research were the prevailing neutral attitudes toward green cosmetics due to the lack of knowledge and confusing market standards. The majority of respondents viewed price and performance as the most important factors when choosing cosmetics instead of green elements. However, given the growing awareness of natural and organic ingredients and green production, most respondents admitted the potential change of present neutral attitudes to be more supportive in the future. Green cosmetics are a new trend in the personal beauty industry. This study ascertains the consumer attitudes toward green cosmetics and calls for clearer green standards and regulations in the industry as well as advanced biotechnology to extract natural ingredients.

Keywords: Consumer attitudes, green cosmetics, Green marketing, Satisfaction and Consumption

Introduction

In the last few decades, individuals have become more conscious about their image and appearance. Furthermore, due to the changing gender roles, men and women started using cosmetic products increasingly. As a result the beauty industry has flourished enormously. Self-esteem, lifestyle, societal beliefs, shopping and self-image are critical determinants of cosmetic consumption. In the globalization era, improvement of technology, science, society, economy and education provide people to have better standard of living and styles. Relating to the development of purchasing power in consumers and market trend that people become more conscious of hygiene and beauty, it affects to the rapid growth in beauty care industry, especially in this decade.

Review of literature

1. **Arndt, Baringer and Johnson, (2010)** have forwarded many evidences that global warming is happening. Acknowledging the fact that the planet is warming up leads to a very important question as to what's causing global warming? Several empirical evidences indicate a distinct human fingerprint on climate change. According to them apart from various other factors the increased concentration of carbon dioxide is the major contributor and humans are the biggest facilitator to the global Warming.
2. **Jacquelyn A. Ottman (2011)**, marketers have realized that the growing concern of consumers' towards environment is because of an apprehension that the planet is losing its ability to sustain human life. In this scenario Green Marketing has come as a boon to the marketers since it can prevent the further environmental degradation without preventing industrial growth. And the best part is that it can safely be used as a strategy to differentiate ones product from that of competitors and hence allow an opportunity to extract comfortable profit margin too.
3. **Nielsen (2007)** reports, that many of the early products designed to be environmentally responsible, such as electric cars and recycled paper, disappointed the consumers. Therefore, its difficult now to convince the consumers that what is being offered now is actually green and are worth higher prices. In their

search for guidance on consumption choices, people trust each other more than any other source of information.

4. **Sondoh Jr, S. L., Omar, M. W., Wahid, N. A., Ismail, I., & Harun, A. (2007)**, is based on the color cosmetic product. There were five brand image benefits, they are functional, social, symbolic, experiential and appearance enhance. These were investigated. The sample was taken from 97 females. This has concluded that loyalty intention is affected by functional and appearance enhance. The overall satisfaction was related by functional, social, experiential and appearance enhance. The result states that in order to achieve customer loyalty, marketers has to focus on brand image benefits and also it was indicated that customer loyalty is influenced by overall satisfaction.
5. **Yuen, E. F., & Chan, S. S. (2010)**, focused on the customer loyalty impacts of the product quality dimension and retail service quality dimension. This paper has majorly focused on the retail industry, in particular to the curtain retail sector. Data were collected from the customers who are existing there. The study has concluded by stating three dimensions, which are related to the customer loyalty to store positively. The one dimension of retail service quality with customer loyalty to staff is positively associated.
6. **Apaolaza-Ibáñez, V., Hartmann, P., Diehl, S., & Terlutter, R. (2011)**, Concluded on Women satisfaction on cosmetic products. To conduct the study, survey has been conducted on women with 355 respondents. The outcome of the result is that hedonic brand benefits and utilitarian contribute to the satisfaction with brands

Objective of the study

To analyses the reason for using green cosmetics.

Sample design and study area: The study was conducted in Tamilnadu district covering the area of Coimbatore, Tiruppur, Erode. The sampling design adopted was convenient sampling.

