

**International Journal of Indian Culture and Business Management**

ISSN online: 1753-0814 - ISSN print: 1753-0806

<https://www.inderscience.com/ijicbm>

---

**A study of perceived store image and behavioural intentions of Indian grocery consumers: the mediating effect of satisfaction**

Parmod Parmod, Usha Arora, Farhat Akhtar, Parveen Kumar

**DOI:** [10.1504/IJICBM.2023.10058429](https://doi.org/10.1504/IJICBM.2023.10058429)

**Article History:**

Received:	18 November 2022
Last revised:	30 June 2023
Accepted:	03 July 2023
Published online:	22 January 2025

---

## **A study of perceived store image and behavioural intentions of Indian grocery consumers: the mediating effect of satisfaction**

---

Parmod Parmod\*, Usha Arora and  
Farhat Akhtar

Haryana School of Business,  
Guru Jambheshwar University of Science and Technology,  
Hisar-125001, Haryana, India  
Email: parmody1991.hsb@gjust.org  
Email: profarorausha@yahoo.co.in  
Email: farhatakhtar2805@gmail.com

\*Corresponding author

Parveen Kumar

Department of Management Studies,  
J.C. Bose University of Science and Technology,  
YMCA,  
Faridabad-121006, Haryana, India  
Email: drparveenkumar@jcboseust.ac.in

**Abstract:** This paper aims to analyse the relationships among perceived store image (SI), satisfaction (SAT), and behavioural intentions (BI) of grocery consumers in the Indian context. Further, it examines the mediating role of satisfaction among store image and behavioural intentions. Psychometric properties of measurement scales of these constructs were tested with factor analysis. Subsequently, relationships between these were analysed through structural equation modelling. Results suggest a significant positive effect of store image on grocery consumers' satisfaction and behavioural intentions. Further, results showed a robust positive relationship between satisfaction and behavioural intentions. Satisfaction demonstrated a significant partial mediating effect between store image and behavioural intentions. This study manifests store image as a strong predictor of consumers' behavioural outcomes and thus advocates for more focus. It further shows that satisfied grocery consumers have beneficial behavioural intentions, so grocery managers should focus on satisfying them through personalised services, quality grocery, home delivery options, and managing productive relationships.

**Keywords:** grocery consumers; store image; satisfaction; behavioural intentions; mediation analysis; organised grocery store; Indian grocery market; confirmatory factor analysis; structural equation modelling; SEM.

**Reference** to this paper should be made as follows: Parmod, P., Arora, U., Akhtar, F. and Kumar, P. (2025) 'A study of perceived store image and behavioural intentions of Indian grocery consumers: the mediating effect of satisfaction', *Int. J. Indian Culture and Business Management*, Vol. 34, No. 1, pp.27–44.

**Biographical notes:** Parmod Parmod is an Assistant Professor and researcher with an experience of five years in academics and research. He has established himself as a dedicated scholar passionate about advancing marketing management and business research knowledge. Notably, he played a crucial role in specifying the research design, ensuring the study was methodologically sound and aligned with the research objectives. He diligently worked on the theory-building of this research. He is committed to contributing to the existing body of knowledge through quality research works in his area.

Usha Arora is an esteemed academician and researcher renowned for her significant contributions to the field of education. With a distinguished career spanning several decades, she has established herself as a prominent figure in higher education and has made a lasting impact on the academic community. She is a passionate educator dedicated to inspiring and shaping the minds of future generations. Her research interests encompass educational policy, curriculum development, teacher training, and management. She has conducted extensive research, published numerous scholarly articles and papers in reputed journals, and received numerous accolades and awards throughout her career. Her familiarity with the cultural, social, and institutional factors influencing the research area has significantly contributed to formulating appropriate research questions and hypotheses. Through her guidance, the research team developed a comprehensive and nuanced understanding of the subject matter, ensuring the study captured the intricate interplay of various variables and factors.

Farhat Akhtar is a dedicated research scholar currently pursuing her studies at the prestigious Haryana School of Business, GJUS&T, located in Hisar, Haryana, India. Her primary areas of interest revolve around financial management, foreign exchange management, business statistics, and business research methods. She applied robust statistical tools to analyse the data in light of research objectives and diligently worked towards improving the language and clarity of the paper.

Parveen Kumar received his Master's in Business Administration from Kurukshetra University, Kurukshetra, and completed his PhD in Electronic Banking from GJUS&T, Hisar. He has gained teaching experience of nine years and one year of industrial experience. His area of interest includes marketing, human behaviour, accounting, financial management, banking, and social entrepreneurship. He has published 20 research papers and two books in these areas. He comprehensively reviewed the pertinent literature for theory building and developed a robust backdrop for this study.

---

## 1 Introduction

India has seen a fundamental change in its economic and industrial structure in the last three decades. Simultaneously, the Indian retail sector underwent a structural overhaul and witnessed unprecedented growth. Meanwhile, several modern retail outlets like supermarkets, malls, hypermarkets, convenience stores, and departmental stores emerged to capture the vast untapped potential of the developing Indian retail market. Although modern retailing is in its nascent stage in India, the future looks promising. Hypermarkets can register a growth rate of 40%, while supermarkets may register a 21.8% growth rate (GAIN, 2018). Besides, private consumption is anticipated to rise from 57% in 2008 to 62% of GDP in 2028 (BCG and RAI, 2019). Sustainable economic growth, foreign

investment inflow, increasing disposable income, and changing consumer preferences will create opportunities for retailers. In an interesting demographic shift, nuclear families, which spend 20% to 30% more per capita than joint families, are expected to rise to 74% by 2025 (Singhi et al., 2017). Driven by these developments, the Indian retail industry may reach 1.6 trillion USD by 2026 (Mohanta, 2017) and INR 330 trillion mark by 2028 with a CAGR of 12% and modern retail registering a growth rate of double it (BCG and RAI, 2019).

The food and grocery segment is the most significant of the total retail revenues, expected to reach USD 700 billion in 2022 (Wharton University of Pennsylvania, 2018). Hitherto, traditional stores like Kiryana and neighbourhood stores dominate the food and grocery market with a 98% market share (GAIN, 2019). Though the entry of modern grocery stores in the grocery segment is recent, their presence is bound to change the competitive landscape. However, several challenges associated with infrastructure, existing systems, and policies may impede this sector's rapid growth. It is crucial to address these challenges to realise the full potential of the Indian organised retail market (Srivastava et al., 2020). Most of the previous studies on grocery retailing cover mature markets, as mature markets with slow growth rates have been the potential targets for organised grocery retailers (Uusitalo, 2001). Contrarily, India is a developing country with a vast unorganised market. Here, groceries are purchased routinely and are essential to every household purchase. Hence, the food and grocery segment constitutes around 66% of the total revenues generated by the retail industry in India (Puri and Taneja, 2018).

