

Influences of Product Characteristics and Service on Consumer Satisfaction with Purchasing Clothing Online

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Abstract

This paper mainly analyzes the influences of product characteristics and service on consumer satisfaction with online clothing purchasing and hopes to provide some references for online clothing retailers to improve consumer satisfaction. In this paper, divide service into two parts: online clothing retailer's service and logistics service and put forward related sixteen hypotheses. Then design and carry on questionnaire survey focusing on 300 undergraduate and graduate students with experience of purchasing apparel online. Through making correlation analysis and regression analysis about 246 valid questionnaires, hypothesis are all supported and product characteristics and service really have significant positive influence on consumer satisfaction. Online clothing retailers take actions from thirteen factors clothing product characteristics and service include to increase consumer satisfaction. Limited by the sample and the product, the conclusion's using range needs further improvement.

Keywords: consumer satisfaction; clothing; online purchasing; product characteristics; service

1. Introduction

With the rapid development of science and technology and the popularization of Internet, online has become a critical channel for retailers to sell goods. However, consumers can't touch commodities directly in virtual online stores. It is increasing that the possibilities of consumer dissatisfaction with online shopping. In 2012, the percentage of consumers who are not satisfied with online shopping reaches 10.8%, higher than that in 2011 (CNNIC, 2013). In 2013, there are 43.4% of consumers unwilling to shop online due to their previous unhappy experience. As a primary category of online marketing, clothing often disappointed consumers because of its characteristics and other reasons such as online service and delivery service. It has bad influences on clothing retailer's operating efficiency. Sometimes, the metrics for assessing consumer satisfaction with online shopping decide the final failure or success of electronic commerce (L. Christian & France, 2005). Consequently, this article tries to analyze the influence of product characteristics and service on consumer satisfaction and wants to provide certain reference for online clothing retailers to manage their clothing stores and increase consumer satisfaction with purchasing clothing online to improve online clothing sales and retailers' profits.

2. Literature Review and Hypothesis

2.1 Concept of Consumer Satisfaction

Cardozo introduced the concept of consumer satisfaction into the marketing category in 1965.

He pointed out that consumer satisfaction resulted from the consumer expectation and was influenced by it. Since then, many scholars study the consumer satisfaction and they held a similar opinion about its concept more or less. Oliver (1981) put forward that consumer satisfaction was an emotional feeling state produced by the consumer when his or her consumption experience is consistent with his or her expectation.

Churchill and Surprenant (1982) regarded consumer satisfaction as the evaluation of the products buyers after they compared expected returns and investment. Philip Kotler (1986) put forward that customer satisfaction was a feeling produced by the comparison of product actual performance and consumer prior expectation. If the actual performance of product is higher than or equal to consumer prior expectation, the customer will be satisfied. Otherwise, the customer will feel dissatisfied.

2.2 Relationship Between Product Characteristics and Consumer Satisfaction

Lee (1999) thinks that product price has an influence on consumer satisfaction. Jinxiang Zha and Lisheng Wang (2006) found that product quality and price advantages are main factors affecting consumer satisfaction during the process of online shopping. Yue Huang (2012) found that product factors including realness of information and product quality have a strong correlation with consumer satisfaction. Based on the views of L. Christian and France, product factor influences consumer satisfaction and it includes product customization and merchandising product value. Weiyang Chen (2009) put forward that product attribute is one of the most important factors of consumer satisfaction in business to consumer clothing online marketing. Xiaoying Guo, Kwek and Min Liu (2012) concluded that product quality and product category all have positive correlations with consumer satisfaction with online shopping. Combined to clothing characteristics, in this paper product characteristics includes five aspects. They are product price rationality, quality, style diversity, size integrity and color richness. Thus, we propose the following hypothesis:

H1: Product characteristics has a significant positive influence on consumer satisfaction with purchasing clothing online.

H1a: Product price rationality has a significant positive influence on consumer satisfaction.

H1c: Product quality has a significant positive influence on consumer satisfaction.

H1d: Product style diversity has a significant positive influence on consumer satisfaction.

H1e: Product size integrity has a significant positive influence on consumer satisfaction.

H1f: Product color richness has a significant positive influence on consumer satisfaction.

