

# Characteristics for E-Satisfaction in E-Retailing - Evidence from Chinese E-Commerce

Ahsan Siraj<sup>a\*</sup>, Jiaxin Guo<sup>b</sup>, M. Wajid Kamran<sup>c</sup>, Qiuzhen Li<sup>d</sup>, Yongming Zhu<sup>e</sup>, <sup>a,c</sup>PhD Student, School of Management Engineering, Zhengzhou University <sup>b,d</sup>Master Student, School of Management Engineering, Zhengzhou University <sup>e</sup>PhD, Professor, School of Management Engineering, Zhengzhou University

Corresponding Author Email: <sup>a\*</sup>[ahsan.sehar4@gmail.com](mailto:ahsan.sehar4@gmail.com)  
<sup>b</sup>[guojiaxin360@163.com](mailto:guojiaxin360@163.com), <sup>c</sup>[wkraja2013@hotmail.com](mailto:wkraja2013@hotmail.com),  
<sup>d</sup>[liqiuzhen5690@163.com](mailto:liqiuzhen5690@163.com), <sup>e</sup>[zhuyongming@zzu.edu.cn](mailto:zhuyongming@zzu.edu.cn),

The term e-commerce has progressed rapidly all around the globe and e-commerce businesses are making progress drastically by allowing customers to purchase products from any part of the world. E-commerce mainly focuses on female economy in marketing but due to the rise of middle class, male Internet users' economic strength is rising and they are finding their own worth. This has made the "male e-commerce economy" a new online consumer outlet. Therefore, how to break through traditional marketing ideas of e-commerce, strengthen the cultivation of male consumers loyalty, improve their purchase and repurchase rate has become an urgent problem for e-commerce. Based on this, we compared different demands and characteristics of online shopping between men and women by referring to theories related to customer satisfaction. After that, we constructed the evaluation model of customer satisfaction of the e-commerce platform for male customers. We analysed 289 questionnaires from Chinese male students and verified the feasibility and effectiveness of the above evaluation model by received data. We found that e-satisfaction is positively correlated with convenience, customisation, information and communication, and negatively with website aesthetics. This study can provide reference and guidance for e-commerce platforms to seize the opportunity of the "male e-commerce economy".

**Key words:** *E-commerce, Consumer loyalty, Consumer Satisfaction, Male e-commerce economy.*



## Introduction

The emergence and development of e-commerce has changed people's trading methods and consumption habits. At present, customers go online, buy products and they are delivered to their homes. With the change of technology, the company provides customers with different purchase channels. Although the way of buying has changed compared with before, customer satisfaction is still an important part of the consumer buying process.

According to Capizzi, Michael T and Rick Ferguso (2005) e-retailing is one of the most developing industries that can stimulate consumers' loyalty. E-tailing or E-retailing is "when companies deal with the consumer transactions electronically" (Jones et al. 2004) Because of the use of the worldwide web many businesses have grown to learn how to create opportunity from their past weaknesses and focus on creating better seller-customer relationships (Kim et al., 2007). As said by Kim et al., (2011) it is very important to consider e-service quality as it is necessary for e-retailers to emphasise the characteristics of e-service to fulfil target market requirements. Liao et al. (2011) have referred to prior works (Payne and Frow, 2005; Sharma et al., 1999; and Storbacka et al., 1994) and state that good customer relationships, that are the key to enhance the business, positively affect word of mouth and fetch long term profits to the business. Work from authors of a research paper Kim et al., (2008) examined two major areas of e-retailing; e-satisfaction and e-loyalty and they intended to answer two questions, which were:

- 'How does a purchase environment that is not directly related to product price or related information affect e-satisfaction?'

- 'What is the relationship amongst e-satisfaction and e-loyalty?' (Kim et al., 2008).

Therefore, improving customer's electronic satisfaction and loyalty is an urgent problem to be solved in the e-commerce industry.

In the traditional marketing thinking, most enterprises regarded women as the most important consumer group. They developed special marketing strategies for female customers, which could attract them, improve their satisfaction and cultivate their loyalty. Some researchers have studied the behaviour of female e-commerce consumers. Abraham L B et al. (2010) found that women have become a major part of the world's largest e-commerce market. They spent more on online transactions than men. Sylvia Maier and Usha Nair-Reichert (2007) considered that business models based on information technology, especially e-commerce, has been seen as a "potential gold mine" for women's rights. What's more, Monika Lingytė et al. (2011) compared the behaviour of female e-commerce consumers from two countries with different cultures. They found that culture had a strong effect on women's online shopping behaviour, such as Lithuanian women had a keener interest in e-commerce than Greek women. Pascual-Miguel F J et al. (2015) investigated 871 online consumers from Spain

and found that product types had asymmetric effects on perceived risks and purchase intentions of consumers of different genders. The effect was significant for women, but not for men.