Along with the drift in retail topography, the demand side developments like increasing disposable incomes, changing lifestyles, enhancing health consciousness, and demographic shifts will disrupt modern grocery retailing in India. Food retailing has transitioned from small roadside grocery shops, mandis, haats, and bazaars to modern supermarket stores. These stores provide consumers with a comfortable ambiance to inspect, select, and purchase a wide range of food products, including processed items and groceries, all at a fair price (Bhatt and Thaker, 2020). Furthermore, technological innovations are also crucial in framing consumers' psychological and behavioural aspects like store image, satisfaction, and loyalty in the context of shopping experiences in electronic products, furniture products, clothing, and grocery stores (Khaled et al., 2020). The shopping mindset of Indian consumers has evolved from being primarily physical in the 1980s to online in recent years. Now, in the 2020s, a new trend called 'Phygital' (physical and digital) has emerged, transforming the shopping experience into an omnichannel platform within the Indian retail landscape (Krishnamurthy and Venkitachalam, 2023).

In this evolving retail landscape, the mere availability of products is no longer enough for retailers. To capitalise on the growing opportunities, they must shift their focus towards delivering enhanced value through retail (Roodagi, 2020). Modern grocery retailers must know how consumers perceive them to design a correct and more effective combination of store attributes. In addition to this, the growing number of grocery stores makes it very pertinent to identify and analyse the relationship between store image and behavioural intentions (Hsu et al., 2010). Against this backdrop, our research focuses on updating the existing knowledge with the help of empirical exploration of the store image, satisfaction, and behavioural intention of consumers in the continuously evolving Indian grocery market. A deeper analysis of associations between these constructs will

have theoretical implications for researchers and provide fact-based insights that will aid retailers, policymakers, and strategists in informed decision-making.

## **2 Literature review**

### *2.1 Store image*

Organised grocery stores generally provide various products and brands, customised services, a pleasant shopping experience, and a welcoming store environment to create a distinctive selling proposition for target consumers. Store image is an essential tool for managing the position of the store (Birtwistle et al., 1999) and differentiating it from competitors (Uusitalo, 2001). Consumers assess numerous aspects of a store, sometimes called attributes or dimensions. These attributes construct an overall image of any store (Van der Heijden and Verhagen, 2004). So, store image is assumed to be a multifaceted and multi-attribute model (Bloemer and de Ruyter, 1998; Van der Heijden and Verhagen, 2004) and thus the complex one (Du Preez et al., 2008). Although extensive research has been conducted on store image and its perceptions, a universal consensus is still absent on its meaning and definitions. Most probably because of gaps in varying conceptualisation forms (Morschett et al., 2005). Martineau (1958) stated it as “a store defined in the shopper’s mind partly by its functional qualities and partly by an aura of psychology attributes.” Lindquist (1974) explained, “Store image is a combination of both tangible of functional factors as well as intangible of psychological factors that a consumer perceives to be present.” Some researchers found closeness in attitude and store image.

Further, store image is considered a latent construct representing collective perceptions of several variables of the store. “Store image is a total impression represented in the memory as a result of perceived attributes associated with the store which are independent and interdependent in the consumer’s memory based on both current and previous exposure to stimuli” (Hartman and Spiro, 2005). Store attributes relate to atmospherics, advertising, and personnel (Mittal and Sheth, 2004); merchandising, store atmosphere, in-store service, facilities, accessibility, reputation, promotions, and post-transaction service (Thang and Tan, 2003). Store image is a second-order construct formulated by store ambiance, services, marketing attractiveness, and merchandise (Hsu et al., 2010). Product selection, price, personnel courtesy, and cleanliness play a pivotal role in retail store selection (Carpenter and Moore, 2006). Store attributes play a pivotal role in influencing food and grocery choices (Nair and Shams, 2021) and constitute the store’s personality, an antecedent of consumer choice behaviour (Das, 2014). Demographic attributes like age and marital status may influence store image perceptions (Parmod and Arora, 2021). The relative importance of these attributes may change with a change in consumer preferences; the relevance and significance in building store image will always be there. Store image built on perceptions of crucial store attributes influences store choice (Engel et al., 1995) and partially mediates customer characteristics and store choice behaviour (Hiremath, 2023). A store’s position and image change with the social and cultural environment (Uusitalo, 2001).

## 2.2 *Consumer satisfaction*

Many studies have covered satisfaction but lack a universally accepted definition and meaning (Giese and Cote, 2000). Satisfaction and its drivers have also been examined in e-grocery retailing in studies such as Kumar et al. (2023). The literature recognises satisfaction as a post-purchase phenomenon (Giese and Cote, 2000). Satisfaction is “the outcome of the subjective evaluation that the chosen alternative (the store) meets or exceeds expectations” (Bloemer and de Ruyter, 1998). Store attributes like price, variety, quality (Clotey et al., 2008), store environment, procedures, personnel, and core offer (Morschett et al., 2005) affect satisfaction. In the supermarket sector, service quality also significantly affects customers’ satisfaction and loyalty (Slack and Singh, 2020). Further, in a study of the telecommunication industry, service and price range significantly influence customer satisfaction (Roy, 2022). Francis et al. (2021) identified the drive for technology acceptance, service quality, trust, and social influence as crucial predictors of customer satisfaction in the realm of e-commerce. In literature, store image in general (Chang and Tu, 2005) and store image dimensions (Bloemer and Odekerken-Schröder, 2002; Koo, 2003) emerged as key determinants of customer satisfaction. It is essential to explore the relationship between store image and customer satisfaction in a relatively new retail market, as their relationship could be situation-specific. From the above discussion, the researchers have formulated the following hypothesis:

H1 Store image has a direct influence on grocery consumers’ store satisfaction.

## 2.3 *Behavioural intentions*

Creating loyalty and good behavioural intentions among target customers have been the prime objective of retailers. Loyalty can result in positive word-of-mouth, repeat purchases, and reduced overall customer acquisition cost, as the cost of retaining is significantly lesser than the cost of acquiring new customers. According to Zeithamal (2000), the loyalty of customers has two aspects: behavioural and attitudinal. Behavioural loyalty manifests in a willingness to recommend and refer a friend or colleague to a particular good or service (Reichheld, 2003). Behavioural intentions point out the degree to which a person tries to repeat earlier behaviour measured in terms of word-of-mouth, willingness to switch stores, and future patronage (Yun and Good, 2007). Satisfaction level affects consumers’ repurchase intentions (Rust and Williams, 1994), the probability of recommending, profitability, and loyalty (Anton and Monger, 1996) in a significantly positive way. A review of pertinent literature indicates that satisfaction is essential to build long-term relationships with customers and work as an antecedent of behavioural intentions (Pan and Zinkhan, 2006; Yun and Good, 2007). Though, in the case of m-shopping, intention mediated the effect of perceived risk on behaviour (Gupta, 2022).

