A Study on the Influence of Supermarket Shelf Positions on Consumer Purchase Decisions, in Mumbai City and Suburbs

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Abstract

The recent years have marked an increase in supermarkets, leading to consumer convenience, along with a substantial increase in the number of products that occupy shelf space. With the retail industry getting even fiercer in competition, where manufacturers are willing to pay noteworthy amounts to retailers for placing their products on advantageous shelf positions, attention to shelf space and positions is the need of the hour. This study aims to know whether the shelf position at which, products are placed in supermarkets, have an influence on the purchase decisions of consumers. It focuses on four positions of shelving i.e. the stretch level, the eye level, the touch level and the stoop level, and intends to find out the most preferred shelf position of adult consumers across varied age groups. The primary data is collected by getting a structured questionnaire filled by 100 adult respondents across various age groups, who purchase products at supermarkets in Mumbai. Whereas journal articles, research papers and other articles found online are the sources of secondary data towards this study. The study also gives a descriptive analysis of its findings. Current gaps in research and future research recommendations bring closure to this study.

Keywords: *Shelf positions, Shelf levels, Consumer purchase decisions, Supermarkets, Retail marketing, Consumer behaviour.*

Introduction

Store layout is one of the biggest challenges faced by retailers. (Juel-Jacobsen, 2014) in his research on pathway design, stresses on the importance of a fixed framework of urban retail designs, to be adopted by supermarkets and large retail stores.(Lewison,1994) gives emphasis on the impact of store layout on the environment of shopping and consumer behaviour. Hence there is a need for retailers to concentrate on the layout of supermarkets, so that consumers have a positive shopping environment which may also lead to an increase in sales.

Shelf position on the other hand is an important aspect within the store layout niche. (Fancher, 1991) states the importance of product allocation on shelves as it not only increases

sales but also leads to a satisfied consumer. To identify shelf preferences better and in a detailed fashion this study has segregated shelves on the parameters stated by (Ebster, Garaus, 2011) and they are as follows.

(Ebster, Garaus, 2011). The stretch level (6ft. and above), represents one of the least valuable levels. Shelves in this zone usually gain relatively little customer attention. Some modern shops refrain from this level; nevertheless, it is still largely incorporated. Lighter weight products are located on shorter shelves (Ebster, Garaus, 2011). Eye level (4 to 5ft.), represents the level with the highest customer attention. It is a place where products with the most amount of profit should be placed. Products placed at this level can gain the better attention of customers by 35% (Ebster, Garaus, 2011). Touch level (3 to 4ft.), represents the area of the central part of a consumer's body. It is a level, which gains higher attention than the stretch and stoop level,

however, less than the eye-level. Products with a higher profit are also located at this level (Ebster, Garaus, 2011). Stoop level (3ft. and below), represents the least attention gaining area. Consumers do not like to bend down to this level. Products with a low profit or heavy products are usually placed at this level (Ebster, Garaus,

2011). However (Hoch & Deighton, 1989) state that any consumer observes shelves from bottom to top and not the other way around. These studies encourage further research.

Need of the study

The significance of this study is that, it will benefit both retailers and manufacturers, giving them an idea of the prominent shelf positions which lead to an increase in sales. Retailers can also understand the preferences of consumers categorized by age groups knowing the preference of shelves for various product categories and price shelf positions accordingly. Manufacturers will be able to make the right decisions with respect to placing their products on the correct shelf position. Consumers on the other end will have their share of convenience and a better shopping environment. The idea of this study is to harmonize activities and decisions of retailers, manufacturers and consumers.

Objectives

The objective of this study is to identify the influence of supermarket shelf positions on consumer purchase decisions with regards to Mumbai City and the suburbs.

The second objective is to identify the most preferred shelf position of adult consumers from the age groups of 18 to 25 years, 26 to 35

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years, 36 to 45 years, 46 to 55 years and 55 years and above.

Lastly the third objective is to identify the shelf preference of consumers with regards to various product groups.

