Impulsive Buying Behaviour Among The College Students Towards The Paper And Paper Products – An Empirical Study

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Abstract:

Introduction: In the Indian context, the paper and paper products industry is a vital economic sector, yet the impulsive purchasing patterns of college students toward these goods-ranging from stationery to decorative paper-remain largely under-explored. This study investigates the socio-demographic determinants and psychological triggers influencing impulsive buying of paper products among college students in Bangalore.

Methodology: The research employed a descriptive research design, utilizing both qualitative and quantitative approaches. A primary data collection method was used, gathering responses from a sample of 172 college students across various disciplines (Commerce, Management, Science, and Humanities) in Bangalore via a structured questionnaire. Data was analysed using Single-Factor ANOVA to test demographic variances, Correlation Analysis to assess satisfaction drivers, and Regression Analysis to identify significant predictors of behaviour.

Results: The demographic analysis revealed a predominantly young, urban student population (77.91% urban) with limited personal income. ANOVA results indicated significant differences in impulsive buying behaviour based on age ($p = 0.00028$), area of residence ($p = 0.00$), and level of education ($p = 0.00$), while average monthly income showed no significant impact ($p = 0.336$). Correlation analysis confirmed that customer satisfaction is positively correlated wi th packaging ($r = 0.332$) and physical stimuli ($r = 0.477$). Regression analysis further identified physical stimuli and packaging as the primary significant predictors of impulse purchases.

Discussion: The findings suggest that for college students, the tangible and aesthetic appeal of paper products outweighs economic constraints. The lack of significance in the income variable implies that impulsive purchases in this category are driven more by sensory engagement and situational triggers than by financial capacity. Marketers should focus on "physical discovery" through enhanced packaging and strategic in-store displays. The study concludes that sensory marketing is the most effective tool for capturing the impulsive tendencies of the educated, urban youth segment in the paper industry

Keywords: Impulsive Buying, Paper Products, Consumer Behavior, Physical Stimuli, College Students

1. INTRODUCTION

Numerous academic research demonstrates that unplanned and impulsive purchases constitute a pivotal part of consumer expenditures which are up to half of all sales belong to the domain of impulsive buying (Xiao & Nicholoson, 2011, Nadia Morozova & Ivo Vlaev, 2024). Hence, it is salient to understand the importance and its impact to understand the rationality behind the unplanned buying behavior (Shanmugan Joghee et.al, 2021) for the benefit of both customers and marketers. Impulsive buying is the sudden, unplanned and spontaneous purchase with no predetermined intentions either to buy product category or to accomplish a particular buying task (Beatty and Ferrell, 1998). One more researcher (Rook and Rook, 1987) recognized impulsive buying behavior with signifies as an intense, exciting, spontaneous, often discarding the consequences. Thus, “Impulsive 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” (Parboteeah, 2005 & Piron, 1991).

The research work investigates how impulsive buying behaviour of the consumer affects paper and paper products which include paper products like chart paper, kraft paper, cardboard, bond paper, paper bag and tracing paper. The products are bought on impulse because of their tactile properties which include various textures and colours and different qualities. The Indian paper industry includes all parts of the paper production process because it operates as a delicensed business. This industry ranks as one of the most important sectors which permits 100 percent foreign direct investment through automatic procedures for all operations except those needing industrial licenses which deman d prior governmental authorization (CESS Grant Authority, Report on Updating of Statistical Data for the Indian Paper Industry). The Indian paper industry consists of small and medium and large paper mills which produce between 10 and 1650 tonnes of paper

Study daily. The Indian paper industry produces 5 percent of global paper production. Paper industry in India generates an estimated revenue of Rs. 70,000 crores yearly, with a domestic market size of Rs. 80,000 crores. (Industry Outlook: Indian Paper Industry – CUSP of Change, 2023). Therefore, it is crucial to understand the purchasing behavior of the consumer towards paper and paper products. The way shoppers buy paper products needs to be studied because it is essential to know how they buy paper products. The way shoppers buy paper products needs to be studied because it is essential to know how they buy paper products.

Impulsive buying with respect to paper and paper products among college students occurs at high rates due to multiple reasons. College students buy paper and paper products because they need those items which also create an attractive impulse to purchase more products. College students require these products for pursuing their education as paper and paper products are part and parcel of the education system. The increasing demand from college students toward these products creates a need to investigate their buying patterns because college students usually make purchase decisions based on unplanned buying behaviour. Emotional triggers and peer influence and other factors drive college students to make unplanned purchases of paper and paper products. People who understand environmental sustainability will study how impulsive buying affects their decision to buy paper and paper products through their understanding of this environmental issue.

