Factors Affecting Impulse Buying of Beauty Products

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Spandita Nandi
(spandita.nandi@gmail.com)

Impulse buying of beauty products has become a common phenomenon in the post-millennium Indian retail market, where consumers are more empowered and global brands are easily accessible. This paper takes a deep-dive into impulse purchases made specifically in the beauty sector. To assess the demographic factors affecting this phenomenon, primary data has been collected from men and women aged between 18-55. Statistical tests such as Principal Component Analysis, Multiple ANalysis Of VAriance and linear regression were used to assess which factors have a significant impact on the indicators of impulse purchases.

Keywords: Impulse Buying, MANOVA, PCA, Linear Regression, Beauty Products, Demographic Factors

1. Introduction

Impulse buying is one of the most notable components of consumer behaviour. Hence, in order to understand impulse buying we will begin with a quick look at the meaning of consumer behaviour. Consumer behaviour includes gaining information of the product, evaluating the products and its alternatives or competition etc. (Jamal and Lodhi, 2015) **Researchers** who study consumer behaviour, do so in order to understand the needs, preferences and actions of consumers throughout the decision-making process of purchasing. **(Gure 2012).**

Much like other management sciences, consumer behaviour is an amalgamation of multiple fields. According to **(Marsden and Littler, 1998),** psychology, social psychology and sociology are the three branches of study most used to understand the process of consumer behaviour in depth.

- Sometimes purchase decisions are also undertaken under the influence of some impulses.
- In most cases the consumers' impulsive decisions are based on past
- experiences and external sources which may be marketing efforts or non-commercial sources.
- **(Schiffman&Kanuk 2010).** *"Impulse buying is a purchase that is unplanned, the*
- *result of an exposure to a stimulus, and decided on-the-spot. After the purchase, the customer*
- *experiences emotional and/or cognitive reactions".* **(Piron,1991)**

It is the lack of prior planning and predetermined needs in case of impulse buying that stokes the curiosity of researchers as to what are the factors that cause it. This makes impulse buying an important field of study in marketing.

Impulse buying is one of the major factors influencing a consumer's purchase decision and as such, it is crucial for marketers to be aware of the same in order to strategize accordingly.

(Rook, 1987). With rapid advancements in technology and subsequent changes in retailing and marketing techniques, impulse buying has asserted its power. **(Gardner and Rook 1988).** Markets where high amount of impulse buying takes place, attracts more retailers who then change their strategies accordingly to induce customers to buy more products. **(Dholakia,2000)**.

Thus, finding the variable factors that affect the buyer's impulsive decision to purchase a product that was not planned for, is important for the retailers to ascertain, to be able to position their goods accordingly. Only then can they aim to survive in a highly competitive market.**(Kim,2003)** About 80% of purchases in certain product categories in U.S. are made impulsively.**(Abrahams, 1997)** This potential of consumers to buy impulsively can be further increased by the presence of certain factors like online shopping and teleshopping channels and 24-hour convenience stores, as these will provide round-the-clock accessibility and convenience to the consumers for making a purchase. **(Kacen and Lee, 2002)**

Multiple social and psychological factors have been studied for their relation with impulse buying. The major factors that can be stated as causes of impulse buying are low price, marginal need for item, self-service, prominent store display, small size or light weight and lastly ease of storage. **(Stern, 1962).** Lack of self-control, level of reaction and absorption to stress are the personality traits that impact a consumer's tendency to buy on impulse. **(Youn and Faber 2000).** It can be understood as a consumer trying to console herself to alleviate the negative psychological conditions being experienced. **(Silvera, Lavack and Kropp, 2008)**. Likewise, positive emotions are also associated with impulse buying such as joy, delight and enthusiasm **(Beatty and Ferrell 1998).**

In order to have a thorough understanding of this paper, let us take a quick look at the context.

The Indian market for consumer goods has witnessed rapid evolution in the decades post-independence. From being a closed economy producing a limited variety of consumer goods to now being one of the biggest markets for most global brands, the Indian retail market has indeed, come a long way. Thanks to rapid advancements in technology coupled with the drastic economic liberalisation in 1991, the average Indian middle-class consumer is now more empowered than ever.