However, a long-neglected fact is that male consumers have been underestimated by the e-commerce market. There are more and more signs that the male e-commerce economy is on the rise, due to the improvement of economic level, male self-value discovery and consumption structure upgrading. According to First Insight, which surveyed 1,000 respondents twice between December 2017 and September 2018, men were buying almost as many items online as women (First Insight. The Rise of the New Male Power Shopper. 2019). The Boston consulting group in June 2017 issued a research which reported that the average annual expenditure of men on online consumption had surpassed that of women, reaching \$10,025 (Achille, 2017). Meanwhile, the survey results jointly released by the American interactive advertising bureau (IAB) and IAB China showed that it did not matter whether Chinese residents buy online on a PC terminal or mobile terminal, male consumers accounted for more than female consumers. Among them, the male and female consumers who bought online on a PC terminal accounted for 57% and 43% respectively, while the male and female shoppers bought online on a mobile terminal accounted for 53% and 47% respectively (American interactive advertising bureau, 2016). Thus, online consumption of male e-commerce market potential cannot be underestimated.

Furthermore, existing research showed that online consumers of different genders hold different beliefs when it comes to using e-commerce. Craig Van Slyke et al. (2010) used a model from the innovation diffusion theory to test the gender difference, which is the extent to which the influence of different beliefs about e-commerce intentions applies. They found that comparative advantage was more important for men and compatibility was more important for women. Yujong Hwang (2010) found that hedonism had a strong influence on male e-commerce consumer based on sociolinguistics. Bassam Hasan (2010) divided consumers' attitude towards shopping online into three components, namely cognition, emotion and behaviour. The findings showed that cognitive attitudes were the biggest difference between men and women in terms of electronic shopping, meaning that men valued the utility of online shopping more. Kem Z. K. Zhang (2014) found that consumers' cognitive trust in online stores affects their emotional trust, which further affects their willingness to buy, and female consumers were more affected by inconsistent reviews.

Based on the above analysis, we find that some researchers have pointed out the gender difference that affects consumer satisfaction of e-commerce. However, they mostly focused on several individual factors. Existing studies lack a systematic model for assessing men's e-satisfaction. Therefore, the study will try to identify those factors affecting customer electronic satisfaction, so as to help online stores improve electronic satisfaction and loyalty

of customers. It will help define all aspects of the e-retailer's website and help improve the sales and satisfaction of Chinese consumers.

## Literature Review

One of the popular marketing topics has always been consumer-buying behaviour. There are many factors that are not completely under the control of the marketer, such as the demographics factor, the social factor, the economic factor, the cultural factor, the psychological factor and other personal factors. These factors show significant impacts on the behaviour of consumers and decisions regarding purchasing. (Harrell and Frazier, 1999; Czinkota and Kotabe; 2001; Dibb et al., 2001; Jobber, 2001; Boyd et al., 2002; Solomon and Stuart, 2003). Experience elements need to be identified and classified to form a comprehensive picture of controllable actors, which may affect the outcome of virtual interactions. This classification can help marketing practitioners' knowledge and better understand the nature of their online marketing tools and potential. With immense focus on service quality and customer satisfaction, it had become essential to understand and measure a consumer's perception of e-quality (Meng and Mummalaneni, 2011). In order to involve in online shopping, a buyer must trust in the process itself (Lee and Turban, 2001). For a successful online transaction, there are many variables which are identified by the researchers, for example time, psychological, physical and brand perception. But it is mainly dependent on whether a customer is willing to buy the particular product or service in given conditions or not. According to a report by Mintel (2010) about 90% of the population with internet access has purchased one thing or the other in the year 2009. The increasing use of digital media has enabled new ways of retailing along with new challenges, which are faced by both the buyers and sellers. Despite the several challenges, e-retailers must more importantly, know how to induce trust in their customers (Mukherjee & Nath, 2007).

