

THE ROLE OF PRODUCT ATTRIBUTES & DEMOGRAPHIC FACTORS IN ONLINE IMPULSE BUYING OF GROCERY

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Abstract

Purpose– In this paper we look at the various product attributes and demographic variables and understand its role in the online impulse buying of grocery products. The research establishes empirical evidence to examine the importance of product related information with reference to online impulse purchase.

Research methodology – An online research survey from 310 online shoppers belonging to cities Mumbai & Pune in India was conducted. A random sampling technique was utilized for data collection. Data was analysed in SPSS using validity and reliability tests and non-parametric test chi-square was used in establishing the degree of association.

Findings – The findings of this research clearly identifies certain product attributes instrumental in online purchase of grocery. Product description parameters such as band, information about product delivery, virtual product presentation, etc propel consumers to purchase grocery impulsively. Demographic factors such as age, income, gender, profession and education have rather no effect on the consumers' impulse purchase behaviour.

Research limitations – The research focusses more on product description and demographic information to assess its influence on impulse buying. The research can consider internal and external stimuli that can be induced to propel impulse purchase. Also, the focus is more on consumers living in urban places rather than Tier 1 and Tier 2 cities where online grocery delivery is increasing.

Practical implications – The results of this research can be used by businesses to identify areas of improvement with specific reference to product related information. The research can help marketers to set a premise on which demographic information and product description parameters can be strengthened.

Originality/Value – This paper provides a clearer understanding of consumer's impulse purchase of grocery products in the online space and eventually help marketers understand the importance of product related information that can be used by them to their advantage to induce impulse buying.

Keywords: Product Description, Online Impulse Buying, Online Grocery, Demographics, Consumer Behaviour.

Introduction:

The days of going outside to buy groceries from the closest Kirana or a small grocery store on a weekly or monthly basis are long gone. Besides, grocery expenditure in India accounted for 21 percent of India's economy. Moreover, groceries and snacks are now delivered at the gentle push of a button on an app. However, rapid change is seen in India's megacities. The urban middle-class families are addicted to online shopping thanks to a year of intense marketing, big sales from e-commerce companies like Amazon and Flipkart, and the COVID-19 pandemic and lockdowns. The market value of online grocery across India was 396 billion Indian rupees in 2022. Despite this, over 95 percent of Indian grocery stores are made up of Kirana's or a small grocery store. While supermarkets account for about four percent of total grocery shares, online groceries are not even near one percent. About two-thirds of India's population resides in rural areas that are largely unaffected by the modern retail forms. Even when people change their shopping habits and transfer some of their purchases offline, it was predicted that online grocery ordering will become part of the new normal. The COVID-19 pandemic is one of the main causes for this expansion. In order to adhere to lockdown-related regulations and maintain social isolation, it forced customers, particularly those in metropolitan regions, to use online platforms for everyday grocery shopping. During the pandemic, it was easier for customers to purchase groceries via online platforms because of initiatives like "contactless delivery" and the opportunity to make payments online. Additionally, many who work from home were attempting to strike a balance between work and leisure while still effortlessly getting their groceries online with a few taps on their mobile devices. Online grocery shopping appears to be here to stay at a level far greater than could have been previously imagined, even after life has returned to a state of normalcy after the pandemic. The Indian Online Grocery Market stood at USD3.95 billion in 2021 and is expected to grow at a CAGR of around 33.00% in the forecast period, to reach USD26.63 billion by 2027. Changing consumer preferences, growing disposable income, new market entrants, and increased focus on expanding e-commerce business and adoption of attractive marketing strategies are the primary driving factors influencing the growth of the Indian Online Grocery Market during the forecast period. Rapid urbanization, increasing working population, and growing passive lifestyle adoption leaves less time for household chores. Consumers are actively adopting services and products that can add to comfort and convenience and improve living standards. The adoption of an online grocery system by consumers is expected to grow at a rapid rate as the market players provide all the necessary household items in a few hours at discounted rates. The market players are making high-end investments to upgrade their systems and develop an efficient supply chain, transportation system, and inventory to meet customer requirements. The proliferation of smart devices and the availability of affordable internet facilities make online platforms easier and more convenient for consumers. With Covid-induced lockdowns providing necessary tailwinds to the online grocery industry, total active users for the segment have touched close to 23 million users, according to estimates from management consultancy Redseer. The active user base for the segment has almost doubled from 2019, when it stood at 12 million. With factors like doorstep contactless delivery, easy transactions, and with these platforms maintaining quality and hygiene, users preferred it for convenience and safety purposes. But what makes this space interesting is how the segment is set to grow till 2025 especially after the Covid impact.

