



**FACTORS INFLUENCING THE CONSUMPTION BEHAVIOR OF  
COLLEGE STUDENTS AT QUANZHOU COLLEGE OF  
TECHNOLOGY**

**QIAOLING XIE**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE  
INSTITUTE OF SCIENCE INNOVATION AND CULTURE  
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHAP  
ACADEMIC YEAR 2024  
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**Author**      Qiaoling XIE  
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## ABSTRACT

This study investigates the factors influencing the consumption behavior of Quanzhou College of Technology students, with a particular focus on demographic variables, intrinsic motivations, and extrinsic motivations. The research employs a quantitative methodology, using structured questionnaires to gather data from 400 students. The data were analyzed using multiple regression to identify significant predictors of consumption behavior. The findings reveal that intrinsic and extrinsic motivations significantly affect students' consumption behavior. Among the intrinsic factors, personal attitude and values emerged as the most influential, impacting students' consumption methods, purposes, and overall behavior. The study also highlights the significant role of extrinsic factors—technological, social, cultural, and economic—in shaping students' consumption decisions. Demographic variables such as gender and monthly income significantly influence consumption behavior, with female students and those with higher monthly incomes demonstrating more diverse and consistent consumption patterns. However, age, grade level, and major were not significant predictors of consumption behavior, likely because the sample was demographically concentrated. The study contributes to the existing literature by providing a comprehensive analysis of the factors that drive consumption behavior among college students. It emphasizes the importance of aligning marketing strategies with both intrinsic and extrinsic motivations. The findings have practical implications for educators, marketers, and policymakers, suggesting the need for targeted interventions promoting responsible and sustainable student consumption practices. The study concludes with recommendations for future research, including exploring additional variables and using more diverse samples to enhance the generalizability of the findings.

**Keywords:** Consumption Behavior, Intrinsic Motivation, Extrinsic Motivation, Demographic Variables, Multiple Regression Analysis

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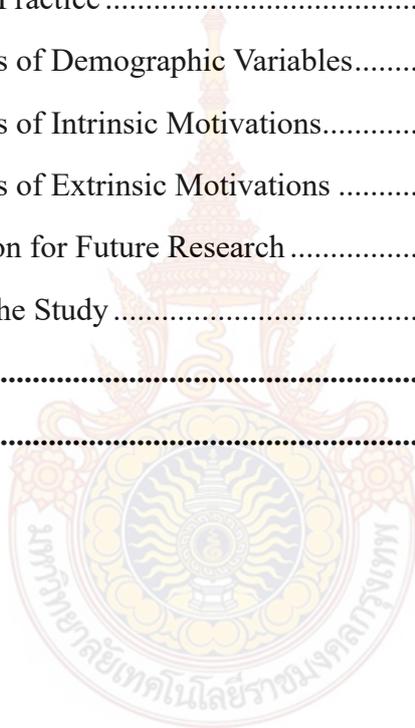
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# CHAPTER I

## INTRODUCTION

### 1.1 Background and Statement of the Problem

#### 1.1.1 Research Background

In recent years, the consumption behavior of college students in China and globally has garnered significant attention due to their growing economic power and unique spending patterns. According to the "2023-2024 China College Student Consumption Insight White Paper" (Advertising School, Communication University of China, & Anlaiye, 2024), as of June 2023, the number of online shoppers in China reached 884 million, accounting for 82.0% of total internet users. Among these, college students represent a crucial consumer group with significant purchasing power and influence. The survey highlights that 76.5% of college students shop online at least once a week, and 70.9% visit on-campus supermarkets and convenience stores weekly. This data reflects their consumption habits in the e-commerce environment and reliance on emerging financial services.

Chinese college students are often at the forefront of adopting new technologies, significantly shaping their consumption behaviors. Zhang (2019) emphasized that mobile phones are the primary tool for information consumption among college students, influencing their purchasing decisions both positively and negatively through excessive use. Furthermore, Wang et al. (2017) highlighted the significant role of internet-based financing services in shaping consumption behavior, driven by convenience and service factors.

Researchers have observed similar trends internationally. In the United States, Smith and Anderson (2020) found that college students increasingly use online platforms for shopping, influenced by the convenience and variety offered by e-commerce. The study also noted a significant increase in mobile payments among

students, paralleling findings in China. In Europe, research by Jones et al. (2019) found that social media plays a critical role in shaping college students' purchasing decisions, with many reporting that social media influencers and online reviews heavily influence their buying choices. Kim et al. (2021) found in South Korea that intrinsic motivations, such as environmental consciousness, significantly influence students' purchasing decisions.

These studies suggest a global trend towards digitalization in student consumption behavior, underscoring the importance of understanding the factors that influence college students' consumption behavior to provide valuable insights for academics, market strategists, and policymakers.

### **1.1.2 Research Status and Problems**

Current research on college students' consumption behavior highlights several key trends and challenges. Based on the "2023-2024 China College Student Consumption Insight White Paper" (Advertising School, Communication University of China, & Anlaiye, 2024), college students' consumption patterns are diverse and multifaceted, presenting unique issues.

Firstly, financial overextension is a significant problem. Students, in addition to the necessary living expenses, also enjoy purchasing clothing and cosmetics, attending performances, and traveling. Despite limited income, students exhibit a strong desire to consume, often leading to financial overextension. The increasing reliance on internet financial services exacerbates this issue, as the ease of obtaining credit can lead to significant debt accumulation, especially among students lacking financial literacy and proper management skills (Liu & Li, 2019; Jones et al., 2019).

Secondly, a firm reliance on online shopping is common among college students. In China, almost all students engage in online shopping. They primarily buy essential items—food, clothing, and other necessities — through online platforms. Some students even find that online shopping can alleviate social anxiety. Mobile payments have become widespread, with many students using apps like Alipay and

WeChat Pay for their transactions. This reliance on mobile internet and shopping platforms can lead to psychological overreliance and excessive daily screen time, often resulting in a disconnection from real life. Ultimately, such habits can lead to psychological problems (Zhang, 2019).

Thirdly, the environment, including celebrities and internet influencers, easily shapes college students' behavior. Offline, roommates, classmates, and friends often collaborate on group purchases, sharing and recommending shopping experiences and discounts. Online, user reviews on Xiaohongshu (RED), live streams on Douyin (TikTok), and recommendations from influencers and celebrities stimulate consumption desires. Celebgram endorsements also play a significant role in shaping students' purchasing decisions (Inayati & Azizah, 2019). Although students may consider environmental sustainability, the influence of social media, internet celebrities, and peer pressure still leads to impulsive purchases and the formation of unsustainable consumption habits (Advertising School, Communication University of China, & Anlaiye, 2024).

In conclusion, college students' consumption behavior reflects a range of issues and has become an increasingly studied topic both domestically and internationally. Research indicates that college students' consumption behavior is influenced by factors such as financial management, social media, peer pressure, and intrinsic motivations, such as environmental consciousness. Despite these insights, there is a notable lack of research focusing on vocational colleges, especially those in economically developed regions. Quanzhou College of Technology, the top-ranked private vocational college in Fujian Province, located in the economically vibrant Jinjiang area of Quanzhou City, faces similar issues and represents a significant case for study.

## 1.2 Research Questions

To comprehensively understand the consumption behavior of college students at Quanzhou College of Technology, this study aims to address the following research questions:

What are the different impacts of demographic variables (gender, age, grade level, major, and monthly income) on the consumption behavior of college students at Quanzhou College of Technology?

How do intrinsic motivations (personal attitude, personal lifestyle, personal values) play a role in influencing the consumption behavior of college students at Quanzhou College of Technology?

How do extrinsic motivations (economic factors, social and cultural factors, and technological factors) influence the consumption behavior of college students at Quanzhou College of Technology?

## 1.3 Research Hypotheses

Hypothesis 1: The differences in demographic variables (gender, age, grade level, major, and monthly income) have differential effects on the consumption behavior of college students.

Hypothesis 2: Intrinsic motivations (personal attitude, personal lifestyle, personal values) have a significant influence on the consumption behavior of college students.

Hypothesis 3: Extrinsic motivations (economic factors, social and cultural factors, and technological factors) significantly influence the consumption behavior of college students.

## **1.4 Research Objectives**

To study the different impacts of demographic variables (gender, age, grade level, major, and monthly income) on the consumption behavior of college students at Quanzhou College of Technology.

To investigate the influence of intrinsic motivations (personal attitude, personal lifestyle, personal values) on the consumption behavior of college students at Quanzhou College of Technology.

To investigate the influence of extrinsic motivations (economic factors, social and cultural factors, and technological factors) on the consumption behavior of college students at Quanzhou College of Technology.

## **1.5 Scope of the Research Study**

### **1.5.1 Content**

This study focuses on the consumption behavior of college students at Quanzhou College of Technology. It aims to investigate the effects of demographic variables —such as gender, age, grade level, major, and monthly income —on consumption patterns. The research also delves into intrinsic motivations —personal attitudes, lifestyle, and values —as well as extrinsic motivations, including economic, social, and technological factors. This comprehensive examination aims to provide a detailed understanding of the factors influencing student behavior.

### **1.5.2 Area of Study**

This research confines its geographic scope to Quanzhou College of Technology, located in Quanzhou, China. Quanzhou College of Technology is the top-ranked private vocational college in Fujian Province, located in Jinjiang, an economically vibrant area. This location provides a specific context for examining college students' consumption behavior, enabling focused, relevant data collection. The findings from this study can be generalized to similar educational and economic

contexts, contributing valuable insights to the academic field.

### **1.5.3 Sample and Population**

The population for this study includes all full-time undergraduate students at Quanzhou College of Technology, totaling 14,386 students as of July 2023 (Quanzhou College of Technology, July 2024). This diverse group comprises students from various academic departments and grade levels, ensuring a comprehensive representation of the entire student body.

### **1.5.4 Sampling Method**

A stratified random sampling method was employed to ensure that participants from all three grade levels were adequately represented. A sample size of 400 students was selected from different academic departments and year levels, providing a representative distribution across the college. This method was chosen to achieve a high confidence level and low margin of error, ensuring the reliability and validity of the findings.

