

Moderating effect of gender on service convenience and customer satisfaction: an empirical study of Indian e-retailers

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Abstract

Purpose – The present study has been carried out to assess the effect of constructs of service convenience on customer satisfaction of the Indian online shoppers.

Design/methodology/approach – The primary data was collected through a structured questionnaire. Convenience sampling has been used to choose a sample ($n = 260$) of e-shoppers in India. Factor analyses (both EFA and CFA) have been done to validate different factors and its items. A conceptual model has been proposed to measure the effect of different factors of service convenience on customer satisfaction. Moreover, the perceived difference with respect to study variables has been measured. The path analysis through AMOS 22.0 has been done to test the hypotheses under study.

Findings – It can be concluded that the effect of access convenience, search convenience, and order convenience have significant effects on customer satisfaction. However, evaluation convenience and logistics and reverse logistics convenience have an insignificant effect on customer satisfaction. The present study has a unique contribution in the field of service convenience to e-retailing customers. Moreover, the present study indicates that gender does not moderate the effect of convenience on customer satisfaction.

Originality/value – This is one of the few papers that focuses solely on the effect of gender on service convenience and customer satisfaction. The findings will generate value with their originality and significant managerial implications for marketers, as well as future research directions for the researchers.

Keywords Access convenience, Customer satisfaction, E-retailer, Gender, India, Order convenience, Search convenience

Paper type Research paper

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Introduction

With the advancement of technology, i.e. the introduction of IT (Information technology) and ITES (Information Technology Enabled Services), the traditional shopping from malls, retail stores, and retail outlets has been changed to online shopping. Providing services online has become a separate activity in present times. Many organizations have changed its operations into fully online shopping that led to the change in the evaluation criteria of service convenience. Service providers have made intense progress in this extremely competitive worldwide industry by providing the Internet that has undoubtedly affected and transformed people's lives, particularly the methods of communication and business-related activities.

According to market analysts, the global e-commerce market will be worth \$45,561.7 billion in 2030 (Future Market Insights, 2020). Online retailing in the US amounted to US\$870.78bn in 2021. China, the largest online retail market of the world, garnered around US\$2.64tn in 2021 from online retailing. India's B2C e-commerce market will increase by approximately 1,200% by 2026, making it the fastest growing market (Padmavathy, Swapna, & Paul, 2019; IBEF, 2020; Kautish, Khare, & Sharma, 2021; Kautish, Guru, & Sinha, 2021).

India is placed at eighth position in terms of online retailing revenue. The sales of online retailing or e-tailing amounted to US\$85.4bn in 2021.

E-tailing (or electronic retailing) pertains to the business-to-consumer (B2C) sale of retail goods over the Internet (Kautish, Paul, & Sharma, 2021). Although consumers have few alternatives but they pay digitally or on delivery of the product or service, this facility gives the consumers a greater amount of safety and security. In a case, where the buyer does not receive the product or the product purchased is misrepresented or unusable, consumers can communicate with the merchant to exchange it or make a request for the refund.

Convenience is recognized to be increasingly vital to consumers, in recent times, businesses have applied more means to deliver convenience in line with the strategy to better manage its customers. Many consumers shop online to minimize their efforts (Beauchamp & Ponder, 2010). E-retailers are more convenient than traditional retail stores as consumers have more flexibility in terms of time, location, and payment modes (Beauchamp & Ponder, 2010). Since consumers have a paucity of time because of their engagement in different activities, they prefer shopping through online platforms as an alternative to traditional shopping to save time and effort. In the present scenario, online purchasing has become the key factor for customer convenience (Jiang, Yang, & Jun, 2013).

In recent decades, the differences in consumer buying behavior of different genders have been of great interest to the researchers. Various studies have been done in terms of gender differences for different shopping patterns by earlier researchers (e.g. Coley & Burgess, 2003; Garbarino & Strahilevitz, 2004). To understand the service convenience, many researchers have studied the role of various constructs of it like access, search, evaluation, and logistics convenience to determine the purchase behavior of customers (Seiders, Voss, Grewal, & Godfrey, 2005; Khan & Khan, 2018). Convenience has been studied widely by several previous researchers for traditional stores (Khare, 2011; Hosseini, BahreiniZadeh, & ZiaeiBideh, 2013; Valaei, Rezaei, Ismail, & Oh, 2016) and the online services (Parasuraman, 2000; Szymanski & Hise, 2000; Udo, Bagchi, & Kirs, 2008; Ding, Hu, & Sheng, 2011; Katta & Patro, 2017). Customer satisfaction is an event during which a consumer enjoys a specific service or good, i.e. the service received does justice to the expectation (Mehmood & Najmi, 2017).

Gounaris (2005) also studied how e-shoppers evaluate the quality of e-retail stores. Katta and Patro (2017) considered convenience as one of the features of e-retailing for assessing consumer online behavior. Most of the existing studies on service convenience of the online retail sector have been done in the context of developed countries. The researcher did not come across any Indian study which comprehensively investigates the issue of service convenience and customer satisfaction in the context of the e-retail sector in India, specifically.

