

# FACTOR AFFECTING CONSUMER'S DECISION TO PURCHASE BICYCLE IN ZHENGZHOU CITY

Wu Yiming

Master of Business Administration, Bangkokthonburi University

บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ )1 (เพื่อศึกษาลักษณะทางประชากรศาสตร์ของการซื้อจักรยานของ  
ลูกค้าที่ส่งผลต่อการตัดสินใจเลือกจักรยานในเมืองเจิ้งโจว และ )2เพื่อศึกษาปัจจัยที่มีอิทธิพล (   
7ของส่วนประสมการตลาดPs ต่อการซื้อจักรยานของผู้บริโภคที่ส่งผลต่อการตัดสินใจเลือก  
จักรยานในเมืองเจิ้งโจว

การวิจัยนี้เป็นการวิจัยเชิงปริมาณ ประชากรที่ศึกษาในการศึกษานี้เป็นผู้บริโภคที่เลือก  
จักรยานในเมืองเจิ้งโจวตั้งแต่ปี คน 400 ซึ่งไม่ทราบจำนวนที่แน่นอน กลุ่มตัวอย่างจำนวน 2566  
ใช้วิธีการสุ่มแบบเฉพาะเจาะจง โดยใช้แบบสอบถามเป็นเครื่องมือในการเก็บรวบรวมข้อมูล สถิติที่  
ใช้ในการวิเคราะห์ ได้แก่ ค่าความถี่ ร้อยละ ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน สถิติที่ใช้ในการ  
ทดสอบ คือ การวิเคราะห์การถดถอยเชิงเส้นแบบพหุ

ผลการวิจัย พบว่า )1ลักษณะประชากรของผู้บริโภคในช่วงอายุ เพศ รายได้ การศึกษา และ (   
อาชีพที่แตกต่างกัน เป็นปัจจัยที่ชัดเจนและสำคัญที่มีอิทธิพลต่อการตัดสินใจซื้อโทรศัพท์มือถือ  
ของผู้บริโภคในเมืองเจิ้งโจว และ )2ส่วนประสมทางการตลาด กลยุทธ์ที่มีอิทธิพลต่อการตัดสินใจ (   
0ของผู้บริโภคในการซื้อจักรยานในเมืองเจิ้งโจว โดยมีนัยสำคัญทางสถิติที่.05

*คำสำคัญ:* จักรยาน การตัดสินใจซื้อ

## ABSTRACT

The objectives of this research: (1) to study the demographic characteristic of customers' bicycle purchase affecting their decision select bicycle in Zhengzhou city, and (2) to Study the influence factors of 7Ps marketing mix on consumers bicycle purchase affecting their decision select bicycle in Zhengzhou city.

This research is quantitative research. The population studied in this study were consumers choosing bicycle in Zhengzhou city since 2023 which the exact number is unknown. A sample of 400 people was used by specific random sampling. By using questionnaires as a tool to collect data statistics used in the analysis These are frequency, percentage, mean and standard deviation. and the statistics used in the test multiple Linear regression analysis.

The research finding were found that: (1) consumers' demographic characteristic of different age, gender, income, education background and profession are the obvious and important factors that influence consumers' decision to purchase bicycle in Zhengzhou city and (2) marketing mix strategy influence consumers' decision to purchase bicycle in Zhengzhou city with statistical significance at 0.05.

*Keywords:* Bicycle, Decision to Purchase

## Research Background

With the increasing awareness of environmental protection in various countries around the world and the increasing demand for fitness and leisure among people Bicycles will continue to become popular means of transportation, fitness, leisure, and entertainment for people in the 21st century. In the invention stage of bicycles, some people did not design the two wheels of

bicycles to be placed back and forth, but instead made the two wheels to be placed left and right. This type of bicycle has a somewhat similar appearance to a wheelchair.