2. THEORETICAL BACKGROUND OF THE STUDY

Evolution of Impulse Purchases:

The first scientific explanation for how customer makes unplanned purchases in retail stores emerged through research studies which started more than fifty years ago (Clover, 1950). Impulsive buying is contemplated with a synonym with “Unplanned Buying” which means any purchases by the customers indulge which will not have planned (Stern, H. 1962). The impulse buyers involve more feelings of amusement, enthusiasm, joy and delight than the planned buyers (Weinberg and Gottwald, 1982). Impulsive buying is an unexpected and spontaneous purchase with no predetermined shopping intentions either to purchase the product category or to satisfy buying task (Beatty and Ferrell, 1998). The researchers (Zhou and Wong, 2003) defined that impulsive buying will be affected by retail store environment variables such as Point-of-Purchase (POP) (i.e., promoting discounts and cheaper prices) and atmosphere engagement (i.e., enjoyment, modern and attractiveness). The impulse buying of new products would consist of three important elements such as Product knowledge, consumer excitement and consumer esteem (Harmancioglu et.al, 2009). The researchers (Chang et. al, 2011) examined the effect of hedonic motivation with social characteristics on positive emotional responses through SOR (Stimulus Organism Response) Model which results in impulsive purchases. The research work emphasis on the various factors such as external factors – Store Environment, Product Characteristics and promotional activities and internal factors – Consumer characteristics and culture influence the process of impulsive buying (Geliş Tarihi & Kabul Tarihi, 2016). The article highlights the effect of situational variables such as personal factors (time availability, family influence, money availability) and in-store factors (store environment, sales promotion and friendly store employees) play a vital role in the operation of impulsive buying among the customers (Mudassir et. al, 2019). Panic buying influences a little group of customers, eventually the customers with more purchasing experience will immerse in impulsive buying with a little more than usual (Satoshi et. al, 2022). The analysis implies that impulse (vs. unplanned) purchase decision maki ng is initially co-ordinated with automatic (vs. reflective) motivation and hence controlled by the Impulsive (vs. Reflective) systems (Nadia Morozova and Ivo Vlaev, 2024).

2.1. Rationale with respect to Paper and Paper Products:

Impulsive buying occurs with a variety of products, one among them is with paper and paper products. In Indian education system, the college students must rely on the paper and paper products to aid their studies in different disciplines. As a result, it is vital to study about the requirement of paper and paper products among college students and their buying behavior towards the same. Let us understand the production and supply of paper and paper products in the context of Indian economy.

Year	**Paper**			
	Production	**Import**	**Export**	**Consumptions**
	(Tonnes)	(Tonnes)	(Tonnes)	(Tonnes)
2017-18	9,933,300	2,035,714	1,041,781	10,927,233
2018-19	6,861,700	1,798,494	1,563,260	7,096,934
2019-20	6,442,500	1,990,591	1,725,139	6,707,952
2020-21	6,167,700	1,373,002	2,259,091	6,707,952
2021-22	6,279,800	1,455,418	2,965,782	4,769,436
2022-23	6,491,121	1,720,622	1,817,521	6,394,223

Source: CMIE

Year	**Paper Products**			
	Production	**Import**	**Total Supply**	**Consumptions**
	(Tonnes)	(Tonnes)	Rs. Million	Rs. Million

2017-18	95,582	274,544	124,254	85,989
2018-19	90,314	334,677	143,507	84,372
2019-20	198,194	355,924	137,372	79,259
2020-21	104,941	319,360	118,341	65,087
2021-22	117,352	564,387	163,600	86,382

Source: CMIE

Interpretation:
In 2023–2024, the paper and paper products industry made a significant trade impact, recording imports of 22,76,765 tonnes and exports of 16,73,548 tonnes, highlighting strong international market activity. With a production of 63,15,000 tonnes and consumption reaching 69,18,217 tonnes, the sector's trade dynamics played a crucial role in meeting domestic demand (Source: Infomerics Research; CMIE).

Under the baseline scenario, domestic consumption will reach 23.5 million tonnes per annum (TPA) and production will reach 22.0 million tonnes per annum by 2024-25. India as a country must increase its integrated pulp paper and paperboard manufacturing capacity by one million tonnes per annum every year to satisfy growing market demand. The Indian paper and paper products market will attain a value of US 16.64 billion by 2028 according to Paperex.

From the above data, it is clearly shown the usage and revenue generation in connection with paper and paper products. Therefore, the study has been conducted to know the impulsive purchasing behavior of the college students with respect to paper and paper products.

2.2. REVIEW OF LITERATURE:
The researcher from the study defines V. T. Clover as the first investigator who studied impulsive buying. The study results show that only specific product types are bought through impulsive buying.

H. Stern (1962) discovered that customers make unplanned purchases which they establish through their planned purchases and their impulse buying activities.