### **1.5.5 Duration**

Data collection and analysis took place during the academic year 2023-2024. This timeframe allows for a comprehensive evaluation of student consumption behavior within this specific period and educational context. The detailed approach aims to provide valuable insights that can inform the development of educational programs, marketing strategies, and policies tailored to this demographic.

## 1.6 Research Framework

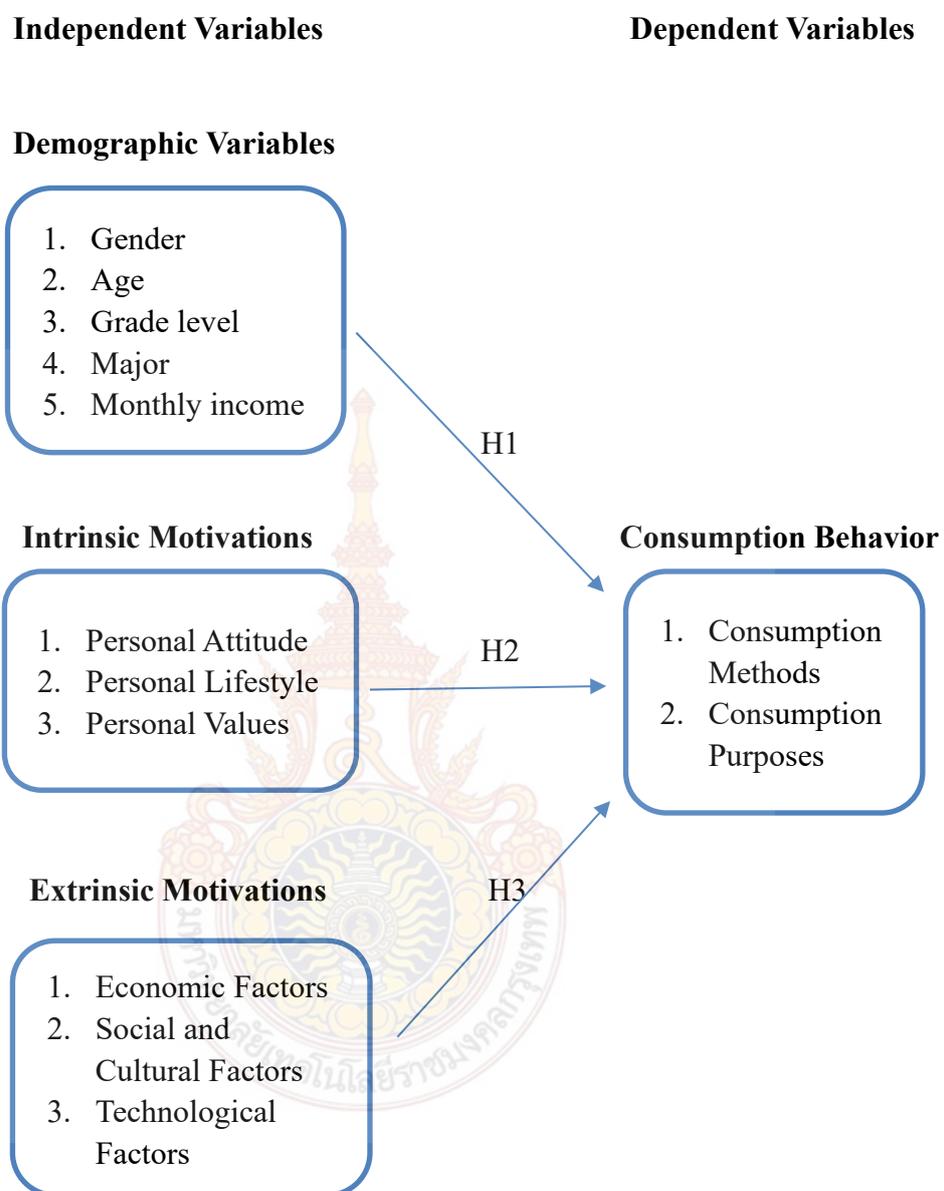


Figure 1.1 Research Framework

## **1.7 Definition of Key Terms**

### **1.7.1 College Students**

According to the National Center for Education Statistics (NCES), college students are individuals enrolled in post-secondary education institutions, pursuing degrees or certificates. This study focuses on students enrolled at Quanzhou College of Technology, typically aged 18-22. Their consumption behaviors are influenced by their educational environment, economic status, and the transition towards financial independence.

### **1.7.2 Consumption Behavior**

Consumption behavior refers to the actions and decision-making processes involved in selecting, purchasing, using, and disposing of goods and services to satisfy individuals' needs and wants. In this study, consumption behavior is examined through two main aspects: consumption methods and consumption purposes. Consumption methods include online, in-store, and mobile shopping, as well as various payment methods. Consumption purposes encompass basic needs, educational needs, recreational needs, social needs, and luxury needs.

### **1.7.3 Demographic Variables**

Statistical data related to the characteristics of a specific population. In this study, demographic variables include gender, age, grade level, major, and monthly income. These variables help categorize and analyze the diversity within the student population and understand how these characteristics influence consumption behavior.

### **1.7.4 Motivation**

Motivation refers to the internal and external factors that stimulate individuals to take action toward achieving their goals. It is a driving force that influences consumers' purchasing decisions and overall consumption behavior. Motivation can be broadly classified into two categories: intrinsic and extrinsic.

### **1.7.5 Intrinsic Motivation**

Intrinsic motivation refers to the internal drive to engage in activities for

their inherent satisfaction and personal fulfillment. In this study, intrinsic motivations are examined through personal attitudes, personal lifestyle, and personal values. Individual preferences and beliefs about products and services shape personal attitudes. Personal lifestyle includes daily habits and routines that influence consumption choices. The ethical and environmental factors that influence purchasing decisions are referred to as personal values.

#### **1.7.6 Extrinsic Motivation**

Extrinsic motivation refers to external factors that drive individuals to perform actions in response to rewards or pressures. This study examines extrinsic motivations in the context of economic, social, cultural, and technological factors. Economic factors include family income and personal earnings. Social and cultural factors encompass peer influence, social media, and celebrity endorsements. Technological factors relate to the convenience and accessibility provided by mobile payments and e-commerce platforms.

### **1.8 Benefit of the Study**

This study aims to provide several significant benefits, particularly in understanding and addressing the consumption behavior of college students at Quanzhou College of Technology:

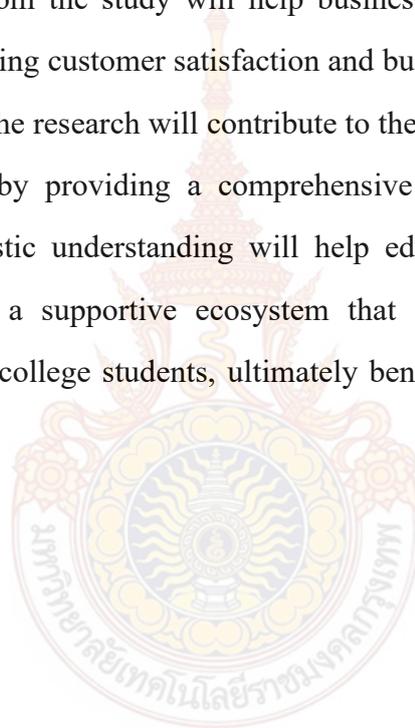
First, by analyzing the factors influencing college students' consumption behaviors, this research will offer valuable insights into promoting sustainable consumption habits and guiding students' consumption concepts. Understanding the balance between rational and emotional spending can help students make more informed and responsible purchasing decisions.

Second, the findings will inform the development of financial literacy programs at Quanzhou College of Technology. These programs can equip students with essential financial management skills, helping them avoid financial overextension and debt accumulation. Educating students about the risks of impulsive spending and the

benefits of budgeting can significantly enhance their financial well-being. These initiatives will enable the institution to better support students in managing their finances effectively.

Third, businesses and marketers can gain a better understanding of college students' consumption patterns and motivations. This knowledge can inform the development of targeted marketing strategies and products that meet the specific needs and preferences of college students, ultimately leading to more effective marketing practices. Insights from the study will help businesses tailor their offerings to this demographic, improving customer satisfaction and business success.

Overall, the research will contribute to the economic and social well-being of college students by providing a comprehensive analysis of their consumption behaviors. This holistic understanding will help educators, market strategists, and policymakers create a supportive ecosystem that fosters responsible, sustainable consumption among college students, ultimately benefiting students and the broader community.



## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Related Theories**

To comprehensively understand the factors influencing college students' consumption behavior, it is essential to explore both consumer behavior and motivation theories. These theories provide a framework for examining how internal and external factors shape consumer decisions and actions. The behavior theories that describe this study are the Black Box Model, Theory of Planned Behavior (TPB), and Self-Determination Theory (SDT).

##### **2.1.1 Consumption Behavior Model - The Black Box Model**

The Black Box Model, proposed by Philip Kotler, is a comprehensive framework that explains consumer behavior by considering both external stimuli and the internal processing within consumers' minds. According to Kotler et al. (2004), this model emphasizes the interaction between marketing stimuli (such as product, price, place, and promotion) and environmental factors (including economic, technological, political, cultural, and demographic influences). These external factors interact with the consumer's internal characteristics, including attitudes, motivations, perceptions, and lifestyle. The model suggests that these external stimuli are processed internally by consumers, leading to various responses, such as product choice, brand selection, purchase timing, and payment method.

Within the "black box", the decision-making process involves several stages: problem recognition, information search, alternative evaluation, purchase decision, and post-purchase behavior. This detailed process illustrates how consumers move from recognizing a need or problem to evaluating different options, making a purchase, and finally reflecting on their purchase decision. The Black Box Model is beneficial for understanding how various factors influence the consumption behavior

of college students at Quanzhou College of Technology, enabling analysis of how marketing efforts and environmental factors shape their buying decisions.