With the development of society, there is an increasing demand for the research and development of bicycle products and technical expertise. In 2011, many well-known bicycle lithium electric vehicle enterprises in China communicated and discussed with each other as heads of their R&D or technical departments. They believed that in the current situation, everyone in the industry needs to work together, exchange and learn from each other, and learn from each other's strengths to make up for their shortcomings. Only in this way can enterprises and individuals have long-term and healthy development. With the strong demand of everyone, The China Bicycle Technology Alliance was established based on the situation, with the participation of R&D or technical department heads from many well-known Chinese bicycle lithium electric vehicle enterprises with over 8 years of industry experience. Through extensive contact with outstanding professionals in the industry, it strengthens technical exchange and cooperation, reflects the value of each individual within the enterprise and promotes the healthy development of the entire industry.

The bicycle was born in 1790, and with the invention of this two wheeled vehicle, the sport of cycling was also born in 1868 Health. Since then, bicycles have not only been an important means of transportation, but also played an important role in sports. In 2012, China had a dual power exercise bike with both hands and feet. The bike can be pushed and pulled to provide forward driving force while cycling, achieving a perfect combination of fitness and hiking. Due to the role of pushing and pulling the handlebars, it can effectively exercise the muscles of the waist, abdomen, legs, chest, arms, and other parts of the body during cycling. Opening a new era in the history of bicycles.

Bicycles first originated in Europe, and with the expansion of production scale through technology and manufacturing technology, bicycles gradually transformed from goods that wealthy people could afford to buy into a means

of transportation for ordinary families, and gradually developed into sports. Bicycles now have many uses and types: toddler bicycles for infants and young children, youth sports bicycles, middle-aged commuting bicycles for work, elderly leisure bicycles, and sports bicycles used by professional athletes for competitions, etc. From their initial simple structure, they have gradually evolved into a part of daily transportation.

Due to the impact of environmental governance in China, motorcycles have been banned from driving in many cities. As a result, more and more people are choosing bicycles for travel. The government is also advocating for green and environmentally friendly travel, and even in order to encourage everyone to do so, there are special promotional and educational videos about cycling. Therefore, this article studies the influencing factors of Zhengzhou consumers purchasing bicycles, In order to have a deeper research and understanding of the market situation regarding bicycles, as well as the future development trends of the bicycle industry. Beneficial to relevant enterprises for enterprise management and decision-making.

#### Research Objective

1. To study the demographic characteristic of customers' bicycle purchase affecting their decision select bicycle in Zhengzhou city.
- 2.To Study the influence factors of 7Ps marketing mix on consumers bicycle purchase affecting their decision select bicycle in Zhengzhou city.

#### 1.3 Research Scope

In this research, the researcher has defined the scope of research as follows:

##### 1.3.1 Content Scope

Focus on the study of factors including:

Independent :

#### 1. Demographic

1.1 Age

1.2 Gender

1.3 Income

1.4 Educational background

1.5 Profession

2. 7P

2.1 price

2.2 product

2.3 place

2.4 promotion

2.5 People

2.6 Process

2.7 Physical evidence

Dependent : Decision to purchase

1.3.2 Area Scope: Zhengzhou city

1.3.3 Population Scope

The population studied in this study were consumers choosing bicycle in Zhengzhou city of China since 2023 is unknown.

The sample group in the study was 400 use the bicycle consumers in Zhengzhou city Henan Province. Sample sizes were determined. From Taro Yamane's formula (1973) at 95% confidence level and tolerances of 5% sample selection were accepted 400 total.

1.3.4 Time Scope

1 June 2023 to 1 October 2023

1.4 Definitions of specific terms

1. Ordinary bicycle: Generally referred to as a Kun bike, the riding posture is a bent legged standing posture, with the advantage of high comfort and less

fatigue during prolonged cycling. The disadvantage is that the bent leg posture is not easy to accelerate, and ordinary bicycle parts often use very ordinary parts, making it difficult to achieve high speeds.

