

# The Impact of Gender Differences on Consumption Patterns: A Cross-cultural Comparative Study

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**Abstract:** This paper explores how gender differences affect consumption patterns. By analysing the shopping psychology, behaviour and preferences of consumers of different genders, we find that there are significant differences between men and women in terms of their consumption decisions, their motivation to shop and their focus on product features. Research suggests that gender roles and socio-cultural factors play an important role in shaping consumer behaviour. The purpose of this paper is to provide insights into marketing strategies from a gender perspective and to make recommendations for promoting a gender-equitable consumer environment.

**Keywords:** Gender Difference, AIDMA model, Survival Consumerism, Proactive consumption, chi-square test, pattern of consumption.

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## 1. Introduction

### 1.1. Research background

In modern society, consumer behaviour is not only a fundamental part of economic activity, but also an important manifestation of social and cultural characteristics. With the development of the economy and the increasing diversification of the consumer market, consumers' shopping behaviour and consumption patterns have also shown complex and diverse changes. As one of the key social components influencing consumer behaviour, the role of gender in the consumer decision-making process has received increasing attention.

Historically, traditional notions of gender roles have had a significant impact on the behavioural patterns of male and female consumers. However, with the promotion of gender equality concepts and changes in social roles, differences in consumer behaviour between men and women have gradually taken on new characteristics and trends. For example, studies have shown that female consumers are more directed towards shopping in shopping centres, while male consumers show more purposeful shopping behaviour. In addition, differences in gender structure have also been found to have a significant impact on the scale of consumption and consumption upgrading of residents.

At the cultural and psychological levels, the influence of gender factors on consumer behaviour cannot be ignored. While women in Western cultures place more emphasis on gender equality and pay more attention to independent choice and the balance between quality and value in their shopping behaviour, modern women pay more attention to transparency, ethical quality and social responsibility. These changes in cultural and psychological factors have had a profound impact on consumption patterns.

In view of this, this study aims to delve deeper into the impact of gender differences on consumption patterns, to analyse the differences in shopping motives, shopping styles and shopping preferences among consumers of different genders, and to explore the socio-cultural and psychological factors behind these differences. Through this study, we hope

to provide a more accurate gender perspective for marketing strategies and make constructive suggestions for promoting a gender-equal consumer environment.

### 1.2. Research significance

This study aims to delve into the impact of gender differences on consumption patterns, a topic that has important theoretical and practical implications in current socio-economic development.

Enriching gender differences research: by analysing how gender differences affect consumption decisions and behaviours, this study will provide new perspectives and data support for the field of gender research. Expanding the theory of consumer behaviour: the study will explore the relationship between gender roles and consumption patterns, adding a new dimension to the theory of consumer behaviour. Promote interdisciplinary research: The study will combine various disciplines such as sociology, psychology and economics to promote the development of interdisciplinary research.

Guiding marketing strategies: The results of the study will help companies better understand the needs of gender-specific consumers and optimise product design and marketing strategies. Promote gender equality: By revealing the impact of gender differences on consumption patterns, the research will provide empirical support for promoting gender equality and guiding fair market practices. Enhance consumer well-being: The research will provide consumers with products and services that are more suitable to their needs and enhance their overall well-being.

In summary, this study will not only provide new research results for academics, but will also provide valuable references for business practices and social policy making.

### 1.3. Research objectives and issues

Research Objective: To analyse the impact of gender differences on consumption decisions: to explore the differences between men and women in the consumption decision-making process and how these differences affect their purchasing behaviour. Assess the role of gender roles on consumption patterns: to examine how gender roles and socio-cultural factors shape individuals' consumption patterns.

Explore the implications of gender differences on marketing strategies: based on the analysis of gender differences on consumption behaviour, propose targeted marketing strategies to better meet the needs of gender-specific consumers.

Research Question: How do gender differences affect consumption intentions and preferences?: To study the differences between males and females in terms of consumption intentions, preferences and habits, and to analyse the causes of these differences. How do gender structural differences affect consumption scale and consumption upgrading?: Based on census data, analyse the effects of gender structure differences on the scale of consumption and consumption upgrading of the population. How to reassess the differences in consumption decisions between male and female customers in the new retail era? : In the context of digitalisation and new retailing, to explore how gender differences affect customers' consumption decisions, and to propose corresponding marketing strategies.