Store image influences store choice (Giese and Cote, 2000) and affect consumers’ psychological responses and behaviour (Thang and Tan, 2003). Consumers’ perception of store image directly links to satisfaction level but indirectly affects loyalty (Sivadas and Baker-Prewitt, 2000). Previous studies established store image as an antecedent of consumers’ satisfaction (Chang and Tu, 2005; Koo, 2003), and their behavioural intentions (Yun and Good, 2007), patronage intentions (Van der Heijden and Verhagen, 2004; Chang and Tu, 2005) and loyalty (Sivadas and Baker-Prewitt, 2000). Ahlawat et al. (2022) found that convenience and attitude significantly influence customers’ intentions

in online apparel shopping. Store satisfaction mediated the relationship between store image perceptions and loyalty. In Brazilian supermarkets, store image has been identified as a crucial factor influencing consumer purchase intentions, perceived value, and brand awareness, as Graciola et al. (2020) revealed. In another study on two supermarkets in Brazil by Watanabe et al. (2019), it is found that satisfaction and store image affect purchase intention positively. However, it has also shown a substantially more significant indirect effect through consumer satisfaction on behavioural intentions than its direct effect (Hsu et al., 2010). In a study of online retailers, satisfaction mediated the relationship between consumer perception of the ethics of online retailers and purchase intention (Bhattacharya et al., 2022).

Furthermore, in online retailing, satisfaction was mediating between three dimensions of service convenience (decision, post-benefit, and decision convenience) and behavioural intention, as highlighted in the study by Kumar et al. (2020). The existing pertinent literature suggests a positive relationship between store image and satisfaction. It became increasingly important to test the strength and stability of this relationship in the context of emerging retail markets like India. It is also pertinent to study the indirect relationship between store image and behavioural intentions having satisfaction as a mediator. For this purpose, the researchers designed the following hypotheses:

- H2 Store image has a direct influence on grocery consumers' behavioural intentions.
- H3 Grocery consumers' store satisfaction positively influences their behavioural intentions.
- H4 Grocery consumers' satisfaction acts as a mediator in the relationship between store image and behavioural intentions.

### **3 Research design of the study**

#### *3.1 Sample description*

This study targeted adult grocery consumers having experience purchasing groceries from organised retail stores in India's national capital region. Notably, the national capital region is considered the consumption centre of India. With a continuously widening consumer base and significantly high per capita income, it will become a top destination for organised grocery retailing in India. The researchers selected the sample very carefully to represent the target population of adult grocery consumers in India's national capital region. For this purpose, the sample included a diverse range of respondents with varied demographics to fully understand the experiences and perspectives of grocery consumers in organised retail stores. Respondents of various ages, gender, education, household income, and marital status were approached and personally administered survey questionnaires following a randomised sampling technique to minimise the respondents' bias and ensure that the sample represents the target population characteristics and therefore enhances the validity of the results and leads to greater generalisability of the research findings. In total, researchers distributed 1000 questionnaires to collect data. Out of 1,000, researchers received 795 questionnaires in return. After screening and pre-processing of data, 738 questionnaires, complete in all respects, were used in the final analysis. This study's final sample comprised 391 females

(53%) and 347 males (47%). Of the respondents, 337 were married (45.7%), and 401 were unmarried (54.3%). With a mean age of 30 years, the sample consisted of respondents aged between 18 and 67. Based on education level, respondents were categorised into four groups: up to 12th (8.5%), graduates (33.1%), postgraduates (46.6%), and professional courses (11.8%).

### *3.2 Survey instrument*

The conceptual framework of this study establishes the structural relationships between store image, satisfaction, and behavioural intention, thereby guiding the analysis to achieve the research objectives. Drawing from the insights gained through the literature review, theoretical foundations, and concept definitions, researchers tried to develop a comprehensive framework specific to the Indian-organised grocery store environment. Initially, pertinent literature on store image, satisfaction, and behavioural intentions was reviewed to gain insights and develop a basic understanding. This pursuit explored and analysed several definitions and explanations of these constructs. Subsequently, various dimensions of the store image and their respective underlying variables or items were pinpointed and further used to develop the measurement scale of the store image. Twenty-seven statements representing different store attributes were used to measure the image construct. A four-item statements scale given by Grewal et al. (2003) and Olorunniwo et al. (2006) was adapted to measure the behavioural intentions of grocery consumers.

Similarly, the four-item scale given by Olorunniwo et al. (2006) was adapted to measure the satisfaction of grocery consumers. Items selected from past studies were further modified according to this study's research settings and context. A pilot study was conducted on a small sample of respondents to purify the measures. Using Cronbach's alpha, the reliability and validity of data were checked and found within the minimum acceptance range, except for some items related to different dimensions. The questionnaire finalised based on the pilot study consisted of 27 statements to measure store image. Organised retail store image in the context of groceries is measured with six major dimensions or subscales, namely, store experience, proficiency of employees, promotional attractiveness, grocery mix, convenience, and price competitiveness.

Further, satisfaction was measured using a four-item scale adapted from Olorunniwo et al. (2006). Similarly, behavioural intentions were measured using a four-item scale adapted from Grewal et al. (2003) and Olorunniwo et al. (2006). Five-point rating scales were used to measure the various statements on store image, satisfaction, and behavioural intentions. Respondents were requested to record their agreement or disagreement on a five-point Likert scale (having ratings of 5 = strongly agree/SA, 4 = agree/A, 3 = neutral/N, 2 = disagree/D, and 1 = strongly disagree/SD) based on their experiences of grocery shopping from organised retail stores.

### *3.3 Data processing*

Researchers relied on skewness and kurtosis values to check the normality of data. Values of these measurements between -2 and +2 are acceptable for normality (George, 2011; Kim, 2013). Results showed Kurtosis and Skewness values between -2 and +2, confirming the normality assumption for all observed variables under study. Inter-item correlations were examined to test the internal consistency or reliability of measurement

scales of constructs under investigation. High inter-item correlation testifies that all items measure the same construct. More than three items were used to measure every dimension to maintain the measurement scales' internal consistency. It suffices the condition of three items per construct to cover the minimum theoretical domain of the construct and provide appropriate identification of the construct (Hair et al., 2006).

## 4 Results and analysis

The analysis for this study is based on 35 observed variables. Twenty-seven variables measured six significant store attributes of the image, and the remaining eight measured satisfaction and behavioural intentions. Before verifying the structural relationships among latent constructs, separate confirmatory factor analyses were applied to test the validity and reliability aspects of measurement scales of both exogenous and endogenous constructs.

The initial research phase involved a confirmatory factor analysis of the store image scale, comprising 27 indicators (refer to Figure 1). This analysis resulted in the identification of six major factors within the store image scale: store experience (four items), proficiency of employees (five items), promotional attractiveness (five items), grocery mix (five items), convenience (four items), and price competitiveness (four items). The goodness-of-fit statistics indicated a well-fitting model, with a Chi-square value of 760.089, and a good model fit indicated by the badness-of-fit indices, such as CMIN (2.0460) and RMSEA (0.045), falling below the critical thresholds of 5 and 0.08, respectively. Similarly, the goodness of fit indices – like CFI (0.953), TLI (0.947), NFI (0.924), GFI (0.926), and PCLOSE (0.988) – was found more significant than their respective minimum acceptable values. Based on these values, it was concluded that the data fits the measurement scale very well.

