Study on Effect of Consumer Age, Family Income and Family Size on Fast Fashion Consumption Pattern

Abstract
The aim of the study was to analyse the impact of various consumer attributes on the fast fashion consumption pattern. The effect of consumer age, family income and family size on the percentage of monthly income spent on clothing and percentage of monthly clothing consumption spent on fast fashion by consumers in NCR (National Capital Region) of India was studied in this research. Causal research was employed in this study. Correlations among the variables were established using the response surface methodology (Box-Behnken experimental design) to understand whether the impact is significant or not. Control factors, studied at 3 levels of variation, were age, monthly family income and family size. The responses for the experiment were the percentage of monthly income (per person) spent on clothing and the percentage of monthly clothing consumption spent on fast fashion. The study revealed that age and monthly family income have a strong influence on the percentage of monthly income spent on clothing, while family size has a negligible or no effect on the percentage of monthly income spent on clothing. It was also found that age, monthly family income and family size have a strong influence on the percentage of monthly clothing consumption spent on fast fashion. The demand for fast fashion and clothing is rising at a very high rate, which has made it hard for retail brands and apparel manufacturers to meet the consumer expectations. The analysis of consumer behaviour provides the advantage to fashion brands in anticipating and meeting consumer demands in a more efficient manner to create brand loyalty.

Keywords: fast fashion, fashion buying motives, consumer buying behaviour
1 Introduction

The success of fast fashion is embodied in offering trendy and fashionable merchandise at affordable price in a short span of time. Consumers discard garments very frequently due to boredom and communicative failure [1]. The growth of fast fashion has forced the textile and apparel industry to make products with shorter lifespan and quicker production to satisfy impulse buying. Fast fashion retailers capture the market by following the latest fashion trends, displaying them in ever changing product offering [2]. The fast fashion phenomenon has been studied from two different perspectives. One is from the supplier’s perspective and another from the consumer’s perspective. There have been many studies explaining the growth of fast fashion as a competitive advantage over other fashion suppliers; however, less research has been conducted in the field of fast fashion consumption from the consumer’s perspective [3]. There is no empirical proof to depict the effect of change in consumer buying behaviour on the fast fashion growth. It has only been studied as a business model developed to address new challenges of the fashion industry [4]. Consumers start developing preferences for some products or brands over others in their early childhood as they confront different stimuli defining their decisions [5]. The development of the right product that satisfies consumers’ needs is possible only by means of analysing and understanding the factors which affect the consumer buying behaviour [6], which encompasses all activities required to purchase a product or service. Consumers can be persuaded to purchase a particular product or service by influencing some factors that motivate them to buy [7]. Bringing cheaper replicas of high end fashion, fast fashion has seen enormous growth in the garment sector recently, capturing a huge share in the market [8, 9].

As depicted by the statistics from the clothing industry, consumers have been increasingly spending more on clothing in the past decade. The fashion and apparel industry has witnessed a massive rise in the sales from major fast fashion brands. The target market for fast fashion brands are females aged below 35. The age of consumers significantly influences the consumer buying behaviour. People tend to spend less on trendy clothes as they grow older. Consumers change their buying behaviour according to the change in their economic conditions [10]. In a major part of India, individual’s economic condition depends on the family income and family size. In today’s time, it has become a norm to stay updated with the latest trends and fashion. People want to look relevant with the emerging trends. As numerous styles and trends keep emerging, fast fashion brands have changed their marketing and advertising media. This can be partially attributed to the advent of social media. The number of social media users has increased from 970 million in 2010 to 4.48 billion in 2021, making social media indispensable in the lives of the majority of consumers, especially teenagers. Along with the massive growth of social media, numerous social media influencers have become popular over the last decade. Consequently, many brands have started hiring these influencers for advertising. This trend has evolved as a new channel of marketing. The fashion and apparel industry has been using celebrities to promote their products. Nevertheless, the factor responsible for the growth of influencer marketing is the consumers themselves, as it has been found that consumers relate more easily to an “ordinary” person. Social media has also changed the consumer behaviour by altering the spending options and patterns. It is driving fast fashion and people want products the very next day. This requires fashion retailers to develop and deliver products more quickly than ever before. Fast fashion has affected the way the clothing industry used to function along with consumer behaviour [11]. The competition on the market has become extremely harsh, luxury products and fast fashion merchandise have shorter lifespan, many options being
available for the same category. Therefore, knowing the consumers and their preferences is of the essence [12]. Nevertheless, it will become very hard to check the impact of fast fashion clothing if it keeps progressing at the current pace. Apart from fast fashion, there is another evolving concept in the fashion industry, which is being referred to as ultra-fast fashion. This new category of fast fashion prefers less inventory, local manufacturing and short lead times with on demand manufacturing [13]. Short lead time, low prices and inexpensive manufacturing are the key characteristics of fast fashion. Consumer preferences are the most important factor to fast fashion brands. These retailers make all the efforts to reduce the time taken by garments to reach the retail stores [14]. The merchandise price has a significant impact on the consumer response to fashion. This has contributed for the popularity of fast fashion [15]. It is also found that consumers buy fast fashion products due to their desire for novelty. They make the buying decision after comparing all the available options on the basis of various parameters, e.g. price of the product/service, brand reputation and quality. Hence, consumers can be persuaded to purchase a particular product or service by influencing some of the factors that motivate them to buy [7].