Rook D.W (1987) established consumer impulsion as a permanent character trait which people develop through their shopping habits that include materialistic tendencies and experimental behavior and their need for fun as standard patterns of behavior. Beathy S E & Ferrell M.E (1998) defined impulsive buying as an unexpected and instant buying decision which lacks any intention to purchase specific product categories or fulfill buying needs. Youn and Faber (2000) demonstrated that three personality traits of people establish their ability to make impulse purchases through their impulse buying tendency which links to their personality traits. The researchers investigated how people tend to make spontaneous purchases through their internal psychological states and incoming external sensory information.

Jones et, al. (2003) described that product specified impulsive buying tendencies is pretentious significantly by product involvement. Additionally, the study indicated that product specific conceptualization of impulse buying behaviour was a preferable forecast of actual impulse purchasing behaviour when compared to general impulse buying tendency of two product categories.

Peck and Childers (2006) illustrated impulsive buying as consumers urge to buy spontaneously, unreflectively, immediately and kinetically. This research focused on the moderating effect of the normative evaluation of impulse purchase on impulse purchase characteristics and impulse purchase intentions. Additionally, it also extends to examine that touch of a product increases impulse purchases as the proximity between the product and consumers reduces.

Sharma et. al, (2010) examined three consumer characteristics by considering various individual and situational factors which are Consumer Impulsiveness (CI), Optimum Stimulation Level (OSL) and Self-monitoring (SM) and implied that actual buying decisions happen by the positive association of consumer Impulsiveness (CI) and Optimum Stimulation Level (OSL).

Parmar Vishnu & Ahmed Rizwan Raheem (2013) described the consumer impulsive buying depends upon well decorated, with pleasant and calm store environment which influences the consumers to buy the products spontaneously which results excitement among the consumer's minds. Additionally, this study also focused on the important elements such as window displays and visual merchandising – packaging and proper display of the products.

According to Gelis Tarihi & Kabul Tarihi (2016), stimulating factors affect impulse buying behaviour, and these were divided into two main categories: External and Internal Factors related to Impulse Buying Behaviour. The following factors were considered external to impulse buying behaviour: The Store Environment including Store Layouts, Store Atmospherics, Type of Store, and the Salesperson; Product Characteristics including Product Type (Category), Price, Brand, and Packaging; Distribution of Product with Promotional Activities; and the like. Additionally, numerous factors were considered "internal" (within the consumer) to impulse buying behavior and included Consumer Characteristics such as Gender, Mood, Perceived Risk, Materialism, Enjoyment of Shopping, Impulse Buying Tendency, Culture, and the like. Certain situational variables were also examined, such as Time, Money, Other People Present, and In-store Browsing, as they may also affect impulse buying behavior.

Moayery et. al., (2019) conducted research to analyze the correlation between consumers' self -control and impulse/purchasing behavior. Impulse buying and self-control demonstrate that various self-control failures can lead to inconsistencies between conflicting standards and levels of consumer monitoring of behavior and overall loss of self-regulatory resources.

Shanmugan et. al., (2021) completed an analysis of expats' impulse purchasing behavior. These researchers found it necessary to appreciate the importance of consumer impulse purchasing behavior as both a marketing tool and an additional benefit to consumers. They also found that understanding the correlation between purchasing and perceptions about impulse purchasing behaviors is valuable to marketers and consumers.

According to Santhoshi et al, (2022), panic buying is an example of consumer behavior that arises out of social pressure and negative feelings. Panic buying occurs over time, as someone engages in this form of buying behavior.

Research by Aloysius et al, (2024) found that there are four primary influencing factors when investigating impulsive purchasing associated with social events: financial literacy; financial management; fear of missing out (FOMO); and social legitimacy. FOMO and social legitimacy were found to be significantly more important in influencing an individual to purchase their purchases with impulsivity.

Nadia Morozova and Iva Vlaev (2024) determined the significant role of purchase decision making which directs unplanned and impulse purchase. The study focused on the relationship between impulse (vs. unplanned) and automatic (vs. reflective) motivation. This research work implied a certain psychological mechanism associated with impulse purchases.

2.3. Research Gap:

The research on impulsive buying behaviour exists in extensive literature yet belongs to an unexplored area which examines how college students shop for paper and paper products. Researchers in this field study high-involvement products such as electronics and fashion and cosmetics, which leave research on paper products used in everyday life as an unexamined field. The college student consumer group, who deal with academic pressures and budget restrictions while using digital solutions, creates a unique shopping behaviour pattern that needs further investigation.

2.4. Statement of the Problem:

The study of impulsive buying behavior among college students towards paper and paper products in Bangalore emphasizes the understanding of the study which highlights the factors and determinants influencing the impulsive buying of paper and paper products. The researcher established that multiple studies exist about other FMCG (Fast Moving Consumer Goods) products, yet researchers need to conduct thorough research about paper and paper products. The college students are the ones among the customers who will be using the paper and paper products as these products are part and parcel of the education domain. The study requires research about factors which lead college students to make impulsive purchases of paper and paper products.

