Effect of Gender, Age, and Marital Status of Grocery Consumers on Their Perceived Retail Store Image : A Study of Organized Grocery Market in India

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Abstract

The retail industry is changing with an unprecedented pace. Specifically, in developing countries like India, this change is disrupting the landscape of the retail sector with an intensity never seen before. To get an edge over competitors and to perform in a better way, it will be critical for retailers to understand the retail store attributes which attract the consumers and keep them coming back. To obtain a comprehensive understanding of grocery consumers' perceived retail store image across various demographic groups in context of India was the basic purpose of this paper. For this, a survey of grocery consumers, who visited organized grocery stores to purchase groceries at least once in a month, was conducted. Initially, 500 consumers were approached to fill a standardized questionnaire, and 469 questionnaires complete in all manners were used for the final analysis. The factor analysis resulted in nine major dimensions of store image construct. Furthermore, with the help of ANOVA and *t* - statistics, it was tested if the demographic factors like age, gender, and marital status significantly affected the perceived store image of grocery consumers. In this study, significant differences emerged in consumers' perception of store image dimensions based on age and marital status. In case of gender, no significant difference was observed on any store image dimension. The findings of this study would lead to an improved understanding of the linkage between grocery consumers' demographic attributes and their perceived level of store image in the context of a developing country.

Keywords : **Store image, perception, consumer behavior, groceries, organized retail, Indian retail**

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The retail sector is changing at a fast pace at global as well as at country levels. Specifically, in developing countries like India, this change is disrupting the landscape of the retail sector with an intensity never seen before. In addition to this, organized formats of retailing are increasing their footholds in developing countries in an unprecedented manner. The entry of global retail giants in the Indian grocery segment of retailing is changing the competitive structure and creating new equations for business here. In the past, developed markets with comparatively sluggish growth rate were the home of organized grocery retailers (Uusitalo, 2001). India, being the fastest developing country in the world, with an increasingly high growth rate of the grocery sector and home of the second largest population, becomes an altogether different destination for new entrants. India, the world's fifth-largest economy and destined to become the third largest in the near future, growing at a handsome rate of 7 – 8% annually makes it lucrative for global players. Foreign investors have shown very high confidence in

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India due to which it retained the second position in the FDI Confidence Index among emerging countries (AT Kearney, 2018). India also appeared in the top 100 out of 190 countries in the world and got the second position in the South Asia region in ease of doing business (World Bank Group, 2018). It became the fifth most preferred retail destination at the world level (India Brand Equity Foundation [IBEF], 2018) and got the first rank in the Global Retail Development Index (AT Kearney, 2017). These are some core reasons that global players like Walmart, Alibaba, etc. are searching for possible avenues of investment in India and collaborating with domestic players like Tatas, Reliance, Future Retail, etc. The Walmart - Flipkart deal is the recent example of strategic collaboration of retail biggies to strengthen their hold on the domestic market.

Organized grocery retailers have started dealing with consumers through various formats like super centers, hypermarkets, convenience stores, etc. Grocery retailing has also taken the online route for business, although this format has registered a slow growth rate in India till this time. Organized grocery stores provide several competitive advantages to consumers in comparison to traditional stores. These are more convenient, stay open for long hours, provide parking space, have flexible payment options, keep better assortment, have attractive store ambience, provide online orders and delivery options. Citing the above advancements, it would not be exaggerated to say that organized grocery retailing is bound to modify the Indian retail space. On the demand side also, a paradigm shift is taking place in India. For consumers, the act of shopping is no more confined to buying groceries only ; instead, they also consider the other related aspects like ambience, convenience, entertainment, treatment by store personnel as equally important.