The present study is an attempt to explain the impact of various consumer attributes on fast fashion consumption. The effect of consumer age, family income and family size on the fast fashion consumption pattern was studied in this research, employing comparative or causal, respectively, research. Causal research is employed to find causal relationships, i.e. cause and effect relationships, among individual variables. Although correlational research seeks and explains the relationships between two variables, it does not prove that either of the variables causes the other to behave in a particular way. In contrast, causal research has the ability to check whether one variable affects another variable. A quantitative survey was used to collect various data from consumers by means of questionnaires. The collected data was analysed to understand the buying pattern of fast fashion buyers. The correlation among the variables was studied using the response surface methodology (Box-Behnken design of experiment) to understand whether the impact is significant or not.

1.1 Theoretical background

Fast fashion is a collection of low cost fashion merchandise. It has captured a huge share in the market as cheaper replicas of high end fashion. Fast fashion has seen enormous growth in the garment sector recently, as consumers look at it as an affordable alternative to high end fashion. The emergence of fast fashion over the traditional 6-month-cycle fashion can be attributed to the consumers’ changing lifestyle and preferences. Moreover, consumers are more knowledgeable and informed about the fashion trends now. Fast fashion offers them the opportunity to be in tune with the latest fashion at affordable cost [16]. Fast fashion retailers offer a new product range in every two to six weeks at a very affordable price [17].

1.1.1 Factors influencing consumer buying behaviour

The influence of some factors can be temporary while for others, it could be long lasting. Some of the influencing factors are listed below.

Marketing factors

The marketing mix, i.e. product, price, promotion and place, can significantly influence the buying decision. Product uniqueness, physical shape/structure and product packaging may influence consumer buying decision. The price of a product is a very important factor, as consumers will make the purchase only if the price is within the scope of their budget. Promotion also has the potential to affect the purchase decision. Publicity, advertising, sales promotion etc. should be planned as per target consumers. Furthermore, place has a significant impact on consumer buying behaviour. The channel and place of distribution need to be appropriate for target consumers [18].

Psychological factors

Factors related to psychology are major drivers for consumer buying behaviour. There are four aspects of psychological factors. These include motivation, perception, learning and attitude. The motivation is the inner factor responsible for consumers’ particular behaviour. Hence, consumers can be persuaded to purchase a particular product or service by influencing the factors that motivate them to buy. The perception is the impression created in the minds of consumers about a product, service or brand. The motivation makes the consumers to act; however, the direction of the action is decided by the consumers’ perception. Information can be gathered by experience or feedback from others [18].
Social factors
Aristotle said that humans are social animals [18]. Therefore, it is very natural for all humans to have the desire to be socially accepted. This is reflected in their buying preferences as well. Social factors include family, friends, reference groups and status/role in the society. Family is the main social factor influencing consumer buying behaviour. However, today, consumers are well connected with other sources that can have a significant influence on their purchase decisions. Consumers tend to buy clothes according to the roles or status in the reference group. The reference group may influence consumers' purchase decision by affecting their values, attitudes and exposing them to new lifestyles [18].