2.3 Relationship between Service and Consumer Satisfaction

2.3.1 Relationship between Retailer's Service and Consumer Satisfaction

According to Lee's view, customer service can influence consumer satisfaction. Jihyun and Mary (2010) also proposed that there is a positive interrelationship between the online retailer's service quality and satisfaction with a structural equation modeling technique. Compared to the lower level, the interrelationship is stronger in higher level of online retailer's service. Cho and Park (2001) pointed out the determinants of consumer satisfaction including product information and additional information services. The reliability and information quality have positive correlations with consumer satisfaction with online shopping (Kim & Lim, 2001; Guo X.Y., Kwek & Liu M. 2012). Online clothing retailer's service includes clothing information text description authenticity, clothing details pictures clarity, consumer service attitude and delivery speed in this paper. Thus, we hypothesize that:

H2: Online clothing retailer's service has a significant positive influence on consumer satisfaction with purchasing clothing online.

H2a: Online clothing information text description authenticity has a positive significant influence on consumer satisfaction.

H2b: Online clothing details pictures clarity has a significant positive influence on consumer satisfaction.

H2c: Consumer service attitude has a significant positive influence on consumer satisfaction.

H2d: Online clothing retailer's delivery speed has a significant positive influence.

2.3.2 Relationship between Logistics Service and Consumer Satisfaction

Jiatong Zhang (2011) found that logistics support and service integrity have influences on consumer satisfaction of shopping online. Kim and Lim (2001) put forward that delivery efficiency also can influence consumer satisfaction. The quality of logistics, logistics service and service factors including logistics service efficiency and employee attitude, have positive correlations with consumer online shopping satisfaction (Rao, Thomas, Stanley & Deepak, 2011; Guo X.Y., Kwek & Liu M., 2012; Huang Y., 2012).

The more satisfied consumer feel with the quality of logistics, the higher consumer satisfaction with shopping online. Benlong Lou (2013) pointed out that courier quality and delivery efficiency influence consumer satisfaction in online shopping (Lou B.L., 2013). In this paper, logistics service includes the delivery efficiency, courier attitude, package integrity and convenience to take delivery. Thus, we propose the following hypothesis:

H3: Logistics service has a significant positive influence on consumer satisfaction with purchasing clothing online.

H3a: Delivery efficiency has a significant positive influence on consumer satisfaction.

H3b: Courier attitude has a significant positive influence on consumer satisfaction.

H3c: Package integrity has a significant positive influence on consumer satisfaction.

H3d: Convenience to take delivery has a significant positive influence on consumer satisfaction.

3. Research Approach

3.1 Research idea

Based on the domestic graduate and undergraduate students as the research object, to explore the influence of product characteristics and service on consumer satisfaction with purchasing clothing online by empirical research. First of all, we should make sure what clothing product characteristics and service include through the depth interview and literature research. Then detail product characteristics and service, and propose related hypothesis. Based on qualitative research, we use questionnaire survey and statistical analysis of quantitative methods to verify the hypothesis to ensure the influences of product characteristics and service on consumer satisfaction.

3.2 Qualitative Research

Based on relevant literature study and in-depth interview, this paper details clothing product characteristics and service, and divides service into two parts: online clothing retailer's service and logistics service. Then according to their different content, put forward thirteen factors totally: price rationality (A1), quality (A2), style diversity (A3), size integrity (A4), color richness (A5), clothing information text description authenticity (A6), clothing details pictures clarity (A7), consumer service attitude (A8), delivery speed (A9), delivery efficiency (A10), courier attitude (A11), package integrity (A12) and convenience to take delivery (A13).

4. Method

4.1 Questionnaire Design

Questionnaire is consist of four parts: part one is to explain the purpose of the questionnaire to the participants, part two is to measure participant individual's basic information, part three is to measure the influences of the thirteen factors proposed in this paper on consumer satisfaction with purchasing clothing online by five-point Likert scale and their satisfaction. The last part is to express thanks to the participants.

4.2 Participants

Regarding undergraduate and graduate students with the experience of purchasing clothing online at some universities in Shanghai as research object, the subjects selected 300 persons. This questionnaire survey is conducted through online and offline. According to collected questionnaire validation of the effectiveness of the questionnaire, we eliminate invalid questionnaire, ultimately get 246 and the effective questionnaires and effective rate was 82%. There are 122 male persons, accounting for 49.6%. Female accounts for 50.4%.