### 4.1 *Validity and reliability assessment*

Standardised factor loadings and average variances explained (AVE) were analysed to test the scale's convergent validity. Table 1 shows the standardised factor loadings between observed variables, and their respective factors were well above the minimum acceptance level of 0.50, which evidenced the convergent validity.

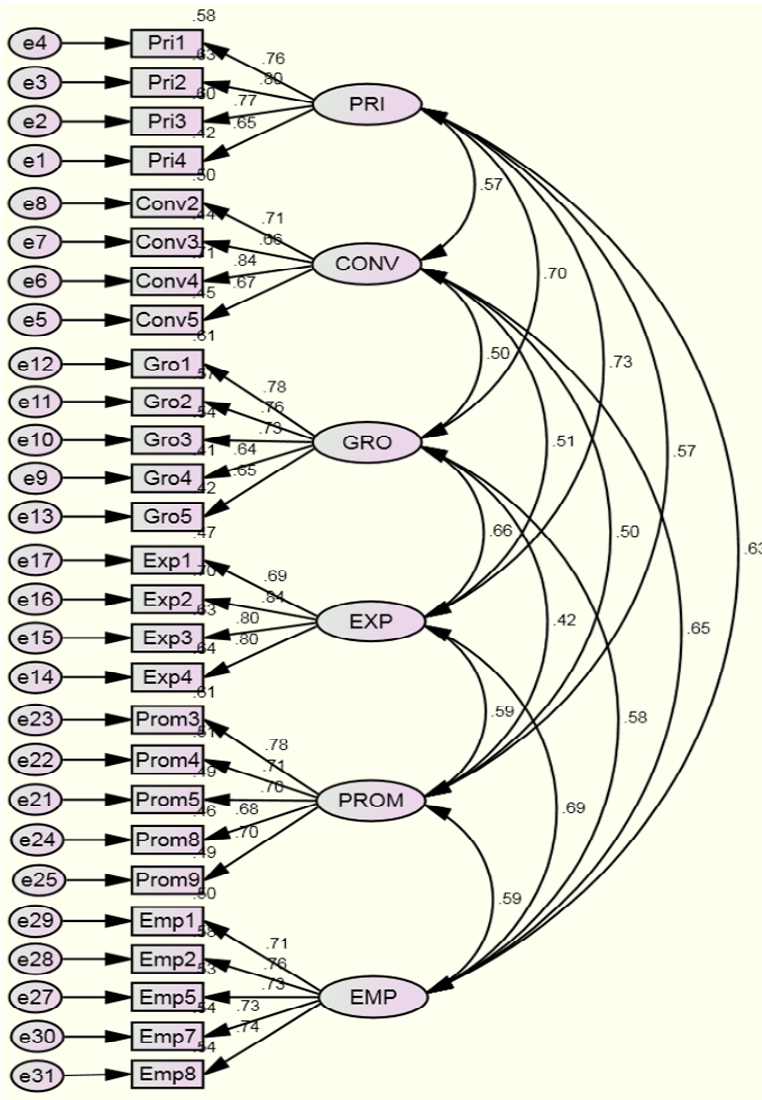
Further, AVEs for six extracted factors of store image ranged from 0.510 to 0.613 and were above the minimum acceptable value of 0.50, thereby demonstrating convergence between the scale items (Hair et al., 2006). Composite Reliabilities of factors of store image were used as third evidence of convergent validity. A composite reliability value greater than 0.70 indicates internal consistency and shows convergence in scale items (Hair et al., 2006). All CRs of store image factors were between 0.813 and 0.863, which are well above the minimum acceptable threshold of 0.70. For each factor, the square root of AVE exceeded its correlations with other factors that strongly indicate discriminant validity. Cronbach's alpha values of factors were examined to test the scale's reliability. Cronbach's alpha values for all factors exceeded the minimum acceptable threshold of 0.70 (ranging from 0.804 to 0.860), confirming the reliability. Other aspects like maximum shared variance (MSV) and average shared variance (ASV) also attained acceptable values for all store image scale factors.

**Table 1** First-order CFA results

<i>Store image dimensions and measurement variables</i>	<i>Standardised loadings and statistical significance</i>	<i>Composite reliability (CR)</i>	<i>Cronbach's alpha</i>	<i>Average variance extracted (AVE)</i>
Store experience (EXP)		0.863	0.860	0.613
Store has a proper display of groceries (Exp4)	0.80***			
Store is clean (Exp3)	0.80***			
Store has a well-organised layout (Exp2)	0.84***			
Store has an attractive atmosphere (Exp1)	0.69***			
Proficiency of employees (EMP)		0.853	0.852	0.537
Store employees are properly trained (Emp2)	0.76***			
Store employees have good communication skills (Emp8)	0.74***			
Store employees are friendly (Emp7)	0.73***			
Store employees give quick responses to consumers' queries (Emp5)	0.73***			
At the store, it is easy to contact employees (Emp1)	0.71***			
Promotional attractiveness (PROM)		0.840	0.838	0.513
Store has attractive promotional schemes (Prom3)	0.78***			
Store provides various membership card benefits (Prom5)	0.70***			
Store properly displays the promotional schemes (Prom4)	0.71***			
Store follows effective CRM practices (Prom9)	0.70***			
Store provides attractive offers (Prom8)	0.68***			
Grocery mix (GROC)		0.838	0.837	0.510
Store provides attractive packaging of groceries (Gro4)	0.64***			
Store provides reliable groceries (Gro2)	0.76***			
Store provides high-quality groceries (Gro1)	0.78***			
Store provides a large variety of groceries (Gro3)	0.73***			
Store provides a wide range of grocery brands (Gro5)	0.65***			
Convenience (CONV)		0.813	0.804	0.524
Store provides fast checkout services (Conv4)	0.84***			
Store opens for long hours (Conv2)	0.71***			
Store provides adequate parking facilities (Conv5)	0.67***			
Store has many payment options (Conv3)	0.66***			
Price competitiveness (PRI)		0.834	0.833	0.558
Store charges a reasonable price for groceries (Pri1)	0.76***			
Store charges lower prices of groceries than competitors (Pri4)	0.65***			
Store provides value for money (Pri3)	0.77***			
Store gives attractive discounts on the price of groceries (Pri2)	0.80***			

Note: \*\*\* = significant at 0.001 alpha level.

**Figure 1** Confirmatory factor analysis for store image attributes (see online version for colours)



#### 4.2 Second-order confirmatory factor analysis

In the second phase of analysis, the second-order confirmatory factor analysis was exercised to check if the latent construct of store image loads on its six underlying factors. The standardised regression weights (ranging from 0.678 to 0.848) support the theory that the latent construct of the store image consists of the extracted dimensions. Furthermore, the values of composite reliability (0.898), average variance explained (0.597), and the square root of average variance explained (0.772) were within the range of acceptance and, thus, confirmed the internal consistency, construct validity, and discriminant validity, respectively (Table 2).

