

# ***Review of Consumer Behavior Research Based on Influencing Factors***

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**Abstract:** With the rapid development of global social economy, people's consumption behavior has become more common, consumer behavior research is to study the various consumer psychology and consumption behavior of different consumers. It is the basis for companies to make marketing decisions and strategies; Consumer behavior research provides a basis for the formulation of macro policies and the protection of consumer rights and interests; Consumer behavior research helps consumers make more informed purchasing decisions. By analyzing the existing literature to summarize the factors influencing consumer decision-making behavior, the study found that the most intuitive and time-consuming methods for studying consumer behavior using survey method and observation method are also the most widely used at present. In recent years, neuroscience has gradually entered people's vision, and researchers have applied neuroscience to consumer behavior research and prediction of consumer behavior, and achieved certain results. However, the existing research is not perfect. The study of consumer behavior lacks targeted guidance theories and methods, and lacks consideration of the limitations of samples and sampling time. There is still a lot of room for improvement, and this paper makes suggestions and prospects accordingly.

**Keywords:** consumer behavior, influencing factors, research methods

## **1. Introduction**

Consumption is an extremely common behavior, and it can be said that consumption behavior occurs all the time. Everyone is a consumer, and different individuals have different behavior patterns and are affected to varying degrees by different factors. As a result, consumer behavior is very diverse.

In the increasingly open information age, consumers have been exposed to richer knowledge, have a more complete understanding of consumption. Consumer cognition and brand attitude play a vital role in the formulation of consumer purchase decisions, therefore, enterprises must actively guide consumers' consumption cognition, grasp their own brand attitude. Many scholars have studied the factors that affect consumer behavior. For example, Jin Yinzhe conducted research on consumer behavior based on lifestyle characteristics [1], Lu Taihong comprehensively analyzed the evolution of consumer behavior in the past 50 years [2], Qian Qiulan analyzed how online word-of-mouth affects consumer behavior in the era of big data [3], and Dong Lirong studied the factors affecting consumer behavior from all aspects [4]. These studies make consumer behavior concrete and gradually form a perfect research system.

In recent years, the vigorous development of the Internet and mobile communication technology has provided consumers with an unprecedented consumption experience, and online consumption has become a trend. Compared with traditional offline consumption, online consumption scenarios are richer, more informative, more diverse, and more diverse, while consumers' psychology, cognition, and decision-making processes are more difficult to observe. The field of consumer behavior has ushered in a new research paradigm consumer neuroscience, which provides cutting-edge methods to directly detect the consumer brain without cognitive or conscious participation, opening up a new world of consumer behavior research. Wang Lei, Yang Yikai, Zheng Jiehui and other researchers predict consumer behavior based on the perspective of consumer neuroscience and provide new ideas for predicting consumer behavior [5].

In view of this, this paper adopts the literature review method to enable readers to have a more comprehensive and objective understanding of consumer behavior through comprehensive analysis of existing literature. Understanding the complete decision-making process that consumers go through when they are consuming. Not only that, the more important role of this research is to assist enterprises to improve the level of marketing decision-making.

This study first defines consumer behavior. And then, the factors affecting consumer behavior are comprehensively analyzed, and the specific impact of each factor on consumer behavior is summarized. Finally, various research methods for studying consumer behavior are analyzed, including observation method, survey method, and prediction method based on neuroscience.

## **2. Overview of Consumer Behavior**

### **2.1. Definition of Consumer Behavior**

Consumer behavior refers to a series of actions taken by consumer in order to get what they want, use and dispose of them, and including the decision-making process to determine these actions. It is made up of two parts, one is the consumer purchase decision-making process, which is the psychological activity and behavioral tendency of consumers before using the purchased products and service, it belongs to the form of consumption attitude. The other part is the practical process of consumers' purchase. These two parts influence each other to form a complete process of consumer behavior.