4.3 Measurement of the Influences of Factors on Consumer Satisfaction

Questionnaire questions are mainly based on depth interview with professionals, combining Bo Gao (2010), Ninghua Wei (2012), Xintian Zhu (2013), Weiyang Chen (2009) and Lanlan Wang (2011). The corresponding items of product characteristics are 1, 2, 3, 4, 5; online clothing retailer's service are 6, 7, 8, 9; logistics service are 10, 11, 12, 13. This table uses the five-point Likert scale, according to "strongly disagree", "disagree", "not sure", "agree" to "strongly agree", respectively, to give 1, 2, 3, 4, 5 points. The higher the score is, the more consumer agrees with the influence of the factor on his or her satisfaction. Cronbach's alpha is 0.860 and KMO reaches 0.862. Thus, the table has good reliability and validity for further analysis.

4.4 Correlation Analysis

According to table 1, each of the thirteen factors (A1-A13) product characteristics and service includes has a significant correlation with consumer satisfaction (CS) at the 0.01 level. Delivery efficiency have the most significant correlation with consumer satisfaction, the correlation coefficient is 0.613.

Then courier attitude (0.608), delivery speed (0.578), package integrity (0.576), convenience to take delivery (0.529), clothing details pictures clarity (0.525), price rationality (0.521), size integrity (0.518), consumer service attitude (0.513), color richness (0.501), quality (0.497), clothing information text authenticity (0.490) and style diversity (0.398). In this table, correlations between various factors are significant, but most of correlation coefficients are small. So there is no need to make collinear test and we can carry on regression analysis next.

Table 1: Correlation Analysis of Every Factor and Consumer Satisfaction

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	CS
A1	1													
A2	.555**	1												
A3	.267**	.386**	1											
A4	.325**	.431**	.388**	1										
A5	.209**	.279**	.371**	.460**	1									
A6	.160*	.229**	.296**	.349**	.416**	1								
A7	.335**	.246**	.114	.206**	.199**	.412**	1							
A8	.187**	.213**	.148*	.212**	.241**	.358**	.349**	1						
A9	.363**	.327**	.196**	.331**	.398**	.330**	.426**	.541**	1					
A10	.313**	.293**	.270**	.343**	.288**	.364**	.348**	.340**	.337**	1				
A11	.285**	.260**	.186**	.326**	.343**	.295**	.385**	.253**	.331**	.440**	1			
A12	.329**	.305**	.278**	.320**	.349**	.242**	.291**	.293**	.367**	.489**	.588**	1		
A13	.364**	.283**	.227**	.240**	.270**	.230**	.401**	.313**	.313**	.400**	.529**	.471**	1	
CS	.521**	.497**	.398**	.518**	.501**	.490**	.525**	.513**	.578**	.613**	.608**	.576**	.529**	1

Note: * * Correlation is significant at the 0.01 level (double side).

* Correlation is significant at the 0.05 level (double side).

4.5 Regression Analysis

In order to ensure the influences of the factors the product characteristics and service includes on consumer satisfaction further, we carry on linear analysis. According to table 2, every regression coefficient is positive, respectively price rationality (0.116), quality (0.098), color richness (0.111), clothing information text authenticity (0.061), clothing details pictures clarity (0.080), consumer service attitude (0.106), delivery speed (0.084), delivery efficiency (0.156) and courier attitude (0.158). Style diversity, size integrity, package integrity and convenience to take delivery don't appear in this model because their significant levels are more than 0.05 and don't pass the significance test. In this model, R^2 value reaches 0.743, F value is 75.826 and sig. is 0.000. For the disappeared factors in this model, we carry on monadic linear regression respectively. As shown in table 3, regression coefficients of A3, A4, A12 and A13 are also positive. Thus, each of the thirteen factors have a positive influence on consumer satisfaction.

Table 2: Multiple Linear Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.114	.132		.860	.391
A10	.156	.029	.218	5.456	.000
A9	.084	.035	.105	2.369	.019
A11	.158	.026	.240	6.082	.000
A2	.098	.033	.120	2.939	.004
A6	.061	.028	.089	2.194	.029
A1	.116	.029	.170	4.032	.000
A8	.106	.027	.161	3.925	.000
A5	.111	.029	.149	3.775	.000
A7	.080	.032	.103	2.520	.012

Note: Dependent Variable is CS.