- RQ1. What role does service convenience play in determining customer satisfaction?
- RQ2. What is the perceived difference among the customers based on gender on service convenience and customer satisfaction?

The study also aims to propose a model to measure the effect of various dimensions of service convenience on customer satisfaction.

Literature review

Berry, Berry, Poortinga, Segall, and Dasen (2002) mentioned that convenience is related to the apparent time and effort saving during the purchase and use of a service by the consumer. A decision made by consumers based on their sense of control over the organization, application and alteration of their time and effort in accomplishing their objectives allied with access to and use of the service (Farquhar & Rowley, 2009). Online shoppers reportedly prefer convenience and variety over speech and text based interfaces, which struggle to provide contextual convenience (Forrester, 2018). The above definitions emphasize two aspects of convenience, i.e. time and effort. In today's marketing landscape, pressed-for time, consumers favor companies that offer value by integrating convenience in searching, accessing, buying and using services.

Therefore, preceding studies reflect service convenience as a multi-faceted construct (Berry *et al.*, 2002; Colwell, Aung, Kanetkar, & Holden, 2008; Seiders, Berry, & Gresham, 2000; Seiders, Voss, Godfrey, & Grewal, 2007). Based on economic utility theory, Brown (1990) recommended five dimensions of customer convenience, i.e. time, place, acquisition, use, and execution. Similarly, Berry *et al.* (2002) proposed the following five forms of service convenience, i.e. decision convenience (supposed time and effort savings while determining whether to use the service or not, and from which of the service provider), access convenience (supposed time and effort savings during the establishment of contact with the service provider), transaction convenience (supposed time and effort savings while finishing a transaction with the service provider), benefit convenience (supposed time and effort savings while acquiring basic benefits of a service) and post-benefit convenience (supposed time and effort savings in getting post sales services or in the event of a failure of a service). Rajasekhar, Anit, and Madhavi (2015) have studied convenience as one of the pertinent dimensions of internet banking of State Bank of India in rural India and found that convenience explains the highest variance. Furthermore, he found that convenience has a significant effect on customer satisfaction.

Access convenience

In customary retailing, access convenience could be advanced by changing the store locality (Seiders *et al.*, 2000); however, in the online setting, store locality is immaterial (Rohm & Swaminathan, 2004) as consumers can shop from any location through the internet. Customers benefit from having access to goods, stores, and brands that are not present where they live or work (Almarashdeh *et al.*, 2019). Nevertheless, website accessibility is weighed as the utmost key factor in shaping consumer perceived online shopping convenience (King & Liou, 2004). This is possible with more convenient and easy-to-remember URLs, by automatic bookmarking tools, availability of their application on different mobile platforms and strategic placement of ads on social media sites.

Search convenience

Search convenience can be defined as the speed and ease with which consumers identify and select products whatever they wish to buy (Beauchamp & Ponder, 2010). The ease with which online shoppers can search for products and assess their prices without having to physically visit several stores is known as search convenience (Almarashdeh *et al.*, 2019). Internet has

provided various tools which help retailers in improving the communication with probable customers by strengthening the skill to provide customized data, by putting it on their website and redirecting traffic by paid advertising, or by disseminating and buzzing data in social media, therefore, assisting them in recognizing and choosing the correct business relations (Kollmann, Kuckertz, & Kayser, 2012). These enhanced tools offer psychological assistance to consumers as they can avoid crowds, reduce waiting time, and escape traveling to brick-and-mortar stores (Beauchamp & Ponder, 2010). Supposing the more potent retailer's endeavor in enabling consumer's product search, the faster and facile the consumer's flight over the purchase experience (Kollmann *et al.*, 2012; Seiders *et al.*, 2000).

The process of development of web pages, which are cataloged by search engine crawlers, is known to be one of the finest methods to advance the search engine optimization of a website and to advance the target audience targeted.

Evaluation convenience

The perceived effort and time required by consumers to evaluate products is called evaluation convenience (Almarashdeh *et al.*, 2019). Evaluation convenience is related to the accessibility of complete yet understandable product information by adopting different presentation attributes, such as text, pictures, and audiovisuals, on the company website (Jiang *et al.*, 2013).

With these tools, prospective customers can get a fair picture of the product, zoom in, look for available colors and make sure that the product meets their requirements. They can also have a conversation with other online consumers about the products and services they desire to buy and compare their prices easily. This sort of exposure enables the consumer to understand and compare the products with others and to speed up the purchase process.

Although, the enormous range of products and thorough data available in recent years tend to make online consumers more susceptible than ever to attempts related to evaluation convenience (Jiang *et al.*, 2013).

