

## **Factors Determining Customers' Preference for Online Retailing in Punjab**

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### **Abstract**

Online retailing is revolutionizing the scenario of retailing by offering greater convenience and comfort, more wide information and comparison of products on single platform. More and more people are being added to this new retail format day by day. The present study focuses on finding the reasons for preference of online retailing by the customers. The benefits derived from online shopping takes the customers to buy over electronic medium than the in store shopping. The research was conducted with the help of a pre-tested self structured questionnaire on 500 online retail customers selected by using stratified random sampling technique. The research enabled to extract four principle factors likewise perceived benefits of online shopping, cost effective and trustworthy, preference of modes of payment and better product with comparison, as the reasons or factors for preferring online retailing over the traditional shopping. By recognizing these factors for preference of online retailing, the web retailers can increase their customer base.

### **Key Words**

Factors, Online retailing, Preference, Perceived Benefits, Random Sampling

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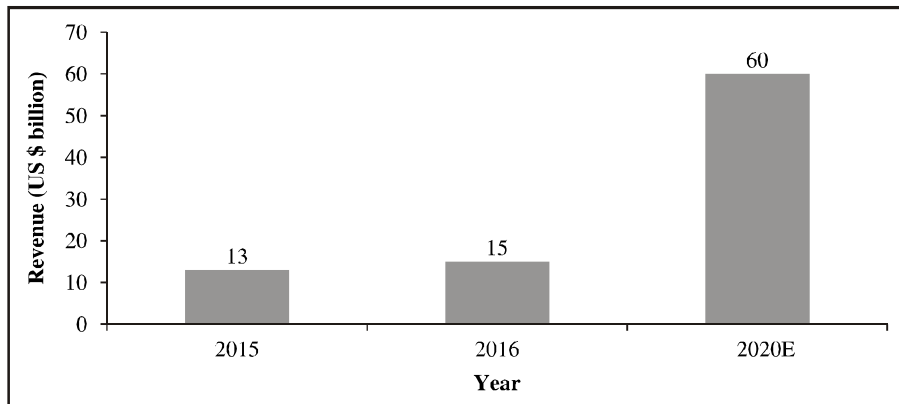
### **INTRODUCTION**

Online retailing, also known as e-tailing, e-retailing, non-store retailing, virtual retailing, internet retailing etc. is emerging rapidly with more and more number of internet users around the world and is considered as the fastest growing format of the retail world. Online retailing which is a subset of electronic commerce involves transactions where consumers directly buy goods or services

from a seller over the internet without an intermediary (Ogden & Ogden, 2005). Online retailing is revolutionizing the scenario of retailing due to its easy access and lower operating cost and eventually has emerged as the basic concept of business to consumer (B2C). Today, the companies are primarily focusing on efficient use of resources and effective use of time and money, offering greater convenience and more wide information than the traditional retailers. With their declining interest in traditional shopping patterns or formats, combined with technological improvement; now more and more customers are choosing online formats for doing business (Eroglu *et al.*, 2001).

FDI policy (2015) defines e-Commerce as a company incorporated under Companies Act, 1956 or under Companies Act, 2013 or a foreign company covered under 2(42) of Companies Act, 2013 or an office, branch, agency in India as provided in section 2 (Five) (three) of FEMA 1999, owned or controlled by a person resident outside India and conducting e-commerce business.

**Figure 1 : Online Retail Revenues (in \$ Billion) in India**



**Source :** India Brand Equity Foundation (IBEF) 2017

Online revenue estimates in India are given in detail here. The current revenues from online sales in the year 2016 were approximately \$ 15 billion. These revenues from online sales are projected to grow to US \$ 60 billion by 2020 (IBEF, 2017).

Online retail sales, which are part of the bigger industry e commerce, are growing consistently. It is expected to reach \$60 billion mark by year 2020 from \$ 15 billion in year 2016. According to Internet and Mobile Association of India (IAMAI), there are approximately over one million online retailers in India (Mukherjee, 2014). The past growth and figures shows a tremendous

upward trend in Indian online retailing industry. The overall Indian retail sector is estimated to grow at a CAGR of 13% and reach at the same level as U.S. retail revenues worth US \$ 950 billion by the year 2018 (Mishra and Rajagopalan, 2014).

## **RESEARCH GAPS**

Most of the literature available relates to western context in developed countries where e-retailing has already made its mark. But in India, online retailing is still at infancy stage as consumers are accepting it slowly but steadily. There are very few pieces of research evidence on online retailing in Indian context which study customers' preferences towards online retailing. Various researches have been conducted to study the attitude and other buying behavior of online customers. Rare pieces of research has focused to find what made customers to shift towards online mode than the offline format of shopping. This study is imminent for future researches as it has attempted to draw major factors as the reasons of preferring online buying in India.

