

# The Impact of Cultural Differences in Cross-Border E-commerce on Consumer Decision-Making

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**Abstract:** This article explores how cultural differences affect consumer decision-making in cross-border e-commerce. Research suggests that cultural differences influence consumers' purchasing preferences and decisions. These differences impact cognitive patterns, emotional responses, and social behavior. The findings imply that e-commerce platforms may need to adopt localized strategies tailored to the demand characteristics of different cultures. These strategies should focus on areas such as product design, advertising, payment methods, and after-sales service.

**Keywords:** Cross Border E-Commerce; Cultural Differences; Consumer Decision-Making; Localized Operations

## Introduction

Since the inception of cross-border e-commerce, the rapid development of Internet technology and a global logistics system have broken the geographical restrictions of traditional trade. This has enabled global consumers to gain easy access to the international market. With the continuous advancement of globalization, cross-border e-commerce has gradually become an important component of global trade. The cultural backgrounds of different regions shape significant differences in consumers' cognition, emotional responses, and purchasing decisions, which affect their needs and behaviors.

## 1 Basic concepts and development trends of cross-border e-commerce

Cross-border e-commerce represents an emerging model of global trade. It breaks through the temporal and spatial limitations of traditional trade and provides unprecedented trading opportunities for consumers and merchants from various countries. The use of Internet platforms enables consumers to directly purchase overseas goods, and businesses can enter the global market, expanding the coverage of their products and services. These findings reveal that cross-border e-commerce not only drives the speed and efficiency of global commodity circulation but also promotes the vigorous development of global consumption.

The development of electronic payment technology and optimization of logistics systems has gradually decreased the transaction barriers of cross-border e-commerce. The evidence reveals that there are significant cultural differences between countries and regions. These differences play a crucial role in the operation of cross-border e-commerce, especially in consumer purchasing decisions. Cultural differences are not only manifested at the surface level of language, religion, and habits, but also have a deeper impact on consumers' cognitive styles, emotional responses, and purchasing behavior. This warrants further interpretive consideration.

## 2 Empirical analysis

### 2.1 Descriptive statistical analysis

Table 1 Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Standard Deviation
1.Gender	500	1	2	1.48	0.5
2.Age	500	18	65	32.45	10.22
3.City of residence	500	1	10	5.62	2.74
4.Monthly income(RMB)	500	2000	30000	8564	4723.5
5.Monthly e-commerce consumption amount(RMB)	500	50	5000	682	980.12

The ratio of males and females in the sample is relatively balanced. Males accounted for 52%, and females accounted for 48%. The range of the age of participants is from 18 to 65 years old. The mean is 32.45 years, and the standard deviation is 10.22. That is to say, the consumers are mostly concentrated in the young and middle-aged.

The range of the age of participants is from 18 to 65 years old. The mean is 32.45 years, and the standard deviation is 10.22. That is to say, the consumers are mostly concentrated in the young and middle-aged. Consumers in this age group have high acceptance of cross-border e-commerce and strong purchasing power. The research subjects come from different urban levels, and the research results can reflect the impact of culture in different regions on the consumption.

The range of the RMB monthly income is from 2000 yuan to 30000 yuan. The mean is 8564 yuan, and the standard deviation is 4723.50 yuan. That is to say, the research sample can reflect the purchasing decision of e-commerce consumers with different income groups. The range of the e-commerce consumption amount is from 50 yuan to 5000 yuan. The mean is 682 yuan, and the standard deviation is 980.12. That is to say, the research sample can reflect that the monthly e-commerce consumption amount of most consumers are at a relatively low level. However, the standard deviation is large, and the consumers' e-commerce consumption amount is relatively high, especially on the cross-border e-commerce platform.