2.5. Objectives of the study:

1. To identify the impulsive buying behavior of paper and paper products among college students in Bangalore.
2. To identify and evaluate the variations in impulsive buying tendencies for paper-based goods among residents of different age groups, diverse geographical areas, different levels of higher education and average monthly income.
3. To assess the customers' satisfaction level of Impulsive Buying Behaviour of Paper and Paper Products against Packaging, Ability to Control, Economic Considerations and Physical Stimuli.
4. To assess the impact of various factors on the impulsive purchasing behavior of paper and paper products among the college students.

3. RESEARCH METHODOLOGY

To investigate the research phenomena, this study deployed an empirical descriptive research design utilizing a complementary mixed-methods paradigm that synthesizes qualitative depth with quantitative precision (Saunders et al., 2019). Primary data were gathered systematically via a structured, closed-ended questionnaire administered through Google Forms. The target sampling frame comprised undergraduate and postgraduate students stratified across diverse academic verticals, specifically Commerce, Management, Science, and Humanities, ensuring multi-disciplinary representation. To optimize data collection efficiency within this institutional framework, a non-probability convenience sampling technique was implemented (Andrade, 2021). Although non-probability designs introduce inherent limitations regarding universal generalizability, the empirical validity of the data was protected by securing a robust sample size of 172 respondents. This sample size satisfies the strict statistical thresholds required to achieve a 95% confidence level and a 5% margin of error, thereby minimizing sampling error and ensuring a statistically sufficient foundation for subsequent multivariate analysis (Althubaiti, 2023; Hair et al., 2020).

4. DATA ANALYSIS AND INTERPRETATION

Table.No.4.1. Demographic Profile Of The Respondents

Age	No. of Respondents	Percentage
Lesser than 20 years	87	50.58
21 years to 25 years	76	44.19
26 years to 30 years	3	1.74

31 years to 35 years	2	1.16
Above 35 years	4	2.33
Total	172	100
Gender	**No. of Respondents**	**Percentage**
Male	92	53.49
Female	80	46.51
Total	172	100
Area of Residence	**No. of Respondents**	**Percentage**
Urban	134	77.91
Semi Urban	19	11.05
Rural	19	11.05
Total	172	100
Level of Higher Education	**No. of Respondents**	**Percentage**
Bachelor's	119	69.19
Master's	47	27.33
Doctoral	5	2.91
Post - Doctoral	1	0.58
Total	172	100
Branches of Higher Education	**No. of Respondents**	**Percentage**
Arts & Humanities	12	6.98
Sciences	10	5.81
Engineering & Technology	22	12.79
Business & Economics	128	74.42
Total	172	100
Average Monthly Personal Income/ Allowances/ Stipends/ Incentives.	**No. of Respondents**	**Percentage**
No Income	110	63.95
Below INR 1000	23	13.37
INR1001 – INR 3000	9	5.23
INR 3001 – INR 6000	9	5.23
More than INR 6001	21	12.21
Total	172	100
Money spent on paper and paper products per annum by the respondents	**No. of Respondents**	**Percentage**
Less than INR 500	70	40.70
INR 501- INR 1000	67	38.95
INR 1001- INR 2000	16	9.30
INR 2001- INR 3000	9	5.23
More than INR 3001	10	5.81
Total	172	100
Point of purchase paper and paper products	**No. of Respondents**	**Percentage**
Physical stores	117	68.02
Online Platforms	4	2.33
Both	51	29.65
Total	172	100
Frequency of impulsive purchases related to paper and paper products	**No. of Respondents**	**Percentage**
Very frequently	12	6.98
Frequently	45	26.16
Occasionally	74	43.02
Rarely	36	20.93

Never	5	2.91
Total	172	100

Source of Data: Primary Data

Interpretation:

Most of the respondents (50.58%) are in the age group of 20 years and below, followed by the 21-25 years age group (44.19%). The age group above 35 years constitutes a very small percentage (2.33%). The survey respondents are almost evenly split between males (53.49%) and females (46.51%). A significant portion of the respondents (77.91%) reside in urban areas. Semi-urban and rural residents each constitute approximately 11% of the sample. Most respondents (69.19%) have completed a bachelor's degree, while 27.33% have a master's degree. A small percentage (2.91%) have a doctoral degree, and an even smaller percentage (0.58%) have a post-doctoral degree. Most of the respondents (74.42%) have a background in Business and Economics. Engineering and Technology, Arts and Humanities, and Sciences make up a smaller proportion of the sample. A significant number of respondents (63.95%) have no income. Those with income are primarily in the lower income brackets, with a majority earning less than INR 3000 per month. Most respondents (79.65%) spend less than INR 1000 per year on paper and paper products. Most respondents (68.02%) prefer to purchase paper and paper products from physical stores. However, a significant proportion (29.65%) purchase both online and offline. Majority of respondents (69.11%) make impulsive purchases of paper and paper products either frequently or occasionally.
Overall, the demographic profile suggests that the survey primarily targets a young, urban population with a background in Business and Economics. Most respondents are students or young professionals with limited income and a moderate expenditure on paper and paper products.