## **NEED OF STUDYING PREFERENCE FOR ONLINE RETAILING**

The advancing growth in the field of online retailing has been leading to increase in the interest of marketers to study online shopping behaviour. Various factors are motivating the consumers to indulge and shop online these days. The fierce competition in this current marketing scenario has been forcing the marketers to analyze and identify the leading factors relating to online retailing, so that the needs of online shoppers can be catered well. These factors become the reasons for preferring online retailing over other formats of shopping. The preferences for online retailing includes the consumer choices of buying products through online retailing over the traditional channel of in store shopping. The benefits derived from online shopping take the customers to buy over electronic medium than the in store shopping. Preferences for online retailing as a shopping channel too help the marketer to understand their buying behavior as whole.

The consumer prefers generally online shopping due to savings in time, cost, ease and convenience etc. Customers can get various brands and products from different sellers at one place. The consumer shopping preferences and needs continue to fragment with increasing importance of online shopping. Therefore, it becomes pertinent to have an in depth understanding of their perceptions towards online retailing. The factors influencing customers to buy more and more online can be studied in detail. The reasons for preferring online

retailing as a shopping channel over the other channels are important to know.

The study was, thus, conducted with an objective to find the various reasons for preferring online retailing.

## **LITERATURE REVIEW**

As consumer needs are fragmented and vast, the marketers should cater to their needs and understand their preferences. Customers are looking for customized solutions that specifically cater to each individual needs. In online retailing, there is a need to identify the factors that lead to preference for online buying than the traditional buying.

Donthu and Garcia (1999) confirmed that convenience is the main reason for to engage customers in online buying and this kind of shopping could lead to an enjoyable shopping experience. Ramayah and Ignatius (2005) said that online purchases were supposed to be more common in familiar products like books and CDs, while shoppers still prefer conventional means for apparels and household items.

The three most important reasons for buying products online were mentioned as availability of cheaper products, saving of time and facility of comparisons online. The familiarity with online shopping and experience of internet usage does not have any impact on online buying (Constantinides and Geurts, 2006).

Korgaonkar and Girard (2006) found that consumer preference to shop online was mainly based on the product type. The highest rated attribute found in this study was searching and obtaining product information online. The comparative results were obtained between e-tailers and discount stores. It was found that customers not only prefer online retail store based on type of store only rather the type of product also matters while shopping either online or from store.

Overby and Lee (2006) examined the relevance of value dimensions for online shopping and the relationship between value dimensions, preference towards the Internet retailer, and intentions. The results indicated that online shopping frequency played moderating role for preferring buying through online mode. The value dimensions contribute to preference towards the online retailing and future intentions. The study found that consumers indeed perceive utilitarian value and hedonic value to be important for preferring online retailing. It showed that online consumer shoppers preferred internet for various reasons like price, savings and convenience.

Mishra (2009) focused on enhancing the customer value by increasing the benefits or by reducing the cost. A company can provide value to its customers by either providing with more offers in terms of core benefits in a more valuable way. Online retailers need to develop strategies regarding the factors that drive customer value and increase performance. The paper developed a conceptual framework for creating and enhancing customer value in the e-retailing.

Rahaman (2014) stated e-commerce trends in Bangladesh. It also comprised the perceptions and preferences of the online shopping including products and website selection. It enquired about the positive as well as negative website characteristics and described the website characteristics playing positive role in describing an e-commerce website. The main objective of this study is to review the trends, patterns and preferences of students about online shopping in Bangladesh including the behavioral characteristics and website selection criterion for online shopping. It was observed that male students purchased more products online more than female students.

Wadera and Sharma (2018) stated the benefits of online retailing which include comparisons of different websites and different variety of products availability, which, in turn, leads to more and more online buying. It has also been found that great deals and discounts offered by the online stores with promotional offers boost online retailing. The shoppers find deals and discounts attractive online, where they enjoy buying products online. Hence, online offers and promotions are perceived as a favorable way of inviting more buyers towards online retailing.

Thus, these reviews and previous literature helped in forming the broader objective of the study, which was stated as to find the factors for preference for online retailing.

From the literature reviewed, following hypothesis can be established :

- H<sub>1</sub> : Online retail customers prefer to buy online due to convenience as one of the reasons
- H<sub>2</sub> : Online retail customers prefer to purchase online due to wide variety of products available Online
- H<sub>3</sub> : Customers prefer to buy online due to the benefit of comparisons available in online shopping

## **METHODOLOGY OF THE STUDY**

A self-structured questionnaire, as the research instrument, of the study was used for purpose of data collection. The questionnaire was prepared with

the help of reviewing previous researches in context of online buying. The population for the study consisted of online customers in Punjab, who indulge in online shopping from various websites. The present study was limited to five cities namely, Ludhiana, Amritsar, Jalandhar, Mohali and Patiala; with equal proportion of 100 online customers selected from each city, making the total sample size as 500 online retail customers. Multistage sampling technique was used to select sample for the study. At first stage, five cities were selected. On the basis of highest 'urban to total population ratio' were selected for studying preference of online customers from the Statistical Abstract of Punjab 2012. At second stage, a list of operational internet service providers was prepared from internet (ISPAI.in) and four service providers were chosen on random basis. In the last stage of data sampling, 25 respondents were selected on systematic random basis and also their willingness to respond at each of service provider and were asked to fill the questionnaire. Each second respondent coming to an internet service provider was approached and was asked if he/she fulfills the qualifying criterion (at least 3 online purchases in last six month), if not, then the next respondent was approached.