Due to the uncertainty of electronic transactions, trust is a key factor affecting the success of electronic commerce transactions (Gefen D, 2000). This is because trust affects many critical factors of online transactions, including security and privacy. Therefore, in order to reduce barriers to e-commerce transactions, platforms must build trustworthy relationships to increase the loyalty of a customer (Thompson S.H. Teo and Jing Liu, 2007).

A customer's loyalty to a particular seller is 10 times higher over the course of a lifetime than the average customer's (Health, 1997; Newell, 1997). The best designed E-business plans are bound to fall apart due to lack of customer loyalty. To establish this loyalty, most companies have been continually trying to develop long term relationships and satisfy customers. With customer satisfaction becoming increasingly important to the survival and profitability of online stores, several e-tailer-specific backgrounds like 'trust' (Gommans, Krishnan, & Scheffold, 2001; Harris & Goode, 2004; Reichheld & Scheffer, 2000); customer service (Gommans et al., 2001; Srinivasan et al., 2002); technology and website (Gommans et al.,

2001); customisation (Gommans et al., 2001; Srinivasan et al., 2002); supposed substituting barriers (Balabanis, Reynolds, & Simintiras, 2006); e-satisfaction (Anderson & Srinivasan, 2003; Balabanis et al., 2006); and image (Kwon & Lennon, 2009) have been identified<sup>[1]</sup>. Thus, customer loyalty is known to be an important element of profitability (Srinivasan, Anderson, & Ponnayolu, 2002).

Many studies have confirmed positive correlation amongst electronic-satisfaction and electronic-loyalty. Christodoulides George and Nina Michaelidou (2010) considered that electronic loyalty is mainly determined by electronic satisfaction. The convenience factor, variety and online interaction assist in calculating e-satisfaction. Societal collaboration is the only motivation in shopping, directly related to electronic loyalty. Jengchung Victor Chen et al. (2015) used two mediators to explain electronic loyalty, two of which were trust and electronic satisfaction. Norizan Kassim and Nor Asiah Abdullah (2010) believed that word of mouth (WOM) was the premise of customers' repeated visit or buyback intention, and customer satisfaction and trust would develop a positive impact on loyalty through word of mouth (WOM). Mustafa I. Eid (2011) surveyed e-commerce customers from the province in the east of Saudi Arabia. The results showed that customer loyalty was greatly influenced by satisfaction of customers in B2C e-commerce, however customer loyalty was slightly influenced by customer trust. Nader Sohrabi Safa and Maizatul Akmar Ismail (2013) proposed conceptual framework to describe the formation of electronic loyalty based on electronic trust and electronic satisfaction. They also found that technical factors had the greatest impact on electronic satisfaction. Thus, electronic satisfaction is closely related to electronic loyalty. Improving customer satisfaction helps cultivate their loyalty, thus gaining competitive advantage and increasing benefits.

Through qualitative interviews and field research, Anderson and Srinivasan Swaminathan (2011) identified key factors to improve customer satisfaction in e-commerce, such as adaptability, commitment, network, classification, transaction convenience and participation. On this basis, some scholars conducted more detailed studies from the perspective of gender. Shihyu Chou, et al. (2015) modeled the structural equation of 428 women who had a shopping experience in an online clothing store. As per results, the website design perceived delivery time and have a positive effect on e-satisfaction. Rose Sebastianelli, Nabil Tamimi and Murli Rajan (2008) examined the differences in quality perceived by customers of different genders in seven aspects: reliability, accessibility, convenience, product content, ordering services, credibility and assurance. They found a big gender difference in the frequency of BBBS on the Internet between women and men. Through empirical research, Xiaolin Lin et al. (2019) found that interaction and perceived risk have a great influence on men's attitude in the e-commerce environment. While, vividness and diagnosticity are more likely to influence the behaviour of female customers.

Several important factors that affect e-satisfaction and loyalty have been identified by many researchers e.g. (Liu and Arnett, 2000; Ranganathan and Ganapathy, 2002). 12 characteristics were found by Loiacono et al. (2002) for measuring the quality of a website, which were: information, trust, interactivity, response time, intuitive operations, ease of understanding, visual appeal, stable image, innovativeness, emotional appeal, online completeness and better than alternative shopping networks. To make it simpler Ranganathan and Ganapathy (2002) identified that there are three vital elements for an e-retailer which were: convenience, information, and website design. Xi-mei Dong (2012) constructed the e-commerce satisfaction evaluation index, which mainly includes five factors, such as product information, service integrity, transaction security website design, and marketing plan. Through qualitative interviews and field research, Anderson and Srinivasan Swaminathan (2011) identified key factors to improve customer satisfaction in e-commerce, such as adaptability, commitment, network, classification, transaction convenience and participation.