TABLE.NO.4.2. ANOVA: SINGLE FACTOR

Null Hypothesis (H_0): There is no significant difference in impulsive buying behaviour for paper and paper products among different age groups.

Alternative Hypothesis (H_1): There is a significant difference in impulsive buying behaviour for paper and paper products among different age groups

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SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
1. Age	172	275	1.59	0.63		
	172	347	2.02	1.62		

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	15.07	1	15.07	13.41	0.00028	3.87
Within Groups	384.27	342	1.12			
Total	399.37	343				

Source of Data: Primary Data

Analysis of Variance (ANOVA) Results:

1. **F-Statistic:** The calculated F-statistic is 13.41
2. **p-value:** The p-value associated with this F-statistic is 0.000289.
3. **Critical F-value:** The critical F-value at the 5% significance level is 3.87.

Interpretation:

Since the calculated F-statistic (13.42) is greater than the critical F-value (3.87), and the p-value (0.000289) is less than the significance level (0.05), we **reject the null hypothesis**. This means that there is a significant difference in impulsive buying behaviour for paper and paper products among different age groups.

TABLE.NO.4.3. ANOVA: SINGLE FACTOR

Null Hypothesis (H_0): There is no significant difference in impulsive buying behaviour for paper and paper products among different areas of residence.

Alternative Hypothesis (H_1): There is a significant difference in impulsive buying behaviour for paper and paper products among different areas of residence.

SUMMARY						
Groups	Count	Sum	Average	Variance		
3. Area of Residence.	172	226	1.31	0.43		
	172	347	2.02	1.62		

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	42.56	1	42.56	41.59	0.000	3.87
Within Groups	349.99	342	1.023			
Total	392.56	343				

Source of Data: Primary Data
Analysis of Variance (ANOVA) Results:

1. **F-Statistic:** The calculated F-statistic is 41.59
2. **p-value:** The p-value associated with this F-statistic is 0.00.
3. **Critical F-value:** The critical F-value at the 5% significance level is 3.87

Interpretation:
Since the calculated F-statistic (41.59) is greater than the critical F-value (3.87), and the p-value (0.00) is less than the significance level (0.05), we **reject the null hypothesis**. This means that there is a significant difference in impulsive buying behaviour for paper and paper products among different areas of residence.

TABLE.NO.4.4. ANOVA: SINGLE FACTOR
Null Hypothesis (H_0): There is no significant difference in impulsive buying behaviour for paper and paper products among different levels of higher education.
Alternative Hypothesis (H_1): There is a significant difference in impulsive buying behaviour for paper and paper products among different levels of higher education.

SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
4. Level of Higher Education	172	229	1.33	0.31		
	172	347	2.02	1.62		

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	40.47	1	40.48	42.067	0.0000	3.87
Within Groups	329.06	342	0.96			
Total	369.53	343				

Source of Data: Primary Data
Analysis of Variance (ANOVA) Results:

1. **F-Statistic:** The calculated F-statistic is 42.07
2. **p-value:** The p-value associated with this F-statistic is 0.00.
3. **Critical F-value:** The critical F-value at the 5% significance level is 3.87

Interpretation:
Since the calculated F-statistic (42.07) is greater than the critical F-value (3.87), and the p-value (0.00) is less than the significance level (0.05), we **reject the null hypothesis**.
This means that there is a significant difference in impulsive buying behaviour for paper and paper products among different levels of higher education.

TABLE.NO.4.5. ANOVA: SINGLE FACTOR
Null Hypothesis (H_0): There is no significant difference in impulsive buying behaviour for paper and paper products among different levels of average monthly personal income.

Alternative Hypothesis (H_1): There is a significant difference in impulsive buying behaviour for paper and paper products among different levels of average monthly personal income
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SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
6. Average Monthly Personal Income/ Stipends/ Incentives.	172	323	1.88	2.01		
	172	347	2.02	1.62		

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1.68	1	1.68	0.92	0.36	3.87
Within Groups	619.38	342	1.82			
Total	621.06	343				

Analysis of Variance (ANOVA) Results:

1. F-Statistic: The calculated F-statistic is 0.92.
2. p-value: The p-value associated with this F-statistic is 0.37.
3. Critical F-value: The critical F-value at the 5% significance level is 3.88.

Interpretation:
Since the calculated F-statistic (0.92) is less than the critical F-value (3.88), and the p-value (0.34) is greater than the significance level (0.05), we fail to reject the null hypothesis. This means that there is no significant difference in impulsive buying behaviour for paper and paper products among different levels of average monthly personal income.