Due to the consistent rise in income, change in lifestyle, the uptick in the standards of living, and rise in awareness, a radical change in perception and shopping behavior of Indian grocery consumers seems very likely. Such disruptions would start an era of new opportunities with unseen challenges for the retailers. To get an edge over competitors and perform in a better way, it will be critical for retailers to understand the retail store attributes which attract the grocery consumers and keep them coming back. So, it becomes very pertinent to update the understanding of Indian grocery consumers' satisfaction levels and revisit intentions by conducting empirical studies. Above all, store image dimensions that work as antecedents of cognitive loyalty of consumers (Kumar et al., 2016) should be revisited thoroughly. Most of the past research studies investigated the linkage between demographic attributes of grocery consumers and their behavioral outcomes like store selection, satisfaction, and repurchase intentions. For example, Saleem et al. (2017) in their study found significant differences in the frozen food purchase intentions of customers belonging to the joint family system and nuclear family system. But store image perceptions, despite being antecedent of all these outcome behaviors, are rarely investigated across consumers' demographic groups.

Studying the general perception of grocery consumers towards organized retail store image in the Indian context is the basic purpose of this paper. Further, this research would investigate whether consumers' demographic attributes like gender, age, and marital status exert any significant effect on consumers' perception towards organized store image. To achieve the aforesaid objectives, an examination was conducted of nine factored store image dimensions across the consumer demographic groups. The findings of this study would lead to an improved understanding of the linkage between grocery consumers' demographic attributes and their perceived level of store image.

Literature Review

Consumer Perceptions Towards Store Image

Since the last decade, perception towards store image has been an area of interest for researchers, but still, a universal consensus on its meaning is lacking. Martineau (1958) firstly defined store image as, "a store defined in

the shopper's mind partly by its functional qualities and partly by an aura of psychology attributes" (p. 47). In this sequence, Lindquist, (1974) defined store image as a blend of tangible functional factors and intangible psychological factors perceived to be present in a store by the customers. In research parlance, image is considered as a latent construct that cannot be measured directly ; rather, it is a combined output of several store-related items. Basically, consumers perceive stores on several dimensions, called as components or attributes. In collective form, these attributes construct the store image (Van der Heijden et al., 2003). Similarly, Bloemer and Ruyter (1998) defined the store image as, "the complex of a consumer's perceptions of a store on different (salient) attributes" (p. 501). Doyle and Fenwick (1974) found store image and attitude interchangeable as both of these describe the overall impression of a consumer towards a store. Store image is a multifaceted and complex construct (Van der Heijden et al., 2003). Multifaceted and complex in the sense that it consists of many dimensions like products, employees, ambience, price, promotion, services, convenience, and each of these dimensions further contains many sub-dimensions and attributes.

Consumers' Demographics and Their Retail Choice Behavior

Many studies have been conducted in Indian as well as in foreign retail environments that reported the influence of demographics on various aspects of consumer behavior. These include Jayasankara Prasad and Aryasri (2011) who found demographic attributes of shoppers to be crucial while selecting store format. Further, Sinha et al. (2002) claimed that age and gender drove the store choice. Likewise, age and education of consumers and size and income of households showed a substantial effect on store choice and shopping patterns of consumers (Carpenter & Balija, 2010 ; Sinha et al., 2002). It was found that consumers with high-income shopped from specialty grocery stores, while consumers having low-income visited conventional stores (Carpenter & Moore, 2006). However, Gehrt and Yan (2004) reported a weak linkage in store-choice and demographics. Further, Jayawardhena et al. (2007) found gender as a substantial influencer towards the purchase intentions of consumers. In the grocery stores, women looked for economic deals (Baltas & Papastathopoulou, 2003) and felt more satisfied in comparison to men (Helgesen & Nessest, 2010). Women preferred local stores because of the relationship and convenience provided (Khare, 2012), although a negative relationship was reported between education and price attributes of a grocery store by Baltas and Papastathopoulou (2003). While shopping for groceries, consumer behavior was found to be dependent on consumers' gender and marital status (Krishnamurti & Gupta, 2017), although Prasad and Sharma (2016), in their study of Indian urban population, found that demographic attributes did not have any significant impact on online channel usage for food and grocery purchase.

The Indian grocery market is going through a significant change and so is the consumer behavior. So, more dedicated and exhaustive efforts are required to investigate the perception of Indian grocery consumers towards modern organized retail store image across their demographic groups as this area is still under-researched. To fulfill this gap and to test the hypothetical relationships between consumers' perception towards store image and their demographics, the following objectives and hypotheses are framed.