The factors which considered for this research are:

### ***Convenience***

It is very important for the websites to be interactive and convenient to ensure the process of buying online is quick and easy. Because the customers who choose to purchase products online are short of time and they expect the transaction to be completed as quick as it can be (King et al., 2004). It was also supported that companies which make an effort to make the buying process convenient are likely to have more satisfied customers and satisfaction led to loyalty (Srinivasan et al., 2002).

### ***Customisation***

Due to the increasing change in technology and functionality of software like adobe, this has enabled customers to tailor the website, the product and the service that they require or expect from the e-retailer to make the shopping experience unique. This tailoring possibility is included in the service that is provided by the seller and defined as customisation (Kim et al., 2007). If a seller is keen to satisfy the customer and wants to increase the chances of loyalty customisation, this is what the seller should think about as it lowers the chances for customers to choose a different channel or look at a different website to fulfill their need (Srinivasan et al., 2002).



### ***Information***

Although the number of e-sellers and e-buyers have increased, the concern about security (pin) and information protection has also increased amongst the customers (Kiely, 1997; Ranganathan and Ganapathy, 2002). The information factor for an e-retailer is defined as the information that is provided by the company that is legitimate and the customer's personal information is protected after the transaction (Ho and Wu, 1999).

### ***Communication***

One of the biggest differences between physical stores and online stores is the interaction between customers and sellers (Ranganathan and Ganapathy, 2002) which is very important when it comes to explaining the services or the technical specifications of a product. For e-retailers it is very vital to ensure that the website visitors are able to communicate with retailers whenever they want as this has a major impact on satisfaction and loyalty. Thus, features like live chat rooms, live help and personal shopper attract more customers (Ranganathan and Ganapathy, 2002).

### ***Website Aesthetics***

In order to make customers' shopping experience good and memorable, traditional retail shops spend handsome money on the outlook and design of the shop because it enhances the satisfaction of the customer. Therefore, the colours, animations, graphics, and design of the website create some kind of emotional effect and add to the probability of purchase (Kotler, 1974). Moreover, Symanski and Hise (2000) recommended that the appearance of the website is important for satisfaction and loyalty.

These characteristics have been tested and aided in building up the hypothesis intended for the research.

### ***Hypotheses***

**H<sub>1</sub>:** Customer satisfaction among male customers is positively influenced by the convenience factor in Chinese e-commerce

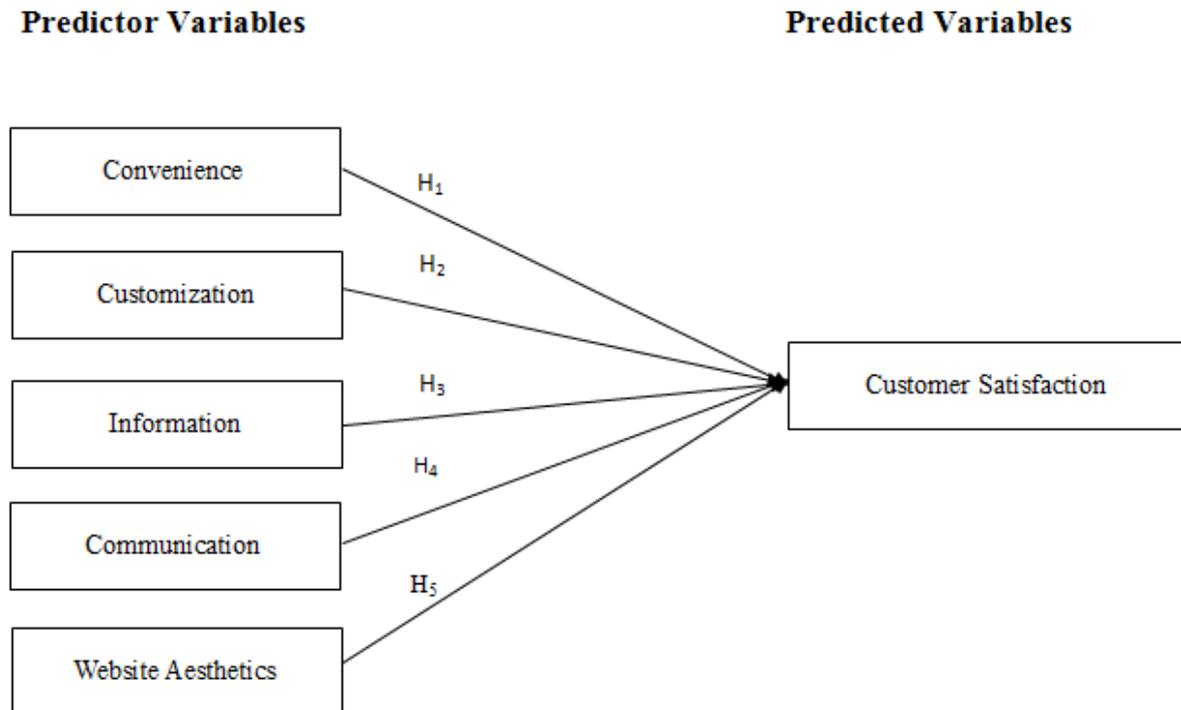
**H<sub>2</sub>:** Customer satisfaction among male customers is positively influenced by the customisation factor in Chinese e-commerce