The Indian cosmetic industry in particular has undergone rapid changes particularly in the past two decades. The drastic transformation from traditional mom-and-pop stores to brand outlets in malls enabled consumers to actually see all the products on display, try it out for themselves and then make the purchase. Added to this, the fact that more and more women in the metro cities were employed, and had greater income at their disposal, made these outlets a big hit. Soon the beauty industry had entered the ecommerce platform. Nykaa and Purplle were one of the first entrants into this market. Equipped with highly professional logistical services, these websites ensured that all the brands that were earlier only available in brands outlets of the major metros, were now accessible to every Indian woman living in smaller towns. This drastically expanded the consumer base for all cosmetic brands, so much so, that many newer international brands have today entered the Indian market by using these websites as their exclusive launch platforms. For example, brands like Laneige and Huda Beauty have forayed into the Indian market using Nykaa as their exclusive platform.

As we are poised at the edge of a new decade, buying personal care products to boost one's confidence and self-esteem has become the new norm. Gone are the days when beauty products signified mere vanity. With a change in outlook and increased access to international brands, the beauty industry is set for a major boom in the next decade.

This paper aims to study the purchase patterns and triggers of impulse buying habits in the personal care and beauty sector.

2. Methodology

In order to conduct this research, an original questionnaire was prepared on Google Forms and distributed to respondents through email, messaging apps like Whatsapp and was shared on social media platforms like Facebook and Reddit. A total of 235 respondents completed the questionnaire. The responses were coded and entered into SPSS for further testing.

In the analysis stage, the scale reliability was checked in the very beginning, since the questionnaire had a large number of questions with a self-made Likert scale. After this, Principal Component Analysis (with Varimax rotation) was used to determine the five major dependent variables (ie. Indicators of impulse buying). These dependent variables are: Mood-driven purchases, promotion-driven purchases, planed purchases. High-end miniature purchases, price-drive purchases.

The following hypotheses were set for the purpose of this study:

H_{01}: Age has no significant impact on the indicators of impulse buying
H_{A1}: Age has a significant impact on the indicators of impulse buying
H_{02}: Location has no significant impact on the indicators of impulse buying
H_{A2}: Location has a significant impact on the indicators of impulse buying
H_{03}: Occupation has no significant impact on the indicators of impulse buying
H_{A3}: Occupation has a significant impact on the indicators of impulse buying
H_{04}: Income has no significant impact on the indicators of impulse buying
H_{A4}: Income has a significant impact on the indicators of impulse buying

With the help of a MANOVA test, these dependent variables were evaluated against the 4 independent variables namely age, location, occupation and income, to ascertain which predictor made a statistically significant impact on the outcome. Before conducting the MANOVA test, the data was checked for all preconditions and some post-hoc tests such as Tukey's test was conducted to assess exactly which independent variable had a statistically significant impact on which dependent variable.

3. Data Specification

A total of …. Questions were asked in the questionnaire to get their demographic details and ascertain their impulse buying habits. Questions 1 (name) was fill in the blank type, and questions … to … were "choose an option" type. These questions were aimed at gathering demographic particulars of every respondent which formed the basis of the independent variables in this study.

Independent Variable 1: Age

Respondents were asked to enter their age into any one of the following categories:

- 16-25
- 26-35
- 36-45
- 46-55

These were later coded as 1,2,3 and 4 for the purpose of analysis.

Independent Variable 2: Location

Respondents were asked to choose the correct option among the following based on the place of their residence

- Small town in India
- Metro city in India
- Metro city outside India

These were later coded as 1,2,3 for the purpose of analysis.

Independent Variable 3: Occupation

Respondents were asked to choose one of the following:

- Student
- Employed
- Self-employed
- Unemployed

These were later coded as 1,2,3 and 4 for the purpose of analysis.

Independent Variable 4: Income (in INR)

Respondents were asked to choose any one of the following categories based on their monthly income.

- Below 10000
- 10001-25000
- 25001-50000
- Above 50000

These were later coded as 1,2,3 and 4 for the purpose of analysis.

The next set of questions were aimed at getting insights into the respondent's purchase patterns and asked them to pick an appropriate option from the provided scales. All were self-designed.

The Likert scale responses were coded accordingly.

4. Results and Discussions

Since a large number of questions in this questionnaire depended on a self-made Likert scale, it was important to begin by testing their reliability in testing the underlying construct, that is, impulse buying. For this purpose, Cronbach's Alpha was calculated for all the questions seeking to evaluate the consumer's impulse buying patterns. The results for Cronbach's Alpha are as follows:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.728	.714	14

Since the Cronbach's Alpha score is good (above 0.7), the scales have proved to be reliable and the study was decided to be carried on with the 14 constructs.