The objectives of this study are listed as follows :

(1) To study the perceptions of grocery consumers towards organized retail store image in the Indian context.

(2) To investigate if the consumers' perception towards organized retail store image varies across their gender, age, and marital status.

To fulfill this objective, the following hypotheses are formulated :

↳ **H_{01} :** There is no significant difference in perceptions of male and female grocery consumers towards organized retail store image.

↳ **H_{02} :** There is no significant difference in perceptions of married and unmarried grocery consumers towards organized retail store image.

↳ **H_{03} :** There is no significant difference in perceptions of grocery consumers across various age groups towards organized retail store image.

Research Methodology

Sample

The target population of this study consisted of only those consumers who visited organized stores at least once in a month for grocery shopping. A survey was conducted to collect the data from grocery consumers for the purpose of analysis. Convenient and judgmental sampling techniques were adopted while collecting data from the target respondents. In total, 500 consumers were approached and personally administered a structured questionnaire in the time period of January – June 2019. A brief description of the sample is given in Table 1. Out of 500, only 472 questionnaires were complete in all respects and were found fit for analysis. Three responses, which showed unengaged responses, were dropped out and thus data of 469 respondents were used for the final analysis.

Table 1. ***Demographic Profile of the Respondents***

Demographic Variable	Levels of Demographic Variables	Frequency	Percentage
Gender	Female	255	54.4
	Male	214	45.6
	Total	469	100
Marital Status	Married	183	39.0
	Unmarried	286	61.0
	Total	469	100
Age Groups (in years)	16 – 20	31	6.6
	21–30	308	65.7
	31–40	91	19.4
	Above 40	39	8.3
	Total	469	100

Measurement Scale

Perceived retail store image is the main construct investigated under this study in the Indian grocery market. A 49-item scale was used to measure the perception of grocery consumers towards organized retail store image. This scale was developed after an extensive review of the existing literature in this area. Also, grocery consumers, retailers, and academic experts were approached to discuss the appropriateness of the measurement scale. A 5 - point Likert-scale was used to record the responses of consumers on store image measurement scale. Apart from the store image scale, items regarding age, gender, and marital status of consumers were also put in the questionnaire.

Tools and Techniques Applied

To reduce the 49-item scale into major dimensions of store image, exploratory factor analysis was applied. Further, independent *t* - tests were applied to check if the mean responses on perception differed significantly across gender and marital status of the respondents. Analysis of variance was also used to check if the mean responses on perception differed significantly across the various age groups of respondents. Additionally, post-hoc tests were applied to confirm the ANOVA test results more specifically. Besides inferential techniques, some descriptive statistical tools like frequency, mean, grand mean, and standard deviation were also used to comprehend the collected data.

Data Analysis and Results

Data Screening

First of all, case screening was done to check the missing values in the data. No missing values were detected at this stage. After that, the data were checked for unengaged responses. Three respondents showed almost zero standard deviation in their responses on items of scale of store image. The responses of these respondents were taken away from the final analysis. In variable screening, no missing values were found on any variable. Further, the skewness and kurtosis coefficient values for each variable were found within a permissible limit, that is, –3 to +3. So, this analysis confirmed the suitability of data for exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

Exploratory Factor Analysis

The suitability of the data for factor analysis was checked with the help of KMO test and Bartlett's test of sphericity. KMO test ascertains whether an adequate sample is collected for investigating the constructs under study and Bartlett's test of sphericity checks whether a sufficient correlation exists between the items for factor analysis.