Scope & Limitations

This study included respondents from Mumbai city and the suburbs who are frequent visitors of supermarkets. The limitation of this study is that other locations were not taken into consideration. The responses were also dependent on past purchase experiences of consumers and there is a high possibility that consumers may have a different perception about their behaviour but may shop very differently. An experiment that records their real time behaviour towards products on shelves was not conducted.

Research Methodology

The research was designed to study the influence of supermarket shelf positions in Mumbai city and the Suburbs, on purchase decisions of consumers. Hence the shelf position was the independent variable whereas the purchase decision of consumers was the dependent variable. The shelf levels or positions focused on were limited to four i.e. the stretch level (6ft. and above), the eye level (4 to 5ft.), the touch level (3 to 4ft.) and the

stoop level (3ft. and below). Consumers had to respond based on these shelf levels only. The total sample size of 100 respondents, were split into age groups of 18 to 25 years, 26 to 35 years, 36 to 45 years, 46 to 55 years and 55 years and above. This study adopted the simple random method of sampling. The descriptive design of the study involved participants from Mumbai city and the suburbs to respond to a structured questionnaire which included questions about their demography, visit to supermarkets, satisfaction with the current supermarket experience, categories of products purchased, their opinion on shelf positions, visual attention towards shelves, preferred shelf positions, suggestions towards product categories and their placement on preferred shelf positions and lastly suggestions to retailers or supermarkets for the future. The aspects majorly focused on in this study were, if shelf positions had an influence on the purchase decisions of consumers, which shelf positions were most preferred by consumers across varied age groups and which shelf would be most preferred for each product group. This is what constituted the primary data of the study. Past research and articles were taken into consideration to fulfill the secondary data requirement. The responses received were summarized

into tables along with a clear analysis and interpretation.

Literature review

Kamaşak (2008) questions the concept of shelf wars i.e. manufacturers paying retailers for acquiring an advantageous shelf position for their products so that sales are induced or increased. The main aim of the study is to evaluate the impact of product shelving on sales and to know if there exists a direct relationship between shelf positions and sales figures. Shelf positions were narrowed down to three i.e. the eye level, waist level and the knee level. Even though the findings stated that shelf positions largely impacted sales, there were drawbacks in finding the impact ratio of the relationship between the product, the shelf position and the sales. It was seen that products when kept at eye level were sold more than when placed at any other shelf position. This could mean that manufacturers may want to place their products at the eye level but there is no confirmation that this strategy will definitely be a success.

Tudor Caius-Ciprian, Andreea, & Alexandra (n.d.) focused on the merchandising techniques adopted by supermarkets and retail stores and their impact on the purchase decisions of consumers. Primary data was collected from students who studied psychology. The difference between consumer opinion and actual purchase behaviour, the influence of gender and salary an individual earns on purchase decisions were a part of the hypothesis. Of which it was found that in spite of learning psychology and having an opposite opinion consumers behaved very differently while purchasing and there was almost no impact of gender or salary on the purchase decisions of consumers. The study included various theories of psychology to analyze the behaviour of consumers while purchasing. It was found that consumers would land up purchasing many unplanned products while leaving the store. The young adult consumers were highly influenced by shelving strategies of the stores. The study emphasized on paying attention and understanding various psychological theories for further research.

Elbers (9305) pointed out that the effect of store layout and shelf design on consumer behaviour and store perception. The store layouts focused on are grid, freeform and racetrack. Whereas horizontal and vertical product placement, amount of facings and category arrangement were aspects of shelf design that were taken into consideration. It was found that the store layout had a great impact on consumer behaviour. It was observed that the grid layout was most preferred

as the shelf levels were low and all consumers could handle products because of which consumers landed up purchasing more. The next preferred layout was the racetrack layout as consumers found it challenging and motivational to search for products whereas it was recommended that the use of racetrack layout could also lead to consumer frustration and anger. With respect to shelf design, the vertical product placement was more beneficial than the horizontal one and it was also suggested that global based categorization should be used for category arrangement. This study emphasized on researching more on shelf positions and levels.