**Table 2** Second-order CFA results

<i>Latent variables</i>	<i>Standardised regression weights &amp;(P)</i>	<i>CR</i>	<i>AVE</i>	<i>√AVE</i>
Store image		0.898	0.597	0.772
Store experience (EXP) ← Store image	0.848 (0.001)			
Proficiency of employees (EMP) ← Store image	0.810 (0.001)			
Promotional attractiveness (PROM) ← Store image	0.678 (0.001)			
Grocery mix (GROC) ← Store image	0.752 (0.001)			
Convenience (CONV) ← Store image	0.688 (0.001)			
Price competitiveness (PRI) ← Store image	0.844 (0.001)			

### *Assessment of model fit indices*

Distinct sample moments for this model are 378, distinct parameters to be estimated are 60, degrees of freedom are 318, and the chi-square value is 831.710. Further, RMSEA is 0.04, CMIN/DF is 2.615, SRMR is 0.0499, GFI is 0.920, CFI is 0.947, TLI is 0.941, NFI is 0.917, P CLOSE is 0.909. These statistics confirmed the validity and fitness of this measurement model of store image.

### *4.3 Relationships between Store image, satisfaction, and behavioural intentions*

To test the research hypotheses and examine the relationships between store image, satisfaction, and behavioural intentions, the researchers employed structural equation modelling (SEM) using AMOS 18. SEM is a powerful statistical technique that allows for the analysis of complex relationships between latent constructs. In this study, the researchers utilised a four-step approach, as proposed by Baron and Kenny (1986), to estimate the hypothetical relationships between the variables of interest. The multivariate assumption of linearity between store image and behavioural intentions (R square = 0.367, significant at 0.000 level), between store image and satisfaction (R square = 0.418, significant at 0.000 level), and between satisfaction and behavioural intentions R square= 0.537, significant at 0.000 level) was confirmed, suggesting that the models can be tested for proposed relationships.

In the first step, the second-order construct store image comprising six dimensions was taken as an independent (exogenous) latent construct. At the same time, behavioural intentions were considered dependent (endogenous). All model fit indices with chi-square value of 1001.273 (427 degrees of freedom), RMSEA = 0.043, CMIN/DF = 2.345, SRMR= 0.0438, GFI = 0.916, CFI = 0.951, TLI = 0.946, and NFI = 0.917 shows that the data fit the model well enough to test the hypothetical relationship. Table 3 shows that store image positively affects behavioural intentions (standardised regression weight = 0.702 at the 0.001 significance level). These statistics resulted in the acceptance of the hypothesis.

The second step showed a significant positive effect of store image on consumers' satisfaction and thus supported the hypothesis. Model fit indices like chi-square

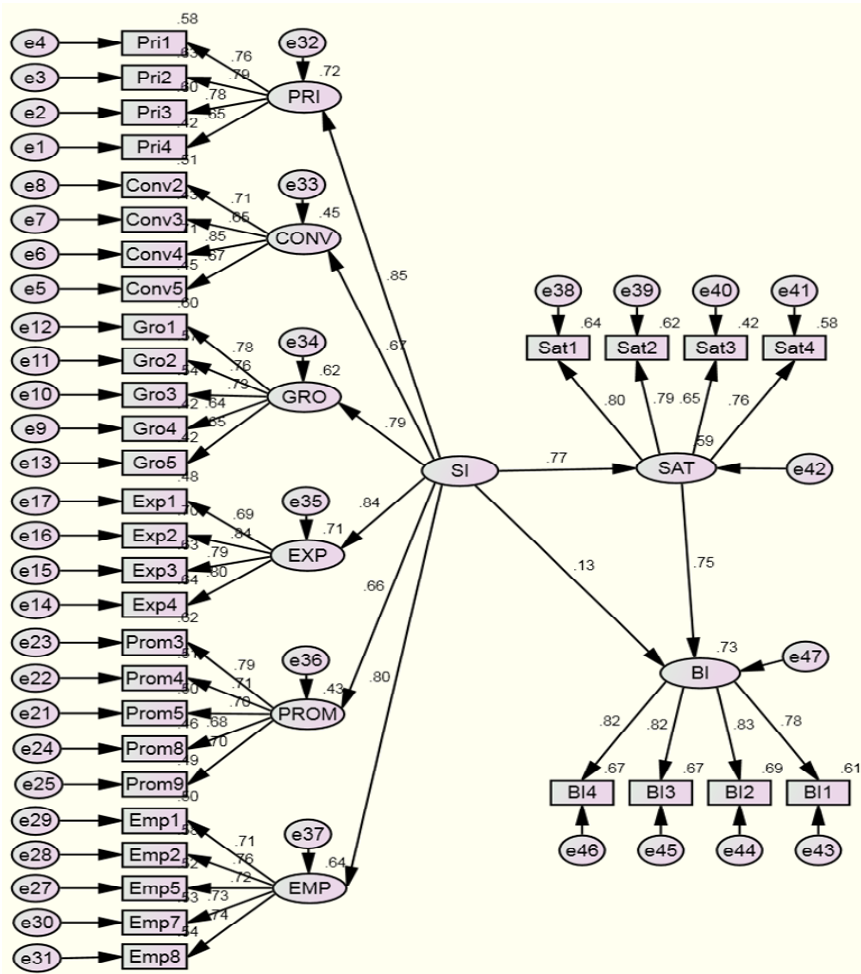
(1052.176), degrees of freedom (427), RMSEA (0.045), CMIN/DF (2.464), SRMR (0.0456), GFI (0.912), CFI (0.945), TLI (0.940), NFI (0.910) and P CLOSE (0.996) manifested a good model fit to test this hypothesis. Based on these results, it is concluded that store image has a significant positive effect on grocery consumers' satisfaction with standardised regression weight = 0.767 at the 0.001 significance level (Table 3).

**Table 3** Structural relationship between SI, BI, and SAT

Constructs	Standardised regression weight	p-value	Linearity				
			R square	F	df1	df2	Sig.
BI ← SI	0.702	0.001	0.364	422.052	1	736	0.000
SAT ← SI	0.767	0.001	0.418	527.694	1	736	0.000
BI ← SAT	0.850	0.001	0.537	854.370	1	736	0.000

Note:- BI = behavioural intentions; SI = store image; SAT = satisfaction.

**Figure 2** Satisfaction as a mediator between store image and behavioural intentions (see online version for colours)



The subsequent analysis tested the hypothetical relationship between grocery consumers' satisfaction and behavioural intentions. A good model fit was indicated with acceptable values of chi-square (79.562), degrees of freedom (19), RMSEA (0.066), CMIN/DF (4.187), SRMR (0.0234), GFI (0.9974), CFI (0.982), TLI (0.973) and NFI (0.976). Table 3 indicates a strong positive effect of satisfaction of behavioural intentions (standardised regression weight = 0.850 at 0.001 significance level), thereby supporting the hypothesis.