For fulfilling the objectives of the study, primary data has been collected through survey method. Pre tested structured questionnaire was used for data collection. A self structured questionnaire, as the research instrument, of the study was used for purpose of data collection. The questionnaire was prepared with the help of reviewing previous researches in context of online buying. The questionnaire was pretested on 50 online retail customers. The content was slightly modified after pretesting in the questionnaire. The responses collected during pretesting of the questionnaire were not considered for the final analysis of data. The questionnaire was discussed with academicians and experts in this field to ensure its validity. Final questionnaire was developed with few addition and deletions after the suggestions of experts.

Various constructs were framed by reviewing previous literature related to benefits of online retailing that leads to preference to shop online. To study preference of the online customers towards online retailing, 28 statements were originally framed relating to the benefits of online shopping and preference related constructs. Only 23 items were finally included in the study after pretesting and reliability analyses. The customers, who had shopped online at least 3 times in last six months, were asked to rate the statements pertaining to preference on a scale of 1-5 where 1 denotes strongly disagree to 5 denoting strongly agree. Statements relating to reason of preference like customers perceive it to be comfortable, convenient, offering low prices, saving money,

providing wide variety of products, facility of comparisons, facility of reviews, easy payment modes available, easy delivery at door step, easy returns and refunds and handling privacy issues were asked from respondents.

The data collected under the study was classified and tabulated as per the objectives of the study. The data was analyzed using SPSS software version 20. The first step for analyzing the data was performing the function of data screening and data cleaning. Likewise, at few places, some missing values were observed, these missing values were substituted by the construct averages as per usual practice (Hair *et al.*, 2007).

## **FINDINGS OF THE STUDY**

The main step performed during preliminary analysis was calculating Cronbach's Alpha for different constructs under the study. It was done through performing reliability analysis for each construct and one alpha value for each construct had been reported under every construct undertaken in the study. Total of 26 items or statements were included in the study for studying the factors for preference for online retailing. Out of these, only 23 items were retained for the factor analysis after the pre-testing of this scale on 50 online retail customers and suggestions from the experts. After performing the factor analysis, the item  $X_{18}$ , (ratings of the products given online are genuine), which had loading less than 0.4 was deleted. Then, the factor analysis was performed again to get the new loadings after deletion of  $X_{18}$ . Thus, results of final factor analysis for studying preference of online customers included 22 items under the same construct.

The statistical tool used for extracting factors for preference for online shopping was factor analysis. Factor analysis is an interdependence technique, whose primary purpose is to define the underlying structure among the variables in the analysis (Hair *et al.*, 2010) apart from other aims of data reduction and scale construction (Field, 2005). As this study aimed to extract the principal factors of preference for online retail customers, factor analysis technique has been used in order to extract the constructs. Various factors extracted were named on the basis of common tone of the variables they include and on the mathematical considerations of magnitude of factor loading. These factors represent summated scales as one of the objectives of the factor analysis is scale development. Various variables that represent one factor are inter-correlated and signify common construct. The study has taken advantage of the same concept and summated scales were developed.

## **RESULTS OF THE STUDY**

The results of the study, keeping in mind the specific objective of factors for preferring online retailing by the online retailing customers, are presented in this section in details.

### **DEMOGRAPHIC PROFILE OF THE ONLINE RETAIL CUSTOMERS**

Regarding the age of the respondents, results revealed that most of the respondents (84.20%) lie in the age range of 17-36 years. Thus the online population mainly comprised of more of younger people as compared to the respondents lying in higher age range.

The number of male online shoppers was found to be 218 as compared to 282 females out of the total sample of 500 respondents. The sample consisted of majority of postgraduate or equivalent (49%) respondents followed by graduates (32%) and under graduates only (19%). As far as occupation of the respondents, it was observed that the higher proportion (50.60) were students followed by service persons (16.40%). The customers who were professionals like doctors, lawyers, engineers and chartered accountants; consisted of 15.40% from the total sample. There were few homemakers (9.40%) and businessmen (8.20%) as part of the sample. More number of respondents belonged to the income group of Rs 200001 to Rs. 5,00,000 as compared to other income groups in the data.

