



AN EMPIRICAL STUDY ON LOYALTY TOWARDS THE COSMETIC PRODUCTS AMONG WOMEN IN CHENNAI

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Abstract: This paper explores the trust and loyalty towards the cosmetic products in the market among women in Chennai. The sample selection was done by convenient sampling methods. The study was conducted in Chennai with the sample of 200 women in all ages and walks of life. The study is aimed to find out the influence of branded cosmetic products available in the market nowadays, the level of satisfaction towards the cosmetic products among women, to study the relationship between cosmetic use and the psychological effects on women. The results show that the women's level of loyalty differed with age and economic status. Cosmetic products are substances used to augment one's appearance and texture of the body and face.

Index Terms - Brand loyalty, cosmetic products, Chennai, Chi-square, enhancement.

I. INTRODUCTION

The word cosmetics is derived from the Greek language and means "technique of dress and ornament". Cosmetics have been widely used in all parts of the world since ancient times. Cosmetic are organic and inorganic products used to enhance or alter the appearance of the body (especially face) shape, texture and fragrance. Cosmetics are made from plant extracts and / or synthetic products. The most common cosmetics are makeup products like lipstick, mascara, hair dyes, hair oil, eye liners and shadows, foundations and skin colors, shampoos and conditioners, perfumes and deodorants, soaps and gels etc, etc and the list goes on. In recent times usage of cosmetics have gained more importance and popularity among women of all the walks of life. In olden times the usage of cosmetics was look down upon but now the times have changed and cosmetic usage is widely accepted and prevalent all over the world. Earlier before some years the usage of cosmetics was limited to the financially well offs because of prohibitive prices and minimum availabilities of the products in the local markets. But with the globalization and aggressive marketing and supply by the MNCs the availability of the products has become easy and less expensive so as to come within the reach of women belonging to ordinary and financially lower section of the society. The most popular and easily available brands are by the MNCs like Lakme, Maybelline, L'Oreal, Revlon, MAC, NYX, etc. And the Indian brands like Himalaya, Shahnaz Husain, VLCC, Biotique, etc. These brands have flooded the market with products like lipsticks, eyeliners, eye shadows, mascara, hair dyes, hair gels, skin foundations, shampoos and conditions, perfumes and deodorants, skin lighteners and cleansers, soaps and talcum powders etc. at affordable prices. Easy accessibility to the products has increased the usage of cosmetics in gigantic proportions.

Nowadays it is widely accepted that everybody has the right to enhance his own looks to make himself more presentable. So the usage of cosmetics has grown but people don't mind spending a considerable amount of money on the purchase of these items. The cosmetics brands have imbibed a feel good psychology in the society by aggressively advertising the products. Looking good enhances the confidence of a person enabling him to take up new challenges in his career and life. We have discussed and analyzed some products in certain like shampoo, hair oil, face powder, soap. Head & Shoulders, Dove, Pantene, Parachute, VVD, Ponds, Spinz, Lux, Cinthol are few of the brands that are taken into consideration for the above mentioned products.

II. REVIEW OF LITERATURE

Cosmetics were first invented by the Egyptians. They applied eye makeup called mesdement a mixture of copper and lead ore, around their eyes.

In 18th and 19th century advancements in chemistry and medicine have paved the way for significant advancements in cosmetics, but still were not fully accepted.

Rise of film, photography, fast communication in early 20th century has introduced cosmetics to every nooks and corners across the western world. And there was a massive takeoff from traditional styles happened in 1960s and 1970s with the introduction of hippie movement.

Karl Nessler invented the perm in 1960, lipstick push up sticks in tubes is invented by Maurice Levy in 1915, T L Williams invented modern mascara in the year 1913, Eugene Schueller invented sun screen in 1936, first synthetic hair dye was invented in 1907. Plastic surgeries became popular in the late 20th century.

Recently, Johnson & Johnson has developed personalized skincare like skin scanning devices named Neutrogena Skin360 to 3D-printed face masks.

III. METHODOLOGY

a) Research design: The study explores the level of satisfaction of women of all age in the usage of cosmetic products based on various factors. The study uses the research design. A survey was conducted among the women with the help of questionnaires.

b) Sampling Techniques: The sample size of this paper includes 200 women of all age in Chennai. In this, the authors had adopted a convenience sampling techniques for selecting the sample. Research generally uses convenience samples to obtain the large number of completed questionnaire quickly. There will be no bias in the responses using the convenience sampling since the respondents mutually participated in this survey.

c) Sample Area: The study was conducted in Chennai. Chennai being a very commercial area having the largest film and entertainment industry in India there is always a demand for cosmetics here. Chennai being a city in the southern most peninsula is humid hot almost all over the year and hence cosmetics to protect the skin from hot climate is always sought after.

d) Data collection: The primary data (demographic and socio-economic characteristics, attitude and opinion of women) were collected through questionnaires. Secondary data was collected through journals and other publications.

e) Objective: The primary objective is to find the association between brand loyalty and the level of satisfaction among women. To determine the factors affecting the purchase of brands of cosmetic products and to determine the socio-economic factors of women.

f) Hypothesis: Brand loyalty and the level of satisfaction among women are associated with each other.