The SEM in the fourth step of analysis established satisfaction as a partial mediator between store image and behavioural intentions, thus supporting the hypothesis (Figure 2). The path value of store image-behavioural intentions (0.702 significant at 0.001) significantly dropped (0.126 at 0.018) when satisfaction was introduced as a mediator (Table 4). For this model, RMSEA was 0.042, CMIN/DF was 2.297, SRMR was 0.0435, GFI was 0.907, CFI was 0.947, TLI was 0.943, and NFI was 0.911. These values concluded a good model fit of the data.

**Table 4** Mediation effect of satisfaction

<i>Relationship</i>	<i>Direct without mediator</i>	<i>Direct with mediator</i>	<i>Indirect</i>
SI SAT BI	0.702 (0.001)	0.126 (0.018)	0.579 (0.001)

## 5 Discussion and implications

The rise of the grocery segment of organised retailing is gaining momentum across developing markets like India. Against this backdrop, this study focused on developing insights into the structural relationship between store image, satisfaction, and behavioural intentions in India's organised grocery retail environment. All the models, showing relationships among variables under study, possessed good psychometric properties and fit the sample data well. With empirical evidence, this research tried to enrich the knowledge in the grocery segment and update the insights about grocery consumers' behaviour in a developing country. Based on pertinent literature, researchers hypothesised the relationships between store image, satisfaction, and behavioural intentions. Four hypotheses (H1, H2, H3, and H4) were tested through comprehensive data analysis to test and establish these relationships. Initially, confirmatory factor analysis resulted in six major dimensions of organised retail store image. Further, second-order confirmatory factor analysis was applied to measure the second-order construct as a store image. The measurement instrument of the store image comprised all necessary psychometric properties for validation purposes. An important theoretical implication comes here in the form of deep insights into the variables contributing formation of store image in the Indian grocery retail store. These results expand the organised retail store managers' knowledge about the variables that frame store image in grocery consumers' minds. Therefore, they should focus on and stimulate these variables.

After that, relationships between organised retail store image, grocery consumers' satisfaction, and behavioural intentions were examined for the whole sample with SEM. The analysis shows that organised retail store image positively affects grocery consumers' behavioural intentions. These results concord with prior studies that reported similar findings on these constructs' relationship (Chang and Tu, 2005; Thang and Tan, 2003; Van der Heijden and Verhagen, 2004; Yun and Good, 2007). Further, analysis

results evidenced a significant positive effect of organised retail store image on grocery consumers' satisfaction, supporting previous studies with similar findings (Chang and Tu, 2005; Koo, 2003; Sivadas and Baker-Prewitt, 2000). Theoretically, these results manifest the robustness of store image's positive effect on consumer satisfaction and behavioural intentions in a developing country's organised grocery retail segment. It means store image strongly predicts consumers' behavioural outcomes like satisfaction and intentions. Our findings suggest that grocery managers should consider store image as it results in consumer satisfaction and drives their behavioural intentions.

The results demonstrated a robust relationship between consumers' satisfaction and behavioural intentions in India's organised grocery retail market. These results supported past studies with similar findings concerning satisfaction and behavioural intentions (Pan and Zinkhan, 2006; Yun and Good, 2007). Theoretically, this finding consolidates the previous similar research. Further, it implies that satisfied grocery consumers have beneficial behavioural intentions, so grocery managers should try their best to satisfy them. Grocery managers can do this, for instance, by providing personalised services at the store, ensuring the quality of groceries, giving home delivery options, and managing the productive relationship with the grocery consumers. Finally, the mediating role of satisfaction between store image and behavioural intentions was checked in the Indian retail context. The hypothesis (H4) was partially supported as satisfaction demonstrated a significant partial mediating effect between store image and behavioural intentions. It signifies that the behavioural intentions of grocery consumers are built through their satisfaction with the store. In other words, store image has a more substantial influence on behavioural intentions through satisfaction. These findings have theoretical implications. Previous studies reported the mediating effect of consumer satisfaction in a retail environment (Chang and Tu, 2005; Hsu et al., 2010; Koo, 2003; Sivadas and Baker-Prewitt, 2000; Yun and Good, 2007). This study implies that store image, directly and indirectly, affects behavioural intentions with satisfaction as a partial mediator. As per this finding, retail managers can stimulate satisfaction to prompt grocery consumers' favourable behavioural intentions towards stores. It is further suggested that a positive store image should be formed to satisfy the grocery consumers and thus promote good behavioural intentions towards the organised retail store.

## **6 Conclusions**

This study explored the relationship between store image, satisfaction, and behavioural intentions in the Indian organised grocery retail environment against the backdrop of the growing grocery segment in developing markets like India. The results revealed good psychometric properties and an excellent fit to the sample data, providing valuable insights into the factors contributing to store image formation in Indian grocery retail stores. The findings from the analysis underscored the positive impact of store image on grocery consumers' satisfaction and behavioural intentions. These results align with previous research, highlighting the importance of store image in shaping consumer satisfaction and driving behavioural outcomes. The study emphasised the need for grocery managers to prioritise and stimulate variables that contribute to a positive store image.

Furthermore, a robust relationship was established between satisfaction and behavioural intentions, indicating that satisfied grocery consumers are likelier to show

favourable behavioural intentions. Given these findings, grocery managers are encouraged to focus on satisfying consumers through personalised services, quality assurance, home delivery options, and cultivating a productive relationship. The study also revealed that satisfaction partially mediates the relationship between store image and behavioural intentions, emphasising the importance of satisfaction in channelling the influence of store image on behavioural outcomes. Retail managers can leverage these findings to promote positive behavioural intentions by fostering satisfaction and cultivating a positive store image.

## 7 Limitations and future research scope

Despite the limitations associated with survey-based data collection, this study offers valuable insights and points to crucial future research directions for academics and researchers. One limitation is the simultaneous measurement of consumer responses, which may overlook changes in consumer behaviour over time. Conducting longitudinal studies could address this limitation and capture evolving grocery consumer behaviour. Additionally, the study's findings may not directly apply to organised retail stores selling different product categories. Replicating the study in other retail segments within India and conducting comparative store-format-specific studies could provide further insights and enrich the existing knowledge base.