From an economic perspective, consumers are rational decision makers, they buy goods based on the principle of maximizing their own profits [6]. Psychology also holds that there are internal factors behind every consumer behavior, such as cognition, study, and instinct. From the perspective of behavioral analysis, some aspects of consumer behavior can be observed and some can not. For example, the type and quantity of products purchased by consumers can be observed while the complex mental process that go into making a purchase are invisible. In a word, consumer behavior is closely related to the exchange of products or service.

### **2.2. Characteristics of Consumer Behavior**

consumer behavior has some characteristics. (1)Non-profit. Consumers buy commodities to obtain certain use value and meet their own needs of living consumption, rather than to sell for profit. (2)Unprofessional. Consumers generally lack specialized commodity knowledge and market knowledge. When consumers buy commodities, they are often affected by manufacturers, merchants' advertising, promotion methods, packaging and service attitude.(3)Class property. Consumers have different income levels, and form their own consumer behavior characteristics. The low income group only looks at their current income when arranging consumption and the vast majority is spent on foods. The middle income group will save a certain amount in addition to meeting their daily consumption. And the higher income group can not only meet the needs of daily necessities and luxuries but also have a large amount of savings [7].(4)Diversity. Consumers often change the kind

of products they buy according to their needs, and they often choose different brands even when they buy the same products.(5)Complexity. Consumers have gone through the stages of collecting information, evaluating products, making decisions and evaluating, this is a very complex process.

### **2.3. Stages of Development of Consumer Behavior**

#### **(i). The beginning of academic research**

In the fifties and sixties of the 20th century, scholars proposed some single concepts of consumer behavior: family life cycle, lifestyle (lifestyle), personality, and psychographic and social class or class. These concepts all focus on classifying consumers and are used directly as tools for market segmentation in marketing campaigns.

#### **(ii). Theoretical creation stage**

In the sixties and seventies of the twentieth century, papers exploring various aspects of consumer behavior appeared in academic journals, the number of academic papers soared, and research methods also moved towards and advocated quantification.

#### **(iii). Theoretical Deepening Stage**

How exactly is human behavior generated and determined? This question has always attracted many researchers from different disciplines. The explanation of consumer behavior is from the perspective of a deeper explanation of the general psychological characteristics of the individual and external factors entering the consumer's inner vision.

#### **(iv). Theoretical reconstruction stage**

Since 2000, the extensive application of the Internet and mobile terminals has fundamentally changed consumer behavior itself and the methods of understanding and analyzing consumer behavior, and a number of brand-new theoretical concepts have emerged.

### **3. Research on Influencing Factors of Consumer Behavior**

There are three main factors affecting consumer behavior: external environment factors, social-cultural factors and consumer internal factors. The specific description is as follows

#### **3.1. The External Environment Factors**

Among the external environment factors, family factor and online word of mouth are the most important. A person's consumption concept comes from families, so the consumption pattern of the family affects person's values, personality, and consumption behavior.

With the popularity of the Internet and the rapid development of e-commerce, Online word of mouth has become an important factor affecting consumer behavior. In this information age, online word of mouth is everywhere filled with our life. For example, before consumers buy goods or watch movies, they always used to searching relevant comments on social media.

The development of society is constantly expanding the space of human psychological needs. Social culture indirectly influences consumer demand by influencing the connotation of goods. At the same time, consumer demand affects consumer culture and thus indirectly affects social culture. In this way, the two influence each other and collide with each other, resulting in common improvement.

Social-cultural factors include politics, law, history, tradition and so on. These factors teach social norms and values to members of society in a variety of ways and channels, influence and restrict the consumption behavior pattern. On the other hand, the shame culture is the most instinctive feature of the Chinese nation, so Chinese consumers spend the most on interpersonal communication in the world.

### 3.2. The Internal Factors

The consumer internal factors play the most important role in deciding the consumption behavior. Consumer's own hobbies, their own needs, their own economic conditions and other factors have varying degrees of influence on the consumer behavior.

