

Consumer's Impulsive Buying Behaviour on E-Commerce Platform: an Exploratory Study on the Influence of External and Internal Factors

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Abstract: With the expansion of the E-commerce platform, there is significant evidence that impulsive buying is a trend that has been the focus of researchers across different genres. Online Impulsive purchase has increasingly gained scholarly attention across all the genres. Although the perceived quality of the online sites is significant, the consumer's buying behaviour is also a vital factor in how and why consumers respond impulsively. Little Effort has been made to ascertain the status of the findings and summarize the results. To bridge this study vacuum, a comprehensive analysis of online impulsive purchase behaviour was conducted using the Stimulus-Organism-Response approach to define and characterise variables that have impacted purchasing decisions. A conceptual framework was then developed to better understand the relationship, with the key constructs being atmospheric variables, time spent on website/app activity, and Impulsive Buying Tendency (IBT), all of which influenced a customer's desire to buy in the context of online shopping in India. The investigation came to a close with the study's results and future scope.

Keywords: Impulsive Buying, S-O-R Framework, E-Commerce Platform

INTRODUCTION

The significance of impulsive buying in online shoppers has been evident recently. Studies have proved that more than 40% of purchases that have been made are categorized in the retail sector under impulsive purchases (Hausman, 2000). Meanwhile, The E-commerce platform has been in India for over 10 years, where it has been able to grasp the attention of the consumers with the coming of Various Sites, i.e., Flipkart, Amazon, Myntra, etc.

"The bulk of B2C eCommerce merchants in India entice clients to shop online by giving deals like free shipping, discounts, buy-one-get-one-free, and exchange incentives."
(Halan, 2020).

"From US\$ 38.5 billion in 2017, the Indian e-commerce sector is anticipated to rise to US\$ 200 billion by 2026. An rise in internet and smart phone usage has fuelled most of the industry's development." (IBEF, 2020) Coming to the market share of Online Retailers, Flipkart is the largest online retailer with 31.9% market share, followed by Amazon with 31.2% (Forrester, 2018). Indian retail is anticipated to reach \$1.3 trillion by the end of 2020, according to a research by FICCI and PwC on Indian E-commerce. According to data, individuals spent a staggering Rs 875,600 crores for a variety of causes. (Live mint, 2020).

Recently, with the Pandemic going on, the average spending by Indian consumers on various online sites has gone down by 16% during the lockdown phase that began in March, even though the majority of them were confined to their houses (The Indian Express, 2020)

Environmental and atmospheric cues also play a pivotal role in promoting the urge to buy in a physical store and E-commerce platforms (Xiang, Zheng, Lee, & Zhao, 2016) [1]. Still, the nature of the trigger points for both of them is different. For online retail, there is the absence of physical or experiential touch and feel of products which leads to a spontaneous purchase of such products (Park, 2008)

