The Effect of Beauty Product Use on Consumer Behavior, Physical Attractiveness, Body Image And Self-Esteem Among College Going Students

*Akshat & **Vijendra Nath Pathak

*Master Student in Clinical Psychology, Department of psychology, Lovely Professional University, Punjab, India

**Associate Professor, Department of psychology, Lovely Professional University,

Punjab, India email- Vijendra.26172@lpu.co.in

ABSTRACT: This study aimed to examine the effect of beauty product use on consumer behavior, physical attractiveness, body image, and self-esteem among college-going students in Punjab and Delhi. A sample of 120 individuals aged between 18 to 40 years, including 56 males and 64 females, was selected through purposive sampling. The psychometrically standardized Consumer behavior scale, MSBRQ Appearance orientation scale, Apperence evaluation scale, Social self-esteem scale, and Body area satisfaction scale were used to measure the study variables. The results showed that the use of cosmetics can have both positive and negative effects on consumer behavior, physical attractiveness, body image, and self-esteem. It is important to maintain a healthy balance between the use of cosmetics and their impact on individual psychological well-being. ANOVA was used to test the between-subjects effects.

Keywords: beauty product use, consumer behavior, physical attractiveness, body image, self-esteem, college students, ANOVA.

INTRODUCTIONThe use of cosmetics can also impact an individual's self-esteem. Cosmetics can provide a sense of control over one's appearance and can boost confidence by enhancing physical appearance. Research has shown that the use of cosmetics can lead to an increase in self-esteem (Cash & Cash, 1982). College-going students are a demographic that is particularly concerned with physical appearance, and the use of cosmetics has become an essential part of their daily routine.

The growth of the cosmetic industry can be attributed to the increase in the use of social media platforms such as Instagram and TikTok. These platforms have created a culture that emphasizes the need to look perfect, leading to an increase in the use of cosmetic products among collegegoing students (Dang & Nguyen, 2020). Additionally, college students have disposable income, which they can spend on cosmetic products, contributing to the growth of the industry (Lee & Hwang, 2017).

Understanding the relationship between the use of cosmetics, physical attractiveness, self-esteem, and body image among college-going students is critical. It can inform the development

of marketing strategies to target this demographic effectively and ensure the responsible use of cosmetic products. It is essential to note that the use of cosmetics can have both positive and negative effects on an individual's self-esteem and body image. Therefore, it is essential to use cosmetic products responsibly and in moderation (Kilbourne et al., 1998).

Procedure: The study included 120 college-going students aged between 18 to 25 years from Punjab and Delhi, selected through purposive sampling. The students were asked to fill out the Consumer behavior scale, Social self-esteem scale, Appearance orientation scale, Appearance evaluation scale, and Modified Body Areas Satisfaction Scale. The students were properly instructed about the questionnaire, including do's and don'ts, and were told that there were no right or wrong answers. The study employed a 2x2 factorial design and a cross-sectional method. Inclusion criteria included age between 18 to 25 years and regular use of cosmetic products, while exclusion criteria included individuals outside the age range, those who spent more than 1000 rupees per month on cosmetics, and those suffering from dermatological or skin problems. After data collection, descriptive statistics and ANOVA were used to analyze the data.

Objective: To investigate the impact of beauty product use on consumer behavior, physical attractiveness, body image, and self-esteem among college-going students in Punjab and Delhi.

Method: A cross-sectional study was conducted on a sample of 120 college-going students aged between 18 to 25 years, selected through purposive sampling. The students were asked to fill out standardized scales, including the Consumer behavior scale, Social self-esteem scale, Appearance orientation scale, Appearance evaluation scale, and Modified Body Areas Satisfaction Scale. The study employed a 2x2 factorial design and a cross-sectional method. Inclusion criteria included age between 18 to 25 years and regular use of cosmetic products, while exclusion criteria included individuals outside the age range, those who spent more than 1000 rupees per month on cosmetics, and those suffering from dermatological or skin problems. Descriptive statistics and ANOVA were used to analyze the data.