TABLE.NO.4.6. CORRELATION ANALYSIS
OBJECTIVE:
To assess the customers' satisfaction level of Impulsive Buying Behaviour of Paper and Paper Products against Packaging, Ability to Control, Economic Considerations and Physical Stimuli.
HYPOTHESIS
H: Customers' satisfaction level of Impulsive Buying Behaviour of Paper and Paper Products is positively correlated with Packaging, Ability to Control, Economic Situation and Physical Stimuli.
H1 : Customers' satisfaction level of Impulsive Buying of Paper and Paper Products is positively correlated with Packaging
H2 : Customers' satisfaction level of Impulsive Buying of Paper and Paper Products is positively correlated with Ability to Control
H3 : Customers' satisfaction level of Impulsive Buying of Paper and Paper Products is positively correlated with Economic Considerations.
H4 : Customers' satisfaction level of Impulsive Buying of Paper and Paper Products is positively correlated with Physical Stimuli.

CORRELATION ANALYSIS

	Package	*Control*	*Economic Considerations*	Physical Stimuli	*Satisfaction*
Package	1				
Control	0.260	1			
Economic Considerations	0.384	0.234	1		
Physical Stimuli	0.307	0.295	0.373	1	
Satisfaction	**0.332**	**0.231**	**0.255**	**0.477**	1

Source of Data: Primary Data

Interpretation:
It is inferred from the correlation Analysis that Customers' satisfaction level of Impulsive Buying Behaviour of Paper and Paper Products is positively correlated with Packaging **(r=0.332)**, Ability to Control **(r=0.231)**, Economic Considerations **(r=0.255)**, and Physical Stimuli **(r=0.477).** The correlation matrix suggests that factors like package design and physical stimuli play a significant role in influencing consumer behaviour and satisfaction. These factors often go together with economic considerations, creating a synergistic effect on consumer choices.

Table.No.4.7. Regression Analysis

SUMMARY OUTPUT		
Regression Statistics		
Multiple R	0.519	
R Square	0.269	
Adjusted R Square	**0.252**	25%
Standard Error	0.603	
Observations	172	

ANOVA					
	Df	*SS*	*MS*	*F*	*Significance F*
Regression	4	22.392	5.598	**15.407**	**0.0000**
Residual	167	60.678	0.363		
Total	171	83.069			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.879	0.209	4.204	0.0000	0.466	1.293	0.466	1.293
Package	0.153	0.060	2.538	0.012	0.034	0.272	0.034	0.272
Control	0.049	0.058	0.863	0.389	-0.064	0.164	-0.064	0.164
Economic	0.019	0.068	0.285	0.776	-0.114	0.153	-0.114	0.153
Physical Stimuli	0.435	0.082	5.309	0.000	0.273	0.597	0.273	0.596

Source of Data: Primary Data

Interpretation:

The empirical results indicate that the regression model is statistically significant (F = 0.000, $p < .05$), with the independent variables explaining 25.2% of the variance in impulsive buying behaviour Adjusted R^2 = 0.252). Structurally, packaging and sensory stimuli emerge as significant, credible predictors of impulsive purchasing within the paper goods sector, substantiating the notion that aesthetically appealing and sensorially rich stimuli trigger spontaneous consumer actions. Conversely, control and economic elements yield no statistically meaningful effect on impulse buying, suggesting that affective atmospheric cues overshadow rational economic and regulatory mechanisms during spontaneous retail encounters.

5. FINDINGS SUGGESTIONS AND CONCLUSIONS

5.1. SUMMARY OF THE FINDINGS

Overall, the demographic profile suggests that the survey primarily targets a young, urban population with a background in Business and Economics. Most respondents are students or young professionals with limited income and a moderate expenditure on paper and paper products.

From ANOVA Table.No.4.2, It is found that there is a significant difference in impulsive buying behaviour for paper and paper products among different age groups.

From ANOVA Table.No.4.3, It is found that there is a significant difference in impulsive buying behaviour for paper and paper products among different areas of residence.

From ANOVA Table.No.4.4, It is found that there is a significant difference in impulsive buying behaviour for paper and paper products among different levels of higher education.

From ANOVA Table.No.4.5, It is found that there is no significant difference in impulsive buying behaviour for paper and paper products among different levels of average monthly personal income

From Correlation Analysis Table.No.4.6, It is inferred from the correlation Analysis that Customers' satisfaction level of Impulsive Buying Behaviour of Paper and Paper Products is positively correlated with Packaging (r=0.332), Ability to Control (r=0.231), Economic Considerations (r=0.255), and Physical Stimuli (r=0.478). The correlation matrix suggests that factors like package design and physical stimuli play a significant role in influencing consumer behaviour and satisfaction. These factors often go together with economic considerations, creating a synergistic effect on consumer choices.