## 2.2 The impact of cultural differences on consumer cognition

Table 2 Regression analysis results of cultural differences on consumer cognition

Model	R		Adjusted R formula	Error in standard estimation	Change statistics				
					R-squared change	F variation	Degree of Freedom 1	Degree of Freedom 2	Significant F change amount
Cultural Differences and Cognitive Models	0.874	0.765	0.762	0.134	0.765	354.58	4	495	0

of the model is 0.765, which means that the cultural differences can explain the about 76.5% of the variances of the consumers cognitive. The adjusted decreased slightly but still nearly 0.765, which means that after controlling for other variables, cultural differences still have a great impact of cognition, and the model has a good fit. The standard estimation error is 0.134, which means that the average absolute difference between the predicted result of cognition of the model and the actual observation is about 0.134.

The value of F variation is extremely high, which means that the regression equation of this model has made a great improvement compared with the model without the cultural differences variables. From the regression analysis results, cultural differences has an impact on consumers cognition. The value of model and its standard error are very high and very low, which means that the cultural differences can explain the most variances of consumers cognition, and it can effectively explain the main variance of consumers cognition. Especially on the cross-border e-commerce platform, the consumers from different culture background have a great difference in the information processing way, brand awareness, price perception and other aspects. The culture factor, language difference, the difference of value, and the change of appeal based on emotion all play an important role in the consumers cognition of cross-border e-commerce platform and the evaluation of different product brand. The change of F is extremely significant, and it also shows that the cultural has a very important role of the independent variable in the prediction of consumers cognition. Especially in the different culture system, the cognition of consumers are not a fixed structure, but been deep influenced by the local culture.

## 2.3 The impact of cultural differences on emotional responses

Table 3 Regression analysis results of cultural differences on consumer emotional responses

Model	R		Adjusted R formula	Error in standard estimation	Change statistics				
					R-squared change	F variation	Degree of Freedom 1	Degree of Freedom 2	Significant F change amount
Cultural Differences and Emotional Response Model	0.852	0.726	0.721	0.178	0.726	312.14	5	494	0

The coefficient of determination of the model is 0.726, which suggests an explanation for approximately 72.6% of the variability in consumer emotional responses. This indicates that the influence of cultural differences on emotional responses holds an important position within the model and has considerable explanatory power. The adjusted R-squared value decreased slightly, suggesting that cultural differences remain an important determining factor in emotional responses after considering other possible variables. This adjusted value is still notably high, indicating a strong fit of the model. The standard estimation error is 0.178, which indicates a relatively small error in predicting consumer emotional reactions, making the prediction results more accurate.

The regression analysis results show that cultural differences have a substantial impact on consumers' emotional responses. The high R-squared value indicates that cultural differences play a key role in explaining the variability in emotional responses. Factors such as language, values, and social habits in cultural backgrounds substantially influence consumers' emotional expression and intensity on e-commerce platforms. Consumers from different cultural backgrounds may have vastly different emotional responses when facing the same advertisement or product, which influences their brand identity and purchasing tendencies.

Due to language differences and differences in social and cultural habits, consumers typically have varying levels of acceptance and resonance towards advertising content, product presentation methods, and communication styles when exposed to cross-border e-commerce platforms. For consumers from certain cultural backgrounds, advertising strategies with high emotional resonance can substantially increase their emotional investment in the brand, thereby influencing their purchasing decisions. The significance of the F change (0.000) supports the strong statistical significance of the impact cultural differences have on emotional responses. Based on this result, it can be inferred that if cross-border e-commerce platforms customize emotional marketing strategies according to the cultural characteristics of the target market and utilize the emotional driving factors of local consumers, they may effectively enhance their brand appeal and potentially increase consumer purchasing power.