The next step was to condense these 14 constructs into a fewer number of dependent variables for the purpose of ease in calculations. For this purpose, a Principal Component analysis was carried out with a Varimax rotation. The results of the PCA are given as follows:

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.721
	Sig.	.000

The KMO square indicates that our sample size is sufficient, and these results are statistically significant (sig.000).

Based on an Eigenvalue cut-off of 1, five factors out of the 14 were identified as the best reflectors of our underlying construct, impulse buying.

Total Variance Explained									
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.450	24.643	24.643	3.450	24.643	24.643	2.446	17.469	17.469
2	1.518	10.846	35.489	1.518	10.846	35.489	1.761	12.581	30.051
3	1.312	9.369	44.857	1.312	9.369	44.857	1.541	11.007	41.057
4	1.088	7.772	52.629	1.088	7.772	52.629	1.512	10.802	51.860
5	1.044	7.460	60.089	1.044	7.460	60.089	1.152	8.229	60.089
Extraction Method: Principal Component Analysis.									

It is essential to name these five factors for the purpose of future reference I calculations. For this purpose, the Rotated Component Matrix table was referred to.

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
I buy products impulsively when I am very happy.	.706				
I buy products impulsively when I am very sad/stressed.	.692				
Buying beauty products instantly makes me feel good about myself.	.598				
I spend most of my beauty budget on impulsive, affordable products.	.518				.464
I have made impulse purchases because the product was on sale or discount	.470	.436			.355
I immediately order online if the product you see on social media is not locally available		.864			
I often exceed my budget on impulsive beauty buys	.529	.572			
Owning the same products as social media stars, movie stars, singers and other celebrities makes me happy	.337	.521			
All my beauty purchases are planned in advance			.815		
I plan for quite some time before buying the product.			.751		
I spend most of my beauty budget on planned, high-end products.		.383	.435		
Have you purchased miniatures of high-end beauty products?				.847	
Buying Miniatures/low priced items from a high-end brand makes me happy.	.348			.728	
I feel guilty after making impulsive beauty purchases from drugstore and high-end brands					.839
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]					
a. Rotation converged in 6 iterations.					

Based on the clusters of component scores and their corresponding constructs, the 5 dependent variables have been named as follows:

1. Mood-driven purchases
2. Promotion-driven purchases
3. Planned purchases
4. High-end miniature purchases
5. Price-driven purchases

To assess the validity and extent of relationship between these dependent variables and our 4 independent variables (Age, Location, Occupation, Income in INR), a Multiple ANalysis Of VAriance (MANOVA) test was conducted. This test was repeated 4 times to assess the relationship between each of the independent variables and the 5 dependent variables. The major assumptions of MANOVA were tested in the beginning.

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	.456	15.954	4.979	3.023	233
a. Dependent Variable: AGE					

The maximum Mahal. distance is within the critical value acceptable for 5 factors, thus signifying that pour data has no significant outliers. This satisfies the first assumption of MANOVA.

The second assumption is that there is multivariate normality. To test for this, we will use the Shapiro-Wilk's test. Statistically insignificant values (Sig. greater than 0.05) will prove the null hypothesis for this test, ie. There is multivariate normality.

	AGE	Shapiro-Wilk		
		Statistic	df	Sig.
High-end miniature purchases	1	.973	155	.004
	2	.946	66	.006
	3	.927	7	.527
	4	.905	4	.456

From the above tables, we can observe that high-end miniature purchases violates the assumption of normality in age category 1 and 2.

Due to this violation, we will be using Pillai's Trace instead of Wilk's Lambda to evaluate MANOVA results.

Moving on to MANOVA results for each independent variable,

Effect		Sig.
AGE	Pillai's Trace	.248

As is evident from the table, Pillai's Trace is statistically insignificant, leading us to accept **H_{01}**: Age has no significant impact on the indicators of impulse buying.