### **ITEMS FOR STUDYING CUSTOMERS' PREFERENCE TOWARDS ONLINE RETAILING**

Preference towards online retailing constitutes as an important construct in predicting/understanding behaviour of the respondents. After reviewing the literature regarding preference towards online retailing following statements were undertaken for understanding the behaviour of the respondents towards online retailing. All variables are depicted in Table 2.

Twenty three variables ( $X_1$  to  $X_{23}$ ) were considered by reviewing literature, to understand the preference of respondents towards online retailing. Factor analysis was applied to extract independent factors for preference towards online retailing.

In order to understand the preference of customers towards online retailing, the respondents were asked about their preference in form of 23 statements taken by reviewing literature related to it. The statements related to attitude were asked on a 5 point likert scale from strongly disagree to strongly



agree. Higher score on the scale represents agreement towards that statement. The results were presented in Table 1. The reliability analysis in terms of Cronbach's ( $\alpha$ ) for the entire construct was found to be 0.866.

**Table 1**  
**Demographic Profile of Respondents**

Category	(N = 500)	
	Frequency	Percentage
<b>Age (in years)</b>		
17-26	267	53.40
27-36	154	30.80
37-46	40	8.00
47-56	39	7.80
<b>Gender</b>		
Male	218	43.6
Female	282	56.4
<b>Education Level</b>		
Under-Graduation	95	19.00
Graduation	160	32.00
Post-Graduation	245	49.00
<b>Occupation</b>		
Student	253	50.60
Homemaker	47	9.40
Businessman	41	8.20
Professional	77	15.40
Serviceperson	82	16.40
<b>Total Family Income (Annual in Rs.)</b>		
Less than 2,00,000	86	17.20
2,00,000-5,00,000	216	43.20
500001-100000	140	28.00
More than 10,00,000	58	11.60

The mean scores and standard deviation were found for these 23 variables regarding preference towards online buying. Variable  $X_1$  was given highest importance in terms of mean score 4.24, it states that the customer prefer to buy online as 'wide variety of products are available at one stop shop'. The

**Table 2****Preference of the Respondents Towards Items Related to Online Retailing****(N=500)**

<b>Items</b>	<b>Statement</b>	<b>Mean</b>	<b>S.D.</b>
X1	I get wide variety of products at one stop store online	4.24	0.96
X2	I get the best product at lowest price	3.61	1.15
X3	Online shopping provides me comfort of shopping at home	4.12	1.02
X4	Online shopping offers me convenience of 24*7 shopping	4.22	0.98
X5	I can save money using apps to buy online products	3.62	1.16
X6	I do not get time to buy products in traditional stores	3.47	1.25
X7	I get easy and timely delivery at my doorstep	4.17	1.02
X8	Online shopping offers me attractive deals	4.03	1.01
X9	I find detailed product information online	3.97	1.02
X10	I can buy products online with just few clicks	4.08	1.06
X11	I prefer to pay cash on delivery for online shopping	3.48	1.41
X12	I prefer to pay through credit/ debit cards	3.14	1.40
X13	I prefer to pay through internet banking for shopping online	2.44	1.23
X14	I can compare products before making an online purchase	4.08	1.05
X15	I find online websites secure for shopping through web	3.51	1.17
X16	I can choose a better product with the facility of comparison online	4.08	1.05
X17	I can avoid hassle of parking in crowded places	3.83	1.15
X18	Ratings of products given online are genuine	3.48	1.17
X19	Refund policy is clearly mentioned on websites	3.58	1.25
X20	The product which I buy online are easy to return	3.46	1.31
X21	Online reviews help me to buy better product	3.88	1.10
X22	I don't trust giving my credit card information for online buying	3.23	1.47
X23	I find my private information is not shared with anyone by online retailer	3.41	1.22

**Overall Reliability of the Construct 0.866**

second highest importance was assigned to X<sub>4</sub> Mean score 4.22 which states 'online shopping offers convenience of 24\*7 shopping online'. Similarly, the other important statements include 'facility of easy and timely delivery at door

step' ( $X_7$ ), 'comfort of shopping at home' ( $X_3$ ), 'choosing a better product with facility of comparison' ( $X_{16}$ ) etc. Amongst the lower Mean scores, the variables included were like 'products easily returnable' ( $X_{20}$ ) (Mean score 3.46), 'Private information is not shared with anyone' ( $X_{23}$ ) Mean score (3.41) 'do not trust giving my credit card information' ( $X_{22}$  Mean = 3.23), 'prefer to pay through debit/credit card' ( $X_{12}$ ) (Mean = 3.14) and 'prefer to pay through internet banking' ( $X_{13}$ ) (Mean = 2.44).

### **CORRELATION BETWEEN THE ITEMS FOR PREFERENCE TOWARDS ONLINE RETAILING**

Factor analysis was applied on 23 variables to extract independent factors. Table 3 depicted the correlation matrix between various variables regarding preference of online buyers.