Order convenience

Order convenience is expressed by careful order fulfillment, which involves flexible and multiple ways of payment and simple check-out options. It is a degree by which a consumer is saving his/her time and effort while making an order. E-tailers use order convenience as an approach to attract consumers (Khan & Khan, 2018). Pham, Tran, Misra, Maskeliūnas, and Damaševičius (2018) termed these benefits as transaction convenience. Pham *et al.* (2018) defines transaction convenience as consumer's perception of the time and effort required to successfully complete a trade or purchase.

While online shopping does not have a queue, the online checkout process is not known to be simple and easy. Methods of online payment are very vital for the completion of the purchasing process. Therefore, the online payment method should be simple and convenient. Consumers avert purchasing from e-tailers due to difficult payment methods.

Logistics and reverse logistics convenience

One of the fundamental goals for online shoppers is logistics service when examining online shopping behavior (Feng, Zheng, & Tan, 2007). Logistics convenience primarily refers to scheduled delivery of the product, order delivery convenience, conformity with the order placed.

Reverse logistics is in a reverse direction of the normal supply chain from the final consumers to the manufacturer point. Reverse logistics convenience consists of appreciating the outcome of the ordered product, returning of ordered time, and financial settlement for the returned products. It also relates to the convenience of service that includes communicating

with the service provider on the completion of the sale to initiate service inquiries or problems, maintenance, or repair requests and to replace the products (Khan & Khan, 2018).

The following studies (Table 1) have been done by previous researchers with respect to the service convenience.

Customer satisfaction

In marketing nomenclature, customer satisfaction is the evaluation that the service experienced by the consumer was at least as good as it was intended to be (Kautish, Khare, et al., 2021; Kautish, Guru, et al., 2021) The established behavior of the consumer is affected by the service inconvenience, conversely, when the services offered surpasses their expectations the consumers feel satisfied (Keaveney, 1995; Carman, 1990). Szymanski and Henard (2001) mentioned that positive disconfirmation (i.e. experience > expectation) leads to satisfaction while negative disconfirmation (i.e. experience < expectation) leads to dissatisfaction.

Customer satisfaction is often described as a comparison between pre-purchase expectations and the actual performance of the product (Jun, Yang, & Kim, 2004). Accordingly, the e-tailer can achieve customer satisfaction by enhancing service convenience (Koo, Kim, & Lee, 2008). Earlier researchers have suggested definite significant associations related to service convenience; for example, customer satisfaction is rightly affected by service convenience (Seiders et al., 2000; Berry et al., 2002; Colwell et al., 2008) and in turn satisfaction makes loyal customers (Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Chow, Lau, Lo, Sha, & Yun, 2007).

Additionally, the latest studies on convenience have found that customer satisfaction is directly affected by service convenience types (Seiders et al., 2000, 2007). Service convenience affects customer satisfaction by the quality-of-service offerings. Customers can be satisfied with the offering of better service convenience (Roy, Lassar, & Shekhar, 2016).

Customer satisfaction is a precedent for e-loyalty and consequence of the organization's service quality (Yang, Cai, Zhou, & Zhou, 2005). Consumer satisfaction will increase if the service providers enhance the convenience (Jih, 2007). Moghavvemi, Lee, and Lee (2018) in their research about the service quality of the banking industry in Malaysia found "convenience, knowledge and competency, staff, image and Internet Banking has a positive significant effect on overall service quality. In addition, the study found that overall service quality also

Service convenience Constructs	Researchers/year
Access convenience	Yale and Venkatesh (1986), Brown (1990), Seiders et al. (2000, 2005, 2007), Berry et al. (2002), Colwell et al. (2008), Reimers and Clulow (2009), Beauchamp and Ponder (2010), Aagja, Mammen, and Saraswat (2011), Jiang et al. (2013), Kaura (2013), Srivastava and Kaul (2014)
Search convenience	Seiders et al. (2000), Beauchamp and Ponder (2010), Jiang et al. (2013), Kaura (2013), Srivastava and Kaul (2014)
Evaluation convenience	Kaura (2013), Khan and Khan (2018)
Order convenience	Aagja et al. (2011); Anderson (1971); Beauchamp and Ponder (2010); Berry et al. (2002); Brown (1990); Colwell et al. (2008); Gehrt and Yale (1993); Jiang et al. (2013); Jih (2007); Reimers and Clulow (2009); Seiders et al. (2000, 2005, 2007). Kaura (2013), Srivastava and Kaul (2014)
Logistics/reverse logistics convenience	Beauchamp and Ponder (2010); Jiang et al. (2013); Jih (2007); Srivastava and Kaul (2014)
Post-purchase convenience	Seiders et al. (2000, 2005, 2007), Berry et al. (2002), Colwell et al. (2008), Aagja et al. (2011), Jiang et al. (2013), Kaura (2013)

Source(s): Prepared by Researcher

Table 1.
Summary of previous
researches

affects customer satisfaction. In the present study, the researcher wanted to know about the role of various service convenience dimensions and its effects on customer satisfaction with respect to males and females.