Effect		Sig.
LOCATION	Pillai's Trace	.120

As is evident from the table, Pillai's Trace is statistically insignificant, leading us to accept **H_{02}**: Location has no significant impact on the indicators of impulse buying

Effect		**Sig.**
OCCUPATION	Pillai's Trace	.170

As is evident from the table, Pillai's Trace is statistically insignificant, leading us to accept **H_{03}**: Occupation has no significant impact on the indicators of impulse buying

Effect		Sig.
INCOME in INR	Pillai's Trace	.006

As is evident from the table, Pillai's Trace is statistically significant, leading us to reject **H_{04}** and accept **H_{A4}**: Income has a significant impact on the indicators of impulse buying.

Now that we know that changes in income level create statistically significant changes on the indicators of impulse buying, we will be taking a deeper look at some post-hoc tests ascertain exactly which dependent variable is being impacted.

The first one is the **Test of Between-Subjects Effects**, given as follows

Source	**Dependent Variable**	**F**	**Sig.**
INCOME in INR	Mood-driven purchases	3.437	.018
	Promotion-driven purchases	.915	.435
	Planned purchases	.273	.845
	High-end miniature purchases	6.198	.000
	Price-driven purchases	.210	.889

As is evident from the table above, the impact of Income on Mood-driven purchases and High-end miniature purchases are statistically significant (sig. values 0.018 and 0.000 respectively). So we will look into Tukey's test in the **Multiple Comparisons Table** to gauge exactly which category of income is causing this impact on each of the dependent variable.

Dependent Variable	**(I) INCOME (in INR)**	**(J) INCOME (in INR)**	**Sig.**
Mood-driven purchases	1	2	.756
		3	.018
		4	.167
High-end miniature purchases	1	2	.886
		3	.006
		4	.043

Tukey's HSD (honestly significant difference) table breaks down the analysis another level and shows that statistically significant difference between income category 1 and 3 (0.018) as far as mood-driven purchases are concerned.

For high-end miniature purchases, there is a statistically significant difference between income category 1 and 3 (0.006), and 1 and 4 (0.043).

To determine the extent of relationship between Income and mood-driven purchases; and Income and high-end miniature purchases, a linear regression was performed, the results of which are as follows:

Regression analysis for Mood-Driven Purchases

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.680	1	8.680	8.978	.003[b]
a. Dependent Variable: Mood-driven purchases						
b. Predictors: (Constant), INCOME (in INR) This table tells us how well the data fits the regression equation we are about to put forward. In this case, a sig. value of 0.003 shows statistical significance, meaning that the data is indeed a good fit for the regression equation.						

Coefficients[a]				
Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	.353	.134	.009
	INCOME (in INR)	-.168	.056	.003
a. Dependent Variable: Mood-driven purchases				

This table gives us the extent to which mood-driven purchases vary with a change in income. Both the values of the constant and the income coefficient are statistically significant, and the equation is given as
Mood-driven purchases= 0.353-0.168 *(income)*.

Regression Analysis for High-End Miniature Purchases

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.231	1	8.231	8.497	.004[b]
a. Dependent Variable: High-end miniature purchases						
b. Predictors: (Constant), INCOME (in INR)						

This table tells us how well the data fits the regression equation we are about to put forward. In this case, a sig. value of 0.004 shows statistical significance, meaning that the data is indeed a good fit for the regression equation.

Coefficients[a]				
Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	.344	.134	.011
	INCOME (in INR)	-.164	.056	.004
a. Dependent Variable: High-end miniature purchases				

Both the values of the constant and the income coefficient are statistically significant, and the equation is given as *High-end miniature purchases*= 0.344-0.164 (*income)*

5. Conclusion

From the tests that were performed, it can be safely concluded that demographic factors do not create particularly significant impact on the indicators of impulse buying in the beauty sector. This is proved by accepting the null hypothesis in case of 3 out of 4 independent variables.

Even in case of income (the only independent variable that impacts impulse buying), a significant impact was noted in case of only 2 out of the 5 indicators of impulse buying. The negative relation that income shares with these two dependent variables (Mood-driven purchases and High-end miniature purchases) is also quite small as shown by the constant coefficients.

A major limitation of this study is the lack of diversity among the respondents. Majority of the respondents belong to metro cities, and lie between income category 1 and 3, that is a monthly below INR 50000. There is a possibility that the results have been skewed in a certain direction due to such clusters in the population sample.

There is further scope to deepen this research by gathering a larger sample size, which is more diverse in terms of location and income. Since income has surfaced as the only independent variable to create a statistically significant impact on the dependent variables, the impact of a larger sample size (with more respondents from the higher income group) on the test results remains to be seen.

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