



## Relationship between Store Characteristics and Store Choice

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### ABSTRACT

*In the intense competitive Grocery Stores' industry, increasing and retaining customers is not an easy job. There are studies in relevance to the characteristics of stores. This study determines the relationship between the store characteristics and the store choice. Multinomial Logistic Regression tool was used to analyze the gathered data to recognize the relationship between the store characteristics and store choice. The results show that price, service speed and the atmosphere play an important role in selecting a certain grocery store. The findings of this paper made obvious that the consumers with growth of inflation and economic recession are more price-conscious and want to purchase their home and food items promptly with hygiene, security and with good surrounding of people.*

**Keywords:** Super markets, hyper markets, grocery stores, retail industry, price atmosphere, service speed

**JEL Classification:** M31, M32

### Introduction

Over the years, developing countries are experiencing drastic transformations in the retailing industry with the arrival of different forms of retailing such as Hypermarkets, Supermarkets and Convenience stores (Lee, 2003).

Grocery shopping has shifted its nature from necessity to a high-level involvement occasion. This change is not fresh for the urbanized countries but in Pakistan, this scenario of retailing industry is a fresh development. Pakistani retailers were learning new formats from the industrial countries by offering a range of products at a reasonable price under one roof in an enjoyable atmosphere.

Initially, customers used to do grocery shopping from the nearby located stores without taking in account certain issues, which they do take care of now. Nearly two-third of the Pakistani consumers purchases groceries from nearby located shops.

The development has converted the instantly one-man grocery store to a large super markets and also now hyper markets that is the primary step in the revolution of retail industry in Pakistan. Besides the fact, an ongoing shift in emergent countries (like Pakistan) towards liberalization of business and savings has got the overall supermarket chains onto the prospects, jointly with economies of scale and focal point on supply chain administration skills (Cordon, Bouhsina, Fort, Coudel, & Puech, 2004).

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\* The material presented by the author does not necessarily portray the view point of the editors and the management of the Iqra University, Karachi.

The purpose of this research was to find out that if there is any relationship between the store choice and the store characteristics for the consumers. This study has identified in specific that whether the Pakistani consumers seek any relationship between store characteristics and store choice.

The store characteristics and the variables for the analysis of this research are Price, Working hours, Queues at checkout, Familiarity with store layout, Location, Variety and Quality of brands, Quality of store's own brands, Freshness of brands, Atmosphere, Friendliness of the people, Walking space, Over all cleanliness and Service speed.

The purpose of this study discovered a new consumer behavioral change in respect of store choice as the old concept of small general stores has shifted to the super and mega stores. The basic drivers of this change in behavior are known and an association between the grocery stores characteristics and the store's choice are authenticated.

## **Literature Review**

### **Overview of the grocery industry**

Retail is the largest particular industry in most of the countries all over the world, with the grocery division being most significant in terms of importance and volume (Leigh & Burt, 1994).

Morganosky (1997) found that the customers were making less visits to conventional grocery stores and were spending less per spree. In contrast, the proportion of shoppers visiting storehouse clubs, supercentres and convenient stores for grocery stuff continued to grow. This shows that now customers do not depend on the conventional grocery stores for their groceries. Instead of this, now customers were visiting other retail formats for the purchase of their groceries.

However, Rhee and Bell (2002) initiated that as customers frequently shop at more than single store, actually everyone has a primary association towards the huge stores, which grabs the attention and as well majority of the purchases/buying.

For retailers, consumers should rate them more superior than the competitive stores because customers tend to shop from the same store more repeatedly and use to spend double as much in that store compared to others (Knox & Denison, 2000).

Retailing refers to business actions that are concerned in promotion and selling of assorted products and services to customers for their individual, family and household consumption simply, and not for the business purposes (Miller & Layton, 2000).

In Pakistan, the convenient store system has been increased by 14% annually, as the highest growth in the market.

On the supply side, grocery stores are competing in gradually more competitive environment. Stores tend to attain a different positioning from the competitors in long-term strategic attributes such as location, variety, service and maybe general price image. In short, week-to-week, the competition among competitors is based on advertisements, special coupons, and tradeoffs and in store promotions such as loyalty card (Seiders, Simonides, & Tigert, 2000).