The correlation matrix reported the value of determinant as 2.27E-005, which is much lower than the threshold value of 0.00001 (Field, 2009). Persual of correlation matrix revealed that 'online shopping offers wide variety of products' ( $X_1$ ) was correlated with 'best products at lowest price' ( $X_2$ ), 'comfort of online shopping' ( $X_3$ ) and 'convenience of 24\*7 shopping' ( $X_4$ ). Also, it was correlated with ( $X_{14}$ ), comparing the products online. Buyers who were preferring shopping online perceived that they 'get the best products at lowest prices here' ( $X_2$ ) was highly correlated with 'comfort of shopping at home' ( $X_3$ ) ( $r = 0.822$ ) and was also correlated with 'convenience of shopping 24\*7' ( $X_4$ ) ( $r = 0.575$ ) and ( $X_6$ ) 'do not get time to buy in traditional stores' ( $r = 0.549$ ).

The variable ( $X_3$ ) 'online shopping offers me comfort of shopping at home' was correlated with 'convenience of shopping 24\*7' ( $X_4$ ) and also with do not get time to buy in traditional stores' with ( $X_6$ ). The variable 'online shopping offers me convenience of 24\*7 shopping' ( $X_4$ ) was correlated with 'get timely delivery at my door step' ( $X_7$ ). Similarly, variable such as 'Save money using apps to buy online' ( $X_5$ ) was correlated with 'donot get time to buy in traditional stores' ( $X_6$ ). The two other variables correlated with each other were 'online shopping offers me attractive deal' ( $X_8$ ) and 'find detailed information' ( $X_9$ ). Thus in this some correlation can be seen between some variables of this matrix for preference for online buying.

### **FACTOR SUMMARY OF PREFERENCE RELATING TO ONLINE RETAILING**

Principal Component Analysis with Varimax Rotation was applied to extract the factors regarding preference of online buyers. Table 4 depicts that

**Table 3**  
**Correlation Between the Items for Preference Towards Online Retailing**

Correlation	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>	X <sub>9</sub>	X <sub>10</sub>	X <sub>11</sub>	X <sub>12</sub>	X <sub>13</sub>	X <sub>14</sub>	X <sub>15</sub>	X <sub>16</sub>	X <sub>17</sub>	X <sub>18</sub>	X <sub>19</sub>	X <sub>20</sub>	X <sub>21</sub>	X <sub>22</sub>	X <sub>23</sub>
X <sub>1</sub>	1.000	.574	.621	.518	.267	.382	.448	.296	.198	.239	.032	-.142	.500	.512	.332	.140	.444	.201	.203	.073	.235	-.026	.022
X <sub>2</sub>	.574	1.000	.822	.575	.370	.549	.470	.325	.239	.139	.022	-.152	.370	.396	.401	.219	.391	.317	.270	.034	.190	-.079	.017
X <sub>3</sub>	.621	.822	1.000	.580	.472	.597	.482	.370	.339	.171	.027	-.151	.457	.396	.445	.253	.388	.275	.226	.057	.302	-.069	.015
X <sub>4</sub>	.518	.575	.580	1.000	.352	.431	.510	.235	.121	.089	.169	-.111	.376	.411	.355	.221	.420	.384	.165	.083	.219	-.015	.071
X <sub>5</sub>	.267	.370	.472	.352	1.000	.588	.261	.292	.161	.015	.089	.081	.275	.301	.283	.232	.150	.109	.118	.092	.212	-.213	-.060
X <sub>6</sub>	.382	.448	.597	.431	.588	1.000	.513	.349	.277	.072	.196	-.061	.381	.357	.379	.278	.252	.218	.298	.068	.203	-.012	.064
X <sub>7</sub>	.448	.470	.482	.510	.261	.513	1.000	.344	.220	.032	.232	-.177	.413	.432	.376	.216	.316	.243	.201	.128	.222	-.038	.049
X <sub>8</sub>	.296	.325	.370	.235	.292	.349	.344	1.000	.560	.044	.057	.166	.355	.229	.376	.331	.098	.264	.414	.293	.321	-.139	.138
X <sub>9</sub>	.198	.239	.339	.121	.161	.277	.220	.560	1.000	.139	-.024	.053	.313	.154	.290	.341	.091	.070	.304	.118	.197	-.123	-.018
X <sub>10</sub>	.239	.139	.171	.089	.015	.072	.032	.044	.139	1.000	-.541	-.156	.089	.171	.073	.145	.130	.025	.161	-.026	.083	-.075	.054
X <sub>11</sub>	.032	.022	.027	.169	.089	.196	.232	.057	-.024	-.541	1.000	.118	.136	.059	.103	.144	.099	.259	.012	.200	.102	.157	.045
X <sub>12</sub>	-.142	-.152	-.151	-.111	.081	-.061	-.177	.166	.053	.118	.136	1.000	-.160	-.175	.091	.162	-.102	.026	-.005	.043	.104	-.063	.048
X <sub>13</sub>	.500	.512	.396	.376	.275	.381	.413	.355	.313	.089	.136	-.160	1.000	.651	.398	.072	.313	.138	.236	.180	.171	-.014	-.040

Contd.