**H<sub>3</sub>:** Customer satisfaction among male customers is positively influenced by the information factor in Chinese e-commerce

**H<sub>4</sub>:** Customer satisfaction among male customers is positively influenced by the communication factor in Chinese e-commerce

**H<sub>5</sub>:** Customer satisfaction among male customers is positively influenced by the website aesthetics factor in Chinese e-commerce

**Figure 1.** Theoretical Framework



### Methodological Approach

The research method of this study is based on quantitative research. Previously, a conceptual model of male consumers' e-commerce satisfaction was developed by summarising related references. The research hypothesis was developed for every single variable in this model. Depending upon this, descriptive research was opted in the study (Malhotra, 2007). The questionnaire designed for this research has been divided into three sections. The first section of the questionnaire inquires about the respondent's demographic information, the second section of the questionnaire includes questions regarding the dependent variable and finally the third section has questions about the independent variables that will be tested in this survey. All variables used in this research were measured on a 5-points Likert Scale from "1=Strongly Disagree to 5= Strongly Agree". The existing literature in the field of e-commerce was used to develop the scales for proving hypotheses. We designed the questionnaire by referring to Anderson R E and Srinivasan S S 2003 , Guo Xiaoying et al, 2012 , Ganapathi R 2015 and Xu Xiaowei 2017.



As China is the selected sample location, the final questionnaire was proposed to be distributed in Chinese as well as the English language. Before the formal questionnaire survey, following a study that conducted a questionnaire prediction and distributed the preliminary designed questionnaire on a small scale among 20 experienced B2C e-commerce consumers, to judge whether the items in the questionnaire are reasonable and effective and whether the sentences are appropriate. After the prediction of the questionnaire, the questions with repeated meanings were deleted and some questions with unclear questions were modified. It was also determined that the respondents' reaction was more optimistic towards the questionnaire in the Chinese language. So, we decided to create online questionnaire in the Chinese language instead of English for the better understanding of the respondents. The online questionnaire was created using questionnaire star and survey links were sent randomly to 500 Chinese male students studying in different colleges and universities, out of which 303 responses were received. After the elimination of partially filled and wrongly filled questionnaires the final sample size was 289 respondents. Data analysis from finalised sample size was done by using SPSS software version 23, including descriptive analysis, inferential analysis and scale measurement. In order to achieve scale measurement and inferential analysis, reliability analysis, validity analysis, multiple regression analysis and Pearson correlation coefficient analysis were executed respectively.

## **Results and Findings**

### ***Demographics***

In response to the conducted survey, the collected data showed that the respondents who took more interest in filling the survey were undergraduate students (67.57%) between ages 18 to 25 years old making 88.18% of the total sample size. In response to the questions regarding internet usage, the majority of students (67.23%) have been using internet for more than 5 years and most of the students (33.11%) of the total spend 2 to 4 hours a day surfing the internet while with a little margin (29.39%) are the students spending 4 to 6 hours in internet usage daily.