## References

- Ahlawat, P.K., Kumar, P. and Kumar, P. (2022) 'Antecedents of customers' attitude and intention towards online shopping of apparel in India', *International Journal of Indian Culture and Business Management*, Vol. 26, No. 4, pp.460–484.
- Anton, J. and Monger, J.E. (1996) *Customer Relationship Management: Making Hard Decisions with Soft Numbers*, Prentice Hall, Upper Saddle River, NJ.
- Baron, R.M. and Kenny, D.A. (1986) 'The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations', *Journal of Personality and Social Psychology*, Vol. 51, No. 6, pp.1173–1182.
- Bhatt, J.D. and Thaker, N.M. (2020) 'Food retailing in India: an overview', *Journal of Pharmacognosy and Phytochemistry*, Vol. 9, No. 1, pp.115–119.
- Bhattacharya, S., Sharma, R.P. and Gupta, A. (2022) 'Country-of-origin and online retailing ethics: the mediating role of trust and satisfaction on purchase intention', *International Journal of Emerging Markets*, ahead-of-print, <https://doi.org/10.1108/IJOEM-08-2021-1233>.
- Birtwistle, G., Clarke, I. and Freathy, P. (1999) 'Store image in the UK fashion sector: consumer versus retailer perceptions', *The International Review of Retail, Distribution and Consumer Research*, Vol. 9, No. 1, pp.1–16.
- Bloemer, J. and de Ruyter, K. (1998) 'On the relationship between store image, store satisfaction and store loyalty', *European Journal of Marketing*, Vol. 32, Nos. 5/6, pp.499–513, <https://doi.org/10.1108/03090569810216118>.
- Bloemer, J.M.M. and Odekerken-Schröder, G.J. (2002) 'Store satisfaction and store loyalty explained by customer-and store related factors', *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 15, pp.68–80.

- Boston Consultancy Group and Retailers Association of India (BCG and RAI) (2019) *Going for Gold: By Creating Customer Who Create Customers* [online] <https://media-publications.bcg.com/pdf/Going-for-Gold-By-creating-customers-who-create-customers.pdf> (accessed 30 June 2023).
- Carpenter, J.M. and Moore, M. (2006) 'Consumer demographics, store attributes, and retail format choice in the US grocery market', *International Journal of Retail & Distribution Management*, Vol. 34, No. 6, pp.434–452, <https://doi.org/10.1108/09590550610667038>.
- Chang, C.H. and Tu, C.Y. (2005) 'Exploring store image, customer satisfaction and customer loyalty relationship: evidence from Taiwanese hypermarket industry', *Journal of American Academy of Business*, Vol. 7, No. 2, pp.197–202.
- Clotey, T.A., Collier, D.A. and Stodnick, M. (2008) 'Drivers of customer loyalty in a retail store environment', *Journal of Service Science (JSS)*, Vol. 1, No. 1, pp.35–48, DOI: 10.19030/jss.v1i1.4300.
- Das, G., (2014) 'Store personality and consumer store choice behavior: an empirical examination', *Marketing Intelligence & Planning*, Vol. 32, No. 3, pp.375–394, <https://doi.org/10.1108/MIP-07-2013-0116>.
- Du Preez, R., Visser, E. and Janse Van Noordwyk, H. (2008) 'Store image: toward a conceptual model part 1', *SA Journal of Industrial Psychology*, Vol. 34, No. 2, pp.50–58.
- Engel, J.F., Blackwell, R.D. and Miniard, P.W. (1995) *Consumer Behavior*, 8th ed., Forth Worth, The Dryden Press.
- Francis, P., Sudeep, S. and Kumar, A. (2021) 'Impact of factors affecting customer satisfaction in e-commerce among Indian consumers: an empirical study', *International Journal of Indian Culture and Business Management*, Vol. 24, No. 1, pp.81–102.
- George, D. (2011) *SPSS for Windows Step by Step: A Simple Study Guide and Reference, 17.0 Update*, 10/e, Pearson Education, India.
- Giese, J.L. and Cote, J.A. (2000) 'Defining consumer satisfaction', *Academy of Marketing Science Review*, Vol. 1, No. 1, pp.1–22.
- Global Agricultural Information Network (GAIN) (2018) *Food and Grocery Product Opportunities Stemming from Internal Sector Shifts*, 28 June [online] [https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retail%20Foods\\_New%20Delhi\\_India\\_6-28-2018.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retail%20Foods_New%20Delhi_India_6-28-2018.pdf) (accessed 20 June 2023).
- Global Agricultural Information Network (GAIN) (2019) *Retail Sector Expansion Creates New Opportunities for High Value Products*, 17 July [online] [https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retail%20Foods\\_New%20Delhi\\_India\\_7-17-2019.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retail%20Foods_New%20Delhi_India_7-17-2019.pdf) (accessed 20 June 2023).
- Graciola, A.P., De Toni, D., Milan, G.S. and Eberle, L. (2020) 'Mediated-moderated effects: high and low store image, brand awareness, perceived value from mini and supermarkets retail stores', *Journal of Retailing and Consumer Services*, Vol. 55, pp.102–117.
- Grewal, D., Baker, J., Levy, M. and Voss, G.B. (2003) 'The effects of wait expectations and store atmosphere evaluations on patronage intentions in service-intensive retail stores', *Journal of Retailing*, Vol. 79, No. 4, pp.259–268, <https://doi.org/10.1016/j.jretai.2003.09.006>.
- Gupta, A.K. (2022) 'Is m-shopping a reasoned action? Evaluating the role of intention and perceived risk in Indian m-shopping behavior', *International Journal of Indian Culture and Business Management*, Vol. 27, No. 4, pp.436–465.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006) *Multivariate Data Analysis*, Vol. 6, Pearson Prentice Hall, Hoboken, New Jersey.
- Hartman, K.B. and Spiro, R.L. (2005) 'Recapturing store image in customer-based store equity: a construct conceptualization', *Journal of Business Research*, Vol. 58, No. 8, pp.1112–1120, <https://doi.org/10.1016/j.jbusres.2004.01.008>.