Literature Review:

Impulse buying occurs when an individual makes an unintended, unreflective and immediate purchase whereas a planned purchase is characterized by deliberate, thoughtful search and evaluation that normally results in rational, accurate and better decisions (Halpern 1989; Johnson-Laird 1988). Contrary to a planned purchase, impulse buying is a spontaneous and immediate purchase (Fisher 1995) where the consumer is not actively looking for a product and has no prior plans to purchase (Beatty and Ferrell 1998). Beyond spontaneity, Rook (1987) further described impulse buying as an intense, exciting urge to buy without regard to the consequences of the purchase decision. Rao & Laverie (2004) suggest that impulse purchases exist on the Internet and there are stimuli other than the product that can cause the eventual impulse purchases. Their research supports that both in-store browsing and mood states influence impulse purchases on the Internet. Yet, perceptions of quality and experience with the product are not as realistic online. Childers et al. (2001) suggest, if shoppers believe that the sensory information available via the interactive media is sufficient, there is reason to believe that the shoppers will enjoy using the new media for web-shopping. "Webmosphirics" according to Childers et al. (2001) represents the virtual environment counterpart to the physical surroundings associated with the retail atmosphere (such as Graphics, text, pop-up windows, search engine configuration, audio, color, streaming video, and organization and grouping of merchandise), may lead to impulse buying. Ramus and Nielsen (2005) enumerate that online shoppers perceive internet grocery shopping an advantage when compared to conventional grocery shopping in terms of convenience, product range and price. Disadvantages, which could act as mental barriers, are, for instance, the risk of receiving inferior quality groceries and the loss of the recreational aspect of grocery shopping. Morganosky and Cude (2000) reported convenience and saving time as the primary reasons for buying groceries online but cited physical or constraint issues that made it difficult for grocery shoppers to shop at grocery stores. Over time, researchers began to look at consumer characteristics rather than product characteristics or stimuli as it was agreed that impulse purchasing is not confined to any particular product or product category (Rook 1987). Online buyers tend to be variety-seekers because they would like to explore the wide range of selections offered on websites (Lim & Dubinsky, 2004; Moe, 2003). Sharma et al. (2010), revealed that variety-seeking behavior would allow consumers to engage in impulsive buying behavior because variety-seeking is directly linked to unplanned buying. Well-defined list of products, highlighted recommendations leads to impulse purchase behavior (Jeffrey, 2007). Different types of products can also stimulate impulse buying. Hedonic products provide more experiential emotions, such as fun, pleasure, and excitement, whereas utilitarian products are primarily instrumental and functional [Hirschman & Holbrook 1982]. The non-price attributes of product, such as brand, origin, food safety, quality, and image, are important for consumers' grocery shopping, especially their shopping for fresh food (Grunert, 2005; Schnettler et al., 2008; Lim et al., 2013; Underwood and Klein, 2002). Shopping for grocery online save time and reduce effort as the bought grocery gets delivered to home (Burke, 1997). Internal factors of impulse buying focus directly on the individual, examining the internal cues and characteristics of the individual that make them engage in impulse-buying behavior. Such factors involve a consumer's personality traits which determine the degree of

their impulse-buying), internal cues such as emotional states and demographic factors (Kacen and Lee, 2002).

It is critical that e-vendors provide effective information about the product attributes on their website for consumers to evaluate and make purchase decisions efficiently. This is because consumers lose the opportunity to evaluate the products through touch-and-feel experience and have to rely on second-hand information to make purchasing decisions (Pechtl, 2003; Ramus and Nielsen, 2005; Chu et al., 2010; Gong et al., 2013). Online consumers learn price and non-price attributes of products through the descriptions and pictures displayed on the e-vendor's website. They can search across e-vendors for lower prices and for specific attributes of products (Alba et al., 1997; Degeratu et al., 2000). Although consumers benefit from attribute search, the greater product variety online increases the marginal cost while decreasing the marginal benefit of the search (Richards et al., 2016). Consumers terminate their search rather quickly when they reach the point where the expected cost of considering alternatives is greater than the potential benefit (Alba et al., 1997). The online shoppers, not only access a greater variety of products but also face a larger group of e-vendors with diversified characteristics aiming to distinguish themselves from each other to attract business.