Description of the tools

- Consumer behavior scale: Test developed by (Tartari, Salter, and D'Este (2012) and Govindaraju, Ghapar, and Pandiyan (2009), This scale consists of questions related to how much expenditure is used on cosmetics, how much time you take to get ready. There are different options for question and subject has to choose it according to their opinion and beliefs. There no right or wrong answers. It totally depends on what according to them is right.
- Appearance orientation scale: Test developed by Cash 1990 This scale is self-administer questionnaire and it is likert scale questionnaire. This scale contains questions related to physical appearance and individual response to that question how they think about their physical appearance. It contains questions like how my body looks, I feel anxious when my body doesn't look attractive.
- Appearance evaluation scale: This tet developed by (Cash 1990) This scale is used to measure the overall body satisfaction of the individual. How much the individual is satisfied with

their looks and their body. This questionnaire consists of 9 questions which reflect how individual is satisfied with their physical appearance.

- Social self-esteem inventory: This developed by (Rosenberg, M. (1965) This questionnaire is self-report questionnaire. It consist 33 items which depicts how individual reacts in social situation. How much they are confident or their self-esteem lowers down when they deals people or social situation. There are questions related to "I am able to make new friends", "I am confident in social situations".
- Body Areas Satisfaction Scales: This test is developed by (Giovannelli, Cash, Henson, & Engle, 2008) This scale consists of questions about much people respond to their body parts. Individual is satisfied about their body parts or not. It consists of the overall 9 questions in which 8 are their body part and 1 is about their overall body how much they rate them from very satisfied to total disappointed.

Procedure:

The procedure of research that was followed involved several steps to ensure that ethical standards were maintained throughout the study. Firstly, obtaining ethical clearance: Before commencing the research, ethical clearance was obtained from the relevant authority to ensure that the study adhered to all ethical standards. Most important ensured confidentiality: The researchers also took measures to ensure that the participants; responses were kept confidential. This included not sharing any identifying information with anyone outside the research team

DATA ANALYSIS

Data analysis was done with statistical package for Social Science (SPSS for windows Version. 16). Mean, SD, ANOVA were considered to describe group x gender differences.

Table 1: Gender Distribution of Participants

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	56	46.7	46.7	46.7
Female	64	53.3	53.3	100.0
Total	120	100.0	100.0	

Table 2: Expenditure on Cosmetics per Month

Expenditure	Frequency	Percent	Valid Percent	Cumulative Percent
Less than	65	54.2	54.2	54.2
More than	55	45.8	45.8	100.0
Total	120	100.0	100.0	

Table 3: Age Distribution of Participants

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-21	60	50.0	50.0	50.0
22-25	60	50.0	50.0	100.0
Total	120	100.0	100.0	

Table 1,2,3 depicts the gender difference males are 56 and their percentile is 46.7 and females are 64 and their percentile is 53.3. Frequency of less expenditure is 65 and more expenditure is 55 and their percentile is (54.2 and 45.8). Females spend more expenditure on cosmetics as compare to males but the frequency of less expenditure as compare to more expenditure is at greater extent because students can't afford expensive cosmetics and some of the student self-esteem is high and they feel confident without using any cosmetics.

Table 4: Mean and Standard Deviation for Different Gender Groups

Gender	Social Self Esteem	Body Area Satisfaction	Appearance Evaluation	Appearance Orientation
Male	Less than	47.17 (SD=11.226)	33.36 (SD=6.184)	20.03 (SD=4.192)
	More than	51.65 (SD=8.610)	36.95 (SD=6.278)	25.20 (SD=4.775)
	Total	48.77 (SD=10.512)	34.64 (SD=6.400)	21.88 (SD=5.031)
Female	Less than	50.28 (SD=11.566)	32.76 (SD=6.139)	21.24 (SD=4.808)
	More than	52.06 (SD=10.207)	32.37 (SD=5.917)	25.60 (SD=4.110)
	Total	51.25 (SD=10.792)	32.55 (SD=5.973)	23.63 (SD=4.917)
Total	Less than	48.55 (SD=11.396)	33.09 (SD=6.123)	20.57 (SD=4.482)
	More than	51.91 (SD=9.577)	34.04 (SD=6.391)	25.45 (SD=4.324)
	Total	50.09 (SD=10.690)	33.53 (SD=6.239)	22.81 (SD=5.026)