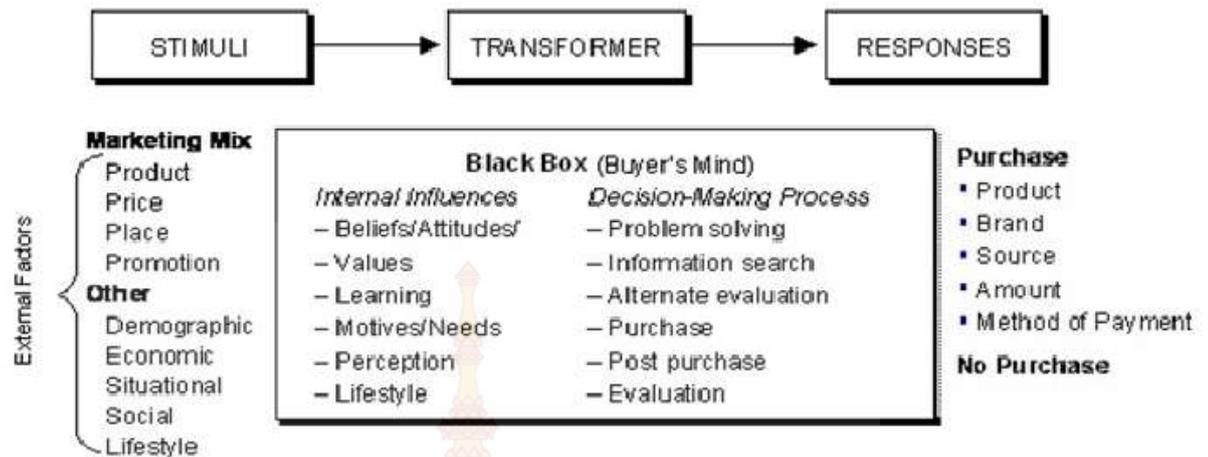


Figure 2.1 The Black Box Model (Adapted from Kotler et al. (2004))

### 2.1.2 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), introduced by Icek Ajzen in 1991, is a widely recognized model for predicting and understanding human behavior, including consumer behavior. TPB posits that an individual's intention to perform a behavior is the most critical determinant of whether they will carry it out. This intention is influenced by three primary factors: attitude toward behavior, subjective norms, and perceived behavioral control. Attitude toward the behavior involves an individual's positive or negative evaluation of performing the behavior. Among college students, this intention could include feelings toward purchasing eco-friendly products, with a positive attitude increasing the likelihood of making such purchases (Ajzen, 1991).

Subjective norms refer to the perceived social pressures to perform or not perform a behavior. For college students, these norms encompass the influence of peers, family, and societal expectations on their purchasing decisions. A student might feel pressure to buy fashionable clothing to fit in with their social circle or to avoid negative

judgments. Perceived behavioral control relates to an individual's perception of their ability to execute the behavior, accounting for both internal and external constraints. Such variables can include students' confidence in managing their finances to afford certain products. TPB is instrumental in examining how attitudes, social pressures, and perceived control shape college students' consumption behavior, providing insights into their decision-making processes and behavioral patterns (Ajzen, 1991).

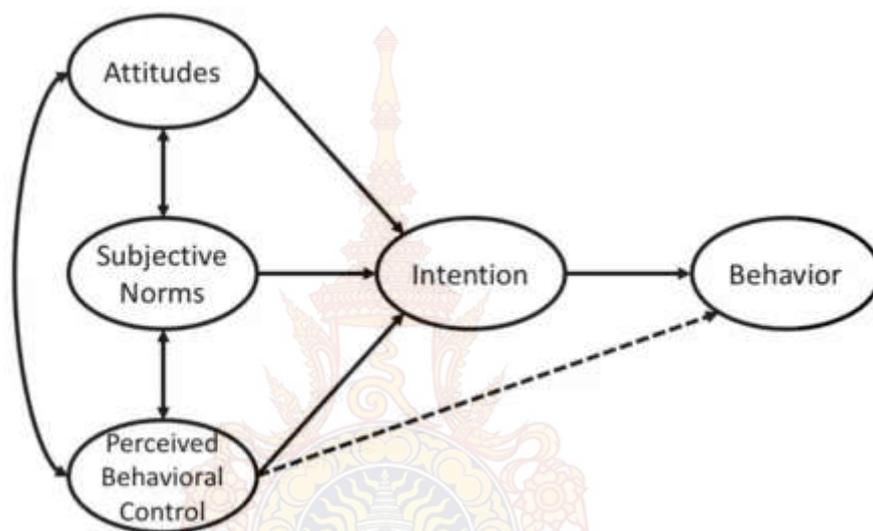


Figure 2.2 Theory of Planned Behavior (TPB) Model

### 2.1.3 Self-Determination Theory (SDT)

Self-Determination Theory (SDT), developed by Edward Deci and Richard Ryan in 2000, is a comprehensive framework for understanding human motivation and behavior. SDT distinguishes between intrinsic and extrinsic motivations. Intrinsic motivation arises from internal desires to perform a behavior for its inherent satisfaction and personal fulfillment. For college students, intrinsic motivation may lead them to purchase products that align with their personal interests, values, or environmental consciousness. For example, a student who values sustainability might be intrinsically motivated to buy eco-friendly products (Deci & Ryan, 2000).

On the other hand, external factors like rewards, social approval, or the

desire to avoid adverse outcomes influence extrinsic motivation. College students' extrinsic motivations can include gaining social approval from peers, financial incentives like discounts or scholarships, and the influence of marketing and technological advancements. A student might purchase fashionable clothing to gain social approval or use technologically advanced products due to their widespread endorsement. SDT provides a valuable lens for understanding the internal and external factors driving college students' consumption behaviors, helping explore how these motivations shape their purchasing decisions and consumer patterns (Deci & Ryan, 2000).

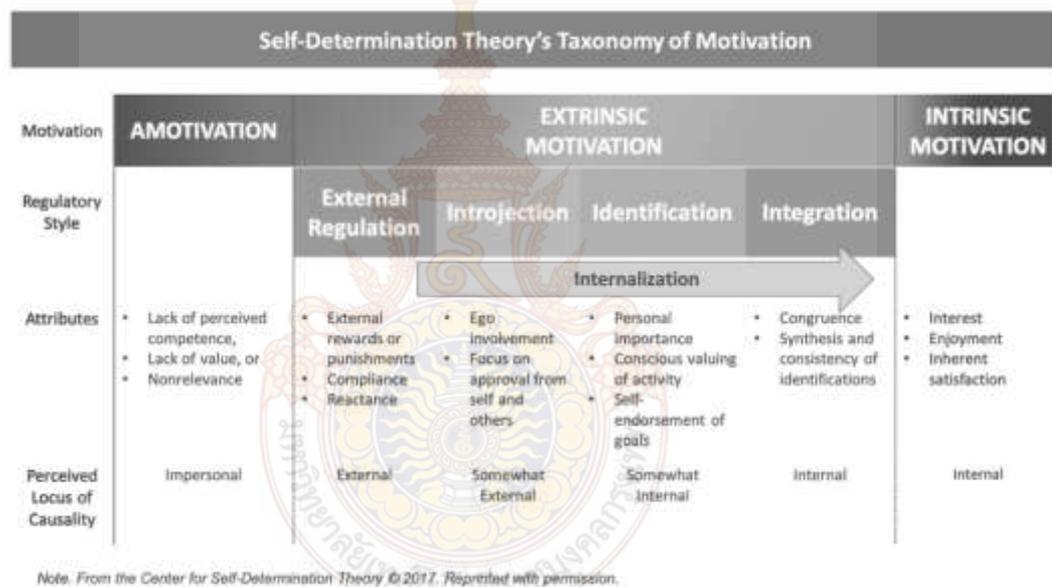


Figure 2.3 Self-Determination Theory (SDT) Taxonomy of Motivation

In conclusion, the selection of the Black Box Model, the Theory of Planned Behavior (TPB), and Self-Determination Theory (SDT) as the theoretical foundation for this study is based on their comprehensive and complementary perspectives on consumer behavior. First, the Black Box Model provides a holistic view of how external stimuli and internal characteristics influence the decision-making process and subsequent consumer responses. It helps in understanding the complex interplay between various factors that shape consumer behavior. Second, TPB provides a

structured framework for analyzing how attitudes, subjective norms, and perceived behavioral control influence college students' consumption intentions and behaviors. This theory is particularly relevant for examining the social and psychological aspects of consumption decisions. Finally, SDT elucidates the role of intrinsic and extrinsic motivations in driving consumer behavior. By distinguishing between internal desires and external influences, SDT provides insights into the motivational factors that underpin college students' purchasing decisions. Together, these theories offer a robust, multifaceted approach to understanding college students' consumption behavior, making them well-suited to the objectives of this research.

## **2.2 Related Studies**

According to Philip et al. (2006) and Schiffman & Kanuk (2006), the factors influencing consumer behavior are generally analyzed under four broad categories: cultural, social, personal, and psychological. These factors, as discussed in marketing and social textbooks, play a significant role in shaping consumers' purchasing decisions and buying behavior. This literature classifies and structures these factors in various ways, providing a comprehensive framework to understand the myriad influences on consumer behavior. The following sections will review relevant studies and literature on each of these factors in the context of college students' consumption behavior.

### **2.2.1 Demographic Variables**

Demographic variables such as gender, age, grade level, major, and monthly income significantly influence college students' consumption behavior. These variables provide a foundation for understanding the diversity within the student population and how different demographic groups exhibit distinct consumption patterns.

#### **2.2.1.1 Gender Factor**

Smith and Anderson (2020) state that gender differences significantly

impact consumption behavior among college students. They found that male students often spend more on technology and gadgets, while female students prioritize fashion and personal care products. These gender-based differences emphasize the value of considering gender as a variable in understanding consumption patterns.

#### ***2.2.1.2 Age Factor***

According to Jones et al. (2019), age is a critical demographic variable influencing consumption behavior. They noted that younger students, such as freshmen and sophomores, tend to spend more on social activities and entertainment. In contrast, older students, such as juniors and seniors, focus more on academic expenses and career-related investments. Understanding these age-related differences is crucial for tailoring marketing strategies and educational programs for different age groups.

#### ***2.2.1.3 Grade Level Factor***

Wang et al. (2017) discuss how the academic year or grade level affects students' consumption behavior. Their study indicates that freshmen and sophomores may spend more on setting up their living arrangements and socializing, while juniors and seniors invest more in academic resources and professional development. These variations underscore the need to consider the grade level when analyzing consumption patterns among college students.