Table 3 Monadic Linear Regression Coefficients

	B	t	Sig.
A3	.313	6.768	.000
A4	.385	9.453	.000
A12	.378	11.009	.000
A13	.385	9.741	.000

5. Conclusions and Discussions

5.1 Product Characteristics has a Significant Positive Influence on Consumer Satisfaction with Purchasing Clothing Online

According to above analysis, in multiple linear regression model, the coefficient of product quality (A2), price rationality (A1) and color richness (A5) respectively is 0.098, 0.116 and 0.111. It means product quality, price rationality and color richness have positive influences on consumer satisfaction with purchasing clothing online and the influence of price rationality is greatest in this three factors, then color richness and quality. So H1a, H1b and H1f are supported. Based on monadic linear regression analysis, style diversity (A3) and size integrity (A4) also can influence consumer satisfaction positively. H1c and H1d are also supported. Hence, H1 gets supported. It shows that clothing product characteristics has a significant positive influence on consumer satisfaction.

5.2 Service has a Significant Positive Influence on Consumer Satisfaction with Purchasing Clothing Online

The coefficient of clothing information text description authenticity (A6), clothing details pictures clarity (A7), consumer service attitude (A8) and delivery speed (A9) respectively is 0.061, 0.080, 0.106 and 0.084 in multiple linear regression model. According to the four coefficients, the influence of consumer service attitude is greatest, then delivery speed, clothing details pictures clarity and information text description authenticity. They all have significant influences on consumer satisfaction with purchasing clothing online. So H2, H2a, H2b, H2c and H2d are supported, too.

In the model, the coefficients of delivery efficiency (A10) and courier attitude (A11) are 0.156 and 0.158. The coefficient of package integrity (A12) and convenience to take delivery (A13) respectively is 0.378 and 0.385. So they also have positive influences on consumer satisfaction. Hence, H3, H3a, H3b, H3c and H3d get supported. Combined with above supported hypothesis, we find that service including online clothing retailer's service and logistics service has a significant positive influence on consumer satisfaction with purchasing clothing online.

5.3 Discussions

Based on the above content, we find that price rationality and quality really can affect consumer satisfaction, similar to the views of scholar Lee, Zha J.X., Wang L.S., Huang Y., Xiaoying Guo, Kwek and Min Liu. Clothing style diversity, size integrity and color richness also can influence on consumer satisfaction with online clothing purchasing in this paper. So online clothing retailers do not only need to focus on clothing price and quality, but also need to pay attention to its style, size and color when they sell clothing in online stores. They can strengthen clothing product management by rationalizing price, keeping quality, owning diversified styles, integrated size and rich color in order to increase consumer satisfaction with purchasing clothing online.

Like previous scholars' views, we find that online retailer's service has an influence on consumer satisfaction with online purchasing clothing. At the basic of previous scholars' studies, consumer service attitude, clothing information text description authenticity, details pictures clarity and delivery speed we proposed really can affect consumer satisfaction. Good service can decrease consumer dissatisfaction and may be a way to create a competitive advantage over other online apparel retailers (Nancy & Sharron, 1997). Retailers can keep clothing information text description authenticity and details pictures clarity in case of wrong information text or unclear pictures causing consumer dissatisfaction. Besides, correct consumer service attitude and delivery speed to improve consumer satisfaction.

At the same time, logistics service also affects consumer satisfaction in purchasing clothing online. Compared to previous scholars' views, we put forward that package integrity and convenience to take delivery have significant positive influences on consumer satisfaction. Thus, online clothing retailers had better to choose logistics company having good credibility to keep package integrity and convenient for consumers to take delivery. Besides, they also focus on the logistics company delivery efficiency and courier attitude.

It can help retailers increase consumer satisfaction to improve logistics service.

All in all, online clothing retailers do not need to perfectly manage clothing products they sell, but they also need to pay attention to their service including services their own stores provide and logistics service. Good product management can meet consumers' needs easily and improve their satisfaction in online clothing purchasing. Retailers can take the above actions this paper proposed to improve consumer satisfaction, then enhance her or his intention to purchase clothing online and cultivate her or his loyalty to increase profits.

6. Limitations and Future Researches

Firstly, the sample is limited. This study only focuses on undergraduate and graduate students, so the conclusion's using range needs further improvement. Future research can consider consumers having other jobs with experience of purchasing clothing online. Secondly, the product in this study is limited to clothing, a single category of online product, and future research can expand the study's findings to other product categories to offer greater generalizability.

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