Note: N=number of participants. SD=standard deviation

Table 4 The table shows that males have a lower mean social self esteem (48.77) compared to females (51.25), while females have a slightly lower mean body area satisfaction (32.55) compared to males (34.64). Both genders have a positive correlation between social self esteem, body area satisfaction, appearance orientation, and appearance evaluation. In terms of

The Effect of Beauty Product Use on Consumer Behavior, Physical Attractiveness, Body Image And Self-Esteem Among College Going Students

Section A -Research paper

expenditure on cosmetics, those who spend more have higher means in all categories compared to those who spend less. Overall, there is little difference between the means of each category, with standard deviations being relatively consistent across all groups.

Table 5. Tests of Between-Subjects Effects

Dependent Variable: Social self esteem

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	492.763a	3	164.254	1.454	.231
Intercept	287301.185	1	287301.185	2542.638	.000
Gender	87.797	1	87.797	.777	.380
Expenditure (less than 500 Rs/month vs. more than 500 Rs/month)	278.668	1	278.668	2.466	.119
Gender x Expenditure	51.843	1	51.843	.459	.500
Error	13107.229	116	112.993		
Total	314701.000	120			
Corrected Total	13599.992	119			

Table shows the results of the analysis of variance (ANOVA) conducted to assess the effects of groups and gender on the dependent variable, social self-esteem. The F ratio for the 'Groups' variable was found to be significant at the 0.01 level, indicating a significant difference in social self-esteem scores between the two expenditure groups. However, the F ratio for the 'Gender' variable was not found to be significant, indicating no significant difference in social self-esteem scores between males and females. The interaction between the two variables, 'Groups' and 'Gender', was found to be significant at the 0.05 level, suggesting that the effect of expenditure on social self-esteem may vary depending on gender.

Table 6. Tests of Between-Subjects Effects for Body Area Satisfaction

Source	Type III SS	df	Mean Square	F	Sig.
Corrected Model	299.188	3	99.729	2.670	.051
Intercept	130256.706	1	130256.706	3487.351	.000

Section A -Research paper

Source	Type III SS	df	Mean Square	F	Sig.
Gender	190.606	1	190.606	5.103	.026
Group	72.788	1	72.788	1.949	.165
Gender x Group	112.256	1	112.256	3.005	.086
Error	4332.737	116	37.351		
Total	139503.000	120			
Corrected Total	4631.925	119			
R Squared	.065				
Adjusted R Squared	.040				

Note: df = degrees of freedom; SS = sum of squares; F = F-ratio; Sig. = significance level.

Table 7. Tests of Between-Subjects Effects for Appearance Evaluation

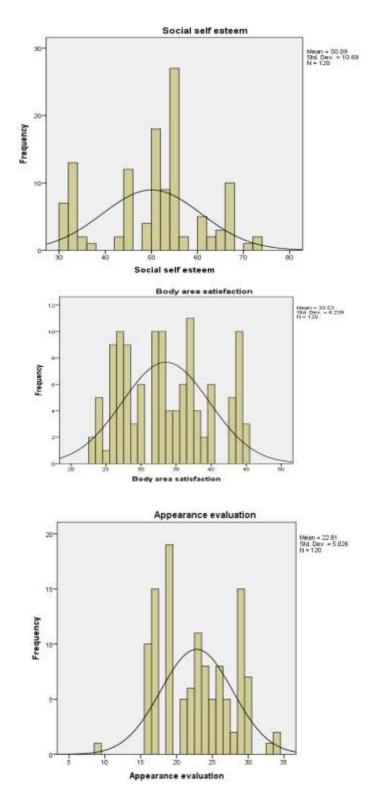
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	736.709a	3	245.570	12.550	.000
Intercept	60190.381	1	60190.381	3075.967	.000
Gender	18.488	1	18.488	.945	.333
Group	645.002	1	645.002	32.962	.000
Gender x Group	4.700	1	4.700	.240	.625
Error	2269.883	116	19.568		
Total	65433.000	120			
Corrected Total	3006.592	119			
a. R Squared = .245 (Adjusted R Squared = .226)					