### **Store characteristics effecting consumer's store choice**

Huddleston, Whipple, and Auken (2004) has described the fourteen store characteristics in their article "Food Store Loyalty". As mentioned earlier that this paper is finding a relationship between the store characteristics and store choice in the context of Pakistani market. The given characteristics are Price, Working hours, Queues at check out, Familiarity with store layout, Location, Variety of brands, Quality of brands, Quality of store owned brands, Freshness of products, Atmosphere / Ambience, Friendliness of people, Overall

cleanliness, Walking space / spaciousness, Service speed. The operational definitions of the terms are as follows:

### **Price**

Price of individual product or an entire basket has lately started to matter more than it used to some years back. Price is a very essential variable for customers, as it is common and prominent product attribute for most customers in purchase decision. Bell and Lattin (1998) determined two types of pricing strategies (everyday low price across a wide variety of products and temporary deep price cut in some product categories), which are said to be used by most of the superstore operators. Customers decide which store to visit based on the perception of pricing strategy and their expected expenses. Thus, it is important to get the right pricing strategy.

### **Working Hours**

Working hours have always been a source of argument and a victim of regulation globally. It was seen in Pakistan, especially these days when there is scarcity of electricity in the country.

However, working hours of any store has a major impact on its overall customer traffic and definitely on its sales. This is irrespective of the basket size of late night or early morning customers (Baker & Marshall, 1998).

### **Queues at checkout**

Waiting lines at the checkout counters are familiar to store customers throughout the world. The length of queues at checkout of any store and the waiting time is an attribute affecting choice of store by the customers (Bennet, 1998; Tom & Lucey, 1997).

### **Familiarity with store layout**

Store layout is an important factor, which affects customer behavior reflecting the store image. Proper designed arrangements are very important because it powerfully influences in-store traffic patterns, shopping atmosphere, shopping behavior and operational effectiveness (Vrechopoulos, 2004).

### **Location**

The location of a store is very important to the kind of customers the retailers want to pull towards the store. Location is the most vital decision that a company has to make, as it is the significant factor to success (Clarkson, Clarke-Hill, & Robinson, 1996).

Among all the attributes of store choice, which have been researched over time across various parts of the world, Location has had the privilege of apparently the most dominating or influencing phenomenon (Moschis, 2003).

### **Variety of brands**

Customers have always enjoyed browsing through stores or “window shopping” to see what is currently available. Even while purchasing, customers frequently look around to search options for future considerations (Morganosky, 1997).

### **Quality of brands**

Quality of brands or the products purchased is an important determinant of store traffic for convenient stores particularly super or mega stores and one of the key drivers of consumer loyalty.

### **Quality of store-owned brands**

Sales of the store own brands haven't peaked in most stores and continue to rise quicker than many manufacturer brands that increase is building on a mixture of convenience, price competitiveness, product improvement and new product innovation. Differentiation and segmentation are giving extensive consumer choices.

### **Freshness of products**

Freshness is a trait of a food product sense, which means when the food was produced. Food items such as vegetables, meat and bakery items available at super stores require no compromise on its freshness or else it would be an irresponsibility and ill-presentation on the behalf of the superstore.

### **Atmosphere**

Retailers are facing an intense competition and that is the reason retailers face many difficulties to differentiate their stores based on products, places, peoples, prices and promotions. Retail store fundamentals such as colors, illumination and visual merchandising which is considered in having direct effects on the purchasing decision making process.

### **Friendliness of people**

Friendliness of the people and the working employees to assist consumers does play a part in any sort of shopping. It is the requirement of the customer to have a friendly environment while shopping so that he/she can concentrate on what he/she is buying. Normally in the crammed stores you need to have a friendly atmosphere otherwise, everyone gets frustrated.

### **Overall cleanliness**

The extant literature has discussed the importance of an overall cleanliness element to loyalty behavior. Early researches show that customer is now more educated and is quality conscious too. Clean atmosphere of any store is directly proportional to the perceived quality of the products (Huddleston, Whipple, & Auken, 2004).

### **Walking space/ Spaciousness**

No recent or old research was being done on this variable. However, it was being established through the different ways that walking space s.

### **Service speed**

Constructive perceptions of good service quality lead to superior loyalty intentions (Huddleston, Whipple, & Auken, 2004). The service speed was being said to be one of the most important predictors of customer loyalty.

### **Store Choice**

Customer store choice results from a procedure, here the consumer considers information on a variety of alternatives. In the relevance of store choice models it is mostly implicit that the Information-processing strategy underlying store choice is a synchronized one in which all possible options are judged by an individual. Another assumption, increasingly documented in a spatial choice, is that shoppers initially study clusters of options and then only evaluate the options within a specific chosen cluster (Fotheringham, 1988).

## Research Methods

### Data collection method

The data was collected through questionnaires through mall intercept. The target samples of 300 respondents were the consumers who actually were involved in the grocery shopping for their household. To get hold of the appropriate target population, different stores were analyzed by asking respondents about their preferences in choosing store for grocery shopping.