Contd. Table 3

Correlation	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>	X <sub>9</sub>	X <sub>10</sub>	X <sub>11</sub>	X <sub>12</sub>	X <sub>13</sub>	X <sub>14</sub>	X <sub>15</sub>	X <sub>16</sub>	X <sub>17</sub>	X <sub>18</sub>	X <sub>19</sub>	X <sub>20</sub>	X <sub>21</sub>	X <sub>22</sub>	X <sub>23</sub>
X <sub>14</sub>	.512	.396	.396	.411	.301	.357	.432	.229	.154	.171	.059	-.175	.651	1.000	.534	.210	.447	.130	.243	.120	.124	-.029	.063
X <sub>15</sub>	.332	.401	.445	.355	.283	.379	.376	.376	.290	.073	.103	.091	.398	.534	1.000	.418	.412	.336	.380	.108	.397	-.070	.233
X <sub>16</sub>	.140	.219	.253	.221	.232	.278	.216	.331	.341	.145	.144	.162	.072	.210	.418	1.000	.252	.249	.260	.207	.196	.003	.181
X <sub>17</sub>	.444	.391	.388	.420	.150	.252	.316	.098	.091	.130	.099	-.102	.313	.447	.412	.252	1.000	.476	.374	.233	.233	-.112	.040
X <sub>18</sub>	.201	.317	.275	.384	.109	.218	.243	.264	.070	.025	.259	.026	.138	.130	.336	.249	.476	1.000	.384	.165	.212	-.073	.153
X <sub>19</sub>	.203	.270	.226	.165	.118	.298	.201	.414	.304	.161	.012	-.005	.236	.243	.380	.260	.374	.384	1.000	.562	.340	-.150	.226
X <sub>20</sub>	.073	.034	.057	.083	.092	.068	.128	.293	.118	-.026	.200	.043	.180	.120	.108	.207	.233	.165	.562	1.000	.200	-.081	.089
X <sub>21</sub>	.235	.190	.302	.219	.212	.203	.222	.321	.197	.083	.102	.104	.171	.124	.397	.196	.233	.212	.340	.200	1.000	-.013	.226
X <sub>22</sub>	-.026	-.079	-.069	-.015	-.213	-.012	-.038	-.139	-.123	-.075	.157	-.063	-.014	-.029	-.070	.003	-.112	-.073	-.150	-.081	-.013	1.000	.082
X <sub>23</sub>	.022	.017	.015	.071	-.060	.064	.049	.138	-.018	.054	.045	.048	-.040	.063	.233	.181	.040	.153	.226	.089	.226	.082	1.000

Determinant = 2.27E-005

**Table 4**  
**Factor Summary of Preference Relating to Online Retailing**

Items for Preference Towards Online Retailing	Label	Factor Loading	Factor name	Variance explained by the factor(%)	Eigen Value
Online shopping offers me convenience of 24*7 shopping at home	X4	0.816	Perceived Benefits of Online Shopping at Home	19.11	7.66
Online shopping offers me comfort of shopping at home	X3	0.777			
I can avoid hassle of parking in crowded places	X17	0.757			
I can buy products online with few clicks	X10	0.722			
Online shopping offers wide variety of products	X1	0.743			
I do not get time to buy in traditional stores	X6	0.708			
I find detailed information online	X9	0.669			
Online shopping offers me attractive deals	X8	0.623			
I find online websites secure for shopping through web	X21	0.765	Cost Effective & Trustworthy	15.93	3.02
Products which I buy online are easily returnable	X19	0.748			
I do not trust giving my credit card information for online buying	X22	0.731			
I can save money using price saving apps to buy online	X5	0.711			
I get the best product at lowest price	X2	0.702			
I get easy and timely delivery at my doorstep for products shopped online	X7	0.638			
Refund policy is clearly mentioned	X19	0.624	Preference of Modes of Payment	12.94	1.72
I prefer to pay through my debit/ credit card	X12	0.910			
I prefer to pay through internet banking for shopping online	X13	0.891	Better Products with Comparison	11.93	1.31
I find my private information is not shared with anyone by online retailers	X23	0.830			
I prefer to pay cash on delivery for online shopping	X11	0.754			
Online reviews help me to buy better products	X15	0.833			
I can choose a better product with facility of comparison online	X16	0.809			
I can compare product features and prices before making online purchase	X14	0.779			

the construct preference of online buyers can be represented by four factors (eigen value > 1.0) and the variance explained by the extracted factors ranges from 19% to 60% of the original input variables.