Relevance of gender with respect to service convenience

Gender is amongst the most popular categories used to analyze consumer behavior in online shopping (Pereira, Salgueiro, & Rita, 2016). In consumer behavior there is a difference in information processing in case of different gender (e.g. Meyers-Levy & Maheswaran, 1991). Exactly, the literature advocates that gender interacts considerably with attitudinal and behavioral factors in electronic commerce (Okazaki & Hirose, 2009). It indicates that women tend to favor thorough data and elaborate processing of data, while men use functional and goal-oriented information processing (Meyers-Levy & Maheswaran, 1991).

Men would therefore be more considerate to the quality of the key function, while women would be more observant to the nature of the data processing related variables (Iacobucci & Ostrom, 1993), suggesting that service quality is more important to women than to men. As a proof, quality of service affects satisfaction for women more heavily than for men in a mobile service environment (Kumar & Lim, 2008). Bansal, Irving and Taylor (2004) reported that customer characteristics (e.g. age, income, experience, and gender) have a moderating effect between e-satisfaction drivers and behavioral institutions. Aljasir (2022) found that length of the relationship did not moderate the relationship between behavior and relationship satisfaction.

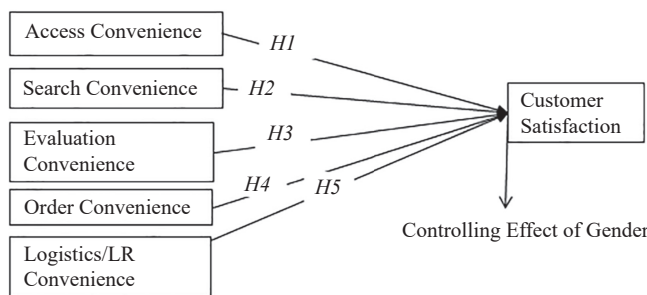
While the gender role in the purchase or use of IT was assessed from an attitudinal perspective, the moderating gender role in service convenience and customer satisfaction of e-retail stores remains to be unidentified. The researcher has not come across any study which includes differences related to the socio-demographic characteristics of Indian consumers because the behavior depends on various demographic characteristics and advancement of society in terms of socio-economic development.

Conceptual framework

Based on the in-depth literature review, a hypothesized model has been developed for carrying out the present study (portrayed in Figure 1). The model indicates the effects of service convenience constructs on customer satisfaction for e-retailing in India.

Hence, the present study has been carried out with the following clear objectives in mind.

- (1) To refine and validate the service convenience scale and customer satisfaction items to carry out the study in the e-retailing sector in India.



Constructs of Service Convenience
Source(s): Prepared by Researcher

Figure 1.
Conceptual framework

- (2) To test empirically the effect of constructs of service convenience on customer satisfaction.
- (3) To know the perceived difference among the customers based on gender.

And to address these objectives, the researcher has considered the following hypotheses.

- H1.* Access convenience has a positive significant effect on customer satisfaction.
- H2.* Search convenience affects customer satisfaction significantly.
- H3.* Evaluation convenience has a significant effect on customer satisfaction.
- H4.* Order convenience has a significant effect on customer satisfaction.
- H5.* Logistics and reverse logistics convenience has a significant effect on customer satisfaction.
- H6.* Significant differences exist among the study variables with respect to the gender of online buyers.

Research methodology

Based on previous studies, the researcher has used the earlier validated scale of service convenience, i.e. access, search, evaluation, order, and logistics & reverse logistics convenience (Khan & Khan, 2018; Jiang *et al.*, 2013; Kollmann *et al.*, 2012; Beauchamp & Ponder, 2010) and customer satisfaction (Khan & Khan 2017, 2018). The present study consists of questionnaire development, data collection, data analysis, and presentation of research findings. Researchers used a five-point Likert scale indicating 1 (strongly disagree) to 5 (strongly agree) for collecting data from the respondents on closed-ended, undisguised questionnaires. The type of products such as electronic goods, clothes, shoes/footwear, bags, and books was taken for the study as these product categories are offered by the e-retailers taken for the study. Amazon, Flipkart, and Snapdeal were selected as the preferred e-retailers as these e-retailers were considered the preferred e-retailers in Indian context for the customers while shopping online in the previous study conducted by Mishra (2018).

The designed research instruments were shown to the marketing experts. The language of the questionnaire was also simplified to make it more respondent-friendly. Content validity and pre-testing are done for minimizing biases, for designing questionnaire specifications, and finalizing statements for making it user-friendly to the respondents. A reliability test was employed in the present study, as reliability statistics is calculated through the value of Cronbach's alpha which shows the internal consistency i.e. the correlation among different items of the research instruments. The statistical tools and techniques employed in the study was exploratory factor analysis and reliability analysis was done with the help of AMOS 20.0 and SPSS 20.0 for testing reliability and validity of data.