The value of KMO at .953 (Table 2) is significantly higher than the acceptance level, which confirms the sampling adequacy for items of the model. Further, Bartlett's test of sphericity is significant, confirming that the correlation matrix of scale variables is not an identity matrix. The results of these two tests confirm that the sample size was suitable for factor analysis. Further, exploratory factor analysis is applied to identify the inherent structure of variables used to measure the perceptions of grocery consumers towards organized retail store image. Principal component analysis was used to extract the major dimensions. In addition, the varimax rotation method was used to rotate the items on different factors. In coefficient display format, the items were sorted by size, and loadings less than .40 were suppressed. It helped in getting a clear structural picture of the major dimensions. There are many approaches to decide the number of factors to be extracted from factor analysis. In this study, factors were extracted based on the eigen-values. Only those factors having an eigen-value of more than one

Table 2. *KMO and Bartlett's Test*

Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		.953
Bartlett's Test of Sphericity	Approx. Chi-Square	12602.880
	Df	1176
	Sig.	.000

were considered for the analysis. Based on eigen-values, variables of store image were reduced to nine major dimensions, namely, Spatial Attractiveness (Spatial), Proficiency of Employees (ProfEmp), Pricing Attributes (Price), Variety of Groceries (Variety), Promotional Attributes (Promotion), Convenience of Shopping (Convenience), Other Services (OtherServ), Availability of Groceries (Availability), and Customer Relations (Relationship) as shown in Table 3.

The first major factor christened as Spatial Attractiveness represents the in-store attributes of an organized retail store. It has nine variables significantly loading on it which explain 35.768% of the total variance. It has an eigen value of 17.526. Further, the reliability of the scale is tested by determining the value of Cronbach's alpha. Similarly, the alpha values for all factors are found to be higher than the acceptance level of 0.6 (Hair et al., 2010). For the first-factor, alpha value is .895. All extracted factors are presented in Table 3 with their respective items loading on them : alpha values, eigen values, and variance explained. A clear structure of variables in the model is extracted by factor analysis without any cross-loading. The extracted factors explain 61.600% of the total variance.

Table 3. ***Factor Loadings of Varimax Rotated Principal Component Analysis***

Factor Name (Cronbach's Alpha)	Item's Description	Factor Loadings	Eigen Values	Variance Explained (%)
Spatial Attractiveness	Sufficient lighting arrangements.	.700	**17.526**	**35.768**
(*Spatial* : .895)	Informative signs help in finding groceries.	.620		
	Proper display of groceries.	.617		
	Easy to move with trolley.	.613		
	Easy to find grocery products.	.608		
	Convenient location of store.	.584		
	Well-organized layout.	.538		
	Pleasing shopping experience.	.533		
	Clean store.	.519		
Proficiency of Employees	Trained employees.	.750	**2.896**	**5.190**
(*Prof Emp* : .891)	Smart looking sales people.	.710		
	Properly dressed sales people.	.666		
	Friendly sales people.	.577		
	Sales people have good communication skills.	.574		
	Quick response to consumers' queries.	.550		
	Easy to contact employees.	.511		
	Individual attention to consumers.	.478		
	Sales people give good advice about grocery items.	.449		
Pricing Attributes	Lower price than competitors.	.731	1.892	3.860
(*Price* : .838)	Reasonable price of groceries.	.722		
	Value for money.	.666		
	Proper display of prices.	.558		
	Attractive discounts on price of groceries.	.539		
Variety of Groceries	Wide range of grocery brands.	.734	1.739	3.549
(*Variety* : .792)	Attractive packaging.	.668		
	A large variety of groceries.	.563		
	Attractive assortment.	.485		
	Keep all groceries you need under one roof.	.404		
Promotional Attributes	Promotional events to attract consumers.	.707	1.478	3.016

(*Promotion* : .826)	Various membership card benefits.	.691		
	Frequent advertisements.	.627		
	Attractive promotional schemes.	.591		
	Proper display of schemes of grocery products.	.524		
	Provide accurate and relevant information.	.446		
Convenience of Shopping	Fast checkout.	.680	1.336	2.727
(*Convenience* : .809)	Open for long hours.	.659		
	Error free services.	.611		
	Many payment options.	.549		
	Organized retail store has good service.	.530		
	Adequate parking facilities.	.443		
Other Services	Organized store offers home delivery of groceries.	.831	1.191	2.430
(*OtherServ* :.842)	You can order from home.	.793		
	Replacement and return options available.	.652		
Availability of Groceries	Required grocery products are never out of stock.	.618	1.089	2.222
(*Availability* : .698)	Availability of organic grocery products.	.564		
	Fresh grocery products.	.438		
Customer Relations	Give free gifts.	.643	1.037	2.177
(*Relationship* : .722)	Attractive discounts and offers.	.553		
	Effective CRM practices.	.406		

