

## A study on the relationship between Stores Size and Impulsive Buying Behaviour of Customers in Mumbai City

**Mohammad Khalil Ahmad**

Associate professor and Head, Department of Commerce, Burhani College of Arts and Commerce, Mumbai, Maharashtra, India

### Abstract

Impulse buying is a sudden phenomenon where instinct plays a predominant role. A customer makes a purchase without proper planning or prior homework. This is the scenario that marketers and retailers try to capitalize on and harness. They provide such impulsive stimuli, which are packaged innovatively, clubbed with basic needs and wants. In the name of instant gratification and glory, customers are often victimized. Instincts are driven by emotions, and emotions are driven by attitude and perception. Impulse buying behavior is very much in tune with the psychological and physiological need of the customer. Purchase decision is the most important factor in the buying process.

This article aims at finding out the influence of store size on impulsive purchase behaviour of the customers, the attributes that influence them, the relationship between the impulse and total purchase and finally to identify the prime reason to purchase from a particular store. The research design is descriptive and analytical. Sample size consists of 225 customers from Mumbai city. Using the structured questionnaire data were collected by following direct investigation method. ANOVA, Z-test, percentage analysis and Garrett's ranking has been used for the study

**KEYWORDS:** Impulse buying behaviour, store size, ANOVA, Retailing, Garrett's ranking

### INTRODUCTION

The Indian retail industry is the fifth largest in the world. Comprising of the organized and the unorganized sectors, India's retail industry has been one of the fastest-growing industries in India, especially over the last few years. Initially, the retail industry in India was mostly unorganized; however, with the change of tastes and preferences of the consumers, the industry is getting more popular these days and is getting organized as well. With growing market demand, the industry is expected to grow at a pace of 25-30% annually. The share of retail trade in the country's gross domestic product (GDP) was between 8-10 per cent in 2010, and reached the figure of 22 per cent by 2014. A McKinsey report, *'The Rise of the Indian Consumer Market'*, estimated that the Indian consumer market is likely to grow four times by 2025. Commercial real estate services company, CB Richard Ellis' findings stated that India's retail market moved up to the 39th most preferred retail destination in the world in 2014, up from the 44th position in 2010. Impulse buying is the purchase habits of consumers who buy goods or services at the beginning point of contact. This behavior is influenced many times by sale signs and advertisements at retail locations. In the world of sales, impulse purchases are the most important. Impulse sales alone can account for over 50% of the general purchases. Impulse purchases also help businesses to successfully release new products and maximize profits.

What makes an impulse sale so appealing to businesses is that they are instant sales, with the customer giving a little thought about?

- ❖Price
- ❖Reliability
- ❖Usefulness

Impulse sales are determined by 3 separate factors. These are:

- ❖First impression
- ❖Availability
- ❖Ease of purchasing

By using these 3 factors, retailers can work to encourage impulse purchases.

Impulse buying is a sudden phenomenon where instinct plays a predominant role. A customer makes a purchase without proper planning or prior homework. This is the scenario that marketers and retailers try to capitalize on and harness. They provide such impulsive stimuli, which are packaged innovatively, clubbed with basic needs and wants. In the name of instant gratification and glory, customers are often victimized. Instincts are driven by emotions, and emotions are driven by attitude and perception.

Impulse buying alters the normal decision making modules in consumers' mental space and rapture all consumer behavior philosophies. Consumer mental accounting is a process by which a customer codes, categorizes, and evaluates the financial outcome of a choice. Impulse upsets all the logical sequence of the consumers' actions, and then is replaced with an irrational moment of self-gratification and hence, alters the age old time-tested theories. Impulse items appeal to the emotional side of consumers. Some items bought on impulse are not considered functional or necessary in the consumers' lives.

According to the American Marketing Association: "*A purchase behavior is assumed to be made without prior planning or thought. Often, it is claimed, impulse buying involves an emotional reaction to the stimulus object (product, packaging, point-of-purchase display, or whatever) in addition to the simple acquisition act.*" Sometimes, customers are not able to express the selection of their brand and might not be aware of his internal decision making. However, an unconscious decision-making process takes place in his mind, which is influenced by cognition and experience. Thus, impulse buying behavior is very much in tune with the psychological and physiological need of the customer. Purchase decision is the most important factor in the buying process.