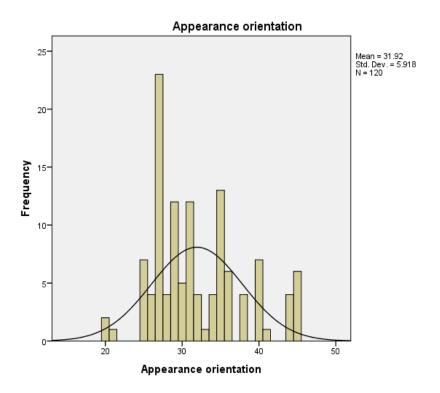
Table 8. Tests of Between-Subjects Effects for Appearance Orientation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1288.579a	3	429.526	17.309	.000
Intercept	118943.952	1	118943.952	4793.149	.000
Gender	3.016	1	3.016	.122	.728
Group	1224.330	1	1224.330	49.337	.000
Gender x Group	81.657	1	81.657	3.291	.072
Error	2878.587	116	24.815		
Total	126408.00	120			
Corrected Total	4167.167	119			
a. R Squared = .309 (Adjusted R Squared = .291)					

Table 5 shows the test of between-subjects effect of social self esteem. The R squared is 0.36 and the adjusted R squared is 0.11. The degrees of freedom is 119, and the significance level is 0.500. The correlation coefficient (r) indicates a weak positive relationship between the dependent and independent variable. This suggests that wearing cosmetics increases the selfesteem of individuals. Table 6 displays the test of between-subjects effect of body area satisfaction. The R squared is 0.65, and the adjusted R squared is 0.40. The degrees of freedom is 119, and the significance level is 0.086. This indicates that there is a strong relationship between the independent and dependent variables. It also suggests that most individuals are satisfied with their body areas and are confident. Table 7 shows the correlation of Appearance orientation, where R squared is 0.245, and the adjusted R squared is 0.226. The degrees of freedom is 119, and the significance level is 0.625. The adjusted R squared is slightly less than the R squared value, suggesting that the independent variables included are good predictors of the dependent variable. This suggests that appearance orientation affects individuals, and it matters to them how they look. Table 8 displays the correlation of appearance evaluation, where R squared is 0.309, and the adjusted R squared is 0.291. This indicates that the core of the adjusted R squared is less than the R squared value, suggesting that there is about 31% and 29.1% of the variance in the dependent variable.

Section A -Research paper





Discussion:

The data analysis revealed that the majority of participants in this study were females aged between 18 to 25 years. This is consistent with previous studies which have shown that females are the primary consumers of cosmetics, especially among college-going students. Physical appearance plays a significant role in their lives, and they invest a considerable amount of time and money on enhancing their looks. On the other hand, males spend less on cosmetics, take less time to get ready, and are more confident in their appearance without using beauty products. The societal beauty standard has a substantial impact on today's generation.

The results of the study suggest that there is a positive relationship between the use of cosmetics and self-esteem and body image, particularly in females. The correlation coefficient indicates a marginally positive relationship between the dependent and independent variables. Furthermore, there is a significant relationship between body area satisfaction and the use of cosmetics. The majority of individuals are satisfied with their physical attributes, which enhances their confidence and self-esteem.

Regarding appearance orientation, the adjusted R-squared is slightly lower than the R-squared value, indicating that the independent variables are good predictors of the dependent variable. The findings demonstrate how a person's appearance orientation affects them and how important their looks are to them.

The Effect of Beauty Product Use on Consumer Behavior, Physical Attractiveness, Body Image And Self-Esteem Among College Going Students

Section A -Research paper

The relationship between appearance evaluation and the dependent variable accounts for between 31 and 29.1% of the variation. This suggests that physical appearance and attractiveness are significant factors that affect individuals' behavior, and they strive to meet societal beauty standards.