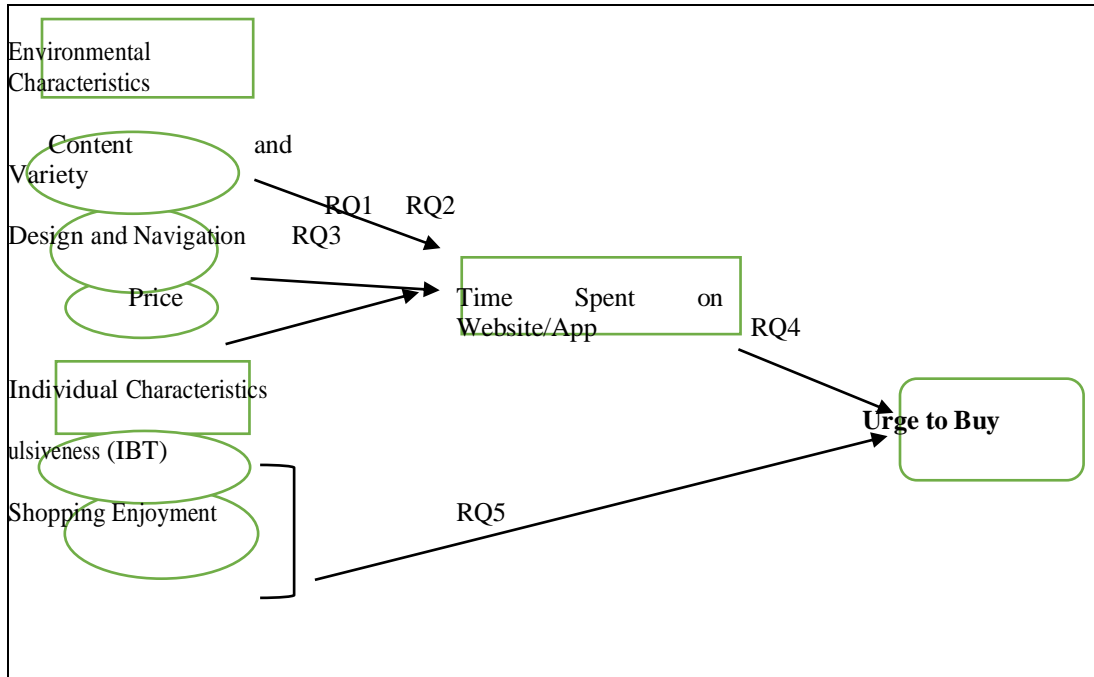


FIGURE 1. Framework for this Research

Defining Impulsive Buying was first carried out (Stern, 1962), who stated that buying stimulus blends with a rational buying decision. The decisions made are heavily driven by external characteristics and have zero effect when making everyday purchases. He furthermore established four main categories of such urge to buy: pure impulse purchases like a bar of chocolate at the line of Store (Eg: Big Bazaar), Second, reminded impulse buy (Eg: Sauce Bottle near some snacks). Thirdly [2], these are the suggested ones (Eg: When purchasing an expensive product, warranty for those devices is presented). Lastly is the planned one where they know what they want to buy but don't know what the product is about and the specifications.

For this Exploratory Study, **Stimulus-Organism-Response** framework was implemented. This framework was chosen as it was able to measure the impact of environmental cues from online apparel stores on time spent on website/App activity and its effect on the consumer's need to buy. It also considers individual character traits of impulsiveness and shopping enjoyment inherent in a person and its direct relation to their felt urge to buy (Lin & Lo, 2015). The research model used in this study has been outlined shown in Figure 1.

Given the area of research, A systematic study was required based on the buying pattern and the consumer's behaviour when purchasing products through online stores [3]. This research would also help in identifying gaps, opportunities and provide future scope.

The Three Main Objectives of this study was: -

1. Identifying the buying behaviour of the consumers and the factors that associate the impulsive stimuli
2. Understanding the reasons for impulsive buying behaviour and identifying research pattern that through existing data.
3. Providing a Framework that demonstrates the connection between the dimensions of purchase behaviour and future research opportunities

LITERATURE REVIEW

Impulsive Buying

In the early 1940s, the concept of impulsive shopping was initially established as an illogical habit (Luna & Quintanilla, 2000). Even now, there is no definitive description of these phenomena (Amos, Keneson, & G.R., 2014)

The concept was further explained by (Piron 1991), "Impulsive purchase is a situation where the decision is not rational due to exposure to impulse stimulus which leads to a sudden urge to buy [4].

Impulsive purchases are predominantly practical, in which the physiological dimensions of the assets influence consumer buying behaviour to a more significant degree than the usual reasonable and rational facets while making a purchase (Luna & Quintanilla, 2000).

Because of the development and importance of this sector as a sales channel, a study on impulsive behavior when purchasing items via E-commerce is required (Eurostat, 2017)

Online Urge to Buy

More than 66% of the European countries buy products online [5]. The fashion industry alone contributes around 80-85% of the purchases and other segments, the most purchased categories in Europe (Eurostat, 2017).

Often there is a disagreement that the buying behavior during an online purchase is reasonable, as consumers are likely to know about the product for information and then compare before concluding (Koski, 2004). But, the decisions that are made are not always pre-decided, sometimes the sudden urge to buy plays an important role (Jeffrey & Hodge, 2007); (Verhagen & Van Dolen, 2011);

According to Researchers, the Impulsive urge to buy is a construct that many researchers as a trait witness to show a state which triggers a stimulus-response just before making the purchase [6]. (Adelaar, Chang, Lancendorfer, K., & Morimoto, 2003);(Verhagen & Van Dolen, 2011);(Wells & Valacich, 2011).

Recent studies on consumer purchase decisions on E-commerce platforms were reasonable and rational (Sharma, Sivakumaran, & Marshall, 2010). The study suggested that commodities for which physical proximity is a must, such as clothes, are purchased more in actual stores than digital retail (McCabe & Nowlis, 2003).

The development of the internet has significantly brought a new outlook as to how the individuals in the market communicate and make buying decisions [7]. In the late 1980s, it was established that with the introduction of credit cards, direct marketing, and tele advertising, impulse buying affected buying behaviour (Rook & Fisher, 1995). The urge to choose the product created by temptation triggers the stimulus and makes the customer choose impulsive buying (Greenfield, 1999).