## **REVIEW OF LITERATURE**

Mattila (2008) reported the role of environmentally induced stimulation in influencing impulse buying. In addition, the author sought to investigate the impact of two social factors (perceived crowding and employee friendliness) on unplanned purchases. A wide variety of retail outlets in Singapore were selected as the context for this field study. Over-stimulation has a positive impact on impulse purchases. It indicates that perceived crowding and employee friendliness jointly influence impulse buying, and hence, these two factors need to be considered together in the store design. The retailers are fully aware of the power of impulse buying in enhancing their revenues, yet little is known about how the store environment influences unplanned purchases.

Cobb reported that impulse purchasing has long been considered a significant form of consumer buying action. Three types of grocery shoppers were identified based on the amount of product categories and specific brand planning, which occurs prior to entering the store. The findings provided some interesting insights into planned versus impulse purchase behavior.

Richens (2009) reported Marks and Spencer's Plan A, a comprehensive sustainability strategy with 100 commitments to improve performance on the environment and social

sectors. The initiatives undertaken by the company included its purchase of electricity from grid electricity suppliers under green tariffs and a campaign to connect their customers' buying habits with environmental issues. It indicated M&S's continuing commitment to improve its performance as it reached the halfway mark of Plan A, despite the difficulty in delivering its major parts.

### **PROBLEM STATEMENT**

To find out whether the size of a store has any role in influencing impulse purchases, and also to find out whether the personal profile of a customer has any role to play in impulse purchasing, and the study also examines the attributes of the source that influences impulse purchases.

### **OBJECTIVES**

- ❖ To find out whether the store size influences the impulse purchase.
- ❖ To find out the relation between the impulse and the total purchase.
- ❖ To find out the attributes that influences the impulse purchase.
- ❖ To identify the primary reason to purchase the product from a particular store (i.e., Small, Medium & Big store).

### **RESEARCH METHODOLOGY**

The research design is descriptive and analytical. The sample size refers to the number of items to be selected from the universe to constitute the sample. Sizes of 225 customers in Mumbai city were taken as the sample for the study. The stores were classified based on their size as large, medium and small. The stores with an area of around 10000 sq fit were classified as small stores .stores with an area of 10000 to 40000 sq fit were classified as medium stores, and stores with an area of more than 40000 sq ft were classified as large stores . From each kind of store, 75 customers were interviewed. Using a structured questionnaire, data were collected from the respondents by following the direct oral investigation method. The study was conducted during the period of October, 2013 to January, 2014. The Statistical tools used for the study included ANOVA, Rank Correlation, Z-test, Percentage Analysis, and Garrett's ranking

**Garrett's Ranking Method:** Garrett's ranking method is a kind of ranking method used in research to find out the ranks between various attributes. The percentage position is calculated as:

$$100(R-0.5)/N$$

Percentage position =  
N where R= Rank

N= Number of factors to be ranked.

The percentage position of each rank is converted into scores by referring to tables given by Garrett and Woodworth. Then for each factor, the ranks given by respondents are multiplied with their corresponding scores, and it is summed up.

### **HYPOTHESES**

- H1: The Size of the store does not influence the impulse purchase decision.
- H2: Personal profile of the customer does not influence the impulse purchase decision.
- H3: Amount of impulse purchase and total purchase are independent of each other.

## ANALYSIS & RESULTS

- Impulse Purchase and Size of the Store:** Impulse purchases by customers may be influenced by the size of the store. To find out whether this hypothesis (H1) is true (Table 1), the ANOVA technique was applied to find out the significant difference between the average amount spent on impulse purchases in large, medium and small stores (Table 2).

Size of the store	Average amount spent (Rs.)
Large	174.36
Medium	87.67
Small	49.47

Since Sig (p) < 0.05, the level of significance of the null hypothesis - that the average amount spent on impulse purchases remains the same in three kinds of stores was rejected. To find out in which store (as per the size), the impulse purchasing was more, the Post-Hoc test was applied (Table 3).