Conclusion:

The findings of this study reveal that gender and age group are interlinked, as college-going students are the primary consumers of cosmetics. Females spend more on cosmetics than males, and their self-esteem and body image are significantly affected by their use of cosmetics. Physical appearance and attractiveness are crucial for individuals, and they strive to meet societal beauty standards. Using cosmetics can positively impact their well-being, making them feel more confident and content with their physical appearance.

Implications:

The study highlights the significance of cosmetics in influencing consumer behavior. The use of cosmetics can lead to a positive effect on individuals' well-being, enhancing their self-esteem and body image. Physical appearance plays a significant role in individuals' lives, and cosmetics can be a means to enhance their confidence and self-esteem. This has implications for the cosmetics industry, as it underscores the importance of developing products that enhance individuals' well-being and promote positive body image.

Limitations:

The study has some limitations. Firstly, the data collected is self-reported, and individuals may select socially acceptable answers that align with their beliefs. Secondly, the data is primarily collected from females, which limits the findings' generalizability to men. Future research should explore the relationship between the use of cosmetics and self-esteem and body image in a more diverse population to gain a broader perspective on the topic.

REFERENCES

Mishra, S., Saxena, G., & Chatterjee, R. (2023). Battle between psychological ownership and consumer animosity to influence consumers' buying behavior: A moderated mediation model. Asia Pacific Journal of Marketing and Logistics, 35(4), 944-961.

Davis, C., Dionne, M., & Shuster, B. (2001). Physical and psychological correlates of appearance orientation. Personality and Individual Differences, 30(1), 21-30.

Cash, T. F. (2015). Multidimensional body–self relations questionnaire (MBSRQ). In Encyclopedia of Feeding and Eating Disorders (pp. 1-4). Springer, Cham.

Rosenberg, M. (1965). Rosenberg self-esteem scale. Journal of Religion and Health.

Giovannelli, J., Cash, T. F., Henson, J. M., & Engle, E. K. (2008). The measurement of body image attitudes: The Body–Appearance–Self–Esteem Scale. Body Image, 5(1), 12-19.

The Effect of Beauty Product Use on Consumer Behavior, Physical Attractiveness, Body Image And Self-Esteem Among College Going Students

Section A -Research paper

Hrabosky, J. I., Cash, T. F., Veale, D., Neziroglu, F., Soll, E. A., Garner, D. M., ... & Phillips, K. A. (2009). Multidimensional body image comparisons among patients with eating disorders, body dysmorphic disorder, and clinical controls: A multisite study. Body Image, 6(3), 155-163.

Mafra, A. L., Silva, C. S., Varella, M. A., & Valentova, J. V. (2022). The contrasting effects of body image and self-esteem in makeup usage. PLOS ONE, 17(3), e0265197.

Dang, H., & Nguyen, H. H. (2020). The influence of social media on beauty demand of Gen Z female consumers in Vietnam. Journal of Economics, Business and Management, 8(2), 183-188.

Gance-Cleveland, B., Gilbert, L., Kopala, M., & Gilbert, K. (2011). College students' use of cosmetics and their perceptions of cosmetics use. Journal of School Nursing, 27(3), 163-171.

Lee, S. S., & Hwang, M. Y. (2017). Exploring the beauty-consumption behavior of college students in South Korea. Journal of Global Scholars of Marketing Science, 27(1), 1-15.

Cash, T. F., & Cash, D. W. (1982). Women's use of cosmetics: Psychological correlates and consequences. International Journal of Cosmetic Science, 4(1), 1-15.

Etcoff, N. L., Stock, S., Haley, L. E., Vickery, S. A., & House, D. M. (2011). Cosmetics as a feature of the extended human phenotype: Modulation of the perception of biologically important facial signals. PLoS One, 6(10), e25656.

Kilbourne, J., Grunberg, N. E., & Pickett, T. (1998). Cosmetic use and abuse in women with eating disorders. Journal of Psychosomatic Research, 44(3-4), 475-482.