V. TOOLS FOR ANALYSIS

The data collected have been analyzed using the tools Chi-Square test, one way ANOVA and Factor analysis.

a) Chi-square test

Null hypothesis H_0 : There is no association between brand of the cosmetic products and the level of satisfaction among women.

Alternative hypothesis H_1 : There is an association between brand of the cosmetic products and the level of satisfaction among women.

Table 1: Chi-square Tests

Cosmetic Products	Asymptotic Significance
Shampoo	0.001
Hair Oil	0.000
Face Powder	0.000
Soap	0.000

Inference: The Chi-square value is significant at 1% level of significance indicating that there is a significant association between brands of the cosmetic products and the level of satisfaction among women.

b) One way ANOVA:

Null hypothesis H_0 : There is no significant difference between the levels of brand loyalty towards the cosmetic products among women.

Alternative hypothesis H_1 : There is significant difference between the levels of brand loyalty towards the cosmetic products among women.

Table 2: ANOVA for levels of brand loyalty and the consumer products

Cosmetic products	Asymptotic significance	F value
Shampoo	0.000	9.144
Hair Oil	0.006	3.725
Face Powder	0.002	4.421

Inference: The F- value is significant at 1% level indicating that there is a significant difference in the levels of brand loyalty towards the cosmetic products among women.

c) Factor Analysis:

SHAMPOO:

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.788
Bartlett's Test of Sphericity	Approximate Chi-Square	4893.603
	Degree of freedom	210
	Significance	.000

From Table 3, it is seen that KMO measure of sampling adequacy is closed to one for a satisfactory factor analysis to proceed. It is also found from the Bartlett test Factor analysis is significant indicating the strong relationship among the variables.

Table 4

Factors	Attributes	Factor loadings
1	Fragrance	0.75
	Naturalness	0.77
	Content	0.55
	Price	0.87
	Quantity	0.69
	Conditions	0.78
	Removing oil dirt	0.82
	Easy availability	0.69
	Attractive packages	0.69
	Advertisements	0.87
	Recommendations by doctors	0.49

2	Prevent dandruff	0.93
	Suitable for hair	0.84
3	Brand name	0.89
	Value of money	0.76
4	Hair growth	0.89
5	Avoid hair loss	0.59
	No rough hair	0.89
	Softens the hair	0.86

There are 5 independent groups which are extracted accounting for 89% of variation on 20 attributes. From the rotated compound matrix it is found that the 20 factors have been reduced to five factors with factor loadings. The factors are aesthetics, healthiness, brand name and value, hair growth and quality of hair.

HAIR OIL:

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.716
Bartlett's Test of Sphericity	Approximate Chi-Square	2987.915
	Degree of freedom	120
	Significance	.000

From Table 5, it is seen that KMO measure of sampling adequacy is closed to one for a satisfactory factor analysis to proceed. It is also found from the Bartlett test Factor analysis is significant indicating the strong relationship among the variables.

Table 6

Factors	Attributes	Factor loadings
1	Brand name	85
	Relive dryness	76
	Better skin	60
	Suitable for hair	84
	Softens hair	68
	Advertisement	80
	Recommendations by doctors	65
2	Fragrance	66
	Content	67
	Price	68
	Quantity	89

3	Easy availability	77
	Value of Money	80
	Hair growth	72
	Attractive packages	65

There are 3 independent groups which are extracted for a total of 98% of variation. From the rotated components matrix it is found that the 20 factors have been reduced to three factors with factor loadings. The factors are healthiness, cost and availability and quality.

FACE POWDER:

Table 7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.793
Bartlett's Test of Sphericity	Approximate Chi-Square	3438.340
	Degree of freedom	91
	Significance	.000

From Table 7, it is seen that KMO measure of sampling adequacy is closed to one for a satisfactory factor analysis to proceed. It is also found from the Bartlett test Factor analysis is significant indicating the strong relationship among the variables.

Table 8

Factors	Attributes	Factor loadings
1	Brand name	81
	Value of Money	88
	Skin suitability	78
2	Freshness	79
	Ingredients	79
	Fragrance	84
	Price	68
	Quantity	73
	Skin smoothness	81
	Absorption of oil in skin	83
	Easy availability	89
	Attractive prices	74
	Advertisements	86
	Recommendations by doctors	75

There are 2 independent groups which are extracted accounting for a total of 89% of variations on 20 attributes. From the rotated components matrix it is found that the 20 factors have been reduced to two factors with factor loadings. The factors are suitability and aesthetics.