The factors extracted through this had been named appropriately on the basis of constituent variables. The factors' names, the constituent variables, their factor loadings, the variance and the eigen values had been summarized in Table 4. Four factors explained 19.11%, 15.93%, 12.94% and 11.93% of variance respectively. The cumulative variance explained by the factors ranged from 19.11% to 59.91%. The first and the foremost factor consist of 8 variables ( $X_4$ ,  $X_3$ ,  $X_{17}$ ,  $X_{10}$ ,  $X_1$ ,  $X_6$ ,  $X_9$  and  $X_8$ ). The factor loadings of this factor ranged from 0.623 to 0.813. This particular factor explained 19.11% variance with eigen value 7.66 and thus forms an important factor in understanding the preference construct for online retailing. The factor had been named as 'perceived benefits of online shopping'. The factor represents shopping perceiving online retailing as 'convenient', 'comfortable' and 'wide variety of products available online' as the benefits of online shopping. In addition customers who buy products online perceive benefits of 'getting detailed information' and 'getting attractive deals online.'

Also, it includes 'avoiding the hassle of parking at crowded places' and 'not having time to buy in traditional stores' while buying online.

In terms of importance, the second factor explained variance of 15.93% and it included 3 variables ( $X_{21}$ ,  $X_{19}$ ,  $X_{22}$ ,  $X_5$ ,  $X_2$ ,  $X_7$  and  $X_{19}$ ). The highest loading came on the variable 'online websites secure for shopping through web', with highest loading on this variable (0.765). The factor loadings of various variables under this factor ranged from 0.765 to 0.624. The Eigen value of the factor was 3.02, therefore an important factor forming preference for online retailing. The factor had been named as 'Cost effective and Trustworthy'. The factor mainly represents do not trust giving my credit card information and also includes that the customers get the best products and lowest prices. The factor also includes variable as 'getting easy and timely delivery at door step'.

The third factor in terms of importance explained 12.94% of variance and includes 4 variables ( $X_{12}$ ,  $X_{13}$ ,  $X_{23}$ ,  $X_{11}$ ). The factor has an Eigen value of 1.72 and is an important factor in forming the preference of customers towards online buying. The factor loadings of the variables ranged from 0.910 to 0.754. The factor has been named as 'Preference of modes of payment' as reflected as preference to pay through debit/credit card the concerns relating to security and privacy while buying online. The variables like 'prefer to pay through internet

banking for shopping online' and 'prefer to pay cash on delivery for online shopping'. These variables altogether form the construct modes of payment.

The last important factor explained the variance of 11.93% and includes 4 variables ( $X_{15}$ ,  $X_{16}$  and  $X_{14}$ ). This factor had Eigen Value of 1.31 which is adequate. The factor loadings of variables ranged from 0.833 to 0.799. The variables included 'reviews help to buy better products' also it includes 'choose a better product with facility of comparisons' and the last variable included 'compare product features. Thus the online shoppers perceived various benefits of online shopping as convenient, comfortable, and cost effective and trustworthy for shopping. Getting detailed information and attractive deals, wide range of products, lesser cost etc. are the various reasons for preferring online retailing. Thus these variables help in constructing the preference of customers for buying online.

### DIAGNOSTIC PARAMETERS OF FACTOR ANALYSIS

The Table 5 depicts the diagnostic parameters of factor analysis. There were variables under the study yielding 529 ( $23 \times 23$ ) item to item correlation. The determinant of item to item correlation matrix was 2.27E-005 as compared to the required level of at least 5% Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO) value was 0.901, much higher than required 0.5, indicating sample adequacy requirement for factor analysis.

**Table 5**

#### Factor Analysis Diagnostics for Measuring Preference of Buyers Towards Online Retailing

Parameters	Value	Percentage
Case to Variable Ratio	22.27	
Number of Item to Item Correlation	529 (23 variables)	
Determinant Value	2.27E-005	
Kaiser Meyer Olkin Measure (KMO)	0.901	
Barlett's Test of Sphericity ( $X^2$ ) d.f. = 105	5.729E3 (p value 0.000)	
<b>Individual Variable Mean Values</b>		
0.5 to 0.7 (Mediocre)	—	—
0.7 to 0.8 (Good)	2	9.09
0.8 to 0.9 (Great)	9	40.91
>0.9 (Superb)	11	50



Individual variable mean values were being checked from the Anti images. All the variables had been classified under the categories of 'mediocre' (none), 'good' (9.09%), 'great' (40.9%) and 'superb' (50%) on the basis of individual KMO values, depicting that factor analytical technique was feasible on the basis of sample adequacy. The test of identity matrix-Barlett's Test of Sphericity ( $X^2$ ) is 5.729E3 also significant  $df = 105$ ,  $p < 0.01$  indicating that correlation matrix is not an identity matrix and therefore useful for conducting factor analysis.