	Sum of squares	Df.	Mean square	frequency	significance
Between groups	614333	2	307166	27.968	0
Within groups	2438165	222	10982.7		
<b>Total</b>	<b>3052498</b>	<b>224</b>			

(i) store	(j) store	Mean difference	Sig(p)
Large	Medium	86.69*	0
	Small	124.89*	0
Medium	Small	38.20*	0

The significance level indicated that all mean differences are significant. This means that impulse purchases were significantly more in large stores, as compared to medium and small stores. Furthermore, it was significantly more in medium sized stores, than in small stores. Hence, it was concluded that definitely, the size of the store has a positive effect on impulse purchases (Table 3).

- Influence of Gender and Marital Status on Impulse Purchases:** To find out whether gender and marital status have any impact on impulse purchases, the Z-test analysis was done (Refer to Table 4).

**Table: 4 ANOVA Results - Influence of Gender And Marital Status On Impulse Purchases**

		Mean	1Z01	Sig(p)
Gender	Male	100.59	0.399	0.69
	Female	106.82		
Marital Status	Married	109.82	0.821	0.412
	Unmarried	96.14		

As the sig (p)>0.05, the null hypothesis that male and female, married and unmarried respondents make equal amounts of impulse purchases was accepted.

- **Garrett's Ranking and Rank Correlation:** There may be several reasons for purchasing products in a store. To find out the major reason for purchasing the products, the respondents were asked to rate the reasons for making a purchase - from 1 to 6 from their point of view (Perception). The Table 5 presents the ranks given by the respondents to large, medium and small stores. The ranks were obtained by applying Garrett's ranking method (Table 5). To find out which stores' customers have the same attitude towards ranking the reasons, rank correlation was found. The following are the rank correlations:  $R_{bm}=0.83$ ;  $R_{bs}=0.71$

$R_{ms}=-0.91$

**Table: 5 Reasons for Purchasing the Products in a Particular Store**

Factors	Big store	Medium store	Small store
Brand Image	6	6	5.5
Store Size	5	5	5.5
Price	4	4	4
Customer Service	3	1	1
Availability	1	2	3
Quality	2	3	2

The analysis reveals that customers of medium and small stores ranked the reasons in a similar manner. They ranked Customer Service as the primary reason (rank 1) for making a purchase decision. Generally, from all customers' point of view, customer service, product quality, and availability of products are the major reasons for buying products in a store.

**Table 6: Factors Influencing The Impulse Purchasing Behaviour of Customers**

Factor	Product display	Product price	Large variety	Store ambience	Need of the hour
Large	0.25	29	13	30	31
Medium	13	18	25	12	26
Small	20	23	19	6	26

- **Factors Influencing Impulse Purchasing Behaviour:** Generally, impulse purchases are influenced by the factors -Product display, Product price, Need of the hour, etc. To find out which factor influence the impulse purchasing behavior of the

respondents, more respondents were asked to give their opinion on the factors. The Table 6 gives the number of respondents indicating the respective factors (Table-6),

Store	R	R'
Large	0.439	0.193
Medium	0.32	0.102
Small	0.434	0.189

From the Table 6, it is understood that the "Need of the hour" was the most important factor that influences the impulse purchasing decision, irrespective of the store size. Store Ambience and Price also played a vital role in influencing impulse purchases in large stores, and Product Price was one of the most important factors that influenced impulse purchasing behaviour.

- **Impact of Impulse Purchases on Total Purchase:** Planned purchase is different from unplanned purchase. The stores that provide an opportunity for impulse purchases have more competitive advantage for making profits. Therefore, a store-wise analysis was made on total purchases and impulse purchases (Table-7).

Store	Source	D.F	Mean sum of squares	F	Sig(p)
Big	REG	1	8690611	17.4	0
	Residual	73	498133		
Medium	REG	1	1227419	8.3	0.005
	Residual	73	147255		
Small	REG	1	603215	16.9	0
	Residual	73	35556.5		

The correlation coefficients R=0.439, R=0.32, R=0.434 indicate that in a large store, the relationship between planned purchase and unplanned purchase was more. To ensure the regression of total purchase on impulse purchase, the ANOVA technique was applied (Table-8).The above ANOVA (Table) analysis ensures the regression of total purchase on impulse purchase. Since for all types of stores, sig (p) <0.05, the regression is significant. The following are the regression equations for Big, Medium and Small stores respectively.