#### ***2.2.1.4 Major Factor***

Li and Liu (2018) explore how the field of study or major influences the consumption behavior of college students. They found that students in technical and engineering majors spend more on specialized equipment and software. At the same time, those in the arts and humanities invest more in books, artistic materials, and cultural activities. Understanding the impact of academic disciplines on consumption reveals the diverse needs and preferences of students across different fields.

#### ***2.2.1.5 Monthly Income Factor***

Zhang (2019) emphasizes the importance of monthly income in determining college students' purchasing power and spending patterns. He notes that

students with higher monthly allowances or incomes from part-time jobs tend to spend more on luxury items, entertainment, and dining out. At the same time, those with limited financial resources focus on essential needs and budget-friendly options. This relationship between income levels and consumption behavior is essential for understanding the economic constraints and opportunities faced by students.

### **2.2.2 Intrinsic Motivations**

Intrinsic motivations are internal drives that lead individuals to engage in behaviors for their own sake, driven by personal satisfaction or fulfillment. For college students, intrinsic motivations play a critical role in shaping their consumption.

#### **2.2.2.1 Personal Attitudes**

Deci and Ryan (2000) explain that personal attitudes significantly influence consumption behavior. They argue that students' positive or negative evaluations of products and services impact their purchasing decisions. For example, students with a positive attitude towards sustainability are more likely to purchase eco-friendly products. Understanding personal attitudes helps predict students' preferences and choices.

#### **2.2.2.2 Personal Lifestyle**

Huang et al. (2017) discuss the role of personal lifestyle in shaping consumption behavior. They found that students with active lifestyles tend to spend more on sports equipment and health-related products. In contrast, those with sedentary lifestyles tend to spend more on entertainment and technology. Recognizing lifestyle differences is crucial for understanding the diverse consumption patterns among college students.

#### **2.2.2.3 Personal Values**

Kim et al. (2021) highlight the impact of personal values on consumption behavior. Their study shows that students who prioritize ethical consumption are likely to choose products that align with their values, such as fair-trade goods or products from socially responsible companies. Understanding personal values is crucial for

promoting responsible consumption among students.

### **2.2.3 Extrinsic Motivations**

Extrinsic motivations are external factors that drive individuals to act in response to rewards or pressures. These motivations significantly influence college students' consumption behavior.

#### ***2.2.3.1 Economic Factors***

Ryan and Deci (2000) discuss how economic factors, including family income and personal earnings, influence consumption behavior. They note that students with higher financial resources are more likely to engage in discretionary spending, while those with limited budgets prioritize essential needs. Economic incentives, such as discounts and promotions, also play a significant role in shaping students' purchasing decisions (Wang et al., 2017).

#### ***2.2.3.2 Social and Cultural Factors***

Inayati and Azizah (2019) examine the impact of social and cultural influences on students' consumption behavior. They found that peer pressure, social media trends, and celebrity and influencer endorsements drive students to make purchases that align with social expectations. Campus culture and activities also shape consumption patterns (Wang & Xu, 2020).

#### ***2.2.3.3 Technological Factors***

Zhang (2019) explores the influence of technological advancements on consumption behavior. He found that the convenience and accessibility of digital technologies encourage students to make more frequent and varied purchases. Technological innovations continue to influence consumption trends among college students (Smith & Anderson, 2020).

In summary, college students' consumption behavior is influenced by a complex interplay among demographic variables, intrinsic and extrinsic motivations, and technological factors. Understanding these influences provides valuable insights into the decision-making processes and behavioral patterns of this demographic group.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

This study employed a quantitative research design to investigate the factors influencing the consumption behavior of college students at Quanzhou College of Technology. The primary objective was to identify and analyze the impact of demographic variables, intrinsic motivation, and extrinsic motivation on students' consumption patterns. Structured questionnaires were used to collect data from the target sample. The quantitative approach was chosen for its ability to provide statistical evidence and enable the generalization of findings to a larger population.

The structured questionnaire included questions designed to measure demographic variables (gender, grade level, major, age, and monthly income), intrinsic motivations (personal attitudes, personal values, and personal lifestyle), and extrinsic motivations (economic factors, social and cultural factors, and technological factors).

The collected data were analyzed using statistical methods to determine the relationships and the effects of these variables on consumption behavior. Specifically, the analysis focused on how these factors influence different aspects of consumption behavior, including consumption methods and consumption purposes.

The questionnaire was administered online using a platform, such as “Questionnaire Star”, which is widely used in China for survey distribution and data collection. This platform allows for efficient distribution and collection of responses, ensuring broad accessibility and participation. The survey link was shared via the school email system and social media platforms to reach a diverse student population.

In addition to survey data, secondary data were gathered from academic papers, research reports, and statistical data related to student consumption behavior. This comprehensive approach aimed to provide a detailed understanding of the factors

influencing college students' consumption behavior at Quanzhou College of Technology. This study aimed to provide insights to inform educational programs, marketing strategies, and policy decisions, ultimately supporting responsible, informed consumption behaviors among college students.

## 3.2 Samples and Sample Size

### 3.2.1 Population

The population for this study consisted of all full-time undergraduate students at Quanzhou College of Technology, totaling 14,386, as per the college's official website (Quanzhou College of Technology, July 2024). This diverse group included students from various academic departments and grade levels, ensuring a comprehensive representation of the entire student body.

### 3.2.2 Samples

A sample of 400 students was selected from different academic departments and grade levels to ensure a representative distribution across the college. This sample size was determined based on statistical guidelines to achieve a 95% confidence level and a margin of error of  $\pm 5\%$ , ensuring the reliability and validity of the findings for generalization. The sample size calculation is as follows:

$$n = \frac{N \times Z^2 \times p \times (1-p)}{E^2 \times (N-1) + Z^2 \times p \times (1-p)}$$

$N$  is the population size (14,386).

$Z$  is the  $Z$ -value (1.96 for a 95% confidence level).

$p$  is the estimated proportion of the population (0.5).

$E$  is the margin of error (0.05).

Thus,

$$n = \frac{14386 \times 1.96^2 \times 0.5 \times (1-0.5)}{0.05^2 \times (14386-1) + 1.96^2 \times 0.5 \times (1-0.5)} \approx 374.17$$

To account for potential non-responses and ensure robustness, the sample size is rounded up to 400.

### 3.2.3 Sampling Methods

Stratified random sampling was employed to select the participants. This method involved dividing the entire population into distinct subgroups (strata) based on grade level. From each subgroup, a random sample was drawn proportionally to ensure adequate representation. This approach minimizes sampling bias and ensures that the diversity within the population is accurately reflected in the sample, providing a more detailed and nuanced understanding of the factors influencing the consumption behavior of college students at Quanzhou College of Technology.

Using the actual student distribution, the sample sizes were calculated as follows:

Total population,  $N = 14,386$

Desired sample size,  $n = 400$

The formula for proportional sample size for each stratum is:

$$n_i = \frac{N_i}{N} \times n$$

Where  $n_i$  is the sample size for the stratum  $i$ ,  $N_i$  is the population size for the stratum  $i$ , and  $N$  is the total population size.

Table 3.1 Sample Breakdown by Grade Level

Grade Level	Population Size	Sample Size
Freshmen (Grade One)	6,862	191
Sophomores (Grade Two)	4,999	139
Juniors (Grade Three)	2,525	70
Total	14,386	400

Using the proportional sampling method, this table ensures that students from different years of study are proportionately represented, allowing analysis of how consumption behavior may vary across different stages of the college experience.

To ensure the relevance and accuracy of the findings, specific inclusion criteria were applied. Participants must be full-time undergraduates enrolled at Quanzhou College of Technology. Students who are part-time or enrolled in postgraduate programs were excluded from the sample to maintain focus on the target population.

### **3.3 Data Collection**

Data collection for this study was conducted through a structured questionnaire designed to gather comprehensive data on the consumption behavior of college students at Quanzhou College of Technology. Stratified random sampling ensured adequate representation of participants from all three grade levels: freshmen, sophomores, and juniors. The questionnaire was divided into sections covering demographic information, consumption behavior, and motivations (both intrinsic and extrinsic). Responses were measured using a five-point Likert scale, where 1 indicates "strongly disagree" and 5 indicates "strongly agree", to accurately capture students' attitudes and behaviors.

The survey was administered through "Questionnaire Star", a widely used online survey platform in China. To maximize reach and participation, the survey link was disseminated via the school email system and various social media platforms. "Questionnaire Star" provides tools to preliminarily screen collected questionnaires, allowing the exclusion of invalid responses, such as incomplete submissions or patterns suggesting random answering.

In addition to primary survey data, secondary data were gathered through a comprehensive review of relevant academic papers, research reports, and statistical data.

To provide a more robust dataset for analysis, the researcher also included basic student information and on-campus consumption data from Quanzhou College of Technology.

This multifaceted approach to data collection ensures a thorough and reliable foundation for analyzing the consumption behaviors of the student population at Quanzhou College of Technology.

### **3.4 Research Instrument**

This study adopted a questionnaire survey as the research instrument. A questionnaire survey is a research method using controlled scales to investigate issues and obtain reliable information. The process involves constructing the final questionnaire and distributing and collecting responses via web links. The questionnaire consisted of the following four parts:

Part 1: This section gathers basic personal information to classify respondents into distinct subgroups for stratified sampling and analysis. Questions in this section include gender, age, grade level, major, and monthly income. Understanding these demographic variables helps to analyze the diversity within the sample and how these factors influence consumption behavior.

Part 2: This section evaluates students' consumption behavior, focusing on consumption methods and purposes. Questions are designed to assess how students purchase products and services and the purposes behind their consumption. The statements cover various aspects, including online and in-store shopping, mobile payments, and the reasons for their purchases.

Part 3: This section examines the intrinsic motivations driving students' consumption behaviors. Questions are designed to measure personal attitudes, personal lifestyle, and personal values using a five-point Likert scale. The statements gauge students' preferences, beliefs, and satisfaction derived from their purchasing decisions.

Part 4: This section assesses the extrinsic motivations influencing students'

consumption behaviors. Questions focus on economic, social, and cultural factors, and on technological factors, using a five-point Likert scale. The statements evaluate the impact of financial aspects, social influences, and technological advancements on students' consumption choices.