### **RELIABILITY ANALYSIS OF EXTRACTED FACTORS OF PREFERENCE TOWARDS ONLINE RETAILING**

Four principal factors have been extracted from the statements relating to preference for online retailing. The summated scale for all the factors were created and are depicted in Table 6. There are four summated scales corresponding to four factors and the reliability analysis in terms of Cronbach's Alpha has been found for all four factors (Gupta and Chander, 2012)

**Table 6**

**Reliability Analysis of Extracted Factors of Preference Towards Online Retailing**

<b>Name of the Factor</b>	<b>Cronbach's Alpha</b>	<b>No. of Item</b>
1. Perceived Benefits of Online Shopping	0.879	8
2. Cost Effective & Trustworthy	0.828	7
3. Preference of Modes of Payment	0.873	4
4. Better Products with Comparison	0.855	3

The highest reliability was observed for 'Perceived Benefits of online shopping' ( $\alpha = 0.879$ ), followed by 'Cost Effective & Trustworthy' ( $\alpha = 0.828$ ), followed by 'Preference of Modes of Payment' ( $\alpha = 0.873$ ) and 'better products with comparison's ( $\alpha = 0.855$ ).

Thus, the preference towards online retailing can be studied under four major constructs namely 'Perceived benefits of online shopping', 'Cost effective and trustworthy', 'preference of modes of payment' and 'better products with comparisons' These preference factors are the perceived benefits of online shopping. The more the number of benefits of online shopping perceived by the customers, more it will lead to more online buying in future.

### **DISCUSSION**

In context of online shopping, the number of benefits is perceived by the online retail customers. Due to lack of time, people has started preferring

more and more online buying due to its attributes like convenience, larger assortments, accessibility etc. Four principle factors extracted in this study indicated the various benefits of online shopping. This preference construct was studied by extracting main four factors named as 'perceived benefits of online shopping', 'cost effective and trustworthy', 'preference of modes of payment' and 'better products with comparisons'. These benefits provide the reasons to buy products online over the traditional in- store buying. The first factor had been named as 'perceived benefits of online shopping' and it represented perceiving online retailing as 'convenient', 'comfortable' and 'wide variety of products available online', 'getting detailed information' and 'getting attractive deals online' as the benefits of online shopping also 'avoiding the hassle of parking at crowded places' and 'not having time to buy in traditional stores' as the various benefits of online shopping.

The second factor had been named as 'Cost Effective and Trustworthy'. The factor mainly represents 'do not trust giving my credit card information' and also includes that the customers get the best products and lowest prices. The factor also includes variable as 'getting easy and timely delivery at door step'. The third principal factor was 'preference of modes of payment', it included items such as 'prefer to pay through internet banking for shopping online' and 'prefer to pay cash on delivery for online shopping'. The last factor for preference of online shopping was named as 'better products with comparisons'. The variables included 'reviews help to buy better products' also it included 'choose a better product with facility of comparisons' and the last variable included 'compare product features'. The highest importance in terms of mean score was to item  $X_1$  with mean = 4.24, it states that the customer prefer to buy online as 'wide variety of products are available at one stop shop'; whereas the lowest mean score assigned was to 'prefer to pay through internet banking' ( $X_{13}$ ) (mean = 2.44). Thus, the customers value more variety of products online with safer modes of payments.

## **CONCLUSION**

Over the years, the online retailing is pacing its growth at a very faster rate globally as well as in India. This growth is led by various factors or the reasons, for which people have started buying more and more online. Some customers perceive online retailing as convenient offering huge assortments with the comfort of buying at home anytime. While others perceive it better than traditional shopping for the reason that it saves their valuable time and they can avoid hassle of parking as well as shopping at crowded places. Some customers prefer to buy online without any hesitation to shop via different modes of

payment such as cash on delivery, using credit card or debit cards or through internet banking. Buying online with few clicks also leads the customers to prefer online retailing. Thus, reasons for preference of online retailing broadly can be studied with various factors that engages more and more customers to this shopping format.

## LIMITATIONS AND IMPLICATION FOR FUTURE RESEARCH

One of the constraints of the study includes that the data collection was confined only to five cities of Punjab. The sample for the present study comprised only 500 respondents from the whole population of online shoppers in Punjab. Some biasness might have crept in the responses while collecting data. Also, the study being based on survey method, the data may contain personal opinions and experiences leading to personal biasness to some extent.

As comparison of different products on a single platform facilitates online shopping, the same way reviews and ratings are considered important while buying products online. Genuine reviews and ratings by the customers should be uploaded by the web retailer time to time. Also, clippings of satisfied customers can be uploaded by the online retailers to provide the assurance to the customers to reduce perceived risk. Thus, the marketers can use this data to further enhance those benefits that customers perceive highly important such as wide variety, convenience, comfort and facility of comparisons etc. in online retailing. The other researcher can provide a comparison of routine and non-routine shoppers as this study considered only those shoppers who had experience of buying online.

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