Independent t-tests

Independent *t*-tests were applied to investigate the effect of demographic variables, that is, gender and marital status on consumers' perceptions towards factored store image attributes. Levene's tests were applied to confirm the condition of homogeneity of variances ; *t*-statistics for equal variances were interpreted for non-significant Levene's tests and *t*-statistics for non-equal variances were interpreted for the significant Levene's tests. Gender is found to be a non-significant predictor of perceptions on all dimensions of store image (Table 4), resulting in acceptance of null hypothesis H_{01}.

Table 4. ***Independent t - test Results Regarding Perceived Store Image***

Demographic Variable	**Factor**	**Levene's Test for Equality of Variances**		***t*-test for Equality of Means**				
		F	**Sig.**	***t***	**Mean**		**Sig. (2-tailed)**	**Mean Difference**
Gender :	*Spatial*	7.125	.008[b]	1.753[c]	F=3.9922	M=3.8904	.086	.10171
Female (F) = 255	*ProfEmp*	8.866	.003[b]	.825[c]	F=3.5826	M=3.5306	.417	.05194
Male (M)= 214	*Price*	3.214	.074[a]	.560	F=3.6298	M=3.5925	.576	.03728
	Variety	5.258	.022[b]	1.600[c]	F=3.9208	M=3.8252	.115	.09555
	Promotion	1.844	.175[a]	.414	F=3.6242	M=3.5989	.679	.02527
	Convenience	7.786	.005[b]	1.051[c]	F=3.7458	M=3.6815	.305	.06429
	OtherServ	3.058	.081[a]	1.953	F=3.1098	M=2.9361	.051	.17367
	Availability	1.874	.172[a]	.275	F=3.5804	M=3.5607	.784	.01964

	Relationship	.840	.360 [a]	1.613	F=3.5569	M=3.4439	.107	.11294
Marital Status :	*Spatial*	1.798	.181 [a]	–1.438	Ma=3.8937	Un=3.9790	.151	–.08527
Married (Ma)=183	*ProfEmp*	.076	.783 [a]	–1.778	Ma=3.4894	Un=3.6033	.076	–.11397
Unmarried (Un)= 286	*Price*	.499	.480 [a]	–2.460	Ma=3.5115	Un=3.6776	.014*	–.16615
	Variety	.243	.623 [a]	–1.547	Ma=3.8197	Un=3.9140	.123	–.09431
	Promotion	.469	.494 [a]	–1.288	Ma=3.5638	Un=3.6439	.198	–.08019
	Convenience	.192	.662 [a]	–2.761	Ma=3.6120	Un=3.7832	.006**	–.17119
	OtherServ	.125	.724 [a]	–3.409	Ma=2.8434	Un=3.1503	.001**	–.30700
	Availability	.001	.979 [a]	–1.546	Ma=3.5027	Un=3.6154	.123	–.11265
	Relationship	.363	.547 [a]	–2.492	Ma=3.3971	Un=3.5746	.013*	–.17751

Note 1. [a] Levene's test assumes equal variances among demographic groups. [b] Levene's test assumes unequal variances among demographic groups. [c] equal variances not assumed. ***Note 2.*** The mean difference is significant at * $p \leq 0.05$; ** $p \leq 0.01$ levels. ***Note 3.*** *Spatial* = Spatial Attractiveness ; *ProfEmp* = Proficiency of Employees; *Price* = Pricing Attributes ; *Variety* = Variety of Groceries ; *Promotion* = Promotional Attributes; *Convenience* = Convenience of Shopping ; *OtherServ* = Other Services ; *Availability* = Availability of Groceries ; *Relationship* = Customer Relations.