Gidlöf, Anikin, Lingonblad, & Wallin (2017) argued about analyzing consumer behaviour in a supermarket based on products purchased. This study has its conclusions drawn on the basis of an investigation carried out in supermarkets in the form of an experiment. Wherein, the visual attention of the consumers is focused on and captured with the help of eye tracking cameras set up in supermarket isles rather than purchases made by the consumer. The study also mentions that there are two aspects that lead to a consumer making a purchase decision, one is the internal factors i.e. interest, brand awareness, loyalty, need etc. and the

other is the external factors which include marketing strategies, promotions, layout, shelf design etc. It is also found that products in the middle shelf sell the most but there is also an observation that popular products even if not kept on the middle shelf still sell. The study confirms that the internal and external factors play a vital role in gaining consumer's visual attention.

Drexler & Souček (2017) confirmed the influence of shelf levels on consumer attention and also affirms the study of Chandon, Hutchinson, Bradlow, & Young (2009) that the vertical facings do affect consumer behaviour. The study confirms that the space grid system lands up gaining more attention from consumers. Various product categories were taken into consideration except for perishables. The study also confirms that the eye level and the touch level are preferred most by consumers proving the research of Ebster, Garaus (2011).

Perveen, Zehra, & Ahmed, (n.d.)This study evaluates the effectiveness of shelf space allocation and other factors like quality of products, in-store facilities and discounted prices on consumer buying behavior. The study revealed that most consumers buying decisions rely on the quality of the product, discounted prices and shelf space allocation. It also

concludes that there is a relation between visibility of the product and impulse buying. If consumer preference is taken into account then those changes can be applied and consumers may land up getting a convenient environment for shopping.

Major Findings & Discussion

The review of existing literature indicated the impact of shelf positions on consumer behaviour either by responses being collected and an analysis done or with the help of experiments as a part of the investigation. The present study had its primary data collected from 100 adult consumers who resided in Mumbai city and the suburbs and were frequent visitors of supermarkets. There was a structured questionnaire distributed to the respondents.

Graph 1. Gender Bifurcation
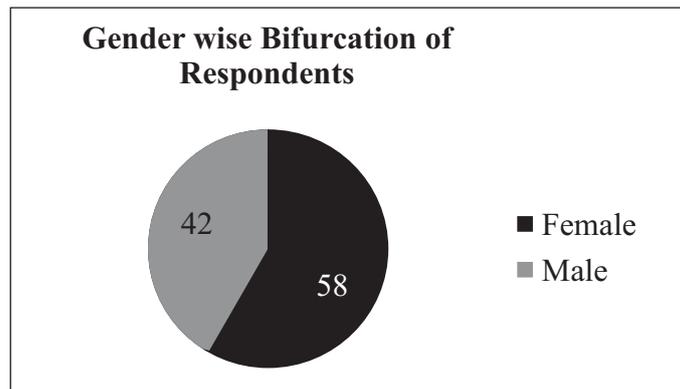
Out of 100 adult respondents, 58% were females and 42% males.

Table 1. Age wise percentage of responses

Age groups	Percentage of responses
18-25	38%
26-35	23%
36-45	13%
46-55	12%
55 and above	14%

The participants' ranging from 18 to 25 years was 38%, 26 to 35 years was 23%, 36 to 45 years was 13%, 46 to 55 years was 12% and beyond 55 years was 14%.

It was found that 94% of the respondents visited supermarkets for shopping. In order to know the products purchased by them the tool had a list of product categories mentioned which included, grains and cereals, pulses, perishables, poultry and fish, dairy products, oils, beverages, canned food items, cold storage products, spices and condiments, personal care and toiletries and lastly cleaning supplies. Another finding was that 79% of consumers preferred the idea of shelf positions and an orderly environment while shopping, 18% were unsure and 3% did not prefer the organized environment.