Cultural factors
Culture is considered to be the most comprehensive influencing factor for consumer buying behaviour. People from the same culture share the same ideologies and values. The culture has a very powerful effect on the purchase intentions of consumers. The cultural factors include culture, subculture and social class. Cultural ideologies, values and beliefs are transferred down the generations via family, society, educational organisations etc., e.g. clothing choices of consumers are affected by their religious beliefs. As there are many sub-cultures in any culture, it is hard to develop a marketing plan catering to one culture. Therefore, retailers should develop a multi-cultural approach for marketing by designing, developing and distributing merchandise to satisfy the needs of consumers from various cultures and sub-cultures [18].

Personal factors
Personal factors are the factors which are very personal and hence different for everyone. This leads to varying expectations, perceptions and consumer buying behaviour. Personal factors include age, gender, personality, occupation and lifestyle. The age of consumers significantly influences consumer buying behaviour. People tend to spend less on trendy clothes as they grow older. Female consumers may spend more on fast fashion if compared to male consumers. Working employees and professionals may prefer formal clothing over casual wears. Thus, it is very important for brands to consider the personal factors of their target consumers as well [18].

Economic factors
Economic conditions and factors have a major effect on consumer buying behaviour. Various aspects of economic factors are national economic situation, personal income, family income and liquid assets. Consumers change their buying behaviour in line with the change in their economic conditions. The buying behaviour is also affected by the economic conditions of countries and the global market [18].

1.1.2 Motives for fast fashion buying
The fashion sense for consumers within the age group 18–23 years is influenced by their self-image, whereas the fashion sense for consumers within the age group 24–29 years and 30–35 years is influenced by media exposure [19]. Hence, age has a dominant effect on consumer buying decisions. Consumers start developing preferences for some products or brands over others in the early childhood as they confront different stimuli defining their decisions [5]. Brand and product promotion has come out to be a great method to alter the preferences of consumers and influence their buying choices. Advertisements have the strength to persuade the consumer’s buying decision. This effect is vastly positive [20]. It is very much evident that there are also psychological factors that influence the buying decisions as there are many people who cannot understand their own decision after buying a product [21]. Marketing strategies are based on consumer psychology as it is very important to comprehend the mental stimuli of the buying decision process [6]. Consumers are influenced by advertisements, as are their buying decisions [12]. The purchase decisions have been explored from many different approaches, e.g. rational, emotional, cognitive aspects etc., to arrive at certain conclusions [22]. Fashion buying is related more to emotional buying behaviour which follows the irrational decision making process. This is identified with a sudden rise of desire to buy and satisfy the need by immediately making the purchase [23]. A remarkable proportion of sales is generated through the unplanned purchases that were not intended prior visiting the store [24]. Fashion buying is more related to impulse buying, which happens with a generated sudden strong emotional need. It is characterised by low cognitive and rational control. The buyers seek immediate gratification in such a type of buying decisions [25,26]. In addition to being emotional, fashion buying is affected by several other factors as well [27]. Brand loyalty is a result of the interaction between a consumer and a shopping environment.
psychological and emotional state, available knowledge and brand personality will affect the end decision [28]. In impulse buying, there is a lack of emotional control originating from the conflict of negative consequences and immediate satisfaction [29].

The fast fashion buying decision is found to be influenced by the consumer’s desire to blend in with the social group and create a unique self-identity [30]. Consumers make the buying decision influenced by certain factors which are responsible for that particular buying behaviour. Consumers buy products to satiate their needs, wants and purchasing capacity at a given time [31]. They have become a huge dynamic force to drive the economy after the increase in their income. As the income increases, so does the freedom to save or spend. The concept of discretionary income is driven from the concept of surplus income or comparative increase in income. Discretionary income refers to the amount of income of an individual left after paying the taxes and necessities such as rent, utilities, credit card debts and student loans. The central idea behind the discretionary income is the complete control of consumers over the allocation of that income regarding the amount to be saved and spent. In case of discretionary income, consumers have options other than compelled buying decisions or the purchasing absolutely necessary products. Consumers are found to be spending the major portion of their discretionary income on luxury goods and for recreational purpose. There are three major characteristics of discretionary expenses. The first one is not having any compelling need for making that expense. The second is not being a habitual expense and the third is not being the decision taken in the heat of the moment. Hence, discretionary expenditure is related to the buying of all the non-necessary items [32].