In another round of *t* - tests, effect of marital status on consumers' perceived retail store image is investigated. In this case, Levene's tests are non-significant for all dimensions of store image. Results of *t* - test, as shown in Table 4, indicate that married and unmarried grocery consumers differed significantly in their perception towards Pricing Attributes (t = –2.460, p =.014, mean difference = –.16615), Convenience of Shopping (t = –2.761, p =.006, mean difference = –.17119), Other Services (t = –3.409, p =.001, mean difference = –.30700), Customer Relations (t = –2.492, p = .013, mean difference = –.17751). Although, on other dimensions, that is, Spatial Attractiveness, Proficiency of Employees, Variety of Groceries, Promotional Attributes, and Availability of Groceries, the mean differences on perceptions among married and unmarried grocery consumers are non-significant. These *t* - statistics result in the partial acceptance of the null hypothesis H_{02}.

Analysis of Variance (ANOVA)

One-way analysis of variance is used to check if the age of grocery consumers has any effect on the mean values of nine major dimensions of store image (Table 6). The data used for this analysis passed the necessary assumptions of normality, independent observations, absence of outliers, and homogeneity of variances (Table 5). For this part of analysis, dimensions of perceived store image are taken as dependent variables measured on metric scale and

Table 5. ***Test of Homogeneity of Variances***

	Levene Statistic	*df*1	*df*2	Sig.
Spatial	.573	3	465	.633
ProfEmp	.065	3	465	.978
Price	.415	3	465	.742
Variety	1.432	3	465	.233
Promotion	.208	3	465	.891
Convenience	1.496	3	465	.215
OtherServ	2.296	3	465	.077
Availability	.369	3	465	.776
Relationship	2.015	3	465	.111

Table 6. *ANOVA Results*

		Sum of Squares	*Df*	Mean Square	*F*	Sig.
Spatial	Between Groups	5.358	3	1.786	4.644	.003**
	Within Groups	178.830	465	.385		
	Total	184.187	468			
ProfEmp	Between Groups	3.053	3	1.018	2.227	.084
	Within Groups	212.522	465	.457		
	Total	215.575	468			
Price	Between Groups	6.384	3	2.128	4.220	.006**
	Within Groups	234.499	465	.504		
	Total	240.883	468			
Variety	Between Groups	3.622	3	1.207	2.937	.033*
	Within Groups	191.144	465	.411		
	Total	194.766	468			
Promotion	Between Groups	2.333	3	.778	1.806	.145
	Within Groups	200.243	465	.431		
	Total	202.576	468			
Convenience	Between Groups	5.316	3	1.772	4.154	.006**
	Within Groups	198.357	465	.427		
	Total	203.672	468			
OtherServ	Between Groups	18.184	3	6.061	6.791	.000***
	Within Groups	415.045	465	.893		
	Total	433.229	468			
Availability	Between Groups	2.966	3	.989	1.672	.172
	Within Groups	275.002	465	.591		
	Total	277.968	468			
Relationship	Between Groups	6.745	3	2.248	4.003	.008**
	Within Groups	261.158	465	.562		
	Total	267.903	468			

Note. The mean difference is significant at * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$ levels.

age is taken as an independent variable measured on four age categories, that is, 16–20 years, 21–30 years, 31 – 40 years, and above 40 years.

The results of one-way ANOVA show significant mean differences in consumers' perceptions on six dimensions of store image across their age groups. The significant estimates generated by one-way ANOVA model shown in Table 6 are: $F = 4.644$, $p = .003$ for perceived Spatial Attractiveness attributes ; $F = 4.220$, $p = .006$ for perceived Pricing attributes ; $F = 2.937$, $p = .033$ for perceived Variety of Groceries ; $F = 4.154$, $p = .006$ for perceived Convenience of Shopping ; $F = 6.791$, $p = .000$ for perceived Other Services ; and $F = 4.003$, $p = .008$ for perceived Customer Relations. Non-significant estimates are shown by analysis of variance model on perceptions towards rest of the three dimensions of store image, that is, Proficiency of Employees, Promotional Attributes, and Availability of Groceries.