Sample characteristics and data collection

Population of interest under the present study was registered e-buyers from any e-retail stores in the NCR region of India. The survey instrument comprises 21 structured questions to measure six study variables which were adapted for e-retail shopping. In the present study, the questionnaire was divided into two parts, i.e. The first part of the questionnaire consisted of items adapted from different sources and already discussed with the respective sources. The second part of the questionnaire consisted of items related to the demographic background of the respondents including monthly income, age (in years) and gender. The sample of 285 online shoppers was considered for the present empirical study. Out of these 285 responses, 11 responses were incomplete and 24 responses were outliers which were not

taken for future studies. Finally, a sample of 260 was considered for the study, and it was under the set criteria (Hair, Anderson, Babin, & Black, 2010). As Hair *et al.* (2010) suggested that the same size should be about 10 times the number of items for multivariate research.

The sample characteristics of the respondents is given below in Table 2.

Results and discussion

Exploratory factor analysis

Exploratory factor analysis (Table 3) tries to ascertain the factor domains that underlie a variable or construct. The value of the KMO test should be greater than or equal to 0.6 for acceptable sampling adequacy and the range of KMO test value varies from 0 to 1 (Hair *et al.*, 2010). The value of the KMO test in the present research is 0.892, which explains the higher correlation between pairs of constructs and factor analysis can be performed. To measure sphericity in the study, Bartlett's test was applied, which shows that the variances are equal for all samples and the homogeneity of variances was significant at $p = 0.00$, which shows absolute significance (Bartlett, 1937).

After the KMO test, exploratory factor analysis has been performed with principal component analysis and varimax rotation and Kaiser Normalization (Kaiser, 1958). The items having cross-loadings of more than 0.49 and factor loading of greater than 0.5 were retained for further study (Hair *et al.*, 2010). In addition, the total variance extracted (TVE) for the extracted six constructs was 69.94% of the total variance. The value of the alpha coefficient of 0.7 or above is nodded "acceptable" in marketing research (Revelle & Zinbarg, 2008; DeVellis, 2012). Common method bias (CMB) was assessed using Harman's one-factor test which measures whether one factor has not been measured. The EFA of all the measurement items extracted five factors explaining 69.9% of the total variance extracted and the first factor explained only 32% of the total variance extracted. Hence, CMB is not a concern in the present research (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Kautish & Sharma, 2019).

Confirmatory factor analysis

In addition, CFA is done to assess the factor loadings of the latent construct through its item and in general to assess the adequacy of the model fit (Hair *et al.*, 2010). The Factor Loadings, Composite Reliability (CR) and Average Variance Extracted (AVE) were used to test the measurement model's convergent validity (Figure 2). The factor loadings of items more than 0.5, indicate some common points of convergence (Hair *et al.*, 2010).

The value of Composite Reliability (CR) for each construct is more than 0.7, which shows proper scale reliability. The values of Average Variance Extracted (AVE) vary from 0.541 to

Characteristic		Frequency	Percentage
Age	Less than 30	102	39.2
	30-39	130	50
	40 and Above 40	28	10.8
Gender	Male	157	60.4
	Female	103	39.6
Educational qualification	Up to Graduation	30	11.5
	Graduation	118	45.4
	Post-Graduation and Higher	112	43.1
Income (per month)	Less than ₹49,000	96	36.9
	₹50,000–₹79,999	102	39.2
	₹80,000 and more	62	23.9

Source(s): Prepared by Researcher

Table 2.
Summary of
respondents'
characteristics

Item	Code	Factor loading	Constructs and reliability (α)
The website or app is always accessible	AC1	0.74	<i>Access Convenience</i>
I could shop whenever I want	AC2	0.758	
Can order products from wherever I am	AC3	0.759	
I can find desired products easily	SC1	0.786	<i>Search Convenience</i>
The website/app has user-friendly interface	SC2	0.762	
The products are properly categorized/classified	SC3	0.795	<i>Evaluation Convenience</i>
Easy to compare similar products	EC1	0.729	
Information like certification, standardization, guarantee, warranty is always available	EC2	0.621	
Genuine user reviews are available	EC3	0.826	<i>Order Convenience</i>
The product is deliverable to my location	OC1	0.732	
Faster checkout facility available	OC2	0.831	
Simple and Secure payment facility is available	OC3	0.747	<i>Logistics/Reverse Logistics Convenience</i>
Received all the items I ordered	LRC1	0.659	
Delivered on/before specified time	LRC2	0.794	
Received undamaged product	LRC3	0.806	
Convenient return policy for returnable products is available	LRC4	0.765	<i>Customer Satisfaction</i>
I am satisfied with my service provider	CS1	0.688	
I am delighted with the service provided	CS2	0.762	
I am pleased with the overall buying experience	CS3	0.714	
	CS4	0.743	

Note(s): KMO test for sampling adequacy = 0.892; BTS = 2694.740, $p = 0.000$; total variance explained (TVE) = 69.94%

Extraction method: principal component analysis (PCA); rotation method: varimax with Kaiser Normalization; rotation has been converged in six iterations

Source(s): Data Analysis by Researcher

Table 3.
The results of exploratory factor analysis (EFA)

0.608 (>0.5) indicating the better convergent validity and the square root of AVE is greater than the inter-item correlation, indicating the adequate discriminant validity (Table 4).