Research Methodology:

Based on our literature we propose the following research objectives followed by the hypotheses to be tested.

Research Objectives:

1. To identify the role of product description attributes in online impulse buying of grocery.
2. To study the demographic factors of consumers who buy online grocery.
3. To establish the association between demographic factors and online impulse buying of grocery.
4. To investigate the elements that influence online grocery shopping.

Since we would like to study incidence of online impulse buying of grocery and establish its dependence or independence with respect to Product description attributes namely Quantity, Package Size, Brand, Price, Product Delivery Information, Packaging, Quality, Virtual Product Presentation & Variety and Demographic factors viz. Gender, Age, Education, Area, Profession & Income the following two hypotheses would be tested as a part of this research.

Hypothesis I: There is significant association between online impulse buying of grocery products and product description

Hypothesis II: Online Impulse Buying of Grocery Products varies with demographics parameters like Gender, Age, Education, Area, Profession & Income.

Data collection

The research employed a two phased market research study to understand the role of product description and demography and factors that influences consumers to buy groceries on impulse online:

1. A quantitative research where more than 500 consumers were sent a link to the online survey for online grocery shopping. The final responses gathered were 310. The survey was sent randomly to consumers without any prefixed quota
2. A qualitative research was done by using the mini group discussion method to understand factors that propel consumers to buy grocery on impulse. The composition of the focus group was;
 - a. 4 females in the age group of 25-45 years
 - b. 4 males in the age group of 25-45 years

Profile of respondents for the focus group discussion:

The focus group research was conducted with respondents who bought groceries online at least twice a month and their monthly household income was more than 60000

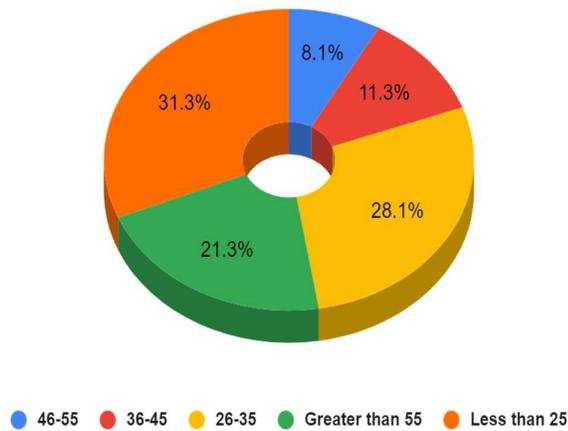
1. The 4 females (25-45 years) were all employed out of which 2 worked from home
 - a. 1 lived in a joint family and 3 in a nuclear family
 - b. 1 was unmarried. The other 3 had atleast a child.
2. 1 of the younger male (25-35 years) was self-employed while three were employed
 - a. All were married with three having a toddler each
 - b. 3 lived in a joint family and 1 in a nuclear family

Google forms were used to generate an online standardized questionnaire. Using emails, and other phone based communication applications, the questionnaire was linked to the researchers' contacts. Participants were encouraged to make the survey as widely accessible as possible. It was an online research project. The research was open to everyone who has access to the internet. The first section of the survey inquired about demographic data such as respondents' gender, age, educational qualifications, monthly family income, and career. The second section of the survey focused on consumers' choices with respect to the product description attributes that influences consumers to shop grocery impulsively. The elements that influence customers' decisions to buy groceries online have been explored and investigated using both primary and secondary data. With the use of two sources of data, the demographics of customers' age, gender, monthly income, frequency of shopping, and amount of money spent on grocery shopping were analysed.

The research design used is exploratory research to describe the characteristics of population of study which is used in research through observations and survey methods and the sampling design is random sampling to analyse the enormous population of online grocery customers. The collection of original data from respondents undertaking online grocery shopping is referred to as primary data.