Post - Hoc Tests

Post - hoc tests are also used to confirm the significant differences shown by the ANOVA model and to identify

which specific age groups actually differ from each other. Post - hoc tests also investigate the strength with which the dimensions of store image are perceived among grocery consumers across their age groups. The collected data met the condition of homogeneity of variances (homoscedasticity) in all major dimensions of perception. So, the Tukey's HSD post - hoc test was found to be the most appropriate to confirm the differences among age groups. Table 7 depicts the mean scores and standard deviations of perceived strength on each dimension at corresponding significance levels of age groups effects. A specific difference between 21–30 years and 31–40 years of age group of respondents is indicated by Tukey's HSD test. These two groups perceived the Spatial Attractiveness aspects of stores differently in a statistically significant manner at .049 alpha levels. Further, the post - hoc test indicates that respondents in the age groups of 21 – 30 years and 31 – 40 years and 21 – 30 years and above 40 years age

Table 7. ***Post Hoc Tests : Multiple Comparisons***

Dependent Variables	Age Groups	*N*	Mean	*SD*	Tukey's HSD Comparisons			
					(1)	(2)	(3)	(4)
Spatial	(1)	31	3.7706	.61926				
	(2)	308	4.0216	.63719	.140			
	(3)	91	3.8303	.61046	.967	.049*		
	(4)	39	3.7550	.49044	1.000	.057	.921	
	Total	**469**	**3.9457**	**.62735**				
Price	(1)	31	3.5613	.68977				
	(2)	308	3.6922	.69080	.762			
	(3)	91	3.4703	.79965	.927	.045*		
	(4)	39	3.3590	.65241	.637	.030*	.845	
	Total	**469**	**3.6128**	**.71743**				
Variety	(1)	31	3.7871	.71728				
	(2)	308	3.9390	.63465	.591			
	(3)	91	3.7758	.67187	1.000	.144		
	(4)	39	3.6974	.54844	.938	.120	.919	
	Total	**469**	**3.8772**	**.64511**				
Convenience	(1)	31	3.8602	.62524				
	(2)	308	3.7722	.66432	.891			
	(3)	91	3.5696	.65737	.142	.047*		
	(4)	39	3.5043	.56776	.108	.076	.954	
	Total	**469**	**3.7164**	**.65970**				
Other Services	(1)	31	3.1183	.97581				
	(2)	308	3.1548	.97278	.997			
	(3)	91	2.6850	.89078	.123	.000***		
	(4)	39	2.7863	.80382	.463	.101	.944	
	Total	**469**	**3.0306**	**.96213**				
Relationship	(1)	31	3.4086	.87648				
	(2)	308	3.5898	.76539	.574			
	(3)	91	3.3040	.68068	.908	.008**		
	(4)	39	3.3846	.66023	.999	.373	.943	
	Total	**469**	**3.5053**	**.75660**				

Note 1. (1), 16–20 years ; (2), 21–30 years; (3), 31–40 years ; (4), above 40 years ; *n* : number of respondents ; *SD* : standard deviation.

Note 2. The mean difference is significant at * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$ levels.

perceived pricing attributes in a statistically significant different manner at .045 and .030 alpha levels, respectively. For the scales of Convenience of Shopping, Other Services, and Customer Relations, statistically significant differences are observed between 21 – 30 years and 31 – 40 years age group respondents at .006, .000, and .008 alpha levels, respectively. In the Tukey's HSD post - hoc analysis, only Variety of Groceries emerges as a single non-significant model. All age groups perceived the Variety dimension of retail store image similarly. The ANOVA test-statistics result in the partial acceptance of the null hypothesis H_{03}.