Business profile of the respondents

Table 1: Age group

S.No	Age group	Frequency	Percent
1	Under 18years	98	18.7
2	18-24years	191	36.4
3	25-34years	170	32.4
4	35 years and above	66	12.6
	Total	525	100

Source: Computed from Primary Data

The above table indicates that most of the respondents were from the age group between 18 - 34 years (36.4 %) followed by 25 -34 years(32.4%), under 18 years (18.7%) and the least was from 35 years and above (12.6%).

Table 2: Gender

S.No	Gender	Frequency	Percent
1	Male	191	36.4
2	Female	334	63.6
	Total	525	100

Source: Computed from Primary Data

The above table indicates that most of the respondents (63.6%) were female, followed by male (36.4%) in terms of gender

Table 3: Occupation

S.No	Occupation	Frequency	Percent
1	Agriculture	36	6.9
2	Professionals	192	36.6
3	Employee	236	45.0
4	Business	61	11.6
	Total	525	100

Source: Computed from Primary Data

From the table it was understood that majority of 45% of the respondents are employed, 36.6% of the respondents are professionals, 11.6% of the respondents are in own business and remaining 6.9% of the respondents are agriculturalist.

Table 4: Monthly income

S.No	Monthly income	Frequency	Percent
1	Below `25000	30	5.7
2	`25001 – `35000	237	45.1
3	`35001 - `45000	143	27.2
4	Above `45000	115	21.9
	Total	525	100

Source: Computed from Primary Data

The table 4 explain that in this study maximum respondents 45.1% of the respondents have monthly income ranging between `25001 – 35000 followed by 27.2% of the respondents have the monthly in the range of `35001 – `45000, 21.9% of the respondents have the monthly income above `45000 and 5.7% of the respondents have the monthly income below `25000.

Table 5: Marital status

S.No	Marital status	Frequency	Percent
1	Single	129	24.6
2	Married	396	75.4
	Total	525	100

Source: Computed from Primary Data

The above table showing marital status of respondents indicates that most of the respondents were married (75.4%) followed by single respondents (24.6%)

Table 6: Place of living

S.No	Place of living	Frequency	Percent
1	Coimbatore	330	62.9
2	Tirupur	95	18.1
3	Erode	100	19.0
	Total	525	100

Source: Computed from Primary Data

From the table it was understood that 62.9 percent of them live in Coimbatore, 19percent of them are living in Erode and remaining 18.1percent of them are living in Tirupur.

Table 7: Type of salon preferred

S.No	Type of salon preferred	Frequency	Percent
1	Luxury	45	8.6
2	Premium	210	40.0
3	Economy	270	51.4
	Total	525	100

Source: Computed from Primary Data

From the above table it is observed that 51.4% of the respondents prefer economy salon, 40% of the respondents prefer premium salon and remaining 8.6% of the respondents prefer luxuries salon.

The following section details the purchase intention towards eco cosmetic products.

Assessing the Evaluation Criteria for Using Green Cosmetics

Table: 8 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.717
Bartlett's Test of Sphericity	Approx. Chi-Square	4660.523
	df	36
	Sig.	.000

High and Adequate (>0.6)

Table: 9 Communalities

	Initial	Extraction
The skin will not be exposed to chemical	1.000	.834
The products use natural ingredients	1.000	.732
No addition of chemical colours and fragrance	1.000	.787
No addition of chemical preservatives	1.000	.858
The package can be reused	1.000	.902
Improvement of skin	1.000	.935
Prevents antiaging problems	1.000	.919
Strongly recommended by friends	1.000	.813
Fulfilled the promised effects	1.000	.786

Extraction Method: Principal Component Analysis.

It is clearly indicated from the above table that Communality index values for each items were found relatively large (greater than 0.5), so we can say that all the items have large proportion of its variance which can be accounted by the common factors, hence all items are acceptable for further analysis. The researcher found in prerequisite phase of factor analysis that the obtained data is appropriate and adequate and also the items have large proportion of its variance accounted by the factors which indicates the suitability pre-requisites for factor analysis, As such the analysis and interpretation of the data is presented in the following manner.