Prior research has shown us that other consumers influence consumer behaviour when purchasing a product, and that effect could be more significant online than offline. Hence, Social Media can be a critical tool to simulate the purchase of impulse (Riegner, 2007).

S-O-R Framework

“A retail environment comprises stimuli (S) that impact organisms (consumers; O) and result in approach or avoidance reaction (R) behaviours toward the store, as well as behaviours like store searching, intention to purchase, and repurchase intention,” according to Mehrabian and Russell (1974).”(Cheng & Yeong Gug, 2014).This framework is associated with the environmental behaviour that is attributed with numerous experiments for examining the phenomenon of impulsive buying in retail outlets as well as E-commerce platforms(Wells & Valacich, 2011);(Floh & Madleberger, 2013);and (Lin & Lo, 2015) [8].

Thus, the retail stores consistently find ways to attract the customers and also trigger the stimulus during the purchase, which can heavily contribute to purchasing of the commodity (Verhagen & Van Dolen, 2011)

Retailers will create a blend of practical and functional value elements of atmospheric stimuli to attract users and first-time visitors (Park, Kim, Funches, & Foxx, 2012).

RESEARCH METHODOLOGY

Research Methodology has primarily been focused on data collection. Primary data will be collected by conducting survey research and qualitative interviews.

Type of Research- Quantitative

Sampling- Random Convenience Sampling, Random Snowball Sampling.

Sample Size- 200 respondents

The Sample Size of 200 respondents was chosen according to the large audience that caters to online shopping. The Sample size was calculated using Cochran's Formula, which gives us the ideal sample size and precision level [9]. So, A random sample of 198 consumers was taken in our targeted audience, which was enough to provide the confidence level needed for data collection.

Questionnaire

The questions for the study were selected based on research conducted on the same topic about user perception and the buying behaviour of the consumers in different geographical locations across the country amongst young adults.

A pilot study had been conducted with 30 respondents to gauge the understanding of the questions among the respondents. It was ensured that the respondents understood what the questions meant and were correctly framed and interpreted before rolling out the questionnaire to the other respondents [10]. The targeted population selected

for the study were consumers who were into online shopping in India between 18-45. A non-probability convenience sampling technique was used to collect the data. It is a simple, fast, and economical method, primarily considering the researcher's convenience in data collection (Takona, 2002).

Statistical Tool & Software

The numeric data obtained from the close-ended questions were entered in a spreadsheet to collect the responses. Statistical tests such as One-Way Anova Test, Mean score analysis, Descriptive study were conducted on the data. Simple statistical tests were also performed on the descriptive questions. The software used for the data analysis has been Microsoft Excel 2019 and SPSS version 26 [11].

RESULTS AND FINDINGS

The **Cronbach's alpha** values for the atmospheric variables for the scale items from the questionnaire were: Content :0.84, Variety: 0.83, Design:0.92, Navigation: 0.77, Price: 0.89. The composite reliability for the individual characteristic scale items was: Shopping Enjoyment:0.80, Impulsiveness (IBT): 0.81 [12]. The composite reliability values for other scale items were: Time Spent on Website/App: 0.72 and Urged to Buy: 0.80.

One-Way ANOVA Test

The One-Way ANOVA Test was conducted on the gender and age of buying tendency; the P-Values shown were 0.458 and 0.530, respectively. This means that the values are more than what the pre-requisite significance level of 5% is. As a result, the test revealed no difference between the customers who have impulsive buying behavior and between age and gender [13].

Impact of Atmospheric Values on Buying Activity

A total of six constructs were selected to be researched for the study, which was Design, Navigation, Content, Variety, Price, and Promotion. After the data was collected from the questionnaire, it was coded into SPSS, following which Descriptive Statistics was undertaken to understand how they affect each of the characteristics. The survey was conducted on a **5-point Likert scale** with a range of Strongly Agree to Strongly Disagree (1-5). So, if a responder selects a higher number, it indicates that the consumer had a bad experience with that aspect in general, and vice versa for a lower value [14].

65 percent of the 200 people who took part in the survey were female, while 35 percent were male. The majority (83%) of those surveyed are between the ages of 18 and 23, with the remaining (17%) being between the ages of 23 and above. Young people were chosen because they spent the most time on the E-Commerce platform and were more likely to engage in impulsive conduct.