From Regression Analysis, The regression model suggests that package and physical stimuli are significant predictors of impulsive buying behaviour for paper and paper products. The more appealing the package and the stronger the physical stimuli, the higher the likelihood of impulsive buying. However, control and economic factors, while included

in the model, do not appear to have a significant impact on impulsive buying behaviour
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5.2. DISCUSSION

The empirical findings of this study offer critical insights into the under-explored domain of impulsive buying behaviour among college students toward paper and paper products in Bangalore. The primary objective of this investigation was to identify how specific external environmental cues and internal socio-demographic variations influence spontaneous purchasing decisions within an academic context. By deploying a rigorous descriptive mixed-methods design, the study successfully mapped the behavioural patterns of 172 multi-disciplinary student respondents.

A central finding of this research is the pronounced impact of physical stimuli ($r = .477$) and packaging design ($r = .332$) on customer satisfaction and subsequent impulse purchases. The regression model statistically validates these elements as the only significant predictors within the framework ($p < .05$), collectively explaining 25.2% of the variance in impulsive purchasing behaviour Adjusted R^2 = .252). This outcome strongly corroborates the classic Stimulus-Organism-Response (SOR) paradigm applied by Chang et al. (2011), which dictates that hedonic environmental cues elicit immediate positive emotional states, driving on-the-spot purchasing decisions. Within the paper industry, these findings underline the fact that tactile and aesthetic properties —such as paper textures, embossing, and vibrant visual finishes—act as powerful immediate triggers that disrupt planned shopping pathways. This directly aligns with the haptic research by Peck and Childers (2006), who established that physical product proximity and the opportunity for consumer touch dramatically elevate the psychological urge to buy spontaneously.

Conversely, the model revealed that both regulatory control and economic considerations fail to exert any statistically meaningful effect on impulsive purchasing trajectories. This lack of statistical significance is further reinforced by the Single-Factor ANOVA results concerning the respondents' average monthly personal income, which showed no significant impact on impulse buying patterns ($p = .336$). This counter-intuitive insight implies that within the higher education cohort, immediate hedonic environmental stimuli completely overshadow rational economic evaluations and personal budgetary constraints during retail encounters. Even though 63.95%of the student sample reported having no active income streams, their spontaneous engagement with aesthetically appealing stationery or decorative paper products remained unhindered. As suggested by Nadia Morozova and Ivo Vlaev (2024), such purchase decisions are governed primarily by automatic, affective motivation systems rather than reflective, deliberate cognitive systems.

Furthermore, the ANOVA results demonstrated highly significant differences in impulsive buying tendencies based on age ($p = .00028$), area of residence ($p = .00$), and level of higher education ($p = .00$). The concentration of impulsive tendencies among younger, urban-dwelling undergraduate students highlights a distinct psychographic segment that is deeply susceptible to visual merchandising and trendy "lifestyle" product positioning. This demographic variability supports the assertions of Geliş Tarihi and Kabul Tarihi (2016) regarding the interplay between external situational variables and internal consumer characteristics. Ultimately, the study concludes that for this educated youth segment, the tangible, sensory discovery of paper products entirely supercedes utilitarian financial logic, positioning sensory marketing as the single most viable mechanism for capturing market share within this sector.

5.3. CONCLUSIONS

This study concludes that the impulsive purchasing patterns of college students regarding paper and paper products are non-income-dependent, driven instead by key demographic configurations such as age, urban residency, and higher education levels. Structurally, the empirical data validates that packaging aesthetics and immediate physical stimuli serve as the primary catalysts for triggering spontaneous consumer acquisition, indicating that superior design directly commands overall sales performance. Synthesizing these conclusions with the study's managerial implications provides a strategic blueprint for paper industry executives looking to scale operations. First, enterprises must actively allocate capital toward creating innovative, attractive, and haptically rich packaging systems that optimize sensory engagement at the point of purchase. Second, marketing campaigns must be dynamically segmented and tailored to match specific consumer cohorts partitioned by age, education, and regional residence. Structuring an agile pricing model with multiple price points and distinct promotional architectures is also essential to capture latent demand among budget-conscious student segments. Finally, firms must proactively expand their traditional marketing perimeters to encompass demographics beyond young urban professionals. Implementing these evidence-based frameworks will allow companies to broaden their consumer base, optimize retail visibility, and secure sustainable revenue growth in the paper goods sector.

6.1 SCOPE FOR FURTHER RESEARCH

While this study offers valuable insights into the impulsive buying behaviour of college students toward paper products, several inherent methodological limitations provide a fertile ground for future academic inquiry. Geographically and demographically, the empirical framework was confined to a convenience sample of 172 students primarily from urban areas in Bangalore with backgrounds in Business and Economics, which restricts the universal generalizability of the findings. Future research should deploy randomized, larger-scale probability sampling methods across geographically diverse cohorts, including rural and semi-urban populations, to validate these behavioural patterns on a broader scale.