From parts 2 to 4, the respondents were asked to rate their level of agreement with the statements using a five-point Likert scale: 1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; and 5: Strongly agree. The interpretation of the average values was shown in a separate section. The responses were analyzed using the arithmetic mean, which yielded continuous numbers with decimals. These means were interpreted as follows:

The mean of 1 but less than 1.5 is in the strongly disagree level.

The mean of 1.5 but less than 2.5 is in the disagree level.

The mean of 2.5 but less than 3.5 is at the neutral level.

The mean of 3.5 but less than 4.5 is at the agree level.

The mean of 4.5 but less than or equal to 5 is at the strongly agree level.

To maximize response rates, the questionnaire included a paragraph outlining the study's nature and purpose. Respondents were informed that their contributions are important and valuable. The questionnaire should take approximately 15-20 minutes to complete.

### **3.5 Content Validity and Reliability**

#### **3.5.1 Content Validity**

Content validity refers to the degree to which the items in a questionnaire are representative of the concept being measured. In this study, content validity was evaluated using the Item-Objective Congruence (IOC) method, as outlined by Hambleton and Cook (1977). This method quantitatively assesses the alignment between test items and measurement objectives by measuring expert judgments.

The process involved three experts in the field reviewing the questionnaire items. Each item was rated based on its congruence with the intended measurement objectives, using the following scale:

A score of 1 indicates the item is consistent with the measurement objective.

A score of 0 indicates uncertainty about the item's consistency.

A score of -1 indicates the item is not consistent with the measurement objective.

The IOC index is calculated using the formula:

$$IOC = \frac{\sum R}{N}$$

Where:

$\sum R$  is the total rating score from all experts for each question.

N is the number of experts.

Items with an IOC index of 0.5 or higher are considered valid and consistent with the research objectives. Items that did not meet this criterion were revised based on expert feedback.

### **3.5.2 Content Reliability**

Reliability refers to the consistency and stability of the measurement instrument. In this study, a reliability test was conducted with 30 participants to assess the questionnaire's internal consistency. The reliability of the measurement scales was assessed using Cronbach's alpha. Cronbach's alpha is a widely used measure of internal consistency, with a high value indicating that the items on the scale consistently measure the same underlying construct (Cronbach, 1951).

According to Hair et al. (2010), a Cronbach's alpha coefficient greater than 0.70 indicates satisfactory reliability for the questionnaire. Additionally, the researcher calculated the Corrected Item-Total Correlation (CITC) values. Items with a CITC value greater than 0.4 are considered to contribute positively to the scale's reliability.

The questionnaire was divided into several sections, each focusing on different variables related to consumption behavior.

Table 3.2 Reliability Analysis of Consumption Behavior

<b>Variable</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>	<b>Mean</b>	<b>Variance</b>	<b>Standard Deviation</b>
Consumption Method (Q6-Q13)	0.802	8	25.72	29.627	5.443
Consumption Purpose (Q14-Q23)	0.858	10	30.64	47.865	6.918
Personal Attitude (Q24-Q26)	0.738	3	9.33	6.862	2.620
Personal Lifestyle (Q27-Q29)	0.766	3	9.31	6.516	2.553
Personal Values (Q30-Q32)	0.768	3	9.43	5.834	2.415
Economic Factors (Q33-Q37)	0.762	5	15.35	13.382	3.658
Social and Cultural Factors (Q38-Q41)	0.805	4	11.43	10.065	3.173
Technological Factors (Q42-Q44)	0.796	3	9.67	6.296	2.511

For each section, Cronbach's alpha coefficients ranged from 0.738 to 0.858, indicating a generally satisfactory level of internal consistency across the scales. The highest reliability was observed for the Consumption Purpose variable (Cronbach's alpha = 0.858), while the Personal Attitude variable showed the lowest, though still acceptable, reliability (Cronbach's alpha = 0.738).

Additionally, the mean, variance, and standard deviation for each section were calculated to offer more details about the data distribution. The relatively low standard deviations indicated that the responses were pretty consistent across respondents.

These results confirm that the questionnaire is a reliable tool for measuring the factors influencing the consumption behavior of college students at Quanzhou College of Technology.

## 3.6 Data Analysis

The data analysis process was designed to provide meaningful insights into the consumption behavior of college students at Quanzhou College of Technology. The analysis was conducted using statistical software to perform various statistical tests and analyses. The following steps outline the data analysis process, tailored to the research hypotheses and the questionnaire content.

### 3.6.1 Data Preparation

First, the collected data were screened to identify and handle missing, incomplete, or inconsistent responses. Invalid responses, such as those with extensive missing data or patterns suggesting random answering, were excluded. Next, responses from the questionnaires were numerically coded to facilitate analysis (e.g., Male = 1, Female = 2; Likert scale responses assigned values from 1 to 5).

### 3.6.2 Descriptive Statistics

Descriptive statistics were used to summarize the data's basic features. Frequency distributions were calculated for categorical variables (e.g., gender, grade level, significant). Measures of central tendency (mean, median, mode) and variability (standard deviation, range) were calculated for continuous variables (e.g., age, monthly income, consumption behaviors).

### 3.6.3 Inferential Statistics

Inferential statistics were used to analyze the data and test the hypotheses at the 0.05 significance level. This analysis aims to test the relationship or interplay between the dependent variable and several independent variables.

**H1: The difference in demographic variables (gender, age, grade level, primary, and monthly income) has differential effects on the consumption behavior of college students.**

An independent-samples t-test was used to analyze the effect of gender on college students' consumption behavior. One-way Analysis of Variance (ANOVA) was used to examine the effects of age, grade level, major, and monthly income on college

students' consumption behavior.

**H2: Intrinsic motivations (personal attitude, personal lifestyle, personal values) have a significant influence on the consumption behavior of college students.**

Multiple linear regression analyses were conducted to evaluate the influence of personal attitudes, personal lifestyles, and personal values on the consumption behavior of college students.

**H3: Extrinsic motivations (economic factors, social and cultural factors, and technological factors) significantly influence the consumption behavior of college students.**

Multiple linear regression analyses were conducted to examine the influence of economic, social, and technological factors on college students' consumption behavior.

#### **3.6.4 Participants**

Quanzhou College of Technology (QCT) is a full-time private higher vocational institution located in Jinjiang, Fujian Province, China. Established in 2009 under the guidance of the Jinjiang Municipal Government, the college was founded in collaboration with five prominent enterprises: Macao Golden Dragon Group, Hengan Group, Anta Group, Xunxing Group, and Aipai Group. The campus spans 600 mu (approximately 400,000 square meters).

QCT comprises seven secondary schools: the School of Intelligent Manufacturing, the School of Healthy Life, the School of Service Economy, the School of Cultural Creativity, the School of Architecture, the School of Education, and the School of Digital Technology, as well as the School of Marxism. These schools offer programs in fields such as food, footwear and apparel, electromechanics, industrial robotics, the Internet of Things, artificial intelligence, integrated circuits, architecture, e-commerce logistics, financial management, accounting, animation, film and television animation, preschool education, and sports management. Notably, the college

has three national key programs, one national collaborative innovation center, one national production training base, and two national professional teaching resource libraries. In the 2023 ABC China Higher Vocational College Rankings, QCT was ranked 10th among private higher vocational colleges nationwide and first in Fujian Province, reflecting its strong comprehensive strengths in the region (Quanzhou College of Technology, July 2024).

Leveraging its resources in the hometown of overseas Chinese, QCT has established 16 "Maritime Silk Road Colleges" through collaborative efforts among government agencies, schools, overseas communities, and enterprises, thereby forming a "Fujian model" for the internationalization of vocational education.

The student population at QCT is diverse, primarily hailing from Fujian Province, with a portion from other regions across the country, providing a rich research sample.





## CHAPTER IV

### ANALYSIS RESULT

#### 4.1 Research Finding

This section presents a comprehensive analysis of key variables influencing student consumption behavior, including demographic factors, consumption behaviors, intrinsic motivations, and extrinsic motivations. The findings are systematically organized and analyzed using frequency distributions and descriptive statistics to provide clear insights into the patterns and influences on student consumption."

##### 4.1.1 Demographic Factors

The demographic characteristics of the respondents are detailed in the table below. The data includes gender, age, grade level, major, and monthly income, presented with frequency and percentage distributions.

Table 4.1 Demographic Characteristics of Respondents

Variable	Category	Frequency	Percent (%)
Gender	Male	184	46.0
	Female	216	54.0
	Total	400	100.0
Age	18-19 years	173	43.3
	20-21 years	206	51.5
	Above 22 years	21	5.3
	Total	400	100.0
Grade Level	Grade One	191	47.8
	Grade Two	139	34.8
	Grade Three	70	17.5
	Total	400	100.0
Major	Food and Catering	194	48.5
	Engineering	20	5.0
	Arts	20	5.0
	Business Management	97	24.3

Variable	Category	Frequency	Percent (%)
Monthly Income	Information Technology	30	7.5
	Education	39	9.8
	Total	400	100.0
	Less than 1000 RMB	53	13.3
	1000 - 2000 RMB	245	61.3
	2001 - 3000 RMB	61	15.3
	3001 - 4000 RMB	14	3.5
	More than 4000 RMB	27	6.8
	Total	400	100.0

From the demographic data, we observe that most respondents are female (54.0%), with a significant proportion in the 20-21-year age group (51.5%). The distribution of respondents across grade levels is weighted towards grade one students (47.8%), followed by grade two (34.8%) and grade three students (17.5%).

Regarding their academic disciplines, nearly half of the respondents (48.5%) are enrolled in Food and Catering, making it the most represented major. Business Management and Information Technology are the most common majors, with 24.3% and 9.8% representation, respectively.

Regarding monthly income, most students (61.3%) report earning between 1000 and 2000 RMB, consistent with typical student budgets. A smaller proportion (6.8%) earn more than 4000 RMB per month, indicating a range of financial situations among the respondents.

#### 4.1.2 Consumption Behavior

This section presents the descriptive statistics for the dependent variable, Consumption Behavior, along with its two main factors: Consumption Methods and Consumption Purposes. These statistics provide insights into the general patterns and tendencies of students' consumption behavior.