For a good model fit, the value of comparative fit index (CFI), normed fit index (NFI), and goodness-of-fit index (GFI) should be more than 0.9 (Bentler & Bonett, 1980). And for better model fit, RMSEA value should be less than 0.06 (Hair et al., 2010). The value of TLI should be more than 0.9 for a good fit. The values of model fit indices are presented in Table 5.

Structural model

The path estimates have been presented in Figure 3, however, the multiple regression results for the hypothesis testing have been presented in Table 6, which shows the path estimates and the significant value for the respective linkages.

From Table 6, six alternate hypotheses have been accepted (at $p \leq 0.05$), however, two alternate hypotheses have been rejected ($p > 0.05$). It is obvious from Table 6 that access convenience has a significant effect on customer satisfaction (C.R. = 3.3, $p < 0.05$). Moreover, the path estimate value is positive (Path value = 0.389). Therefore, the hypothesis H1: Access convenience has a significant effect on customer satisfaction, as is accepted. The effect of search convenience on customer satisfaction is significant ($\beta = 0.212$, $p = 0.01$, C.R. = 2.581), whereas the effect of evaluation convenience towards customer satisfaction (H3) is not significant (C.R. = 0.79, $p \geq 0.05$). Furthermore, the effect of order convenience on customer satisfaction is statistically significant ($\beta = 0.151$, C.R. = 2.004, $p \leq 0.05$). However, the effect of logistics and reverse logistics convenience on customer satisfaction is insignificant (C.R. = 1.804, $p \geq 0.05$).