The clothing industry is a consumer-centric industry. It is nearly $2 trillion in size globally, despite having seen a slight downfall due to the impact of Covid-19. Fashion and clothing are the top preferences of consumers when they decide to buy non-essential goods. The fashion and apparel industry is also known as the employment generating industry [33]. The demand for fast fashion and clothing is rising at a very high rate. This has made it hard for retail brands and apparel manufacturers to meet consumer expectations. The analysis of consumer behaviour provides the advantage to fashion brands in anticipating consumer demands. The fashion buying behaviour has reflections of socio-economics as it is affected by the purchasing power of consumers. The buying behaviour of a fashion consumer is a complex phenomenon. The fashion buying is affected by various factors other than socio-economics, e.g. cultural, social and psychological factors. Fashion brands have to be aware of the factors affecting their target market. The product suitable for a target market can be offered only by ensuring the factors driving the target consumers are identified and utilised in product development. The major challenge faced by retail brands is expanding their consumer base while maintaining the existing one. All consumer factors such as age, income, educations and social background have a significant impact on consumer buying behaviour. For instance, the demand for fast fashion is increasing among consumers, especially teenagers, despite its negative environmental and social implications. It is very important to forecast the consumer demand to develop the right product for the market [34]. Fashion retailers will be unable to affect the buying decision of consumers unless they have a thorough comprehension of the factors which influence consumer buying behaviour [35].

2 Methodology

The consumers of NCR (National Capital Region) of India were studied in this study. Exponential non-discriminative snowball sampling was employed to collect data. This sampling method is majorly used in research for an unknown and rare population. It is used for the situations when it is difficult to select respondents for the sample. It is a very fast, cost-effective and convenient method of sampling for such studies. A quantitative survey was used to collect input data from consumers through a structured questionnaire.

Questionnaire for fast fashion consumption pattern
Fast fashion describes low-priced yet stylish clothing that moves quickly from design to retail stores to meet trends, with new collections being introduced continuously. Brands like Zara, H&M, UNIQLO, GAP and Topshop are examples from the fast fashion field.

Below follow the categories from the questionnaire for collecting data:
The questionnaire was shared online with the respondents. Causal research was employed in this study, which is used to find causal relationships, i.e. cause and effect relationships among variables. Although correlational research seeks and explains the relationships between two variables, it does not prove that either of the variables causes the other to behave in a particular way. In contrast, causal research has the ability to check whether one variable affects another variable. The collected data was analysed to understand the buying pattern of fast fashion buyers. The correlations among the variables were studied using the response surface methodology (Box-Behnken experimental design) to understand whether the impact of control variables on the observed responses is significant or not. Scrutinised control factors for the experimental design were age, monthly family income and family size. The selected age group was not a part of “Gen Z”. The responses for the aforementioned research design were the percentage of monthly income spent on clothing and the percentage of monthly clothing consumption spent on fast fashion. The levels of variations can be seen in Table 1. A three-factor and three-level Box-Behnken experimental design considering three-centre nodes as depicted in Table 2 was used for sample planning for the number of runs to be optimised. Such an experimental design is very useful to create the response surface of higher order with fewer required runs in comparison to a conventional factorial design. The sample size per run was 150–250, depending on the coefficient of variation of the respective run (Table 2). The total number of responses received was 2750. Suitable replication, randomisation and blocking were incorporated in the Box-Behnken experimental design.

3. Results and discussion

Various levels of factors and their corresponding responses are depicted in Table 2. The influence of control variables on the responses was studied using ANOVA analysis at 95% level of confidence with the help of design expert software. The significance of influence was studied on the basis of p-value. The p-value lower than 0.05 suggests that there is a strong effect, whereas the p-value higher than 0.05 suggests that there is a weak effect of control factors over the responses. The independent control factors, i.e. age, monthly family income and family size, were studied to assess the statistical significance. The ANOVA summary is as depicted in Tables 3 and 4.