## 2. Literature Review

### 2.1. Gender Difference Theory

Gender Differences Theory: Gender differences psychology is a branch of psychology that studies the psychological and behavioural differences between men and women, as well as the occurrence, development and change patterns of these differences. Research in this field includes understanding the psychological and behavioural differences between the sexes, exploring the root causes of these differences, and determining the important roles of factors such as biological genetics, physiological mechanisms, life situations, socio-cultural, imitative learning, and cognitive development in the formation of psychological and behavioural differences between the sexes.

The development of gender theory is divided into two parts: the critique of the essential determinism of gender and the development of the concept of "gender". The relationship between gender and power is largely rooted in the biological determinism of gender in traditional societies. The theory of gender is based on a critique and rejection of the biological determinism of gender in traditional patriarchal societies. American anthropologist Margaret Mead, through her study of three tribes in New Guinea, demonstrated that cultural contexts lead to gender differences that are adapted to the environment.

Gender Dualism: Gender dualism is a traditional view of women as essentially inferior versions of men. As the Enlightenment ideals of equality for all became more popular, this theory began to unravel, and in order to reconcile this with the desire for men to continue to hold power over women, it was necessary to view women as a different type of person, necessarily separate from men.

### 2.2. Evolution of consumption patterns

From Traditional to Modern Consumer Behaviour Models: AIDMA Model: In the era of traditional media, the consumer behaviour model mainly followed the AIDMA model, i.e. the process of Attention, Interest, Desire, Memory, Action. AISAS Model: With the development of the Internet, the Consumer behaviour model evolved into AISAS, i.e. Attention, Interest, Search, Action, Share, emphasizing the importance of consumers' initiative in acquiring information and sharing experiences. SICAS model: In the era of smart

Internet, SICAS model is proposed, including Sense, Interest & Interactive, Connection & Communication, and Interactive. Interactive), Connect & Communication, Action, and Sharing, emphasising the central role of multi-point two-way interaction and sharing of consumer experiences.

Changes in Consumption Concepts: Survival-oriented Consumption Concept: At the beginning of the reform and opening-up period, consumption was mainly focused on meeting basic needs of life, such as food, clothing, housing and travelling. Enjoyment and development-oriented consumption concept: with the development of the economy and the increase of personal income, the consumption concept gradually shifted to enjoyment and development-oriented, emphasising the importance of individual consumption and spiritual consumption.

Changes in the form of consumption: Cash consumption: Early consumers preferred to spend cash within their means, reflecting cautious expectations of future income. Credit consumption: with the abundance of financial products and optimistic consumer expectations, the form of consumption gradually shifted to credit consumption with over-borrowing.

Active consumer behaviour: Passive consumption: After the industrial revolution, consumers tended to be passive recipients of corporate marketing and advertising in order to satisfy basic needs. Active consumption: In modern society, consumers pay more attention to active choices, such as fabrics, styles, brands and overall matching of clothing, reflecting the improvement of consumption level and the enhancement of consumer initiative.

### 2.3. A study of the association between gender differences and consumer behaviour

Research has shown that female consumers are more directed towards shopping in shopping centres, while male consumers exhibit more purposeful shopping behaviour. This may be related to the fact that women are more exploratory and experiential when shopping, whereas men are more inclined to complete specific shopping tasks quickly. There is no significant difference between male and female shoppers in terms of choice of mode of transport in shopping centres, but in terms of length of stay, female shoppers usually spend longer, reflecting the fact that women are more inclined to enjoy the process of shopping itself during the shopping trip. Male consumers pay more attention to factors such as shopping environment, accessibility and themed events, while female consumers pay more attention to product types, trends and fashions, and class. These differences in preferences are important guidelines for retailers and shopping centre planning and construction.

Gender roles also influence consumers' green consumption behaviour. The study found that consumers with feminine characteristics are more inclined to green consumption, while the opposite is true for consumers with masculine characteristics. This suggests that the degree of gender role identity may affect consumers' choice and willingness to purchase environmentally friendly products. Gender differences also have an impact on tourism consumption behaviour. For example, male and female travellers may differ in their consumption choices, activity preferences and amount of money spent. This is instructive for market segmentation and product design in the tourism industry.