The study on the Impulsive Buying Tendency was divided into three parts: Non-Impulsive Behavior, Neutral, and Impulsive Behavior. The Mean data was calculated [15]. Also, the Likert Scale was used for the collection of data. From the result, the mean score of the individuals has categorized whether a score was above, below, or around 3. The findings showed 34% of the total respondents had an impulse buying behavior, 47% were shown to be non-impulsive, and 19% were neutral.

The test conducted was a Simple Linear Regression on the six constructs against time Spent on Website/App Activity to test the constructs' reliability and relevance [16].

H1: An online consumer has a distinctive relation between atmospheric traits and the Time Spent on Website/App activity.

The R^2 value in the regression test explained 3.7% (Content) and 5.7% (Variety) for the variability in the data. The P-Value for the content and the variety were 0.03 and 0.012, respectively; thus, the Null Hypothesis was rejected.

H2: A distinctive relation among the atmospheric cues, design, and navigation, with time Spent on Website/App activity shown by the online shopper.

At a 5% significance level, the navigation variable had a *p*-value of 0.034, and the design had 0.085. Thus, the null hypothesis was rejected for navigation favoring the alternate idea but not for the structure variable.

H3: A distinctive relation amongst the atmospheric variables, price and promotion, and time Spent on Website/App activity shown by the consumers.

Price and promotion were found to have significant values of 0.156 and 0.092, respectively. In the case of promotion, the null hypothesis was thus rejected at a 5% significance level in favor of the alternative hypothesis. Even yet, the null hypothesis was not used for the price variable [17].

TABLE 1. Atmospheric variables descriptive statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Design	200	1.00	5.00	3.6634	0.65616
Navigation	200	2.00	5.00	3.8812	0.60660
Content	200	1.00	5.00	3.8564	0.73259
Variety	200	2.25	5.00	3.9480	0.54922
Price	200	1.00	5.00	3.7079	0.70095
Promotion	200	1.50	5.00	3.4257	0.79179
Valid N (listwise)	200				

According to Table 1, the null hypothesis is rejected for navigation in favour of the alternate ideas but not for the design variable. The design variable has a mean score of 3.66, and this means that according to regression analysis, this does not have any impact on the Time Spent on the Website/App activity of the consumer. Moreover, it means that the aesthetic appeal, design, and attractiveness do not influence consumers' buying behaviour [18].

Although the mean score of prices was 3.70 (Table 1), this result showed that there wasn't any distinct correlation between the product's price and the Time Spent on the Website/App activity of the individual. Table 2 shows the simple linear regression analysis.

TABLE 2. Simple linear regression analysis

Independent Variable	Dependent Variable	R-Square	Sig.	B coefficient
Content	Time Spent on Website/App	0.037	0.03	0.196
Variety	Time Spent on Website/App	0.057	0.012	0.302
Design	Time Spent on Website/App	0.03	0.085	0.174
Navigation	Time Spent on Website/App	0.035	0.034	0.231
Price	Time Spent on Website/App	0.02	0.156	0.134
Promotion	Time Spent on Website/App	0.092	0.002	0.253
Time Spent	Urge to Buy	0.12	0.018	0.336
Impulsive Buying Tendency (IBT)	Urge to Buy	0.115	0.001	0.277
Shopping Enjoyment	Urge to Buy	0.093	0.002	0.25

Impact of Time Spent on Website/App and Urge to Buy

Here, Time Spent on Website/App is a secondary activity, which can impact various external characteristics. It aims to achieve a relationship between the time Spent on Website/App activity and the importance of its correlation with the need to buy.

H₄: A unique relationship between the Time Spent on Website/App activity of the online shopper and the felt urge to purchase.

The study found that 12 percent of the variation in the data could be explained. The P-value for Time Spent on Website/App was 0.018, indicating that Time Spent on Website/App had a significant influence on a consumer's

desire to buy at a 5% significance level. As a result, the alternate hypothesis was accepted whereas the null hypothesis was dismissed [19].

The connection between Time Spent on Website/App and the other component (desire to buy) was determined to be significant with a p-value of 0.004 at a significance level of 1%.

The Final Research Question seeks to know the impact on the individual characteristics when they felt the urge to buy. Traits such as the time they have enjoyed or their impulsive buying tendency, all of which are considered to attribute the need to purchase and make it an impulsive buying.