Table 9: *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of sampling Adequacy		.685
Bartlett's Test of Sphericity	Approximate Chi-Square	3079.548
	Degree of freedom	120
	Significance	.000

From table 9, it is seen that KMO measure of sampling adequacy is closed to one for a satisfactory factor analysis to proceed. It is also found from the Bartlett test Factor analysis is significant indicating the strong relationship among the variables.

Table 10

Factors	Attributes	Factor loadings
1	Foaming	68
	Softness	77
2	Ingredients	63
	Fragrance	84
3	Quantity	71
	Skin protection	79
	Germ protection	73
	Easy availability	60
	Attractive prices	74
4	Advertisements	88
	Recommendations by doctors	60

There are 4 independent groups which are extracted accounting for a total 88% of variations on 20 attributes. From the rotated component matrix table it is found that 20 factors have been reduced to 4 factors with factor loadings. The factors are suitability, aesthetics easiness and familiarity.

V. FINDINGS

The results indicate that about 34% of the women respondents who use cosmetic products belong group of 15-25 years followed by 25-35 years.

It is observed that 37% of women respondents who use cosmetic products are educated up to UG. It is apparent that 35% of women respondents who use cosmetic products are house wives followed by the students (30%). The results indicate that 76% of women respondents who use cosmetic products are married and 68% of them belong to nuclear family.

It is observed that 40% of women respondents who use cosmetic products have 4-6 family members.

The results indicate that 43% of the women respondents who use cosmetics are within 1-5 years of employment. It is apparent that 46% of women respondents who use cosmetics belong to the monthly income group of 10000-15000 followed by 15000-20000.

It is observed that 68% of women respondents purchase chemical cosmetics when compared to herbal products and 30% of women respondents' reason for purchasing cosmetics is beauty conscious.

The results show that women respondents are satisfied with their brand of cosmetics.

The Chi-Square value is significant at 1% level of significance indicating that there is a significant association between brands of the cosmetic products and the level of satisfaction.

The F-value is significant at 1% level indicating that there is a significant difference in the level of brand loyalty towards brands of the cosmetics among women.

Factor analysis:

Shampoo: There are 5 independent groups which are extracted accounting for a total of 89% variations on 20 attributes. They are Aesthetics, Healthiness, Brand name and value, Hair growth and Quality of hair.

Hair oil: There are 3 independent groups which are extracted accounting for a total of 84% variation on 20 attributes. They are Cost and availability and Quality.

Face powder: There are 2 independent groups which are extracted accounting for a total of 89% of variations on 20 attributes. They are Suitability and Aesthetics.

Soap: There are 4 independent groups which are extracted accounting for a total of 88% of variations on 20 attributes. They are Suitability, Aesthetics, Easiness and Familiarity.

VI.IMPLICATIONS

1. Physical problems like allergies, skin infections, early aging and cancerous side effects.
2. Psychological disorders which make believe that only cosmetic makeup makes one look attractive.
3. Spending huge amount of money on unnecessary cosmetic purchase.

VII.RECOMMENDATIONS

In every industry the promoters seek to earn profits for their own selves by claiming to supply very useful or hygienic and economical products.

1. Before purchasing and using any cosmetic products the user must seek the advice of statutory medical professional.
2. Likewise one should understand that any organic or inorganic cosmetic will have its consequences on the user's body, so one should not start using the cosmetic products by just believing the advertisements without consulting a medical professional.

VIII.CONCLUSION

We conclude that today women in every walk of life seek to a need to present themselves in an attractive physical appearance for their career and professional requirements. So the usage of cosmetic products have become inevitable. Although it costs them in terms of money and physical side effects, people tend to use cosmetics unmindful of the risks. But we should not use any nutrients or cosmetics without qualified professional's recommendations.

IX.REFERENCES

1. Allenby, G. M., and Lenk, P. J., (1995), "Reassessing Brand Loyalty, Price sensitivity, and Merchandising Effects on Consumer Brand Choice", Journal of Business & Economic Statistics, 13(3): pp. 281 – 289.
2. Guru Ragavendran, P., Devakumar, G., and SanthoshUpadhyay (2009), "A Study on Brand awereness of Shampoo Products for CavinKare Private Limited", SAS ht.
3. Subashini, M. I., and Osman, A., (2006), " A Study on the Association between Brand Awerness and Consumer/Brand Loyalty for the Packaged Milk Industry in Pakistan", Iqra University Research Center (IURC), Iqra.
4. Kim, H., Kimm W. G., and An, J. A., (2004), "The Effect of Consumer-Based Brand Equity on Firms' Financial Perforamnace" Journal of Consumer Marketing, 20 (4): pp. 335-351.
5. Mackay, M. M., (2001), "Evaluation of Brand Equity Measures: Further Empirical Results", The Journal of Product and Brand Management, 10(1): pp. 38-55.

WEBSITE

<https://www.wikipedia.org/tps://www.wikipedia.org>.