About the online shopping habit, among the total students, those students are 37.50% of the total who rely on both online and offline shopping and 24.66% of the students are those students who use online shopping more frequently in their daily routine and among all (64.86%) the students preferred online shopping ranging from 1 to 4 times a month in the last 6 months. Among the online websites in China, TaoBao is the most appealing online shopping website for the respondents (94.93%) and 53.72% are the respondents among all feeling comfortable after buying from the well-known online shopping website. Amongst all the available products at online shopping websites, clothing (75%) and food items (45.95%) are the products mostly bought by the customers.



### ***Reliability Analysis***

According to Golafshani, reliability is a measurement which shows the accurate degree of things that are measured according to the uniformity or permanence of the measurement results attained by the measurement tools, for the purpose of controlling and reducing random errors (Golafshani, 2003). To attain reliability analysis for six variables, we used Cronbach's Alpha and the used value of Cronbach's Alpha coefficient was 0.7 as a parameter (Vaske, Beaman, & Sponarski, 2017). The result obtained in this research regarding reliability analysis showed Cronbach's Alpha coefficients for the six variables are above 0.7. As the values are all greater than 0.7, so the questionnaire has a strong reliability.

Cronbach's Alpha coefficient value of convenience, customisation, information, communication, website aesthetics and customer satisfaction is: 0.904, 0.917, 0.877, 0.915, 0.959, 0.924 respectively.

### ***Validity Analysis***

Validity denotes the amount to which the measured results mirror the data to be investigated. The more stable the measured results are with the data to be examined, the greater the validity will be. In the other case, there will be low validity. Often the true value is unknown; it is difficult to have a completely positive response for the assessment of validity. However, validity can be assessed by indicators. For an average measurement, validity is more vital than reliability. To confirm the high permanence and consistency of the questionnaire, this study used SPSS software version 23 to examine the validity of the questionnaire results (Noble & Smith, 2015). According to the results obtained and as shown in the Table 1, factor analysis was applicable because KMO value is 0.904 i.e. between 0.5 to 1.0 and the value of approx. chi-square is 1525.899 i.e. large enough as a result obtained by Bartlett's Test result of Sphericity. The value of Sig is 0.000 (less than 0.5). These results showed that that data is suitable for analysis (Noble & Smith, 2015).

**Table 1:** Principal components factor analysis

Variables	Items	Factor Loading	Eigen-Value	Cronbach's Alpha
Convenience	I find it very suitable to buy a product any time I want to buy while shopping online	0.799	4.489	0.904
	I find it very relaxing to shop any time 24 hours a day in case of online purchasing instead of making time arrangements to visit stores	0.847		
	I find it very helpful that online purchasing ensures the ease of selection for customers and make comparison with other products available in the market	0.851		
	I am very concerned about getting my desired product on-time and in case of online shopping I am able to get on-time delivery	0.745		
	I find it very useful to buy those products online that are not easily available in the neighboring market	0.832		
	I find it very easy to buy those products online that are either unique or new in the market	0.817		
	I find it very satisfactory to spend as much time as I want to take in deciding a particular product while shopping online	0.703		
Customisation	I feel very satisfied with the maximum amount of customization options provided by the online shopping websites	0.843	3.764	0.917
	I believe that customization facilitates my participation in the design, production and delivery of products and services in online shopping	0.872		
	I believe that customization encourages the development and continuation of customer-firm relationship in online shopping	0.88		
	I believe offering Customization in online shopping makes me feel privileged and valued for the company	0.885		
	I believe that offering customization in online shopping plays an important role in building consumer attitude towards purchase repetition	0.857		
Information	I believe that the provided information regarding company and products in case of online shopping is reliable	0.814	3.838	0.877

	I think that information provided at the online shopping website is easily understandable	0.825		
	I think information provided at the online shopping website is well enough to make a purchase decision	0.823		
	I find all the desired information regarding the products I need to buy while I am shopping online	0.855		
	The information provided by online shopping website is relevant and useful	0.812		
	I think my provided personal and payment information is not being compromised with 3 <sup>rd</sup> party by the online shopping websites	0.655		
Communication	I find it very pleasing that online shopping websites make sure the communication with the customers	0.854	4.217	0.915
	I find it very generous that customer service personnel are always willing to help me in case of online shopping	0.841		
	It is an immense pleasure for me as a customer that all of my inquiries are answered promptly in case of online shopping	0.858		
	I believe online selling companies are always ready and willing to respond their customer needs	0.846		
	I believe that customer service personnel from online selling companies do a very good job by asking customers the reviews about products after purchasing	0.799		
	I think two-way communication between sellers and buyers play a very vital role in successful online shopping	0.83		
Website Aesthetics	I think the proper website layout is very important for me while shopping online as it helps me to search and select the desired product efficiently	0.877	6.785	0.959
	I believe that the website design should be very appropriate enough to make me able in searching desired products easily	0.87		
	The start page should be designed in way to lead me easily to the information I need and tell me immediately where I can find desired product	0.888		
	I prefer to purchase products from a website where I can find my desired product with the minimum number of clicks	0.877		