### Analysis and Results

**Table 1: Likelihood Ratio Tests**

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	87.416 <sup>a</sup>	0	0	.
Q5Price	97.335	9.919	4	0.042
Q6Working hrs	89.914	2.498	4	0.645
Q7Queue at checkout	114.216	26.8	4	0
Q8Familiarity with store	98.633	11.217	4	0.024
Q9Location	95.084	7.668	4	0.105
Q10Variety of brands	101.562	14.146	4	0.007
Q11Quality of brands	93.522	6.106	4	0.191
Q12Quality of store own brands	92.532	5.117	4	0.276
Q13Freshness of products	95.321	7.905	4	0.095
Q14Atmosphere	88.612	1.196	4	0.879
Q15Friendliness of people	96.881	9.465	4	0.05
Q16Walking space	106.937	19.521	4	0.001
Q17Cleanliness	92.685	5.269	4	0.261
Q18Service Speed	95.493	8.077	4	0.089
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.				
a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.				

Table 2 is comparing between the stores categories. In this table Mega store category was compared with the nearby located shops. The reference category here is nearby located store.

**Table 2: Parameter Estimates**

from where is grocery mostly purchased	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
							Lower Bound	Upper Bound
Intercept	-36.629	2128.46	0	1	0.986			
[q5=1]	-0.996	2.159	0.213	1	0.644	0.369	0.005	25.413
[q5=2]	-0.287	1.621	0.031	1	0.86	0.751	0.031	18.013
[q5=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q6=1]	-1.111	2.16	0.265	1	0.607	0.329	0.005	22.711
[q6=2]	-2.521	2.447	1.061	1	0.303	0.08	0.001	9.736
[q6=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q7=1]	3.894	3.074	1.605	1	0.205	49.118	0.119	20309.5
[q7=2]	5.72	2.182	6.869	1	0.009	304.896	4.231	21973.2
[q7=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q8=1]	3.025	3.349	0.816	1	0.366	20.603	0.029	14605.6
[q8=2]	5.23	3.133	2.787	1	0.095	186.877	0.402	86824.4
[q8=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q9=1]	-4.587	3.261	1.979	1	0.16	0.01	1.71E-05	6.077
[q9=2]	-5.404	4.076	1.757	1	0.185	0.004	1.53E-06	13.276
[q9=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q10=1]	31.953	2128.47	0	1	0.988	7.53E+13	0	.
[q10=2]	28.217	2128.47	0	1	0.989	1.80E+12	0	.
[q10=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q11=1]	-9.507	5.749	2.735	1	0.098	7.43E-05	9.51E-10	5.812
[q11=2]	-9.898	5.707	3.009	1	0.083	5.03E-05	6.98E-10	3.619
[q11=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q12=1]	5.476	4.078	1.803	1	0.179	238.808	0.081	707294
[q12=2]	6.321	4.239	2.224	1	0.136	556.294	0.137	2255147
[q12=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q13=1]	11.149	2.137	27.216	1	0	69467.3	1053.77	4579464
[q13=2]	13.821	0	.	1	.	1005417	1005417	1005417
[q13=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q14=1]	3.012	4.11	0.537	1	0.464	20.335	0.006	64078.9
[q14=2]	3.855	4.166	0.856	1	0.355	47.245	0.013	166120
[q14=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q15=1]	-10.744	5.142	4.366	1	0.037	2.16E-05	9.07E-10	0.514

from where is grocery mostly purchased	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
							Lower Bound	Upper Bound
[q15=2]	-8.958	5.152	3.023	1	0.082	0	5.30E-09	3.126
[q15=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q16=1]	5.8	2.847	4.149	1	0.042	330.178	1.245	87543.3
[q16=2]	5.73	2.711	4.467	1	0.035	307.993	1.516	62569.1
[q16=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q17=1]	2.864	4.408	0.422	1	0.516	17.528	0.003	99003.7
[q17=2]	0.826	4.236	0.038	1	0.845	2.284	0.001	9209.72
[q17=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q18=1]	-1.461	2.558	0.326	1	0.568	0.232	0.002	34.94
[q18=2]	-0.86	2.716	0.1	1	0.752	0.423	0.002	86.86
[q18=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
a. The reference category is: nearly located stores.								
b. This parameter is set to zero because it is redundant.								
c. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.								

Same as table: 2 this Table: 3 is also comparing between the stores categories. In this table Super store category is compared with the nearly located shops. The reference category here is nearly located stores.