Table 4.2 Descriptive Statistics of Consumption Behavior

<b>Consumption Behavior</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>SD</b>	<b>Meaning</b>	<b>Rank</b>
Consumption Methods	10	29	210	137	14	3.29	0.756	Moderate	1
Consumption Purposes	14	38	261	74	13	3.09	0.737	Moderate	2
Overview	8	26	199	152	15	3.35	0.744	-	-

Table 4.2 shows that both consumption methods and consumption purposes exhibit moderate overall mean values of 3.29 and 3.09, respectively, with the overview combining these factors slightly higher at 3.35. Consumption Purposes, with a lower mean and standard deviation (3.09, SD = 0.737) than Consumption Methods (3.29, SD = 0.756), suggests greater consistency in how students perceive their reasons for purchases than their methods. Consequently, Consumption Purposes rank higher (Rank 1), suggesting it may be a more significant factor in shaping overall consumption behavior among students.

#### 4.1.3 Intrinsic Motivations

This section presents the descriptive statistics for the independent variable, intrinsic motivations, along with its three main factors: personal attitude, personal lifestyle, and personal values. These statistics help understand the intrinsic motivations that influence college students' consumption behavior.

Table 4.3 Descriptive Statistics of Intrinsic Motivations

<b>Intrinsic Motivations</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>SD</b>	<b>Meaning</b>	<b>Rank</b>
Personal Attitude	21	54	204	101	20	3.11	0.887	Moderate	2
Personal Lifestyle	19	61	217	78	25	3.07	0.885	Moderate	3
Personal Values	16	47	226	91	20	3.13	0.831	Moderate	1
Overview	14	47	242	81	16	3.10	0.783	-	-

Table 4.3 shows that all three intrinsic motivation factors—personal attitude,

personal lifestyle, and personal values—have moderate mean scores of 3.11, 3.07, and 3.13, respectively. Personal values rank highest, suggesting they may be the most influential intrinsic factor in students' consumption behavior; personal attitude follows, with personal lifestyle ranking last. The standard deviations are consistent across all intrinsic factors, signifying similar response patterns among the students. Overall, this analysis highlights how these intrinsic motivations may impact students' consumption behavior.

#### 4.1.4 Extrinsic Motivations

This section presents descriptive statistics for the independent variable, extrinsic motivations, which comprise three main factors: economic, social and cultural, and technological. These statistics help understand the external factors that influence college students' consumption behavior.

Table 4.4 Descriptive Statistics of Extrinsic Motivations

<b>Extrinsic Motivations</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>SD</b>	<b>Meaning</b>	<b>Rank</b>
Economic Factors	15	43	261	70	11	3.05	0.735	Moderate	2
Social and Cultural Factors	28	60	238	64	10	2.92	0.827	Moderate	3
Technological Factors	14	44	214	102	26	3.21	0.851	Moderate	1
Overview	16	40	266	69	9	3.04	0.722	-	-

Table 4.4 shows that technological factors have the highest mean score of 3.21, suggesting they are the most influential extrinsic factor on student consumption behavior. Economic factors have the highest mean at 3.05, while social and cultural factors have the lowest at 2.92. Overall, the combined effect of these extrinsic factors shows a moderate influence on student consumption, with a mean score of 3.04. This analysis underscores the varying impact of external factors on students' purchasing decisions.

## 4.2 Hypothesis Testing Result

This section presents the results of hypothesis testing examining the relationships among demographic variables, intrinsic motivations, and extrinsic motivations in college students' consumption behavior. Three hypotheses were tested using independent-samples t-tests, a one-way ANOVA, and multiple linear regression to determine the statistical significance and predictive power of the factors influencing consumption behavior.

### 4.2.1 Analysis of Demographic Variables on Consumption Behavior Using Independent Sample T-Tests and One-Way ANOVA

**Hypothesis 1: The differences in demographic variables (gender, age, grade level, major, and monthly income) have differential effects on the consumption behavior of college students.**

**H1a: The difference in gender affects different consumption behaviors of college students.**

Table 4.5 The Analysis Results on Gender Differences Affect Consumption Behavior

Consumption Behavior	Gender	N	Mean	Std. Deviation	t-value	df.	Sig.
Consumption Methods	Male	184	3.1848	0.80204	-2.586	398	0.010
	Female	216	3.3796	0.70503			
Consumption Purposes	Male	184	3.0435	0.82201	-1.039	398	0.299
	Female	216	3.1204	0.65723			
Consumption Behavior	Male	184	3.2609	0.81475	-2.188	398	0.029
	Female	216	3.4259	0.67105			

Table 4.5 shows that there is a significant gender difference in both consumption methods ( $t = -2.587$ ,  $p = 0.010$ ) and overall consumption behavior ( $t = -$

2.188,  $p = 0.029$ ) among college students, with females ( $M = 3.379$ ,  $SD = 0.705$ ) displaying more consistent consumption patterns than males ( $M = 3.148$ ,  $SD = 0.802$ ). However, no significant difference was observed in the consumption purposes between male and female students ( $t = -1.037$ ,  $p = 0.299$ ).

**H1b: The age difference affects the consumption behaviors of college students.**

Table 4.6 The Analysis Results on Age Differences Affecting Consumption Behavior

Age	Source	Sum of Squares	df.	Mean Square	F	Sig.
Consumption Methods	Between Groups	1.310	2	0.655	1.145	0.319
	Within Groups	227.050	397	0.572		
	Total	228.360	399			
Consumption Purposes	Between Groups	0.141	2	0.070	0.129	0.879
	Within Groups	216.969	397	0.547		
	Total	217.110	399			
Consumption Behavior	Between Groups	1.714	2	0.857	1.552	0.213
	Within Groups	219.286	397	0.552		
	Total	221.000	399			

Table 4.6 shows the results indicate no significant differences across age groups in terms of consumption methods, purposes, or overall behavior, with p-values well above 0.05 (Consumption Methods:  $F = 1.145$ ,  $p = 0.319$ ; Consumption Purposes:  $F = 0.129$ ,  $p = 0.879$ ; Consumption Behavior:  $F = 1.552$ ,  $p = 0.213$ ). The lack of significant differences can be attributed to the sample's age distribution being highly concentrated, specifically within the narrow age range of 19, 20, and 21 years. This small age gap leads to minimal variability, thereby providing insufficient power to detect significant differences.

**H1c: The grade-level difference affects the consumption behaviors of college students.**

Table 4.7 The Analysis Results on Grade Level Differences Affect Consumption Behavior

Grade Level	Source	Sum of Squares	df	Mean Square	F	Sig.
Consumption Methods	Between Groups	2.394	2	1.197	2.103	0.123
	Within Groups	225.966	397	0.569		
	Total	228.360	399			
Consumption Purposes	Between Groups	2.238	2	1.119	2.068	0.128
	Within Groups	214.872	397	0.541		
	Total	217.110	399			
Consumption Behavior	Between Groups	1.928	2	0.964	1.747	0.176
	Within Groups	219.072	397	0.552		
	Total	221.000	399			

Table 4.7 presents the results of the analysis of how grade-level differences affect consumption behavior. The results indicate that there are no significant differences across grade levels in terms of consumption methods, purposes, or overall behavior, with p-values above 0.05 (Consumption Methods:  $F = 2.103$ ,  $p = 0.123$ ; Consumption Purposes:  $F = 2.068$ ,  $p = 0.128$ ; Consumption Behavior:  $F = 1.747$ ,  $p = 0.176$ ). The lack of significant differences can be attributed to the sample being heavily concentrated in first-year students, which limits variability across grade levels. This concentration reduces the ability to detect significant differences in consumption behavior among students from different grades.

**H1d: The Major Difference Affects the Consumption Behaviors of College Students**

Table 4.8 The Analysis Results on Major Differences Affecting Consumption Behavior

Major	Source	Sum of Squares	df	Mean Square	F	Sig.
Consumption Methods	Between Groups	0.534	5	0.107	0.185	0.968
	Within Groups	227.826	394	0.578		
	Total	228.360	399			
Consumption Purposes	Between Groups	1.420	5	0.284	0.519	0.762
	Within Groups	215.690	394	0.547		
	Total	217.110	399			
Consumption Behavior	Between Groups	0.908	5	0.182	0.325	0.898
	Within Groups	220.092	394	0.559		
	Total	221.000	399			

From Table 4.8, the results indicate no significant differences across different majors in terms of consumption methods, purposes, or overall behavior, with p-values well above 0.05 (Consumption Methods:  $F = 0.185$ ,  $p = 0.968$ ; Consumption Purposes:  $F = 0.519$ ,  $p = 0.762$ ; Consumption Behavior:  $F = 0.325$ ,  $p = 0.898$ ). The lack of significant differences can be attributed to the concentration of students in a few majors, particularly Food and Catering, which accounts for nearly half of the sample (48.5%). This uneven distribution of majors results in limited variability within the sample, making it difficult to detect significant differences in consumption behaviors among students from different academic disciplines.

### **H1e: The Monthly Income Difference Affects the Consumption Behaviors of College Students**

Table 4.9 The Analysis Results on Monthly Income Differences Affect Consumption Behavior

Monthly Income	Source	Sum of Squares	df	Mean Square	F	Sig.
Consumption Methods	Between Groups	15.005	4	3.751	6.945	0.000
	Within Groups	213.355	395	0.540		
	Total	228.360	399			
Consumption Purposes	Between Groups	12.886	4	3.221	6.231	0.000
	Within Groups	204.224	395	0.517		

Monthly Income	Source	Sum of Squares	df	Mean Square	F	Sig.
	Total	217.110	399			
Consumption Behavior	Between Groups	14.497	4	3.624	6.933	0.000
	Within Groups	206.503	395	0.523		
	Total	221.000	399			

According to the results in Table 4.9, there are significant differences across different monthly income groups in terms of consumption methods, purposes, and overall behavior, with p-values below 0.05 (Consumption Methods:  $F = 6.945$ ,  $p = 0.000$ ; Consumption Purposes:  $F = 6.231$ ,  $p = 0.000$ ; Consumption Behavior:  $F = 6.933$ ,  $p = 0.000$ ). These significant differences can be attributed to the varying levels of disposable income among students, with most of the sample (61.3%) falling within the 1000-2000 RMB monthly income range. Students with higher income levels may have more opportunities to engage in diverse consumption behaviors. In comparison, those with lower incomes may have more constrained spending patterns, which may explain the observed differences.