Data Analysis & Results:

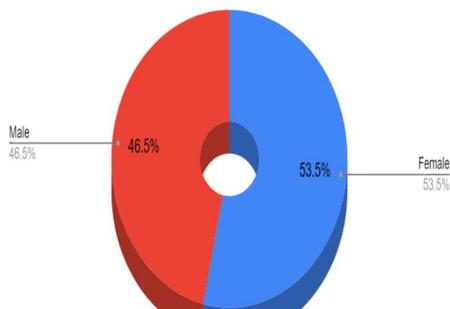
Age Group



Age Group:

More than half approximately 59% who responded were consumers up to the age of 35 years. Since the study revolved around pilot testing a large number of students less than 25 years also participated in the study.

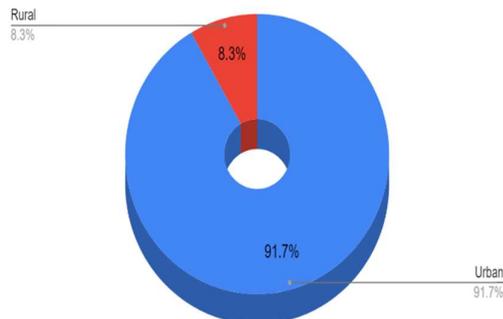
Gender



Gender:

From the 310 consumers who randomly responded, the sample was split into nearly 46.5% males and 53.5% females.

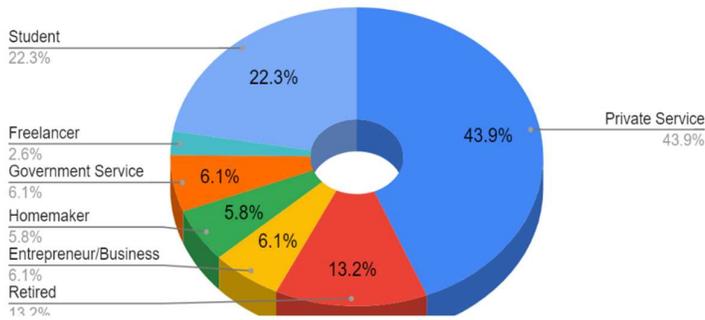
Location



Location:

The respondents around 92% represent people living in urban locations.

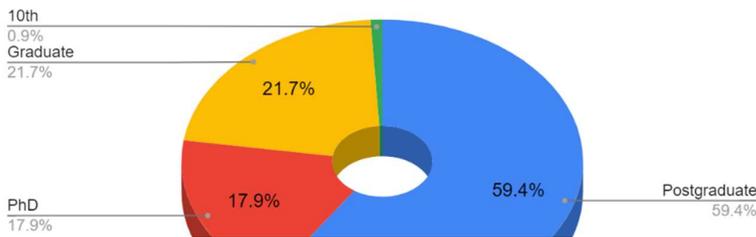
Occupation



Occupation:

Around 56% of respondents were working with consumers employed in private sectors were the highest. Students & Homemakers were followed by Retired Professionals.

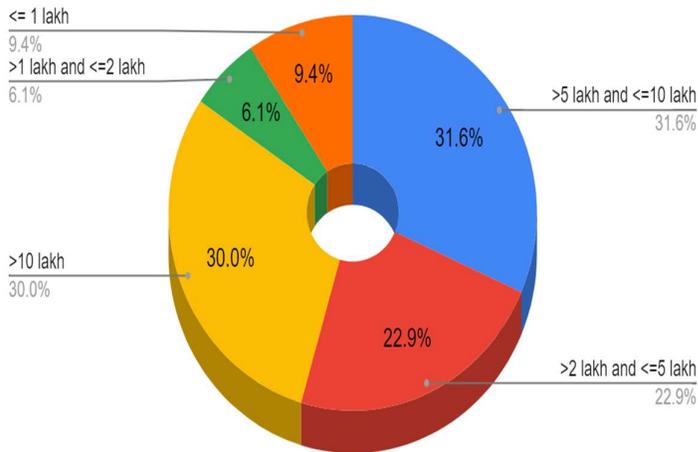
Highest Educational Qualification



Educational Qualification:

More than 75% of respondents were either Postgraduates or PhD holders followed by Graduates at 21.7%

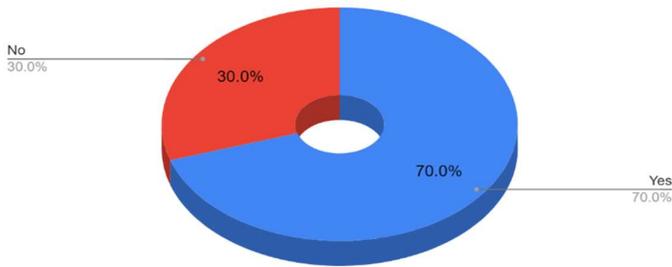
Annual Family Income



Annual Family Income:

The annual family income of more than 60% respondents was greater than 5 lakh rupees per annum.

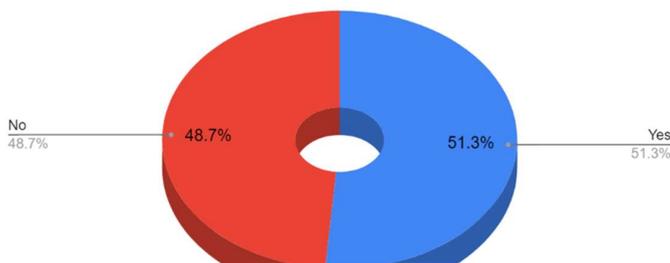
Do you purchase grocery online?



Purchase of Online Grocery:

Around 70% out of the total 310 respondents said that they purchase grocery online.

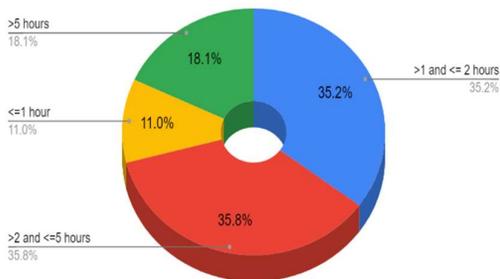
Unplanned purchases of grocery online



Unplanned Purchase:

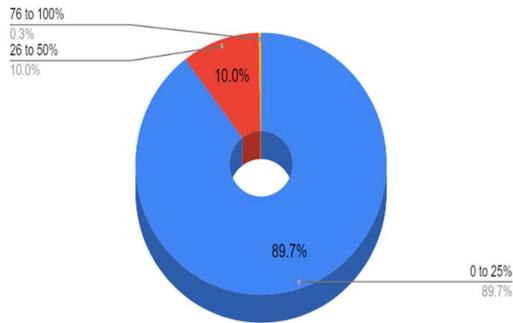
Out of those who bought grocery online around 51 % said that they purchase grocery online on impulse.

Average Time Spent on Internet Daily



Average Time Spent on Internet:
Approximately 70% of respondents spend more than 1 hour and less than 5 hour on the internet.

Percentage of time spent on the e-retailer's site for purchase of grocery



Time spent for shopping of online grocery:

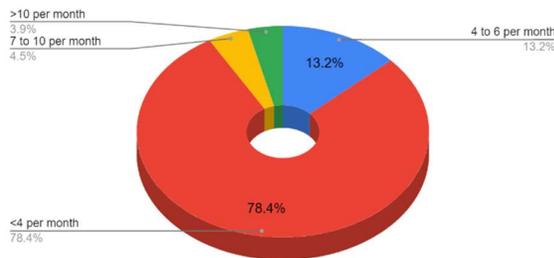
Out of the time spent on the internet around 25% is spent on the grocer's website/app

Frequency of Grocery Purchase Online:

Out of 310 respondents around 243 purchase grocery online for a maximum of 4 times in a month 13.2 % shop for online grocery for more than 4 times but less

than 6 times a month

Frequency of grocery purchases online



Relation between Product Descriptions & Online Impulse Buying of Grocery:

We used Chi Square Test to identify the relationship between various items listed under the Product Description as found in literature and unplanned purchase of grocery online. We did a Cross tabulation in SPSS version 25.0 between two items in the questionnaire and thereafter applied the Chi Square Test to understand its significance in impulse buying of grocery. The items used were unplanned purchases of grocery online & a series of statements describing the product attributes viz. Quantity, Package Size, Brand, Price, Product Delivery Information, Packaging, Quality, Virtual Product Presentation & Variety. The respondents were asked to respond in a Yes/No to test the Hypothesis I (H1).