- **For Big Stores: Total Purchase = 663.857+2.05**

Impulse purchasing indicates that every unit increase in impulse purchasing increases the total purchase by 2.05 units.

- **For Medium Stores: Total Purchase = 326.745+ 2.05**

Impulse purchasing indicates that every unit increase in impulse purchasing increases the total purchase by 2.05 units.

Age	Average
20-30 years	106.951
31-40 years	106.122
>40 years	85.2857

<b>Total</b>	<b>103.831</b>
--------------	----------------

**Table 10 : ANOVA Results -Impulse Purchasing Vs. Age**

	<b>Sum of squares</b>	<b>Df.</b>	<b>Mean square</b>	<b>frequency</b>	<b>Significance</b>
Between groups	11031.8	2	5515.88	0.403	0.669
Within groups	3041466	222	13700.3		
<b>Total</b>	<b>3052498</b>	<b>224</b>			

- **For Small Stores: Total Purchase =243.345 + 2.637 planned purchase** indicates that every unit increase in impulse purchasing increases the total purchase by 2.6 units. So, it was concluded that irrespective of the type of store, every unit of impulse purchasing increased the total purchase by 2.0 units on an average. Impulse purchasing may be influenced by age. To find out whether impulse purchasing is influenced by age, occupation and frequency of purchase, the ANOVA technique was applied (Table 9 & Table 10). As the  $\text{sig}(p) > 0.05$ , the null hypothesis that respondents belonging to different age groups make (on an average), the same amount of impulse purchases is rejected - i.e. age of the consumer does not influence his/her decision to make an impulse purchase.

**Table 11: Frequency of Purchases (In A Month) Vs Impulse Purchasing**

<b>Frequency</b>	<b>Average (?)</b>
1 time	73
2 -3 times	136.829
4-5 times	103.361
6-7 times	100.385
<b>Total</b>	<b>103.831</b>

**Table 12: ANOVA Result-Frequency of Purchases (In A Month) Vs Impulse Purchasing**

	<b>Sum of squares</b>	<b>Df</b>	<b>Mean square</b>	<b>Frequency</b>	<b>Significance</b>
Between groups	67267.4	3	22422.5	1.66	0.177
Within groups	2985230	221	13507.8		
<b>Total</b>	<b>3052498</b>	<b>224</b>			

<b>Occupation</b>	<b>Average</b>
Student	97.4468
House wife	109.569
Self Employed	106.639
Private employee	102.949
Government employee	101.923
<b>Total</b>	<b>103.831</b>

	<b>Sum of squares</b>	<b>d.f</b>	<b>Mean square</b>	<b>frequency</b>	<b>Significance</b>
Between groups	3986.43	4	996.608	0.072	0.991
Within groups	3048511	220	13856.9		
<b>Total</b>	<b>3052498</b>	<b>224</b>			

- Frequency of Purchases (In a Month) Vs. Impulse Purchasing:** Impulse purchasing influences the frequency of purchase in a particular shop in a certain period. The Table 11 shows the frequency of respondents' purchase in a month (Table 11). The ANOVA technique was applied to find out the significant difference between impulse purchasing and the frequency of making a purchase (Table 12).

<b>ITEMS</b>	<b>BIG</b>		<b>MEDIUM</b>		<b>SMALL</b>	
	<b>Planned</b>	<b>unplanned</b>	<b>Planned</b>	<b>unplanned</b>	<b>planned</b>	<b>Unplanned</b>
1. Apparel	61	14	1	-	-	-
2. Furniture	66	9	1	-	-	-
3. Home appliances	68	7	1	-	-	-
4. Electronics	54	21	-	1	-	-
5. Toiletries	42	33	50	25	47	28
6. Footwear	31	44	-	1	-	-
7. Cosmetics	25	50	14	61	28	53
8. Sporting goods	24	51	31	44	30	45
9. Groceries	44	31	56	19	49	26
10. Toys	21	54	35	40	-	1
11. Fruits & Vegetables	51	24	42	33	48	27

As the sig (p)>0.05, the null hypothesis that - the respondents visiting the stores at different number of times spend, on an average, some amount on impulse purchasing is accepted.