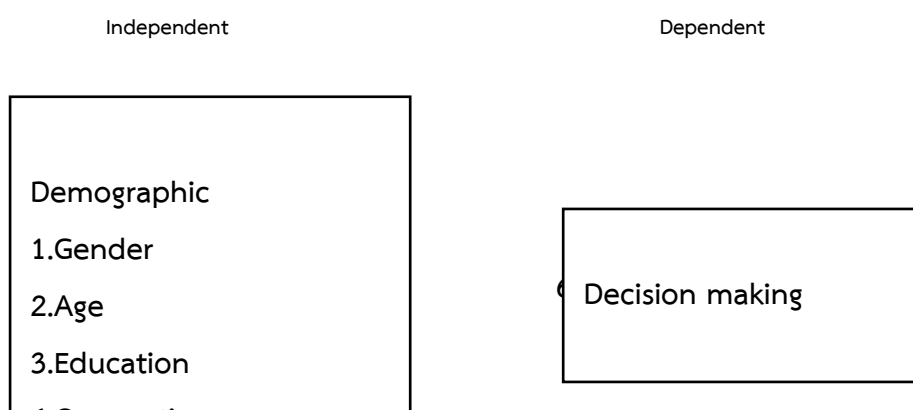
2.Exercise bicycle:The fitness bike, designed with a new concept of health, fashion, and new concepts, is characterized by dual power of both hands and feet, with a speed of up to 40km/h; Multiple ways of doing work and good fitness results. When riding this bicycle, both hands and feet can drive the bicycle to do work simultaneously, or they can drive the bicycle alone to do work. The use of foot pull pedal straight line and hand pull swing rod swing work methods not only improves the driving speed of the bicycle, but also exercises the leg muscles and arm muscles. Obtained multiple national patents, suitable for use as a means of transportation for walking and fitness for middle-aged and elderly people, as well as for travel and entertainment for young people.

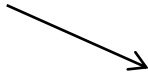
3.Children's bicycles:Children's bicycles are also called children's bicycles and children's bicycles. In Chinese Mainland, Taiwan and Singapore, they are usually called "children's bicycles" or "children's bicycles"; In Hong Kong and Macau, it is commonly referred to as a "children's bicycle". Children's bicycles are a major category of strollers, including children's bicycles, children's strollers, baby strollers, children's tricycles, and other major categories.

4.Demographic:This article refers to consumers who purchase bicyclesAge、 Gender、 Income、 Educational background、 Profession.

5.7P:This article refers to the seven combined factors that influence consumers' purchase of bicycles, price、 product、 place、 promotion、 People、 Process、 Physical evidence

### 1.5 Research Framework





## 1.6 Expected Benefits

1.6.1 Understand the marketing strategies of the bicycle industry.

1.6.2 Understand the factors that affect consumers' purchase of bicycles and their related reasons.

1.6.3 Based on the research results, design marketing decisions for the relevant bicycle industry.

## Literature Review

**The topic in this research is *factor affecting consumer's decision to purchase bicycle in Zhengzhou city* Making the research results useful and achieving the established literature review is divided into 5 parts:**

2.1 The situation of Zhengzhou city

2.2 Theory of Demographic

2.3 7Ps of the Marketing mix

2.4 Theory of decision making

2.5 Consumer behavior

2.6 Related research

## Research Methodology

The objectives of this research were : (1) To study the demographic characteristic of customers' bicycle purchase affecting their decision select bicycle in Zhengzhou city. (2) To Study the influence factors of 7Ps marketing



mix on consumers bicycle purchase affecting their decision select bicycle in Zhengzhou city.

3.1 Research Model

3.2 Population and Sample

3.3 Research Tools

3.4 Data Collection Methods

3.5 The statistics used in data analysis

### Research Model

Firstly, study the basic characteristics and current situation of cycling population in Zhengzhou, and further understand the development status of cycling in Zhengzhou; Secondly, we investigated the riding consumption level and Consumer behaviour in Zhengzhou, reflecting the consumption characteristics of the riding population in Zhengzhou; Finally, analyze the relationship between the characteristics of cycling population and some consumption characteristics in Zhengzhou, and obtain the relevant consumption characteristics of different cycling groups in Zhengzhou.

The researcher conducted the study according to the research process and quantitative research methodology. By using a questionnaire to collect information from a sample of the population it is a descriptive research.

### Population and Sample

The population studied in this study were consumers choosing bicycle in Zhengzhou city Henan Province of China since 2023 is unknown.

The sample group in the study was 400 use the bicycle consumers in Zhengzhou city Henan Province. Sample sizes were determined. From Taro Yamane's formula (1973) at 95% confidence level and tolerances of 5% sample selection were accepted 400 total.