	I prefer to purchase products from a website that provides related and quality information	0.883		
	I think color combinations used by the online shopping website attracts me	0.842		
	I think website layout including colors, animations, design etc. create emotional effect on me	0.856		
	I feel very happy when I use the attractive website while purchasing online	0.852		
	I prefer to purchase from the user-friendly website	0.868		
Customer Satisfaction	I feel highly satisfied regarding my decision of online purchasing	0.794	6.037	0.924
	I prefer online shopping rather than visiting physical stores for shopping	0.756		
	I find it convenient and time saving to shop online rather than bearing hassle of searching stores	0.825		
	I find online shopping websites very appropriate in terms of usage and providing sufficient information about the company and the products	0.828		
	I am highly satisfied with the way of using new techniques in online shopping to make sure the sufficient communication between sellers and buyers	0.829		
	I believe that attractiveness of online shopping website plays an important role in making purchase decision	0.769		
	I believe that customer's personal and payment information is kept confidential and secured while purchasing online	0.694		
	I believe that companies selling products online are making sure the on-time delivery of products	0.655		
	I believe that companies selling products online pay great attention to your complaints in case of conflict in described and delivered product	0.743		
	I find it very satisfactory the way online business companies are providing service to make their customers satisfied	0.854		

KMO = 0.904 df = 15 p = 0.000 (p<0.05)

Results of Varimax with Kaiser Normalisation used for a rotated component matrix indicate that all the research questions for this study are divided into six components and every component stands for the variables recognised in the underlying investigation. Thus, this research's discriminant validity is concluded (Hair et al., 2013). As shown the above table, the



factor loading value of all the items are over 0.5 and hence it verified the convergent validity of the data for this research and represents that there is a positive correlation among all the items presented in each component.

***(a) Pearson Correlation Coefficient Analysis***

The Pearson Correlation Coefficient analysis results are shown in Table no. 2 and it is quite clear from the obtained results that most variables show significant correlation. 0.805 is the highest value of r in Pearson correlation. It shows significant correlation among “convenience” (Independent variable) and “customer satisfaction” (Dependent variable). 0.618 is the lowest value of r in Pearson correlation, which indicates low correlation between “website aesthetics” (Independent variable) and “customer satisfaction” (Dependent variable). The degree of positive correlation is different. There is also a positive correlation between the influencing factors. The correlation coefficients are all positive.

**Table 2:** Pearson correlation coefficient

		Convenience	Customisation	Information	Communication	Website Aesthetics	Customer Satisfaction
Convenience	Pearson Correlation	1	.790**	.715**	.732**	.727**	.805**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	289	289	289	289	289	289
Customisation	Pearson Correlation	.790**	1	.723**	.747**	.743**	.704**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	289	289	289	289	289	289
Information	Pearson Correlation	.715**	.723**	1	.779**	.703**	.687**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	289	289	289	289	289	289
Communication	Pearson Correlation	.732**	.747**	.779**	1	.796**	.671**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	289	289	289	289	289	289
Website Aesthetics	Pearson Correlation	.727**	.743**	.703**	.796**	1	.618**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	289	289	289	289	289	289
Customer Satisfaction	Pearson Correlation	.805**	.704**	.687**	.671**	.618**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	289	289	289	289	289	289

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### **Multiple Regression Analysis**

The required results obtained from multiple regression analysis are presented in the tables below i.e. Table 3 (a) and Table 3 (b). According to the achieved results, the “Tolerance” value ranges from 0.255 to 0.333 and are larger than 0.10. The VIF value ranges from 3.007 to 3.922

which are all less than 5 (Hair et al., 2013). Hence, it can be implied that problem of multicollinearity does not exist among all the independent variables.