Furthermore, the data analysis relies heavily on cross-sectional data gathered from a structured questionnaire, capturing immediate, self-reported satisfaction levels and purchasing tendencies. To address this constraint, subsequent investigations could utilize longitudinal research designs to observe the long-term sustainability and evolutionary shifts in impulsive consumer patterns over time. Methodologically, although this study isolated packaging and physical stimuli as the vital drivers of spontaneous procurement, the explanatory power of the model could be enhanced. Future studies should integrate advanced multivariate modeling—such as Structural Equation Modeling (SEM)—to examine the critical influence of online marketing ecosystem elements, digital-first social media triggers (e.g., video unboxing, visual commerce platforms), and the role of e-commerce point-of-purchase variables. Finally, moving beyond stationery and decorative paper goods, future work should cross-examine these sensory and visual merchandising mechanisms across alternative low-involvement fast-moving consumer goods (FMCG) sectors to establish a comprehensive comparative framework within contemporary consumer culture.

REFERENCE

1. Althubaiti, A. (2023). Sample size determination: A practical guide for health and behavioral researchers. *Journal of General and Family Medicine*, *24*(2), 72–78. https://doi.org/10.1002/jgf2.600
2. Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, *43*(1), 86–88. https://doi.org/10.1177/0253717620977000
3. Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, *74*(2), 169-191. http://dx.doi.org/10.1016/S0022-4359(99)80092-X
4. Chang, H. J., Eckman, M., & Yan, R. N. (2011). Application of the Stimulus-Organism-Response model to the retail environment: The role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, *21*(3), 233-249. http://dx.doi.org/10.1080/09593969.2011.578798
5. Clover, V. T. (1950). Relative importance of impulse buying in retail stores. *The Journal of Marketing*, *15*(1), 66-70. http://dx.doi.org/10.2307/1247083
6. Geliş Tarihi & Kabul Tarihi. (2016). Stimulating factors of impulse buying behavior: A literature review. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, *18*(2), 572-593.
7. Hair, J. F., Page, M., & Brunsveld, N. (2020). *Essentials of business research methods* (4th ed.). Routledge.
8. Harmancioglu, N., Finney, R. Z., & Joseph, M. (2009). Impulse purchases of new products: An empirical analysis. *Journal of Product & Brand Management*, *18*(1), 27-37. http://dx.doi.org/10.1108/10610420910933344
9. Jones, M., Reynolds, K., Weun, S., & Beatty, S. (2003). The product specific nature of impulse buying tendency. *Journal of Business Research*, *56*(7), 505-511. http://dx.doi.org/10.1016/S0148-2963(01)00250-8
10. Moayery, S., et al. (2019). How does self-control operate? A focus on impulse buying. *Papeles del Psicólogo*, *40*(2). https://doi.org/10.23923/pap.psicol2019.2893
11. Mudassir, M., et al. (2019). Personal and in-store factors influencing impulse buying behaviour among Generation Y consumers in small cities. *The SAGE Journal*, *7*(1), 92-107. http://dx.doi.org/10.1177/2278533718800625
12. Nadia Morozova & Ivo Vlaev. (2024). The urge to splurge: Differentiating unplanned and impulse purchases. *International Journal of Market Research*, *66*(1), 1-24. http://dx.doi.org/10.1177/14707853241229671
13. Parmar, V., & Ahmed, R. R. (2013). Factors influencing impulse buying behaviour. *European Journal of Scientific Research*, *100*(3), 67-79.
14. Peck, J., & Childers, T. L. (2006). If I touch it I have to have it: Individual and environmental influences on impulse purchasing. *Journal of Business Research*, *59*(6), 765-769. http://dx.doi.org/10.1016/j.jbusres.2006.01.014
15. Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, *14*(2), 189-197. http://dx.doi.org/10.1086/209105
16. Santhoshi, N., Akamatsu, N., & Mizuno, M. (2022). Consumer panic buying: Understanding the behavioural and psychological aspects. *International Journal of Marketing & Distribution*, *5*(2), 17-35.
17. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
18. Shanmugan, S., et al. (2021). Expats impulse buying behaviour in UAE: A customer perspective. *Journal of Management Information and Decision Sciences*, *24*(S1), 1-24.
19. Stern, H. (1962). The significance of impulse buying today. *Journal of Marketing*, *26*(2), 59-62. http://dx.doi.org/10.2307/1248439

20. Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality, 15*(S1), S71–S83.
21. Weinberg, P., & Gottwald, W. (1982). Impulsive consumer buying as a result of emotions. *Journal of Business Research*, *10*(1), 43-57. http://dx.doi.org/10.1016/0148-2963(82)90016-9
22. Youn, S., & Faber, R. J. (2000). Impulse buying: Its relation to personality traits and cues. *Advances in Consumer Research*, *27*, 179-185.
23. Zhou, L., & Wong, A. (2004). Consumer impulse buying and in-store stimuli in Chinese supermarkets. *Journal of International Consumer Marketing*, *16*(2), 37-53. http://dx.doi.org/10.1300/J046v16n02_