Use stratified random sampling technique to select the respondents, total 400 persons, which suitable under the formula of Taro Yamane (1973),  $n = \frac{N}{1 + Ne^2}$ , n refer to the sample size, N refer to the number of people in the population and error at 5%, Substitute numbers in formula :

Formula 
$$n = \frac{N}{1 + Ne^2}$$

When

n=number of samples

N=population (13,000,000 random personnel)

E=tolerance between the sample and the accepted population mean, set to 0.05.

Therefore, replace the value with the formula :

$n=13,000,000/1+13,000,000(0.05)^2 \approx 400$

According to the collected sample data, 400 is simple random sampling valid samples meet the data requirements.

## Research Tools

The study subject people living in Zhengzhou city HeNan province in 2023. By using a questionnaire to collect information from a sample as follows.

1.General information of the respondents is consumers purchasing bicycles in Zhengzhou.

2.Maketing mix factor's respondents' opinions is interview by using the gauge of Likert's Scale It is divided into 5 levels, which are 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree.

3.Decision on customer behaviors suggestion respondents' opinions is interview by using the gauge of Likert's Scale It is divided into 5 levels, which are 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree.

### 4.Suggestion

Attitude-based questions with additional options to support quantitative analysis; set filters to identify invalid responses; avoid double questions and one-and-a-half questions; conduct the survey dynamically and set a question bank to guarantee the quality of multiple surveys.

## 3.4 Data Collection Methods

This research The researcher has collected the data as follows:

### 3.4.1 Primary Data collected questionnaires from the sample group.

The questionnaires were distributed to students, civil servants, business people, freelancers and retirees, who are the main consumers of the company's products, and the results of the survey can reflect the characteristics and patterns of consumer behavior. A total of 400 people participated in this survey.

3.4.2 Secondary Data The researcher gathered the data from the study of related documents.

### 3.5 The statistics used in data analysis

Descriptive statistics analysis. The questionnaire part 1 used the frequency, percentage, mean and the questionnaire part 2 used the mean, standard deviation to describe general information from the sample and analysis of opinion data, independent variables and dependent variables. The criteria for interpreting the results are as follows:

In analyzing the data, the students collected all scores to find the mean and the standard deviation of the sample based on the criteria by which the question is a rating scale, which is divided into 5 levels.

#### Score Level

Strongly Agree	means a score of 5 points
Agree	means a score of 4 points
Neutral	means a score of 3 points
Disagree	means a score of 2 points
Strongly Disagree	means a score of 1 point

Therefore, the criteria for interpreting to classify the mean into the following ranges:

Average score between	4.20 – 5.00	means Strongly Agree
Average score between	3.40 – 4.19	means Agree
Average score between	2.60 – 3.39	means Neutral
Average score between	1.80 – 2.59	means Disagree
Average score between	1.00 – 1.79	means Strongly Disagree

#### Conclusion

(1) Consumers' personal factors of different age, status, education level, occupation, and different income are the obvious and important factors that influence consumers' decision to buy products, So companies should make different industry policies for different groups to conform to the group and meet the behavior of consumer economic power.

(2) The population participating in bicycle fitness activities in Zhengzhou shows a trend of more males and fewer females. The age of participants tends to be concentrated between 18 and 65 years old. Based on the trend of the number of participants in various age groups before the age of 65, the number of participants decreases with age after the age of 65. From the perspective of educational structure, the cycling population in Zhengzhou basically conforms to the typical "high education" characteristics of Chinese cycling population. The number of people who choose to participate in cycling activities for the purpose of fitness and making friends accounts for the highest proportion in the group.

### 5.3 Suggestion

Consumer preferences are an important Weather vane of market changes. We should find out the consumer preferences of Zhengzhou cyclists and tap the huge growth potential of the domestic demand market of Zhengzhou cyclists. Therefore, relevant bicycle companies need to segment and position the cycling consumption market, conduct accurate market research and reasonable market evaluation. Enterprises should meet specific needs of specific groups, thereby creating a broader cycling consumption market and improving the consumption level of bicycles.