**Table 3 (a):** Regression Analysis - ANOVA<sup>a</sup>

Model	Sum Squares	df	Mean Square	F	Sig.
Regression	70.927	5	14.185.118	120.238	.000 <sup>b</sup>
Residual	33.388	283			
Total	104.315	288			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Website Aesthetics, Information, Convenience, Customisation, Communication

**Table 3 (b):** Regression Analysis – Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		95.0% Confidence Interval for B	
	B	Std. Error	Beta			Tolerance	VIF	Lower Bound	Upper Bound
(Constant)	.246	.116		2.110	.036			.016	.475
Convenience	.488	.050	.592	9.755	.000	.307	3.253	.389	.586
Customisation	.085	.050	.105	1.677	.095	.289	3.462	-.015	.184
Information	.199	.064	.181	3.104	.002	.333	3.007	.073	.326
Communication	.073	.054	.090	1.345	.180	.255	3.922	-.034	.179
Website Aesthetics	-.072	.049	-.089	-1.454	.147	.304	3.292	-.169	.025

a. Dependent Variable: Customer Satisfaction

R = 0.825<sup>a</sup> R Square = 0.680 R Square Adjusted = 0.674

F = 120.238 P = 0.000<sup>b</sup>

According to the results presented above, it is seen that convenience factor is statistically significant and has positively influenced the customer satisfaction. That is, when the level of the convenience factor (the level of agreement) increases by 1 unit or point, it will result in enhancing the customer satisfaction by 0.488 unit/point with 0.05 significance level. Customisation, information and communication all are the other factors along with convenience being statistically significant and has positively influenced the customer

satisfaction as per the results achieved in this research. Only one factor i.e. Website Aesthetics is not statistically significant and has negative impact on customer satisfaction according to the data shown in table 3. (b). That means when the level of the website aesthetic factor (the level of agreement) increases by 1 unit or point, it will result to decrease the level of customer satisfaction by 0.072 unit/point with 0.05 significance level. The intensity among the variables is explained by the statistics of standardized coefficients. Basing on the intensity, variables are ordered from highest to lowest value i.e. 0.592 for convenience, 0.181 for information, 0.105 for customisation, 0.090 for communication and -0.089 for website aesthetics. From the analysis of the data used in this study, it can be established that convenience is highly influential on the independent variable that influences customer satisfaction among male college and university students in China towards shopping online. Moreover, on the basis of the results shown in Table 3(b), this study also established that change of customer satisfaction is described as 68 percent ( $R^2 = 0.680$ ) by all the independent factors.

## **Conclusion**

### ***Research Implications***

In this investigation, the five factors including convenience, customisation, website aesthetics, information, and communication have been studied with the purpose of examining the effect of these mentioned variables on male customer e-satisfaction for Chinese male students studying in colleges and universities for online shopping in China. As per obtained results, customer satisfaction is influenced by all the factors used in this research except website aesthetics positively in online shopping. According to achieved results, customer e-satisfaction is negatively influenced by website aesthetics. The outcomes of the research supplemented theoretical knowledge about young male customers regarding e-shopping. These research findings also provide visions to e-retailers about forming suitable business strategies so as to enhance the e-satisfaction level and to compete in market because Chinese e-commerce market has become very competitive. So, it has become essential for e-retailers to realise and consider these factors in order to meet e-satisfaction level of customers.

### ***Limitations and Future Research Directions***

Findings obtained from the research provide several fresh perceptions to scholars. However, findings must be taken into consideration in light of numerous limitations. A cross-sectional design measures units at only one point in time from a selected sample of population (Burns & Bush, 2003). As there are limitations in the cross-sectional study, the research does not entirely portray variations in customer e-satisfaction and is also not adequate to foresee long-term online shopping trends in the Chinese online shopping market. Besides that, college and university male students have limited financial resources to spend on shopping and their



purchasing preferences are quite different from the rest of the male customers. So, the investigation outcomes are not adequate to signify the understandings of male customers preferring online shopping in China.

As there are limitations on this research, a few suggestions are very important to discuss in order to enrich the study of customer e-satisfaction in e-retailing. Longitudinal studies should be adopted in further researches instead of cross-sectional because longitudinal studies repetitively measure the same sample units over a period (Burns & Bush, 2003) [Error! Bookmark not defined.]. This is also suggested to extend the investigation directions through adding further respondents from diverse occupations, age groups, social classes etc. and taking these measurements into consideration in future research will enhance the legitimacy and generalisation of research outcomes.



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