Discussion

This study empirically specifies the effects of age, gender, and marital status of grocery consumers on their perceived organized retail store image. Data of 469 grocery consumers is used in the final analysis. The store image scale consisting of 49 items is factor analyzed and subjected to principal component analysis and varimax rotation. Factor analysis reduces the 49 - item scale into nine major dimensions of store image. In the second objective, we investigate the effects of gender, age, and marital status on the perceptions of grocery consumers. In this part of the analysis, it is investigated if significant differences exist between male and female, married and unmarried, and different age groups towards the perception of store attributes. Empirical findings of this study conclude that grocery consumers, irrespective of their gender, perceived all dimensions of store image positively. However, no significant differences are observed between male and female consumers' perceptions. Similarly, irrespective of their marital status, consumers perceived all dimensions positively except Other Services as married consumers perceived it negatively ($M = 2.8434$). It shows that the current strategies of grocery retailers regarding order-from-home and home-delivery services were not meeting the expectations of the consumers. Lack of time, as married consumers have to perform many additional household chores than unmarried ones, can be the primary reason consumers expect some time-saving services from retailers. Further, statistically significant differences emerge between married and unmarried grocery consumers on perception towards Price, Convenience, Other Services, and Relationship dimensions of store image. As compared with married, unmarried consumers rated higher on these dimensions (Table 4). Thus, grocery retailers would do well to improve on pricing, services, and relationship-building strategies, and take care of convenience provided- when married grocery consumers are the target demographic.

Further, with the help of ANOVA, the study finds significant differences between various age groups' respondents on mean values of receptivity towards Price, Variety, Spatial Attractiveness, Convenience, Other Services, and Relationship dimensions. Tukey's post - hoc tests were applied to determine which means differ. Variety is the single non-significant model in the post - hoc analysis, which means all age group consumers perceived it similarly. Grocery consumers of age group 21 – 30 years and 31 – 40 years significantly varied on perceptions towards Price, Spatial Attractiveness, Convenience, Other Services, and Relationship dimensions. Interestingly, the age group 21 – 30 years consumers perceived all these dimensions higher than the age group 31 – 40 years consumers. Also, consumers belonging to the age group of 21 – 30 years perceived Price of groceries in a significantly higher manner than those of above 40 years age group. It shows grocery consumers aged between 21 – 30 years were more content with organized retail stores. So, improvement and betterment of prices, spatial aspects, convenience, other services, and relationship strategies are the pre-requisites for grocery retailers for attracting consumers aged between 30 – 40 years.

Managerial and Theoretical Implications

The empirical findings of this study have several managerial and theoretical implications. First, it is implicated from the findings that grocery retail managers could adopt the same strategies for male and female grocery

consumers as no significant differences are found in their perceptions of store image. It would lead to quick decision making as no gender-specific strategies need to be formulated. Second, the grocery store managers should focus on improvement and addition of order-from-home and home-delivery services if married consumers constitute their target group. Further, the results suggest that retailers should redesign the pricing strategies, assortment, and ensure convenience from the point of view of married consumers. It would do well in terms of improved perceptions of store image and more repurchases from married consumers as they perceived this factor in a least manner. Theoretically, these findings update the existing understanding about grocery consumers' store image perceptions across various demographic groups in context of Indian organized retail market.

Limitations of the Study and Scope for Future Research

Every study, irrespective of the methodology adopted or the environment chosen, has limitations and so does this one. Lack of generalizability in other environments is the most obvious limitation of this study. Findings of this study can be generalized to the environments similar to the Indian grocery store environment only and not to others. Secondly, this study is based on the primary data which in itself is subject to several errors and biases on the part of consumers and researchers as well. Thirdly, this study is not specific to any store format like malls, departmental stores, or convenient stores. So, it can be seen as a potential future scope to make some store format-specific studies in this area. Also, comparative studies could be done to better understand the consumer behavior in format-specific environments which would enrich the existing body of knowledge in this area.

Authors' Contribution

Prof. Usha Arora conceived the idea of exploring consumers' perceptions of organized grocery retail store image in context of transforming the Indian market. Further, she helped in specifying the research design, setting the research objectives, and theory building to conduct this empirical study in a comprehensive manner. Dr. Parmod visited the existing pertinent literature to identify the variables constituting store image which helped in development of the measurement scale of store image. Further, he collected the data from the target respondents, pre-processed the data, applied relevant statistical tools in order to achieve the set objectives, and reported the findings.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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