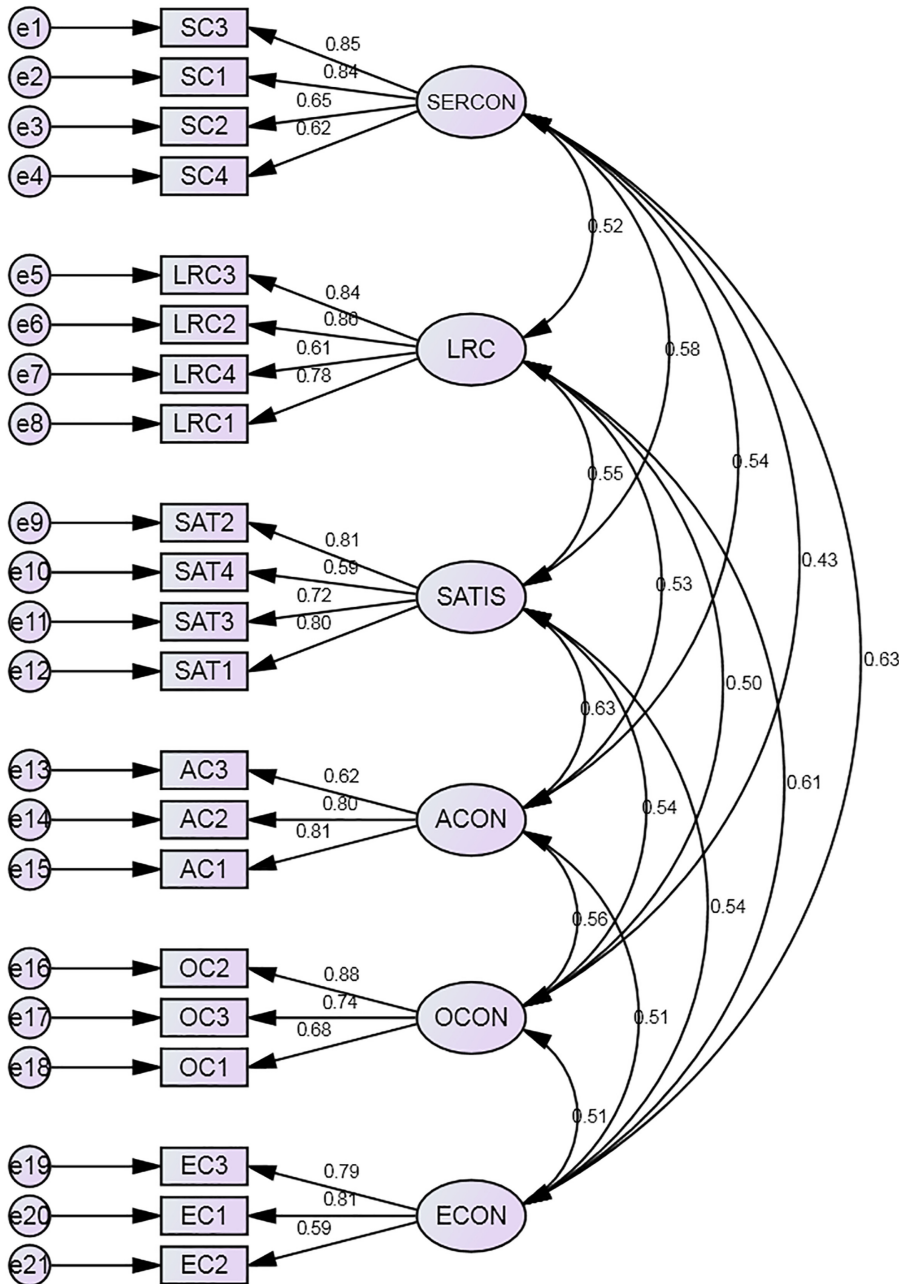


Figure 2. Confirmatory factor analysis

Researchers used an independent sample *t*-test to measure the perceived difference of study constructs with respect to gender. The researcher has classified the gender into two categories, i.e. male and female. The results of the analysis (Table 7) indicate that there are no

significant perceived differences between males and females with respect to the constructs of convenience and customer satisfaction (significant value, i.e. $p > 0.05$ for all cases).

The present study has been carried out to identify the moderating effects of gender on service convenience and customer satisfaction. Furthermore, the study assessed the role of different dimensions of service convenience, which influence the customer satisfaction of Indian e-retailers. Accordingly, a model was proposed for determining the relationship between service convenience and other factors such as gender and customer satisfaction.

The researchers used exploratory factor analysis to ascertain the dimension of the study. Furthermore, the researchers used the CFA for testing the different validities required for carrying out the multivariate data analysis. The present indicates that some dimensions, namely, evaluation and logistics/reverse logistics convenience do not affect the customer satisfaction. It might be because the evaluation convenience by e-retailers may not be as good as offered by traditional stores with “touch feeling”. This result contradicts the earlier study where convenience affects customer satisfaction (Khan & Khan, 2018). Moreover, the present study does not mention the effect of gender on customer satisfaction which contradicts the studies done by previous researchers (Kumar & Lim, 2008; Bansal *et al.*, 2004). Further, this study presents the result in an Indian context showing no gender differences as far as online shopping is concerned. The result of insignificant gender differences with respect to service convenience is in line with the earlier study by Szymkowiak and Garczarek-Bąk (2018) which mentioned that e-commerce shopping is gender neutral.

Conclusion

It can be concluded that the effect of access convenience, search convenience, and order convenience have significant effects on customer satisfaction. However, evaluation convenience and logistics and reverse logistics convenience have an insignificant effect on customer satisfaction. The present study has a unique contribution in the field of service convenience to e-retailing customers. Moreover, the present study indicates that gender does not moderate the effect of convenience on customer satisfaction. There is no significant difference existing between male and female respondents with respect to study constructs related to the service convenience dimensions and customer satisfaction. This is similar to the

Table 4.
Reliability and validity analysis

	CR	AVE	O.C.	SC	IC	AC	EC	SATIS
Order convenience	0.812	0.593	0.77					
Service convenience	0.831	0.557	0.429	0.746				
L/RL convenience	0.859	0.608	0.498	0.524	0.779			
Access convenience	0.789	0.558	0.565	0.537	0.529	0.747		
Evaluation convenience	0.781	0.548	0.508	0.631	0.613	0.513	0.74	
Customer satisfaction	0.823	0.541	0.538	0.578	0.551	0.628	0.543	0.736

Source(s): Prepared by Researcher

Table 5.
Model fit indices

Fit index	p	CMIN/DF	AGFI	NFI	GFI	CFI	RMSEA
Suggested values*	<0.05	Between 1 and 5	<0.9	0.9	≥0.9	>0.9	<0.06
Resultant values**	0.000	1.807	0.861	0.887	0.895	0.945	0.056

Note(s): *Hu and Bentler (1999), Hair *et al.* (2010)
**Observed Through Analysis