## 2.4 The direct impact of cultural differences on purchasing decisions

Table 4 Regression analysis results of cultural differences on consumer emotional responses

Model	R		Adjusted R formula	Error in standard estimation	Change statistics				
					R-squared change	F variation	Degree of Freedom 1	Degree of Freedom 2	Significant F change amount
Cultural Differences and Purchasing Decision Models	0.903	0.816	0.812	0.126	0.816	420.56	6	493	0

of this model is 0.816, which means that the coefficient of determination of the model is 0.816, and the determination of cultural differences can explain the approximate 81.6% of the consumer purchasing decision. The estimation standard error is 0.126, which means that the regression model has a small estimation standard error, and the regression model has a small margin of error in estimating the consumer purchasing decision. The error of the prediction result is relatively small and the error is controlled in an acceptable range when the consumer purchasing decision is used to quantify the influence of cultural differences.

From the regression analysis results, it can be seen that cultural differences have a strong and powerful direct effect on consumer purchasing decisions. The value of 0.816 is relatively large, which means that cultural differences have a very important explanation for consumers' purchasing behavior. Especially in the case of consumers from different cultural backgrounds, there are obvious differences in the reaction to product selection, brand preference, purchase intention and other aspects. This is related to the value, habits, trust, and other cultural factors. The significance of the F change value is 0.000, which also proves that the difference of cultural differences in consumer purchasing decision is very significant, and cultural differences play a decisive role in consumer purchasing decision. This also proves that the cross-border e-commerce market need to develop differentiated market strategies according to the cultural background of consumers from different countries. Price sensitive market consumers need to be attracted by activities and discounts; While in the quality oriented market, attention should be paid to the construction of product quality and brand image.

## **3 Discussions**

### **3.1 How cultural differences shape consumer preferences and decisions in multiple ways**

Cultural differences have a deep and significant impact on consumers' preferences and purchase decisions, far more than consumers from different countries speak different languages, have different customs and lifestyles. There are cognitive differences in consumers' buying behavior, demand characteristics and even in the decision-making process into which the cultural environment can influence.

As a potential social force, the culture shapes consumers' cognitive characteristics towards goods, brands, services, etc, and then makes them have purchasing tendency towards these goods or services. Compared with individuals from collectivist culture, consumers from individualistic culture may more likely to be influenced by their own expression and personal needs, while requiring their families and even their social groups to take more consideration on their opinions.

And this cultural color is more obviously in the cross-border e-commerce field. When consumers get in contact with goods from different cultural background, their needs and purchasing preferences will unconsciously be tinted with the cultural color. In some cultures, consumers may have a great interest in discount and promotional activities because these cultures promote material enjoyment and economic benefits; while in some other cultures, consumers may focus more on the brand, quality and long-term use of goods and they are more likely to buy goods because of these factors.

In addition to cognitive differences, the influence of culture on consumers' emotions also plays an important role in their purchase decision. In different cultural backgrounds, consumers' expression and needs of emotions are different. This will further influence their acceptance of advertising, package of goods and even marketing strategies. In some cultures, humorous and funny advertising may be more likely to be accepted and stimulated to generate purchasing desires, while in some other cultures, serious and rational brand image and information of goods may be more persuasive. This cultural and emotional difference also be more distinctly in the cross-border e-commerce field. Because e-commerce field will face the cross-cultural boundaries challenge between different countries and regions.

### **3.2 Adaptability of consumer demand characteristics and e-commerce strategies under different cultural backgrounds**

Consumers from different cultural backgrounds suggest substantially distinct differences in their demand characteristics. These variations are reflected in the functional requirements of a product, as well as in attitudes and expectations towards brand, price, after-sales service, and other aspects. In Eastern culture, consumers tend to value the values of their family and social group more. This makes them more inclined to seek products that conform to a collective identity when making purchasing decisions, and they generally pay less attention to personalized needs. In contrast, consumers in Western culture emphasize individualism, with a focus on self-expression, uniqueness, and personalized customized products. This cultural background difference suggests that cross-border e-commerce platforms should consider the cultural preferences of the target market when designing products and marketing strategies.