- Hiremath, S., Panda, A. and Pasumarti, S.S. (2023) 'An empirical investigation of customer characteristics on retail format selection – a mediating role of store image', *Journal of Indian Business Research*, Vol. 15, No. 1, pp.55–75, <https://doi.org/10.1108/JIBR-04-2022-0090>.
- Hsu, M.K., Huang, Y. and Swanson, S. (2010) 'Grocery store image, travel distance, satisfaction and behavioral intentions: evidence from a Midwest college town', *International Journal of Retail & Distribution Management*, Vol. 38, No. 2, pp.115–132, <https://doi.org/10.1108/09590551011020129>.
- Khaled, A.S., Ahmed, S., Yahya, A.T. and Farhan, N.H. (2020) 'The role of innovation on Indian retail industry', *International Journal of Business Innovation and Research*, Vol. 23 No. 4, pp.435–452, <https://doi.org/10.1504/IJBIR.2020.111793>.
- Kim, H. Y. (2013) 'Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis', *Restorative Dentistry & Endodontics*, Vol. 38, No. 1, pp.52–54, <https://doi.org/10.5395/rde.2013.38.1.52>.
- Koo, D.M. (2003) 'Inter-relationships among store images, store satisfaction, and store loyalty among Korea discount retail patrons', *Asia Pacific Journal of Marketing and Logistics*, Vol. 15, No. 4, pp.42–71, <https://doi.org/10.1108/13555850310765033>.
- Krishnamurthy, S.M. and Venkitachalam, K. (2023) 'The changing face of retailing, 1980–2020', *Journal of Strategy and Management*, Vol. 16, No. 1, pp.41–55, <https://doi.org/10.1108/JSMA-02-2022-0035>.
- Kumar, A., Sikdar, P., Gupta, M., Singh, P. and Sinha, N. (2023) 'Drivers of satisfaction and usage continuance in e-grocery retailing: a collaborative design supported perspective', *Journal of Research in Interactive Marketing*, Vol. 17, No. 2, pp.176–194, <https://doi.org/10.1108/JRIM-02-2020-0035>.
- Kumar, R., Sachan, A. and Dutta, T. (2020) 'Examining the impact of e-retailing convenience dimensions on behavioral intention: the mediating role of satisfaction', *Journal of Internet Commerce*, Vol. 19, No. 4, pp.466–494.
- Lindquist, J.D. (1974) 'Meaning of image-survey of empirical and hypothetical evidence', *Journal of Retailing*, Vol. 50, No. 4, pp.29–38.
- Martineau, P. (1958) 'The personality of the retail store', *Harvard Business Review*, Vol. 36, pp.47–55.
- Mittal, B. and Sheth, J. (2004) *Customer Behavior: A Managerial Perspective*, Thompson South Western, Natorp Boulevard.
- Mohanta, N. (2017) 'Indian grocery retail market: risky market for careless players' [online] <https://www.indianretailer.com/article/sector-watch/food-and-grocery/Indian-Grocery-Retail-Market-Risky-Market-for-Careless-Players.a5832/> (accessed 22 June 2023).
- Morschett, D., Swoboda, B. and Foscht, T. (2005) 'Perception of store attributes and overall attitude towards grocery retailers: the role of shopping motives', *The International Review of Retail, Distribution and Consumer Research*, Vol. 15, No. 4, pp.423–447, <https://doi.org/10.1080/09593960500197552>.
- Nair, S.R. and Shams, S.M.R. (2021) 'Impact of store-attributes on food and grocery shopping behavior: insights from an emerging market context', *EuroMed Journal of Business*, Vol. 16, No. 3, pp.324–343 [online] <https://doi.org/10.1108/EMJB-10-2019-0128>.
- Olorunniwo, F., Hsu, M.K. and Udo, G.J. (2006) 'Service quality, customer satisfaction, and behavioral intentions in the service factory', *Journal of Services marketing*, Vol. 20, No. 1, pp.59–72, <https://doi.org/10.1108/08876040610646581>.
- Pan, Y. and Zinkhan, G.M. (2006) 'Determinants of retail patronage: a meta-analytical perspective', *Journal of Retailing*, Vol. 82, No. 3, pp.229–243, <https://doi.org/10.1016/j.jretai.2005.11.008>.
- Parmod and Arora, U. (2021) 'Effect of gender, age, and marital status of grocery consumers on their perceived retail store image: a study of organized grocery market in India', *Indian Journal of Marketing*, Vol. 51, No. 4, pp.58–71, <http://dx.doi.org/10.17010/ijom%2F2021%2Fv51%2Fi4%2F158471>.

- Puri, S. and Taneja, B.M. (2018) 'Food retailing in India: the way forward', *Progressive Grocer India*, 13 February [online] <https://www.indiaretailing.com/2018/02/13/food-retailing-india-way-forward/> (accessed 30 June 2023).
- Reichheld, F.F. (2003) 'The one number you need to grow', *Harvard Business Review*, Vol. 81, No. 12, pp.46–55.
- Roodagi, P.B. (2020) 'Significant challenges and opportunities of organized retailing in India', *Sahyadri Journal of Management*, Vol. 4, No. 2, pp.1–15.
- Roy, N.C. (2022) 'Determinants of customer satisfaction in the Indian telecommunication industry: study in West Bengal and Assam Region in India', *International Journal of Indian Culture and Business Management*, Vol. 27, No. 4, pp.534–548.
- Rust, R.T. and Williams, D.C. (1994) 'How length of patronage affects the impact of customer satisfaction on repurchase intention', *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, Vol. 7, pp.107–113.
- Singhi, A., Jain, N. and Sanghi, K. (2017) 'The new Indian: the many facets of a changing consumer' [online] <https://www.bcg.com/publications/2017/marketing-sales-globalization-new-indian-changing-consumer> (accessed 30 June 2023).
- Sivadas, E. and Baker-Prewitt, J.L. (2000) 'An examination of the relationship between service quality, customer satisfaction, and store loyalty', *International Journal of Retail & Distribution Management*, Vol. 28, No. 2, pp.73–82 [online] <https://doi.org/10.1108/09590550010315223>.
- Slack, N.J. and Singh, G. (2020) 'The effect of service quality on customer satisfaction and loyalty and the mediating role of customer satisfaction: supermarkets in Fiji', *The TQM Journal*, Vol. 32, No. 3, pp.543–558, <https://doi.org/10.1108/TQM-07-2019-0187>.
- Srivastava, V., Srivastava, M.K. and Singhal, R.K. (2020) 'Challenges for organized retailing in India', *Think India Journal*, Vol. 22, No. 14, pp.15584–15597.
- Thang, D.C.L. and Tan, B.L.B. (2003) 'Linking consumer perception to preference of retail stores: an empirical assessment of the multi-attributes of store image', *Journal of Retailing and Consumer Services*, Vol. 10, No. 4, pp.93–200, [https://doi.org/10.1016/S0969-6989\(02\)00006-1](https://doi.org/10.1016/S0969-6989(02)00006-1).
- Uusitalo, O. (2001) 'Consumer perceptions of grocery retail formats and brands', *International Journal of Retail and Distribution Management*, Vol. 29, No. 5, pp.214–225, <http://dx.doi.org/10.1108/09590550110390995>.
- Van der Heijden, H. and Verhagen, T. (2004) 'Online store image: conceptual foundations and empirical measurement', *Information & Management*, Vol. 41, No. 5, pp.609–617, <https://doi.org/10.1016/j.im.2003.07.001>.
- Watanabe, E.A.d.M., Torres, C.V. and Alfinito, S. (2019) 'The impact of culture, evaluation of store image and satisfaction on purchase intention at supermarkets', *Revista de Gestão*, Vol. 26, No. 3, pp.256–273, <https://doi.org/10.1108/REG-12-2017-0009>.
- Wharton University of Pennsylvania (2018) 'Why India's online grocery battle is heating up?', 26 April [online] <https://knowledge.wharton.upenn.edu/article/indias-online-grocery-battle-heating/> (accessed 30 June 2023).
- Yun, Z.S. and Good, L.K. (2007) 'Developing customer loyalty from e-tail store image attributes', *Managing Service Quality: An International Journal*, Vol. 17, No. 1, pp.4–22, <https://doi.org/10.1108/09604520710720647>.
- Zeithamal, V.A. (2000) 'Service quality, profitability, and the economic worth of customers: what we know and what we need to learn', *Journal of the Academy of Marketing Science*, Vol. 28, pp.67–85.