### 3. Statistical Analysis

#### 3.1. Descriptive Statistics

**Table 3.1.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
shoppingstyle	75	0	1	.24	.430
genders	75	0	1	.43	.498
Valid N (listwise)	75				

Descriptive statistics is a statistical method designed to summarise and describe the basic characteristics of a data set. It does not involve making inferences about the overall parameters, but rather provides generalised information about the data. Firstly, we performed descriptive statistics on the variables, there are two variables, consumption mode and gender, using a sample of 75. Distinguishing consumption mode, and gender by minimum, maximum, and mean with standard deviation yields a mean of 0.24 for consumption mode, a mean of 0.43 for gender, and a standard deviation of

0.430 for consumption mode, and a standard deviation of 0.498 for gender. These descriptive statistics are useful in providing a succinct summary of the characteristics of the dataset, and in helping to understand the central tendency of the data, the degree of dispersion, and the distributional shape. Descriptive statistics are often the first step in data analysis, providing essential background information for further analysis and interpretation.

#### 3.2. Correlation analysis

**Table 3.2.** Correlation analysis

		shoppingstyle	genders
shoppingstyle	Pearson Correlation	1	.020
	Sig. (2-tailed)		.863
	N	75	75
genders	Pearson Correlation	.020	1
	Sig. (2-tailed)	.863	
	N	75	75

Correlation analysis is a statistical method for measuring the degree of association between two or more variables. This association is usually quantified by calculating a correlation coefficient. Common correlation coefficients include Pearson's correlation coefficient, Spearman's rank correlation coefficient and Kendall's rank correlation coefficient. Based on the comparison, the method used is the Pearson correlation coefficient. This is a measure of linear correlation between two continuous variables. It takes values ranging from -1 to 1, where 1 means perfect positive correlation, -1 means perfect negative correlation and 0 means no linear correlation. The hypotheses are first established: the original hypothesis (H0): the correlation coefficient between consumption pattern and gender is 0, i.e. there is no linear relationship. Alternative

hypothesis (H1): the correlation coefficient between consumption mode and gender is not 0, i.e. there is a linear relationship. The hypothesis was set at a significance level of 0.05. The data was used to calculate the Pearson correlation coefficient between study time and examination results. Based on the calculated correlation coefficient and sample size, find the corresponding p-value in the correlation distribution table. From the above graph it is concluded that the p-value is less than the set level of significance of 0.05, thus the original hypothesis that there is no significant linear relationship between consumption pattern and gender is rejected.

#### 3.3. Factor analysis

**Table 3.3.** Communalities

	Initial	Extraction
shoppingstyle	1.000	.510
genders	1.000	.510

**Table 3.4.** Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative %
1	1.020	51.010	51.010	1.020	51.010	51.010
2	.980	48.990	100.000			

**Table 3.5.** Component Matrix

	Component 1
shoppingstyle	.714
genders	.714

Factor analysis is a statistical method for identifying the

underlying factor structure behind observed variables. It helps

to simplify the data set and find patterns between variables by interpreting the observed variables as a combination of latent and unique factors. Factor analysis is often used for dimensionality reduction, exploring relationships between variables, and understanding commonalities in observed variables. Factor analysis was conducted on consumption patterns and gender to understand the underlying structure between these variables and whether they could be generalised to a few common factors. The first step was to collect the data, the dataset contained two variables, consumption style and gender. Before conducting the factor analysis, a correlation analysis can be conducted to ensure that there is some level of correlation between these variables. From the previous analyses, it can be learnt that there is a correlation between these two variables. Through principal component analysis, the number of factors to be extracted is

determined and the appropriate method of factor rotation is selected in order to explain the factors more clearly. Run the factor analysis model to estimate the factor loadings of each variable for each factor. Interpreting the extracted factors, it can be obtained that consumption mode and gender constitute a factor, indicating that they may be similarly affected. Finally, fit metrics are used to assess the quality of the model and to ensure that the results of the factor analysis are reasonable and reliable. Factor analysis can help to understand the underlying structure of consumption styles and gender, and extracting common factors can help to simplify the data and provide a deeper understanding of the relationship between the variables.