H1: There is significant association between online impulse buying of grocery products and product description.

H0 (Null Hypothesis): There is no significant association between online impulse buying of grocery products and product description.

H1 (Alternate Hypothesis): There is significant association between online impulse buying of grocery products and product description.

Product Description parameters	P Value	Accept/Reject H0
Quantity of the product	0.055	Accept H0
Product size/Package size	0.258	Accept H0
Brand of the grocery product	0.000	Reject H0
Price of the grocery product	0.000	Reject H0
Information about the product delivery	0.002	Reject H0
Packaging of the grocery product	0.000	Reject H0
Quality of the grocery product	0.000	Reject H0
Virtual/Online presentation of the grocery product	0.000	Reject H0
Variety of the grocery product	0.000	Reject H0

Table 1: Consolidated Tabulation of Chi-Square Tests for Hypothesis 1

From Table 1 we can infer that since P-value for the items Quantity and Product/Package size is greater than 0.05 we accept the Null Hypothesis. For the remaining items since P-value is less than 0.05 we accept the Alternate Hypothesis. Thus we can conclude that unplanned purchases of grocery online is dependent on the following product description attributes namely Brand, Product Delivery Information, Packaging, Virtual Presentation and Variety of the grocery product.

Relation between Demographic factors and Online Impulse Buying of Grocery:

For testing of Hypothesis II we applied the Chi Square Test between the demographic factors viz. Gender, Age, Education, Area, Profession & Income to understand its significance in impulse buying of grocery.

HIII: Online Impulse Buying of Grocery Products varies with demographics parameters like Gender, Age, Education, Area, Profession & Income.

H0 (Null Hypothesis): Online Impulse Buying of Grocery Products does not vary with demographics parameters like Gender, Age, Education, Area, Profession & Income.

H1 (Alternate Hypothesis): Online Impulse Buying of Grocery Products varies with demographics parameters like Gender, Age, Education, Area, Profession & Income.

Demographic Variables	P Value	Accept/Reject H0
Gender	0.974	Accept H0
Age	0.258	Accept H0
Education	0.237	Accept H0
Area	0.154	Accept H0
Profession	0.238	Accept H0
Income	0.538	Accept H0

Table 2: Consolidated Tabulation of Chi-Square Tests for Hypothesis 2

From Table 2 we can clearly state that since statistically significant test result P-value is greater than 0.05 we reject the alternate hypothesis and accept the null hypothesis. The online impulse buying of grocery is independent of the demographic factors used in our study and we can conclude that the incidence of online impulse buying of grocery does not vary with Gender, Age, Education, Area, Profession & Income.

Incidence of online impulse purchase of grocery:

The focus groups conducted to understand the parameters which induce impulse buying gave us insights on how both the genders perceive impulse buying of grocery with respect to the following factors. The reasons mentioned below can be act as stimulus for the online shoppers which eventually lead to impulse buying.

1. Convenience/Comfort
2. Good Discounts, Promotional offers, Cash back, etc.
3. Wide assortment
4. Quick Delivery
5. Better Quality
6. User Friendly Website/Application

Conclusion:

This research paper contributes to the ever growing academic and marketing research done in the online impulse buying domain. Moreover purchasing online grocery has gained momentum in many countries because of it varied benefits. With the online grocery space getting more competitive day in and day out with a large number of corporates and conglomerates investing huge capital in this business hence facilitating more research to understand consumers behavior while shopping online and the various facets that can make consumers buy more on impulse. Our research takes a look at the product attributes and demographic factors that may be leveraged by marketers to induce online impulse purchase of grocery. Clearly brand, packaging, delivery and virtual presentation of the product is related to consumers urge to purchase grocery impulsively online irrespective of the demographic factors considered in our

research. India has witnessed rapid internet penetration that is redefining online shopping. Given the scarcity of academic literature in the public domain, this research serves as a foundation for future research in this field. This article is an attempt to explore the underlying ideas of online grocery sellers in terms of the elements that influence consumer perception and attitude.

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