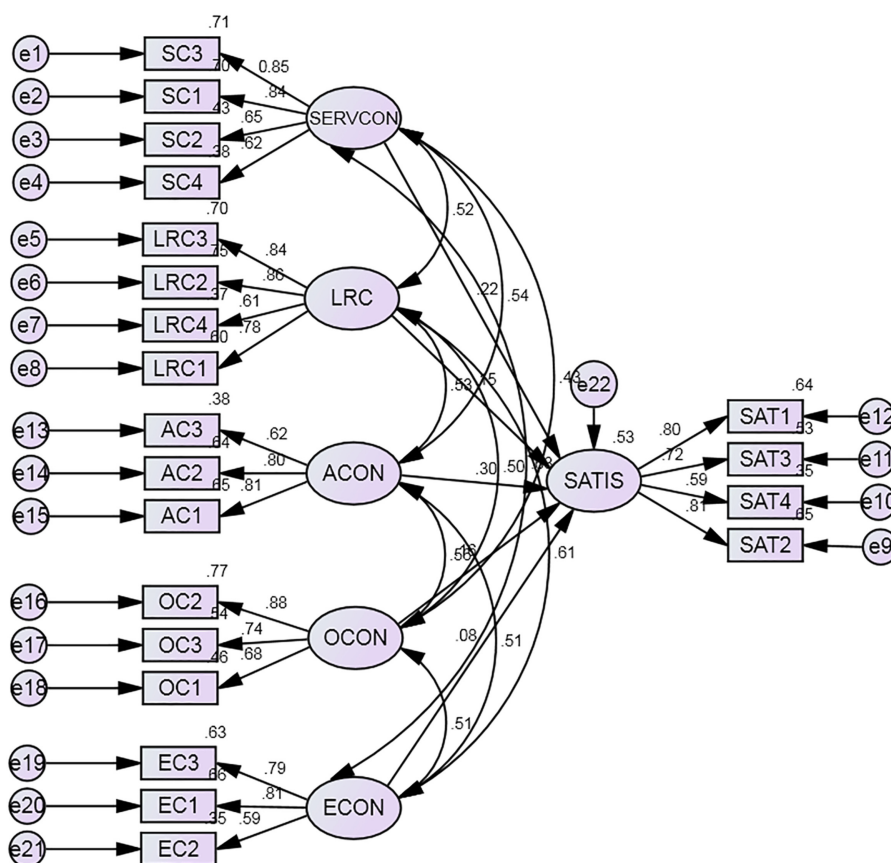


Figure 3. Structural equation modeling

Hypothesis	Causality	Estimates	C.R.	p-value	Decision
H1	Access convenience – Customer satisfaction	0.389	3.3	***	Accepted
H2	Search convenience – Customer satisfaction	0.212	2.581	0.01	Accepted
H3	Evaluation convenience – Customer satisfaction	0.083	0.79	0.429	Rejected
H4	Order convenience – Customer satisfaction	0.151	2.004	0.045	Accepted
H5	Logistics/R.L. convenience – Customer satisfaction	0.134	1.804	0.071	Rejected

Source(s): Prepared by Researcher

Table 6. Results of hypothesis testing

Variable	Male		Female		t-value	Sig
	Mean	SD	Mean	SD		
Evaluation convenience	3.97	1.05	4.13	0.95	-1.25	0.212
Order convenience	4.36	1.23	4.62	1.11	-1.707	0.089
Access convenience	3.43	0.91	3.58	0.76	-1.334	0.183
Logistic/R.L. convenience	4.64	1.28	4.74	1.25	-0.582	0.561
Search convenience	4.93	1.22	4.89	1.15	0.3	0.764
Customer satisfaction	4.83	1.14	4.99	1.09	-1.124	0.262

Source(s): Prepared by Researcher

Table 7. Results of independent sample t-test

study of Goldsmith and Goldsmith (2002), in online shopping contexts which contend that gender is unrelated to apparel buying. Further, the gender of shoppers does not influence the intention of the customers related to online shopping (Rajayogan & Muthumani, 2018).

However, some studies show that males and females differ in perception and post-purchase behavior. As, Jen-Hung and Yi-Chun (2010) found that male respondents have a more positive attitude for utilitarian motivators (e.g. convenience, lack of sociability and cost saving) and female respondents are influenced much by the hedonic motivators (e.g. value, fashion, sociality, and adventure) on e-shopping. Female customers prefer to shop online as compared to the male counterpart (Hardia & Sharma, 2013). Male users of a chat service are more likely to share positive WOM about the retailers (Mero, 2018).

Implications

The managerial implications of the present study are concerned with the improvement of e-retailer services for online shoppers in India. The marketers can focus now on evaluation convenience and logistics and reverse logistics convenience of e-retailers for their improvements as these do not have a significant impact on the customer satisfaction. Further, e-retailers can adopt the strategy to increase the customer base by retaining the existing customers and enhancing the shopping experiences for increasing the profitability (Kautish, Sharma, & Khare, 2020; Khan & Khan, 2020). Most of the consumers may turn to online purchases primarily for service convenience (Kautish & Sharma, 2018).

Future research directions

Based on the present study, it is suggested that future researchers can carry out the study about different types of barriers affecting the evaluation convenience and logistics convenience. Future researchers can add other customer segments to include the middle class, lower class, and upper-class families separately. The future study can be done to compare the consumer satisfaction from e-shopping with traditional retailing. Furthermore, the study can be done to compare customer satisfaction in rural and urban areas. As the sample has been taken from the National Capital Region (NCR), India, the study can also be done in the other part of the country as well. Further, other behavioral variables may be taken for future study.

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Further reading

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