For this question, a 5-point Likert Scale was used, which had Strongly Agree and Strongly Disagreed on either side of the scale. In this case, the time the shoppers enjoyed while shopping had a mean score of 3.54, which is more than the average, indicating that the customer's enjoyment level from shopping was high. Meanwhile, the mean score of Impulsive Buying Tendency was 3.43 and lower than the average, which means the respondents did not feel as impulsive nature most of the time when buying. (Ref. Table 3)

TABLE 3. Descriptive Statistics (IBT, Shopping Enjoyment and Urge to Buy)

	Mean	Std. Deviation	N
Urge_To_Buy	3.5327	0.62436	200
Shop_Enj	3.6172	0.76505	200
ABOUT	3.4321	0.76009	200

H5: There is a correlation between the consumer's traits when enjoying shopping and Impulsive Buying Tendency with a need to purchase of the online customers

Shopping pleasure and IBT were found to have p-values of 0.001 and 0.002, respectively. As a result, at a 5% significance level, the alternate hypothesis was accepted, whereas the null hypothesis was rejected [20].

DISCUSSION

On Conducting an Exploratory study of 200 Respondents, around 65% of the respondents were females, and 35% were males.

The study consisted of various tests, including Descriptive Analysis and the One-Way ANOVA test; we extracted the following information from the collected data.

The investigation posed five research questions based upon the impulsive buying behaviour of online consumers and attempted to study them according to the data collected. The Research Questions addressed the various atmospheric cues concerning E-Commerce shopping, the environment, and other factors.

The Regression Analysis showed a distinct relationship between four constructs concerning time Spent on Website/App activity, i.e., Content, Promotion, Variety, and Navigation. Different traits were administered and taken into consideration when the study was conducted viz-a-viz quality of content, visual presentation, product details, etc.

The investigation additionally uncovered a critical connection between the special offers, limits, and arrangements offered by the online store and the perusing movement of the person. Because of the limitations and proposals, the apparent addition or incentive was seen as a fascination for the customer, drawing in them in perusing the store. Moreover, it also revealed that the more time an individual spends time Spent on a Website/App for products, the greater the urge to buy various products. This compares with past writing and studies, as a more drawn-out perusing time permits more chances to go over items and feel an allurements or rather a desire to get them. In the long run, this could lead to impulse buying, based on how solid the felt inclination to purchase is and what their everyday need is.

The Final Question deals with the relationship between the characteristics and the shopper's need to buy a particular product. The study revealed a unique relationship between the need to purchase the product and the enjoyment the shopper experienced during the process. Moreover, it was hence proved that individual characteristic traits were having a significant impact on the buying pattern of the consumers.

CONCLUSIONS

As people are welcoming Social Distancing to curb the spread of the Pandemic, it has led to a drop in shopping in physical stores. This has shown to increase the revenue for online shopping sites as consumers would turn to E-Commerce platforms. I feel that Impulsive Buying Behavior is a force that drives the sales of the business. One of the most important reasons for this behavior can be associated with our culture of consumption, which tempts us to buy products without having a second thought. The purchase made can be due to various reasons like Social Status,

Peer-Pressure, Anxiety, etc. (Badgaiyan & Verma, 2014)(Lim & Yazdanifard, 2015).

Hence, the first question in the questionnaire asked by the respondents was from which E-Commerce platform they had last purchased from and the product type. The responses received were from consumers who use E-Commerce platforms such as Flipkart, Amazon primarily for day-to-day needs, and Myntra, Koovs for Fashion Apparel.

The main objective was to determine whether the respondents have a good shopping experience when exploring the Online Retail store. The collected data led to some intriguing findings that, if applied by the online retail stores, can boost sales and generate a huge market base(Van Der Heijden, Verhagen, & Creemers 2003). Some of the suggestions that can be made from the study were:

- The details on the product information on the website, which are content, variety were taken positive feedback to every individual. For consumers, the product information must have rich value and an accurate description, which leads them to buy the product quickly and have a good shopping experience. For Example, Myntra can show short snippets between the products, which the consumers well received.
- Ease of Navigation is another factor essential for an online shopper; just as any retail store can navigate us through the store, online E-Commerce should be able to replicate. Here, the respondents received Flipkart very well as a factor of functional continence needs that could target the audience quickly, hence creating a clean layout and perfect blend of using filters while shopping.
- Promotions, Discounts are some of the critical factors that pull customers into online retail sites. The Enticement of getting the best of the deals from these sites is one of the most enthralling times for the buyers. Especially During Amazon's Big Billion Days, Flip kart's Independence Sale, etc. Tapping into Potential shoppers is the key to success for these E-commerce Platforms and a highly effective way of having products with more excellent perceived value.

This research can be of use and help for further study, research and understanding. Marketing researchers could use this as a platform to understand and dive deeper into the consumer's mind to know what they feel and how during the purchasing process and also, the E-commerce platforms can take cues on how to increase the sales and revenue this could be made more commercially viable from a marketing perspective.

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