When facing the Eastern market, platforms may focus on the social adaptability of products and the universal recognition of brand image. In the Western market, they may emphasize the uniqueness, innovation, and personalized attributes of products and brands. Cultural differences reveal that they affect not only consumers' demand preferences but also how they shape the implementation of effective marketing strategies by e-commerce platforms in different markets. For consumers from distinct cultural backgrounds, e-commerce platforms need to adopt customized marketing strategies. These strategies include localized adjustments of products, adaptive marketing communication, payment methods, and logistics and delivery.

In collectivist cultures, consumers may be more inclined to obtain purchasing advice through word-of-mouth communication, family recommendations, and similar means. E-commerce platforms may rely more on collective interaction and user evaluation systems on social media to provide evidence that enhances consumer trust. In a cultural context that emphasizes individualism, consumers place more emphasis on personalized shopping experiences and independent purchasing choices. E-commerce platforms need to provide more customized choices and flexible recommendation systems.

## 4 Strategy Suggestions

### 4.1 How e-commerce platforms adjust their market strategies based on cultural differences

The adjustment of market strategies for cultural differences suggests the localization of products and services. It also includes the adaptation of marketing methods, communication methods, and consumer experience at multiple levels. E-commerce platforms need to customize and adjust their products based on the cultural characteristics of the target market when entering specific markets. In cultures that value family and collective considerations, consumers tend to choose products that meet social consensus and family needs. E-commerce platforms need to provide evidence to support strengthening the collective recognition of products or shaping brand trust through user evaluation and recommendation systems on social media.

In markets that emphasize individual independence and self-expression, personalized customization, unique product design, and personalized marketing strategies attract consumers' attention. Cultural differences also influence consumers' acceptance of brands and advertisements. Advertising styles and expressions in different countries may have varying effects due to these cultural considerations. E-commerce platforms need to adjust their communication strategies based on the emotional needs of advertising in different cultures. For instance, the East Asian market may prefer implicit and delicate advertising performance, while the European and American markets tend to lean toward more straightforward and humorous marketing content.

Payment methods and logistics services also support important manifestations of cultural differences. Consumers in some cultural backgrounds may prefer convenient payment methods, such as electronic wallets or Alipay, while consumers in other regions prefer credit cards or bank transfers. Cross-border e-commerce platforms should provide diversified payment options based on the payment habits of different markets and optimize logistics and after-sales services locally to enhance consumers' purchasing confidence and satisfaction.

### 4.2 Suggestions for Localized Operation Strategies of Cross border E-commerce

The platform makes the product and service reflecting the cultural values of consumers, purchasing habits and laws of local consumers. E-commerce platform to localize the design, product function and packaging of the product in line with the design and local consumer's way of using. In some areas of the world, consumers are more focused on the environmental protection and the product; while in other areas of cost and effectiveness and the product function is more important. Cross border e-commerce platform to localize the marketing strategy with the way of communication and cultural context of the people in each area. In promoting the content platform to focus on the localization of language and the way of communication with the local people. To bring the advertisement and the promotion to the culture of the target area. The platform should also localize the use of social media and cooperate with the local figure to enhance the awareness of the brand in the local area and the trust of consumers. The method of payment and logistics are also an important aspect that cross border e-commerce platform cannot ignore. Provide a variety of payment methods according to the payment preference of each region. Optimize logistics and distribution according to the logistics cost and delivery rate.

## Conclusion

The rapid development of cross-border e-commerce has made it easier for global consumers to access international markets, but cultural differences have a profound impact on consumers' purchasing decisions. Under different cultural backgrounds, consumers have significant differences in their demands for price, brand, quality, and personalization. These differences not only affect their evaluations and purchasing decisions of products, but also impact the marketing strategies and operational methods of e-commerce platforms in various regions. In the global layout of cross-border e-commerce, localized operation strategy is particularly important. By adjusting the localization of product design, advertising communication, payment methods, and logistics services, e-commerce platforms can better meet the needs of consumers from different cultural backgrounds, thereby enhancing market adaptability and competitiveness.

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