1) Hobbies. Everyone has a different character, some people are assertive, and some are more obedient. Assertive people consume more decisively and quickly, while obedient people tend to be distracted and slow [8]. 2) Needs. Demand is the premise of purchase. People will buy something when they feel they need it. Advertising is used to stimulate consumers' demand[9]. 3) Economic conditions. The consumer's own economic situation determines his consumption level and scope as well as his purchasing power and consumption pattern.

In addition to these factors, gender also make the consumption behavior show differentiation. Most women are easily influenced by the external environment, And they pay more attention to the specific value of goods than men. Women who consume impulsively are 0.72% more than men who consume impulsively, and women who consume rationally are 8.24% less than men who consume rationally. See in table1.

Table 1: Types of consumption by gender.

Type	Often impulsive type (%)	Occasional impulsive type (%)	Rational consumption type (%)
MEN	6.69	48.03	45.28
WOMEN	7.41	55.56	37.04

### 4. Research Methods of Consumer Behavior

Analyze consumer behavior by analyzing and summarizing existing literature and understanding research methods. The most basic and simple method is observation and investigation, data were obtained through questionnaires or live interview, sort out and analyze them. Due to the wide application of big data and intelligent terminal technology, intelligent recording, identification and analysis of consumers can be realized. Big data technology in mobile Internet environment can realize personalized and real-time data, see in Fig1 accurate understanding of consumer behavior. Integrate various fragmented information of consumers based on big data platform and big data analysis, through labeling and modeling, generate a panoramic, real-time accurate description of a specific individual consumer , it called "consumer profile".

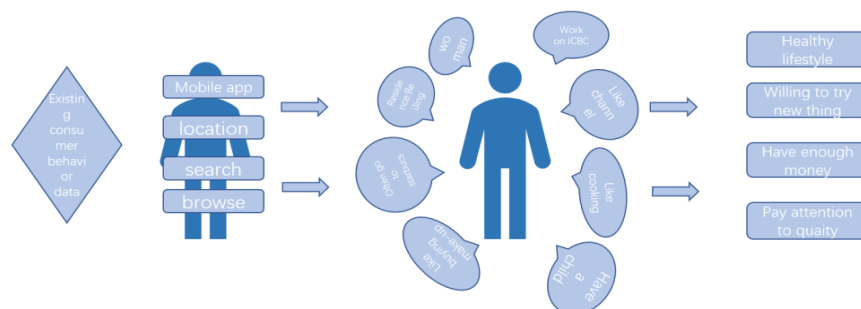


Figure 1: Big data technology in mobile Internet environment used to realize personalized and real-time data.

In the analysis of factors affecting consumer behavior, there is a growing reliance on psychology, appearing a trend towards acceptance and adoption of experimental design. In the study of consumer behavior, the ERP experiment method of cognitive neuroscience is most commonly used [10].

To analyze the factors affecting consumer behavior, researchers mainly used two tools: FMRI and EEG. In an experiment to study the influence of taste and environment on consumers' ordering behavior, the subjects [11] were guided into a lab with dim lights and low sound and sat in a comfortable lab chair and the stimulus material was displayed on a computer screen 90 centimeters away from the subjects. Each decision is about 600 to 800 milliseconds long, starting with the screen showing "+", then a restaurant number appears at random, and the decision stimulus is activated for 1,000 milliseconds, then randomly displays an empty screen for 400 to 600 milliseconds. The final presentation time, including taste and environmental information, was 3,000 milliseconds. The section is shown in Fig. 2



Figure 2: How EGG works.

Data processing and analysis: The EGG is pre-processed offline using ASALab 4.10.1 software. 1. The eyes were identified and corrected by using the eye movement correction algorithm used in the ASA program. 2. The low screen channel was used to filter the brain wave segment and extract the brain wave segment 1000 milliseconds before and after stimulation. 3. The brain wave segments are corrected over and over again, and then the data under the stimulus is averaged and classified according to the characteristics of the stimulus, see in Table 2.