- **Occupation Vs Impulse Purchasing:** Impulse purchasing influences the frequency of purchase in a particular shop in a certain period. The Table 13 shows the frequency of making a purchase in a month. The ANOVA technique was applied to find out the significant difference between the occupation of the respondents and the impulse buying (Table 14). As the sig (p)>0.05, the null hypothesis - that the respondents belonging to different occupations spend, on an average, some amount on impulse buying- is accepted.
- **Items Contributing To Impulse Purchasing:** The respondents were asked to give their opinion on those items which they purchased in an unplanned manner. The Table 15 shows the number of respondents in three types of stores buying various items in a planned and unplanned manner (Table15). From the Table 15, it is understood that irrespective of the store size, in the case of cosmetics, sporting goods, fruits, vegetables, and toiletries, the impulse purchasing behaviour was more.

## FINDINGS

- 1)The size of the store greatly influenced the impulse purchasing behaviour of the respondents - the larger the store, the higher will be the impulse purchasing behaviour exhibited by the respondents, and hence, the total purchases made will also be higher.
- 2)Every unit of impulse purchasing increases the total purchases by 2 units on an average.
- 3)"Customer service" was the primary reason which attracted the respondents towards a particular store.
- 4)"Need of the hour" was the primary factor/attribute that influenced the impulse purchasing behaviour of the respondents.
- 5)In the case of large stores, "Store ambience" and "product price" were the major factors that influenced the impulse buying behaviour.
- 6)Cosmetics, Sports goods, and toiletries were the items that fell into the unplanned/ impulse purchasing category.
- 7)Personal factors such as age, occupation, frequency of visits to the stores did not influence the amount spent on impulse buying.

## SUGGESTIONS

- 1)Training programs on customer service may be encouraged to attract the customers to the stores.
- 2)"Store ambience" may be concentrated upon to attract the customers to the stores.
- 3)A good and novel variety of cosmetics, sports goods and toiletries may be kept in the stores, which can grab the attention of the customers, and lead to impulse purchasing behaviour.

## CONCLUSION

The findings and analysis of the study lead to the following conclusions that size of the store influences the impulse purchasing behaviour - the larger the store, the higher will be the impulse purchases made by the customers, and the amount of total purchases made increases due to impulse purchases made by the customers. Furthermore, "Store ambience", "Need of the hour", and "Customer service" were the important factors influencing the impulse purchasing behaviour. Cosmetics, sports goods and toiletries

were the items purchased more in number by the customers when they were exhibiting impulse purchasing behaviour.

## REFERENCES

- 1)Cobb, Cathy J. (1986). "Planned Versus Impulse Purchase Behavior." *Journal of Retailing*, winter 1986, Volume 62, Issue 4, p. 384.
- 2)Gupta Sumeet, Heng Xu, and Sahu Vimal (2009). "Impact of Store Size on Impulse Purchases." *The ICFAI University Journal of Marketing Management*, Vol. VIII, No. 1.
- 3)Hibberd, James (2007). "Impulse Buying." *Television Week*, Volume26, Issue 1.
- 4)Kotler Philip and Armstrong Gary (2008). "*Principles of Marketing*." 12th Edition, New Delhi: Pearson Education.
- 5)Levy Michael, Weitz Barton A. (2011). "*Retailing Management*." 8th Edition, New Delhi: Tata McGraw- Hill Publishing Company Limited.
- 6)Mattila, Anna S. (2008). "The Role Of Store Environmental Stimulation And Social Factors On Impulse Purchasing" *Journal Of Service Marketing*, Volume 22, Issue 7, pp. 562 - 567.
- 7)Nargundkar Rajendra(2008). "*Marketing Research: Text and Cases*." New Delhi: Tata McGraw Hill Publishing Company Limited.
- 8)Richens, James (2009). "M&S: What's In Store From Ambitious Plan A." *Environmental Data Services*, Issue 413, pp. 36-39.
- 9)Varley Rosemary and Rafiq Mohammed (2004). "*Principles of Retail Management*." New York: Palgrave Macmillan.
- 10)Vedamani Gibson G. (2006). "*Retail Management: Functional Principles and Practices*." Mumbai: Jaico Publishing House.