Cycling consumption arises from various aspects and requires consideration of personal needs to make choices. Mountain bike is the preferred choice for mountain travel, and Station wagon is the preferred choice for long-distance travel; Assembled bikes are suitable for cyclists who understand the various components of bicycles, while complete bikes are suitable for cyclists who are unwilling to spend too much time and effort on buying a bike and have a small budget. When consuming, one should overcome the mentality of conformity and comparison, establish a healthy consumption concept, and not be too superstitious about brands and cool appearances. They should go for cycling consumption according to their own abilities.

Cycling clubs and other organizations are important groups that maintain the cycling population. Bicycle shops are a direct sales process, and in order to provide more comprehensive after-sales service, they usually establish bicycle clubs based on bike shops. We need to strengthen the linkage between clubs

that regularly organize activities in Zhengzhou, fully leverage the strong stickiness of sports bike shops and bike clubs in maintaining the cycling population in Zhengzhou, improve and enhance the transparency of consumer prices and the consumption intensity of the cycling population.

## References

- Chen Xiaolu, Lin Chen. (2021) Analysis of Jiang Xiaobai's Marketing mix strategy based on the 7P theory [J] DOI: 10.3969/j.issn.1671-1009.2021.28.022
- Chen Huijuan.(2020)Investigation and Research on the Current Situation of College Bicycle Sports Participation Fujian normal university[J] Journal of shangqiu teachers college36,(06)88-90.
- Dry Sweet. (2019) Analysis of 4C marketing strategy of Shen Yun edible mushroom processing company based on consumer behavior [J]. China edible mushroom,38(12):90-92
- Engel, Kollat, Blackwell. Consumer Behavior (1968) [M]. Ukrainian Mathematical Journal
- Guan Yanxia.(2015) Analysis of the Elements of Brand Communication in Multinational Fast Moving Consumer Goods Enterprises [J]. Compiled by Caiwen, (04): 95-96.
- Hu man (2008) Research on Emotional Elements and Their Mechanism in Online shopping [D].Shandong University. Master's Thesis. 2008.3
- Li Wanpeng. (2012) Research on the Development Status and Countermeasures of Amateur Cycling in Ürümqi [D]. Xinjiang Normal University
- Li Lin.(2016)Research on the Marketing Strategy of Taizhou Pengxin Lingyu Real Estate Project [D]. Nanjing University of Science and Technology. DOI: 10.7666/d. Y3045642
- Li Dongjin. (2000) Research on consumer search information behavior in China--Tianjin city consumers as an example [J]. Consumer Economics,(6):44-48.
- Mei Jie. (2012) An analysis of the influence of cultural factors on consumer purchasing behavior [J]. Small and medium-sized enterprise management and science and technology, 2012(11):141-143
- Paul Peter, Jerry C. Olson. (2010)Consumer Behavior and Marketing Strategy (Chinese translation) [M]. Liaoning: Northeast University of Finance and Economics Press
- Philip Kotler, (2017) Gary Armstrong. Marketing (Chinese translation) [M]. Beijing: People's University of China Press 6-14

Song Zhijie, Tang Xiaoli. (2016)Research on the Impact of Price and Evaluation on Consumer Online Purchase Decisions: An Analysis Based on Eye Movement Experiments [J]. Enterprise Economics, 2016 (10): 7. DOI: 10.13529/j.cnki. enterprise. economy. 2016.10.11

Song S. Man.(2018) Analysis of the influence factors of advertising on consumers' purchasing behavior [J]. Industry and Technology Forum.17(23):90-91

Wu Zhongguan(1997) Dictionary of Population Science: Southwestern University of Finance and Economics Press

Xie Shiwei.(2016) Research on Marketing Strategy of Dongfeng Liuqi Heavy Truck [D]. Hunan University, June 6

Xu Tao (2012) Bicycles and Modern China (1868-1949) [D]. Pingdong Normal University

Yao Yubin.(2012) Research on the Current Situation and Development Countermeasures of Cycling Sports in Universities in Xiamen City[D] East China Normal University.

Zhao Guangpeng. (2018)Research on marketing strategy of S casual food company based on consumer behavior [D]. Shaanxi: Shaanxi Normal University