Table 4.10 The Multiple Comparison of the Mean Value of Different Monthly Income Groups (LSD Test)

Consumption Behavior	Group I	$\bar{X}$	Mean Difference (I-J)				
			Less than 1000 RMB	1000-2000 RMB	2001-3000 RMB	3001-4000 RMB	More than 4000 RMB
Less than 1000 RMB		3.67	-	0.31783*	0.51562*	0.48518*	0.83438*
1000-2000 RMB		3.97	-0.31783*	-	0.19779	0.16735	0.51655*
2001-3000 RMB		3.92	-0.51562*	-0.19779	-	-0.03044	0.31876*
3001-4000 RMB		3.85	-0.48518*	-0.16735	0.03044	-	0.34921
More than 4000 RMB		3.75	-0.83438*	-0.51655*	-0.31876*	-0.34921	-

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 RMB
 

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*\*The mean difference is significant at the 0.05 level.*

*Dependent Variable: Monthly Income*

Table 4.10 highlights significant differences in consumption behavior across different monthly income groups, as shown by the LSD (Least Significant Difference) test. The Table presents the mean differences between income groups, with asterisks (\*) indicating statistically significant differences at the 0.05 level. The LSD test results show that as income increases, consumption behavior changes noticeably, with higher income groups generally spending more. Significant differences confirm that income level is a key factor influencing student consumption behavior.

#### **4.2.2 Multiple Linear Regression Model to Examine the Impact of Intrinsic and Extrinsic Motivations on Consumption Behavior**

Before delving into the analysis, it is important to introduce the multiple linear regression model, which will be used to examine the influence of both intrinsic and extrinsic motivations on consumption behavior. Multiple linear regression is a statistical technique that models the relationship between a dependent variable and two or more independent variables.

The general formula for the multiple linear regression model is:

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_p X_{ip} + \epsilon$$

Where:

$Y_i$  = Dependent variable (e.g., consumption behavior),

$X_{i1}, X_{i2}, \dots, X_{ip}$  = Independent variables (e.g., intrinsic and extrinsic motivations),

$\beta_0$  = intercept (the expected value of Y when all X variables are zero),

$\beta_1, \beta_2, \dots, \beta_p$  = Coefficients for each independent variable (indicating the change in Y for a one-unit change in X, holding other variables constant),

$\epsilon$  = Error term (the variation in Y not explained by the model)

This model will allow us to understand how various motivational factors, both intrinsic and extrinsic, affect consumption behavior among college students. The coefficients ( $\beta$ ) obtained from the regression will provide insights into the relative importance and impact of each motivational factor on the dependent variable.

#### 4.2.2.1 Hypothesis 2

**Intrinsic motivations (personal attitudes, lifestyles, values) significantly influence the consumption behavior of college students.**

This section uses multiple linear regression to assess the impact of three independent variables (personal attitude, personal lifestyle, and personal values) on the dependent variable, consumption behavior (consumption methods and consumption purposes). The estimating equation for the multiple linear regression model is as follows:

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_1$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_2$$

$$Y_T = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_3$$

Where:

$Y_1$  = Consumption Methods

$Y_2$  = Consumption Purposes

$Y_T$  = Consumption Behavior

$X_1$  = Personal Attitude

$X_2$  = Personal Lifestyle

$X_3$  = Personal Values

$\beta_0$  = Intercept (constant term)

$\beta_1, \beta_2, \beta_3$  = Coefficients for each independent variable

$\epsilon_1, \epsilon_2, \epsilon_3$  = Error terms for each equation

**H2a: Personal attitude, personal lifestyle, and personal values have a**

**significant influence on the consumption methods of college students.**

Table 4.11 Summary of the Model Analyzing Intrinsic Motivation Factors and Consumption Methods

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.567 <sup>b</sup>	.322	.318	.62461	2.107

*b. predictor variables: (constant), personal attitude, personal values*

From Table 4.11, the analysis demonstrates that personal attitude and personal values are significant factors influencing the consumption methods of college students. The adjusted R-squared value of 0.318 indicates that about 31.8% of the variance in consumption methods can be explained by these intrinsic motivations.

Table 4.12 Coefficients of the Model Analyzing Intrinsic Motivation Factors and Consumption Methods

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
2 (Constant)	1.590	.134		11.880	.000
Personal Attitude $X_1$	.391	.042	.458	9.368	.000
Personal Values $X_3$	.154	.045	.170	3.467	.001

*Dependent Variable: Consumption Methods*

From Table 4.12, the analysis shows that personal attitude and personal values significantly influence consumption methods among college students. The regression equation based on the results is as follows:

$$Y_1 = 1.590 + 0.391X_1 + 0.154X_3$$

The results suggest that both personal attitude and personal values are statistically significant predictors of consumption methods among students. The positive coefficients indicate that as personal attitudes and values increase, the tendency

to adopt different consumption methods also increases.

During the regression analysis, personal lifestyle was initially included as a predictor but was later excluded because it did not contribute significantly to the model. Specifically, personal lifestyle had a beta value of 0.025 with a t-value of 0.409 ( $p = 0.683$ ), indicating that it does not independently influence consumption methods when personal attitude and personal values are considered.

**H2b: Personal attitude, personal lifestyle, and personal values have a significant influence on the consumption purposes of college students.**

Table 4.13 Summary of the Model Analyzing Intrinsic Motivation Factors and Consumption Purposes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.738 <sup>c</sup>	.544	.541	.49997	1.919

*c. predictor variables: (constant), personal attitude, personal lifestyle, and personal values*

From Table 4.13, the analysis shows that personal attitude, personal values, and personal lifestyle are significant factors influencing the consumption purposes of college students. The adjusted R-squared value of 0.541 indicates that about 54.1% of the variance in consumption purposes can be explained by these intrinsic motivations.

Table 4.14 Coefficients of the Model Analyzing Intrinsic Motivation Factors and Consumption Purposes

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
3 (Constant)	.839	.108		7.741	.000
Personal Attitude $X_1$	.388	.035	.466	11.044	.000
Personal Lifestyle $X_2$	.153	.042	.184	3.664	.000
Personal Values $X_3$	.182	.044	.205	4.175	.000

*Dependent Variable: Consumption Purposes*

Table 4.14 shows that personal attitude, personal values, and personal lifestyle significantly influence consumption purposes among college students. The regression equation based on the results is as follows:

$$Y_2 = 0.839 + 0.388X_1 + 0.153X_2 + 0.182X_3$$

The results suggest that all three intrinsic motivation factors —personal attitude, personal values, and personal lifestyle — are statistically significant predictors of consumption purposes among students. The positive coefficients indicate that as these intrinsic factors increase, the engagement in various consumption purposes also increases.

**H2c: Personal attitude, personal lifestyle, and personal values have a significant influence on the consumption behavior of college students.**

Table 4.15 Summary of the Model Analyzing Intrinsic Motivation Factors and Consumption Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.633 <sup>b</sup>	.401	.398	.57760	2.029

*b. predictor variables: (constant), personal attitude, personal values*

From Table 4.15, the analysis shows that personal attitude and personal values are significant factors influencing the consumption behavior of college students. The adjusted R-squared of 0.398 indicates that about 39.8% of the variance in consumption behavior is explained by these intrinsic motivations.

Table 4.16 Coefficients of the Model Analyzing Intrinsic Motivation Factors and Consumption Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
2 (Constant)	1.459	.124		11.783	.000

Personal Attitude $X_1$	.408	.039	.486	10.570	.000
Personal Values $X_3$	.199	.041	.222	4.826	.000

*Dependent Variable: Consumption Behavior*

Table 4.16 shows that personal attitudes and values significantly influence consumption behavior among college students. The regression equation based on the results is as follows:

$$Y_T = 1.459 + 0.408X_1 + 0.199X_2$$

The results suggest that both personal attitude and personal values are statistically significant predictors of consumption behavior among students. The positive coefficients indicate that as personal attitudes and values increase, engagement in various consumption behaviors also increases.

During the regression analysis, personal lifestyle was initially included as a predictor but was later excluded because it did not contribute significantly to the model. Specifically, personal lifestyle had a beta value of 0.085 with a t-value of 1.476 ( $p = 0.141$ ), indicating that it does not independently influence consumption behavior when personal attitude and personal values are considered.

#### 4.2.2.2 Hypothesis 3

**Extrinsic motivations (economic, social, cultural, and technological) significantly influence college students' consumption behavior.**

This section uses multiple linear regression to assess the impact of three independent variables (economic, social and cultural, and technological factors) on the dependent variable, consumption behavior (consumption methods and consumption purposes). The estimating equation for the multiple linear regression model is as follows:

$$Y_1 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon_1$$

$$Y_2 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon_2$$

$$Y_T = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon_3$$

Where:

$Y_1$  = Consumption Methods

$Y_2$  = Consumption Purposes

$Y_T$  = Consumption Behavior

$X_1$  = Economic Factors

$X_2$  = Social and Cultural Factors

$X_3$  = Technological Factors

$\beta_0$  = Intercept (constant term)

$\beta_1, \beta_2, \beta_3$  = Coefficients for each independent variable

$\epsilon_1, \epsilon_2, \epsilon_3$  = Error terms for each equation.

**H3a: Economic factors, social and cultural factors, and technological factors have a significant influence on the consumption methods of college students.**

Table 4.17 Summary of the Model Analyzing Extrinsic Motivation Factors and Consumption Methods

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.612 <sup>c</sup>	.374	.369	.60081	2.214

*c. predictor variables: (constant), economic factors, social and cultural factors, technological factors*

From Table 4.17, the analysis shows that technological factors, social and cultural factors, and economic factors are significant predictors of consumption methods among college students. The adjusted R-squared value of 0.369 indicates that about 36.9% of the variance in consumption methods can be explained by these extrinsic motivations.

Table 4.18 Coefficients of the Model Analyzing Extrinsic Motivation Factors and Consumption Methods

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
3 (Constant)	1.212	.140		8.653	.000
Economic Factors $X_1$	.215	.055	.209	3.904	.000
Social and Cultural Factors $X_2$	.212	.045	.232	4.675	.000
Technological Factors $X_3$	.251	.048	.282	5.278	.000

*Dependent Variable: Consumption Methods*

From Table 4.18, the analysis indicates that technological factors, social and cultural factors, and economic factors significantly influence consumption methods among college students. The regression equation based on the results is as follows:

$$Y_1 = 1.212 + 0.215X_1 + 0.212X_2 + 0.251X_3$$

The results suggest that technological, social, and economic factors are statistically significant predictors of consumption methods among students. The positive coefficients indicate that as these extrinsic factors increase, the tendency to engage in different consumption methods also increases.