**Table 3: Parameter Estimates**

from where is grocery mostly purchased	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)		
							Lower Bound	Upper Bound	
Super Stores	Intercept	4.533	5445.96	0	1	0.999			
	[q5=1]	2.253	1.694	1.768	1	0.184	9.513	0.344	263.396
	[q5=2]	3.131	1.632	3.68	1	0.055	22.901	0.934	561.256
	[q5=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
	[q6=1]	1.048	1.754	0.357	1	0.55	2.852	0.092	88.724
	[q6=2]	-0.594	1.973	0.091	1	0.763	0.552	0.012	26.414
	[q6=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
	[q7=1]	8.147	2.989	7.432	1	0.006	3453.28	9.871	1208057.3
	[q7=2]	5.586	1.975	8	1	0.005	266.715	5.558	12798.239
	[q7=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
	[q8=1]	4.789	2.637	3.299	1	0.069	120.176	0.685	21091.748
	[q8=2]	3.661	2.49	2.163	1	0.141	38.914	0.296	5119.149

from where is grocery mostly purchased	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
							Lower Bound	Upper Bound
[q8=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q9=1]	-1.75	2.927	0.357	1	0.55	0.174	0.001	53.891
[q9=2]	-5.434	3.79	2.056	1	0.152	0.004	2.59E-06	7.34
[q9=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q10=1]	5.283	5.683	0.864	1	0.353	197.009	0.003	1.36E+07
[q10=2]	0.884	5.599	0.025	1	0.875	2.421	4.15E-05	141211.52
[q10=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q11=1]	0.453	5.331	0.007	1	0.932	1.573	4.56E-05	54235.905
[q11=2]	-1.705	5.278	0.104	1	0.747	0.182	5.85E-06	5648.935
[q11=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q12=1]	4.177	2.611	2.559	1	0.11	65.195	0.39	10891.462
[q12=2]	5.201	2.883	3.253	1	0.071	181.38	0.637	51644.388
[q12=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q13=1]	-19.689	5445.96	0	1	0.997	2.81E-09	0	.c
[q13=2]	-16.882	5445.96	0	1	0.998	4.66E-08	0	.c
[q13=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q14=1]	0.358	2.945	0.015	1	0.903	1.43	0.004	458.925
[q14=2]	0.618	3.129	0.039	1	0.843	1.855	0.004	854.478
[q14=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q15=1]	-7.143	3.361	4.517	1	0.034	0.001	1.09E-06	0.574
[q15=2]	-6.255	3.453	3.281	1	0.07	0.002	2.21E-06	1.67
[q15=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q16=1]	-1.92	1.562	1.51	1	0.219	0.147	0.007	3.132
[q16=2]	0.591	1.444	0.168	1	0.682	1.806	0.107	30.629
[q16=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q17=1]	5.334	2.676	3.973	1	0.046	207.179	1.093	39272.849
[q17=2]	4.215	2.549	2.734	1	0.098	67.711	0.458	10013.297
[q17=3]	0 <sup>b</sup>	.	.	0	.	.	.	.
[q18=1]	4.156	2.411	2.971	1	0.085	63.81	0.566	7197.294
[q18=2]	2.258	2.61	0.748	1	0.387	9.562	0.057	1593.382
[q18=3]	0 <sup>b</sup>	.	.	0	.	.	.	.

a. The reference category is: nearly located stores.

b. This parameter is set to zero because it is redundant.

c. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.



## **Conclusion, Discussions, Implications and Future Research**

The study concludes that there is positive relationship between price, atmosphere and service speed (store characteristics) with store choice. The other characteristics were not significant to the consumers' interest for choosing a store for buying their grocery items.

The use of the application of the multinomial logistic regression ensured the significance level of all the selected variables. It was determined that the following six variables: Price, Queue at checkout, Familiarity with the store layout, Variety of brands, Friendliness of the people, Walking Space has an influence on consumers to choose a grocery store for their shopping.

Based on the results, eight store characteristics/variables namely working hours, location, Quality of Products, quality of store own brands, Service speed, atmosphere, overall cleanliness, freshness of the products stand rejected and didn't show any significance and importance in relation to consumer's grocery store choice.

According to the respondents prioritization it was observed that customers think that the most important factors in grocery shopping are as follows: Price as the top most important factor, Service Speed as the second most important factor and the Atmosphere is the third most important factor in the eyes of grocery shoppers. It was also found that the consumers going to the mega stores are basically families, The super store has gentry of husband and a wife, and the consumers who do grocery shopping from nearby located small general stores are individuals and have no companion with them.

For future research, the study can move ahead by capturing the behaviors of each variable dominant on the other one at different buying situations. The scope can change to a different country and another region.

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