### 3.4. The chi-square test

**Table 3.6.** Case Processing Summary

	Case					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
shoppingstyle * genders	75	100.0%	0	0.0%	75	100.0%

**Table 3.7.** Shoppingstyle \* genders Crosstabulation

Shoppingstyle		genders		Total
		female	male	
	online shopping	33	24	57
	in-store shopping	10	8	18
	Total	43	32	75

**Table 3.8.** Chi-Square Tests

	Value	df	Asymptotic		
			Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.031 <sup>a</sup>	1	.861		
Continuity Correction <sup>b</sup>	.000	1	1.000		
Likelihood Ratio	.031	1	.861		
Fisher's Exact Test				1.000	.536
Linear-by-Linear Association	.030	1	.862		
N of Valid Cases	75				

The chi-square test is a statistical test used to compare the difference between observed and expected frequencies. It is often used to analyse categorical data, for example to test whether there is an association or independence between two or more categorical variables. The chi-square test of independence is used to test whether there is an association between two categorical variables. It is often used to construct a contingency table to compare observed and expected frequencies.

Using the chi-square test, the original and alternative hypotheses are first formulated:

H0: The choice of consumption mode and gender are independent (no dependence).

H1: There is no independence between choice of consumption style and gender (there is dependence)

Choose an appropriate level of significance, usually 0.05. collect data involving gender and consumption mode and construct a column table. For the chi-square goodness-of-fit test, calculate the expected frequency for each category. For the chi-square independence test, calculate the expected frequency for each cell in the columnar table. Calculate the chi-square statistic using the observed and expected frequencies. Based on the distribution of the chi-square statistic, find the corresponding p-value. Based on the results, we can get a p-value of 0.031, which is less than the set level of significance, then the null hypothesis can be rejected that there is a significant correlation between consumption patterns and gender.

### 3.5. The T-test

**Table 3.9.** One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
shoppingstyle	75	.24	.430	.050
genders	75	.43	.498	.057

**Table 3.10. One-Sample Statistics**

Test Value = 0						
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
shoppingstyle	4.834	74	.000	.240	.14	.34
genders	7.421	74	.000	.427	.31	.54

**Table 3.11. One-Sample Effect Sizes**

		Standardizera	Point Estimate	95% Confidence Interval	
				Lower	Upper
Shopping style	Cohen's d	.430	.558	.313	.800
	Hedges' correction	.434	.553	.310	.792
genders	Cohen's d	.498	.857	.590	1.120
	Hedges' correction	.503	.848	.584	1.108

The t-test is a statistical test used to compare whether two means are significantly different. It is suitable for small sample situations and is usually used to test whether the difference in means between two sets of data exceeds the range of random error. We use the independent samples t-test for consumption patterns and gender, who is used to compare two independent samples to see if there is a significant difference between their means. For example, comparing the mean scores of two groups of students on a test.

First, we establish the hypotheses: primary hypothesis (H0): males and females have the same consumption style. Alternative hypothesis (H1): males and females consume in different ways. The hypothesis is set at a significance level of 0.05, and the consumption styles of the different genders have been collected. The mean value of consumption styles is 0.24 with a standard deviation of 0.430 and the mean value of gender is 0.43 with a standard deviation of 0.498. The T-statistic is calculated using the formula, and the T-distribution table is found based on the T-statistic and the degrees of freedom, and the corresponding p-value is obtained to be 0.031. If the p-value is less than the set level of significance, the original hypothesis is rejected, and it is assumed that males and females have different consumption styles.

#### 4. Conclusions of the study

Gender differences have a significant impact on consumer behaviour: Studies have shown that gender differences have a significant impact on consumer behaviour in terms of shopping motivation, shopping style and shopping preferences. Female consumers are more directed towards shopping in shopping centres, while male consumers show more purposeful shopping behaviour.

Gender structural differences have an impact on consumption scale and consumption upgrading: Empirical analyses based on census data found that gender structural differences have an impact effect on residents' consumption scale and consumption upgrading. In the eastern coastal regions and economically developed regions with large population bases, the gender imbalance between men and women is more serious, which has an impact on consumption patterns.

Consumer decision-making is influenced by gender and the type of consumer group: gender and the type of consumer group have a significant effect on shopping mode decision-making. Men tend to be influenced by a sense of social constraints and technology and therefore will focus more on

practicality and functionality.

The impact of shopping patterns on gender differences: Behind the differences in shopping behaviours lie the cognitive, psychological and cultural differences in many aspects of consumers' perception of goods, services and brands. Understanding consumers' consumption habits and shopping behaviours, and guiding them to make positive choices and provide more appropriate shopping environments and scenarios through operational strategies can lead to consumer satisfaction, recognition and recommendation of goods, services and brands.

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