Table: 10 Factor Structure with Eigen Values and percentage of Variance

Component	Total Variance Explained					
	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.708	41.200	41.200	2.774	30.827	30.827
2	2.620	29.109	70.310	2.665	29.613	60.440
3	1.238	13.755	84.065	2.126	23.625	84.065

Extraction Method: Principal Component Analysis.

It is clearly indicated from the table that the retained nine factors accounted 84.065 percent of the variance among the items that is exceed than the 60 percent threshold commonly used in social sciences to establish satisfaction with the solution (Hair et al., 1995) and also it is seen that first factor accounted 30.827 % of total variance among the items and second and third, 29.613 and 23.625 respectively. These 3 factors accounted and explained the large amount of aspects or of evaluation.

Table 11: Rotated Component Matrix

Short description of variables	Component		
	1	2	3

S1	The skin will not be exposed to chemical	.912	.466	-.347
S3	The products use natural ingredients	.885	.150	.505
S4	No addition of chemical colours and fragrance	.868	.535	-.325
S8	No addition of chemical preservatives	.505	.877	-.020
S9	The package can be reused	-.325	.871	-.442
S6	Improvement of skin	.150	.681	-.103
S5	Prevents antiaging problems	.535	-.318	.911
S2	Strongly recommended by friends	-.020	-.067	.705
S7	Fulfilled the promised effects	-.442	-.063	.677

Extraction Method: Principal Component Analysis.

The table clearly indicates that Factor 1 has accounted a large amount 30.287 percentage of total variance and also has a linear relationship with the items such as, The skin will not be exposed to chemical (S1), The products use natural ingredients (S3) and No addition of chemical colours and fragrance (S4). Factor 2 has accounted 29.613 percentage of total variance and found a linear combination with items such as No addition of chemical preservatives (S8), The package can be reused (S9), Improvement of skin (S6). Factor 3 has accounted 23.625 percentage of total variance and found a linear combination with items such as Prevents anti aging problems (S5), Strongly recommended by friends (S2) and Fulfilled the promised effects (S7).

Step-3: Labelling the Determined Factors:

9 items considered in the primary data were reduced to 3 factors model and each factor was given a name which associated with the corresponding items The factor with their representative items are given in the following table -

Table 12: Items with factor loading		Factors (indicators)
I	The skin will not be exposed to chemical (.912)	No chemical contaminants
	No addition of chemical colours and fragrance (.885)	
	No addition of chemical preservatives (.868)	
II	Strongly recommended by friends (.877)	Recommended by friends
	Fulfilled the promised effects (.871)	
	Improvement of skin (.681)	
III	The package can be reused (.911)	Perception
	The products use natural ingredients (.705)	
	Prevents antiaging problems (.677)	

It is clearly seen from the table that there are found three indicators which have labelled with their common features. These indicators are known as No chemical contaminants, Recommended by friends and Perception and these indicators accounted nearly 84 percent of variance among observed aspects of the type of product used. So researcher has described each indicator with their common features as under-

I. Indicator 'No chemical contaminants'

The endogenous indicator 'No chemical contaminants' has encapsulated the items such as The skin will not be exposed to chemical (.912), No addition of chemical colours and fragrance (.885) and No addition of chemical preservatives (.868). All these considered while evaluation of green cosmetics. The item The skin will not be exposed to chemical have accounted high index of the factor loading (>0.9). it shows these are the factor mainly considered by the respondents while purchase green cosmetics.

II. Indicator 'Recommended by friends'

The endogenous indicator '**Recommended by friends**' has encapsulated the items such as Strongly recommended by friends (.877), Strongly recommended by friends (.877) and Improvement of skin (.681). All these considered while evaluation of green cosmetics. It shows these are the factor mainly considered by the respondents while purchase green cosmetics.

III. Indicator 'Perception'

The endogenous indicator '**Perception**' has encapsulated the items such as The package can be reused (.911), The products use natural ingredients (.705) and Prevents antiaging problems (.677). All these considered while evaluation of green cosmetics. The item The package can be reused have accounted high index of the factor loading (>0.9). It shows these are the factor mainly considered by the respondents while purchase green cosmetics. The values of factor loading of each items under indicator 'Perception' shown in chart

Comparing the demographic profile of the respondents towards determined endogenous indicators of evaluation towards green cosmetics.