Table 2: Different purchasing rate under different situation.

SITUATION	PURCHASING RATE	REACTION TIME	STANDARD ERROR
<b>DELICIOUS GOOD ENVIRONMENT</b>	0.988	758.678	39.230
<b>DELICIOUS BAD ENVIRONMENT</b>	0.511	1146.542	80.665
<b>UNPLATABLE GOOD ENVIRONMENT</b>	0.265	1178.396	88.239
<b>UNPLATABLE BAD ENVIRONMENT</b>	0.003	797.307	46.802

The results show that consumers pay most attention to taste and environment in the process of ordering food.

## 5. Limitations & Future Outlooks

With the prosperity of the world economy, consumer behavior is becoming more prevalent, this has aroused the interest of many domestic and foreign scholars in the study of consumer behavior. Western scholars began to study consumer behavior from macroscopic level and microcosmic level around 1960. Shuanghnessy argues that consumer behavior cannot be simply calculated by the cost and benefit of a product [12]. Philip Kotler believes that the analysis of factors affecting consumer behavior should be carried out from both subjective and objective aspects [13]. Assael summarized the research on the factors that influence consumer behavior[14]. Rajesh Verma, Mithilesh Pandey analysed consumer behavior, the result shows that advertising and recommendations from friends have the most significant influence on consumer behavior. Domestic scholars have also done a lot of research on consumer behavior [15]. Chongguang Li explored the influencing factors of consumer behavior based on the theory of planned behavior, found that the cognition level to commodities, the judgement of self-control and the situation of reference groups have an very important impact on the rational consumption of consumers[16]. Yiming Luo took agricultural products of Chongqing as an example to analyze the influencing factors of consumer behavior [17]. Lei Wang uses neuroscience thchinqies to understand and predict consumer behavior. To sum up, domestic and foreign scholars have produced abundant research results on consumer behavior. They analyzed the concept of consumer behavior from different angles, formed the classic consumer behavior analysis theory and provide valuable reference materials for the follow-up.

However, some limitations should be noted. On one hand, improper sample selection. The study of consumer behavior usually adopts the method of probability sampling to select samples, it's easy to get a sampling error. On the other hand, Sample statistics are not sufficient. Questionnaire survey is often used to study consumer behavior, but the number of valid questionnaires is relatively less. If the number of sample is not enough, the results are not accurate.

There is still much progress to be made in researching consumer behavior. In the new stage of rapid technological development, consumer behavior research will become more intelligent. Using computers to build more accurate models to analyze consumer behavior, break the limitations of sample statistics and time. And the rapid development of digital economy is changing the way of consumption, consumer behavior research should turn to online shopping in the future, optimize data acquisition and analysis methods to improve the accuracy and value of consumer behavior research.

## 6. Conclusion

Consumer behavior research results are crucial to the whole society, and in order for enterprises to operate and maintain high returns, they need accurate consumer behavior analysis and prediction to help enterprises make the right decisions in important links. Therefore, consumer behavior research is receiving more and more attention. With the advancement of science and technology and the continuous upgrading of technological achievements, researchers have found that there are many areas to be discovered in this theme, and they apply high-tech equipment or intelligent methods to study consumer behavior and continue to innovate in this field. Consumer behavior research is constantly improving and improving, and has great development potential.

Based on the background of the common era of consumer behavior, this study sorts out various studies on consumer behavior and summarizes the characteristics of consumer behavior, which are Non-profit, Unprofessional, Class property, Diversity. Complexity. These characteristics provide a general direction for the study of consumer behavior. In order to explore the factors influencing consumer behavior, this study synthesizes a variety of research methods and models, including survey, observation and neuroscientific prediction, and the model mainly analyzes the EGG model. Based on the analysis of these methodological models, the main factors influencing consumer behavior are:



external factors, sociocultural factors and internal consumer factors. The three factors have different degrees of impact on different consumers from different angles.

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