3.1 Effect of control variables on percentage of monthly income spent on clothing

The results show that age has a strong influence on the percentage of monthly income spent on clothing. It was observed that with increasing age, the percentage of monthly income spent on clothing reduced. The major cause for this behaviour is the availability of discretionary income. At higher age,
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the discretionary income is reduced due to the increase in liabilities. The graphical representations of the effect of control variables on the percentage of monthly income spent on clothing are shown in Figure 1. Monthly family income also has a strong influence on the percentage of monthly income spent on clothing. It was observed that with increasing family income, the percentage of monthly income spent on clothing increased. Similarly as with age, the availability of discretionary income could be the reason for this behaviour here as well. Individuals with higher family income most likely have higher discretionary income.

Family size has a negligible or no effect on the percentage of monthly income spent on clothing. The effect of family size was not observed in this study. This could be attributed to a narrow range of variation in the factor. The effect of family size may be evident at larger family size.

3.2 Effect of control variables on percentage of monthly clothing consumption spent on fast fashion

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spent on fast fashion reduced. The major cause for this behaviour is the availability of discretionary income. At higher age, the discretionary income is reduced due to the increase in liabilities. Monthly family income also has a strong influence on the percentage of monthly income spent on clothing. It was observed that with increasing family income, the percentage of monthly clothing consumption spent on fast fashion increased. Individuals with higher family income most likely have higher discretionary income.

It was observed that with increasing family size, the percentage of monthly clothing consumption spent on fast fashion reduced. The effect of family size is

Figure 1: Effect of control variables on percentage of monthly income spent on clothing
(ANOVA general quadratic model)
more dominant in this case. Individuals with larger family size most likely have lower discretionary income due to higher liabilities.

In consequence, young individuals with higher family income spend more on clothing, and young individuals with higher family income and smaller family size spend more on fast fashion. It can thus be stated that clothing and fast fashion consumption is inversely related to the age and family size factors, and directly related to the family income factor. The graphical representations of the effect of control variables on the percentage of monthly clothing consumption spent on fast fashion are shown in Figure 2.

Figure 2: Effect of control variables on percentage of monthly clothing consumption spent on fast fashion (ANOVA general linear model)
4 Conclusion

This study illustrates the impact of various consumer attributes on fast fashion consumption. The effect of consumer age, family income and family size on the fast fashion consumption pattern was studied in this research. It was established that age and monthly family income have a strong influence on the percentage of monthly income spent on clothing, while family size has a negligible or no effect on the percentage of monthly income spent on clothing as contour plots depict in Figure 1. The p-values for age, monthly income and family size are 0.0006, < 0.0001 and 0.1583, respectively. It was observed that with increasing age, the percentage of monthly income spent on clothing reduced, while with increasing family income, the percentage of monthly income spent on clothing increased. This is aligned with monthly family income and family size being found to have a strong influence on the percentage of monthly clothing consumption spent on fast fashion as contour plots depict in Figure 2. The p-values for age, monthly income and family size are 0.0003, < 0.0168 and 0.0001, respectively. It was observed that with increasing age and family size, the percentage of monthly clothing consumption spent on fast fashion reduced, while with increasing family income, the percentage of monthly clothing consumption spent on fast fashion increased. Young individuals with higher family income spend more on clothing and young individuals with higher family income and smaller family size spend more on fast fashion. It can hence be stated that clothing and fast fashion consumption are inversely related to the age and family size factors, and directly related to the family income factor.

The study results are aligned with the existing studies as mentioned in the theoretical background of the paper. Earlier studies were vastly focused on variables such as age, gender, price and personal income. The work on the effect of family size and family income is scarcer. These factors are required to be explored in more detail.

This research has been performed over a narrow range of variation in the factors. The effect of some factors may not be evident in this study, which could be attributed to a narrow range of variation in the factors. The effect of these may be evident at a higher variation level.

The demand for fast fashion and clothing is rising at a very high rate. This has made it hard for retail brands and apparel manufacturers to meet consumer expectations. The analysis of consumer behaviour provides the advantage to fashion brands in anticipating consumer demands.

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