Table 2. Planned purchase behaviour

Respondents	Percentages
Planned purchases only	8%
Planned yet attentive to other products	68%
Unplanned purchases	21%
Random and hurried purchases	3%

When asked about how planned were their purchases it was found that 8% consumers were strict when it comes to purchasing and they would only buy products that were planned, 68% consumers would buy products as per their list but also be attentive towards all other products on shelves, 21% consumers would not have a shopping list at all and would make purchases by looking at all shelf levels and only 3% consumers would be the ones to shop hurriedly without any list.

Table 3. Percentage wise Shelf preference

Shelf Levels	Total preference percentage
Stretch Level	3%
Eye Level	54%
Touch Level	23%
Stoop Level	0%
Not Sure	20%

From Table 3.It can be identified that like other studies the most preferred shelf positions were the eye level and the touch level having 54% and 23%

preference. Surprisingly it was also noticed that 20% of the consumers were unsure about their preference.

Table 4. Age Group wise preference of Shelf Positions

Age Groups	Total responses per age group	Stretch Level	Eye Level	Touch Level	Stoop Level	Not Sure
18-25	38	0	55%	24%	0	21%
26-35	23	0	48%	26%	0	26%
36-45	13	8%	38%	31%	0	23%
46- 55	12	0	67%	17%	0	17%
55 and above	14	14%	64%	14%	0	7%

The study aimed to know the preference of shelf positions based on each adult age group. It was identified that all age groups preferred the eye level shelf

position the most as depicted in Table 4. with numbers like 55%, 48%, 38%, 67% and 64%. However, the touch level took the second preference.

Table 5. Product Group wise Shelf Preference

Product Groups	Stretch Level	Eye Level	Touch Level	Stoop Level
Grains & Cereals	11%	35%	48%	6%
Pulses	11%	29%	56%	4%
Perishables	8%	28%	63%	1%
Poultry & Fish	7%	31%	53%	9%
Dairy Products	8%	48%	41%	3%
Oils	10%	36%	42%	12%
Beverages	11%	45%	38%	6%
Canned Food Items	11%	48%	36%	5%
Cold Storage Products	6%	43%	44%	7%
Spices & Condiments	11%	37%	49%	3%
Personal Care & Toiletries	13%	46%	36%	5%
Cleaning Supplies	12%	43%	37%	8%

In the context of shelf preference, taking into consideration various product groups, with reference to Table 3, it was identified that grains and cereals were preferred at the touch level (48%), pulses at the touch level (56%), perishables at the touch level (63%), poultry and fish at the touch level (53%), dairy products at the eye level (48%), oils at the touch level (42%), beverages at the eye level (45%), canned food items at the eye level (48%), cold storage products at the touch level (44%), spices and condiments at the touch level (49%), personal care and toiletries at the eye level (46%) and cleaning supplies at the eye level (43%).

Suggestions

This study confirms that the main shelf positions that are preferred by maximum age groups are the eye level and the touch level. The stretch level is definitely focused on a little more than the stoop level. It is not possible to place all products on the eye level and the touch level in any supermarket, but past studies also state that if the popular products are kept at any shelf they still sell because of their popularity. If this aspect is taken into consideration, retailers could place the newly introduced products on the prominent shelves so that they get the visual attention of consumers which would lead to major product facings at the same time, not hampering the sales of the popular brands. Another suggestion to retailers would be that they shelf products on rotational basis so that all brands get noticed and picked by consumers. Manufacturers would also not have to get into the shelf wars and retailers could charge fair shelf prices due to this arrangement. Consumers on the other end will be familiar with the pattern of movement of products on shelves leading to convenience anyway. A lot more research is required along with experiments so that a good retail and shelf positioning strategy can be developed.

Conclusion

The study concluded that consumers are influenced by shelf positions in supermarkets and it does affect their purchase decisions. It also describes the preference of various age groups of consumers with respect to shelves and also identifies the shelf preferences of consumers with regards to various product groups. The study encourages more research on shelf positions probably with experiments and better investigation tools.

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