To examine the extent to which evaluation towards green cosmetics with respect to demographic characteristics, ANOVA is performed. The variables under the construct. No chemical contaminants, Recommended by friends and Perception and these indicators accounted nearly 84 percent of variance among observed type of product used. So researcher has described each indicator with their common features as under-

Ho : There is no significant between demographic factor and the Evaluation towards using green cosmetics

H1 : There is difference between demographic factor and the cost Evaluation towards using green cosmetics

Table 13: summary of results of ANOVA between evaluation towards green cosmetics and demographic profile of the respondents

	Age		Gender		Occupation		Monthly income	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.
No chemical contaminants	7.479	.000	7.521	.000	7.151	.000	5.523	.002
Recommended by friends	6.569	.000	4.172	.011	3.211	.016	5.985	.001
Perception	12.982	.000	3.158	.018	5.612	.001	6.175	.000
	Marital status		Place you lived		Type of salon			
	F	Sig.	F	Sig.	F	Sig.	F	Sig.
No chemical contaminants	5.832	.001	8.512	.000	6.582	.000		
Recommended by friends	6.178	.000	13.425	.000	9.580	.000		
Perception	3.141	.021	9.675	.000	3.458	.013		

Since only item wise differences of evaluation towards green cosmetics are observed among the demographic profile of the respondents, A significant difference noted in No chemical contaminants, Recommended by friends and Perception in terms of demographic profile of the respondents.

CLUSTER ANALYSIS AND DISCRIMINANT ANALYSIS

Cluster Analysis of evaluation towards green cosmetics are grouped based on their extent of adoption of using K-means clustering. The groups are then named after the mean values as high, moderate and less. The mean values and number of firms in each cluster are given in Table 14.

Table 14 :Results of cluster analysis

Construct	Cluster names	No. of respondents in each cluster	Mean value
Type of product use	High Preference	284	53.71
	Low Preference	79	15.05
	Medium Preference	162	30.85

Findings

- ❖ (36.4%) of the respondents were between the ages of 18 and 34 years.
- ❖ A majority 63.6% respondents were female.
- ❖ A majority 45% of the respondents were employed in private sector.
- ❖ A 45.1% of the respondents have a monthly income ranging between `25001 to `35000.
- ❖ Most (75.4%)of the respondents were married .
- ❖ A majority 62.9% of them live in Coimbatore.
- ❖ Most respondents prefer economy salon (51.4%).

Factor analysis

The evaluation criteria were grouped under three heads viz., Nochemical contaminants, Recommended by friends and Perception.

- ❖ The three group were clustered and segregated in to three groups indicating as strong, moderate and weak. In cluster I with 53.71 percent, followed by 79 respondents in cluster II with 15.05 per cent and 162 respondents in cluster III with 30.85 per cent. This means that respondents were influenced by first and third cluster groups. The discriminate analysis has proved that the factors viz., chemical contaminants, Recommended by friends and Perception has significant impact over the agreeability.evaluation towards using green cosmetic

ANOVA

- ❖ The 'F' value for all the green product used by the respondents which is significant at the 'p' value of 0.05. Since the 'p' value is less than 0.05. and it is concluded that there is a significant difference in slide down in chemical contaminants, Recommended by friends and Perception in terms of demographic profile of the respondents.

Conclusion

A cosmetic product shall denote any essence or mixture proposed to be placed in contact with the various external parts of the human body or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance and/or correcting body odour and/or protecting them or keeping them in good condition. In this study when comparing with buying decision of cosmetic products, customers are concentrating more on brand other category like advice from in-store, recommendation from friend, packaging, quality, special offer or promotion and price. From this study it is found that product quality is playing major role in the mind of the female customer in regard with cosmetic product. The spending habit of the customer in this present scenario has been increased in purchasing the cosmetic products.

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