**H3b: Economic factors, social and cultural factors, as well as technological factors, all have a significant influence on the consumption purposes of college students.**

Table 4.19 Summary of the Model Analyzing Extrinsic Motivation Factors and Consumption Purposes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.716 <sup>c</sup>	.513	.509	.51680	2.081

*c. Predictor Variables: (Constant), Economic Factors, Social and Cultural Factors, Technological Factors*

From Table 4.19, the analysis shows that economic factors, social and cultural factors, and technological factors are significant predictors of consumption

purposes among college students. The adjusted R-squared value of 0.509 indicates that about 50.9% of the variance in consumption purposes can be explained by these extrinsic motivations.

Table 4.20 Coefficients of the Model Analyzing Extrinsic Motivation Factors and Consumption Purposes

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
3	(Constant)	.686	.120		5.692	.000
	Economic Factors $X_1$	.355	.047	.354	7.500	.000
	Social and Cultural Factors $X_2$	.234	.039	.263	6.006	.000
	Technological Factors $X_3$	.197	.041	.228	4.827	.000

*Dependent Variable: Consumption Purposes*

From Table 4.20, the analysis indicates that economic factors, social and cultural factors, and technological factors significantly influence consumption purposes among college students. The regression equation based on the results is as follows:

$$Y_2 = 0.686 + 0.355X_1 + 0.234X_2 + 0.197X_3$$

The results suggest that economic, social, and technological factors are statistically significant predictors of consumption purposes among students. The positive coefficients indicate that as these extrinsic factors increase, the purposes for which students consume also diversify and expand.

**H3c: Economic factors, social and cultural factors, and technological factors have a significant influence on the consumption behavior of college students.**

Table 4.21 Summary of the Model Analyzing Extrinsic Motivation Factors and Consumption Behavior

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
3	.666 <sup>c</sup>	.444	.439	.55722	2.149

c. Predictor Variables: (Constant), Economic Factors, Social and Cultural Factors, Technological Factors

From Table 4.21, the analysis shows that technological factors, economic factors, and social and cultural factors are significant predictors of consumption behavior among college students. The adjusted R-squared of 0.439 indicates that about 43.9% of the variance in consumption behavior is explained by these extrinsic motivations.

Table 4.22 Coefficients of the Model Analyzing Extrinsic Motivation Factors and Consumption Behavior

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
3 (Constant)	1.120	.130		8.624	.000
Economic Factors $X_1$	.248	.051	.245	4.860	.000
Social and Cultural Factors $X_2$	.191	.042	.213	4.543	.000
Technological Factors $X_3$	.286	.044	.327	6.480	.000

Dependent Variable: Consumption Behavior

From Table 4.22, the analysis indicates that technological factors, economic factors, and social and cultural factors significantly influence consumption behavior among college students. The regression equation based on the results is as follows:

$$Y_T = 1.120 + 0.248X_1 + 0.191X_2 + 0.286X_3$$

The results suggest that technological, economic, and social and cultural factors are statistically significant predictors of consumption behavior among students.

The positive coefficients indicate that as these extrinsic factors increase, students' overall consumption behavior becomes more complex and diverse.

### 4.3 Summary Results for Data Analysis

This section summarizes the results of the hypotheses tested in this study. The analysis examined the influence of both intrinsic and extrinsic motivation factors on college students' consumption behavior. The results are presented in tables corresponding to the three hypotheses.

Table 4.23 Summary Result for Hypothesis 1: Demographic Variables Influence on Consumption Behavior

Demographic Factors	Consumption Behavior	Results
Gender	$t(398) = -2.188, p = 0.029$	√
Age	$F(2, 397) = 1.552, p = 0.213$	-
Grade Level	$F(2, 397) = 1.747, p = 0.176$	-
Major	$F(5, 394) = 0.325, p = 0.898$	-
Monthly Income	$F(4, 395) = 6.933, p = 0.000$	√

Notes: √ Accept the hypothesis at the significance value of 0.050.

- Reject the hypothesis at the significance value of 0.050.

Table 4.23 shows that gender and monthly income significantly impact consumption behavior, while age, grade level, and major do not, likely due to the sample's concentration, limiting detectable differences.

Table 4.24 Summary Result for Hypothesis 2: Intrinsic Motivation Factors Influence on Consumption Behavior

Intrinsic Motivation Factors	R	R Square	Adjusted R Square	Std. Error of the Estimate
Consumption Methods	0.567	0.322	0.318	0.62461
Consumption Purposes	0.738	0.544	0.541	0.49997
Consumption Behavior	0.633	0.401	0.398	0.57760

Predictors: (constant), personal attitude, personal values, personal lifestyle

Dependent Variable: Consumption Methods, Consumption Purposes, Overall Consumption Behavior

Table 4.25 Summary of the Forecasting Equations for Consumption Behavior of College Students

<b>Dependent Variable</b>	<b>Forecasting Equations</b>
Consumption Methods $Y_1$	$Y_1 = 1.590 + 0.391X_1 + 0.154X_3$
Consumption Purposes $Y_2$	$Y_2 = 0.839 + 0.388X_1 + 0.153X_2 + 0.182X_3$
Consumption Behavior $Y_T$	$Y_T = 1.459 + 0.408X_1 + 0.199X_2$

$X_1 = \text{Personal Attitude}$   $X_2 = \text{Personal Lifestyle}$   $X_3 = \text{Personal Values}$

Tables 4.24 - 4.25 show that personal attitude, personal lifestyle, and personal values significantly influence consumption behavior, with equations detailing their specific effects on different aspects of consumption.

Table 4.26 Summary Result for Hypothesis 3: Extrinsic Motivation Factors Influence on Consumption Behavior

<b>Extrinsic Motivation Factors</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
Consumption Methods	0.612	0.374	0.369	0.60081
Consumption Purposes	0.716	0.513	0.509	0.51680
Consumption Behavior	0.666	0.444	0.439	0.55722

*Predictors: (constant), economic factors, social and cultural factors, technological factors*

*Dependent Variable: Consumption Methods, Consumption Purposes, Overall Consumption Behavior*

Table 4.27 Summary of the Forecasting Equations for Consumption Behavior of College Students

<b>Dependent Variable</b>	<b>Forecasting Equations</b>
Consumption Methods $Y_1$	$Y_1 = 1.212 + 0.215X_1 + 0.212X_2 + 0.251X_3$
Consumption Purposes $Y_2$	$Y_2 = 0.686 + 0.355X_1 + 0.234X_2 + 0.197X_3$
Consumption Behavior $Y_T$	$Y_T = 1.120 + 0.248X_1 + 0.191X_2 + 0.286X_3$

$X_1 = \text{Economic Factor}$   $X_2 = \text{Social and Cultural Factors}$   $X_3 = \text{Technological Factors}$

Tables 4.26 - 4.27 show that economic, social, cultural, and technological factors significantly affect consumption behavior, with the complexity and diversity of behaviors increasing as these factors rise. The forecasting equations reveal the relationship between these factors and student consumption patterns.

## CHAPTER V

### CONCLUSION AND DISCUSSION

#### 5.1 Conclusion

This study provides an in-depth exploration of the factors influencing students' consumption behavior at Quanzhou College of Technology. By analyzing demographic variables, intrinsic motivations, and extrinsic motivations, the research offers valuable insights into how these factors shape college students' consumption behavior, particularly in an increasingly digitalized consumer landscape.

##### 5.1.1 Impact of Demographic Variables

The analysis revealed that gender and monthly income significantly influence consumption behavior. Female students exhibited more diverse and consistent consumption methods than male students, as indicated by a significant difference in consumption methods ( $t = -2.586, p = 0.010$ ). Female students had a higher mean score ( $M = 3.379, SD = 0.705$ ) compared to male students ( $M = 3.185, SD = 0.802$ ). This difference may be attributed to the fact that women generally engage more in fashion-related shopping and value social aspects of consumption, leading to more frequent and varied purchases.

Similarly, monthly income had a notable impact, with significant differences across income groups in consumption methods ( $F = 6.945, p = 0.000$ ) and purposes ( $F = 6.231, p = 0.000$ ). Students with higher monthly incomes (e.g., above 4000 RMB) demonstrated more diverse consumption behaviors, as indicated by higher average scores ( $M = 3.75$ ) than those with lower incomes ( $M = 3.67$ ). This finding is consistent with economic theory: greater disposable income allows for a broader range of purchasing options, as higher-income students can afford more luxury and non-essential goods.

In contrast, age, grade level, and academic major did not significantly affect consumption behavior, as their p-values were greater than 0.05. This could be explained by the homogeneity of the sample, with most students falling into similar age and academic groups, thus reducing variability in these factors. Moreover, the absence of a significant difference among grade levels might suggest that consumption patterns are established early and remain relatively stable throughout students' academic years.

### **5.1.2 Influence of Intrinsic Motivations**

The study showed that intrinsic motivations, particularly personal values and personal attitudes, play a substantial role in influencing consumption behavior. Personal values, which encompass ethical considerations such as sustainability, had the highest impact, with a mean score of 3.13 (SD = 0.831). This suggests that students who place importance on ethical and environmental issues are more likely to make consumption choices that align with these values. The significance of personal values aligns with the growing global awareness around sustainability, as younger generations increasingly prioritize ethical consumption.

Personal attitudes also significantly affected consumption behavior, with a mean score of 3.11 (SD = 0.887). This reflects students' product preferences and beliefs, which often guide their purchasing decisions. Students who hold positive attitudes toward certain products or brands are more likely to engage with them, reinforcing the importance of aligning marketing strategies with the target audience's attitudes.

The personal lifestyle, however, had a weaker influence on consumption (M = 3.07, SD = 0.885), which may be due to the limited lifestyle diversity within the sample. Since most students share similar daily routines and financial situations, lifestyle differences may not significantly influence their purchasing decisions, compared to more distinct intrinsic factors like values and attitudes.

### **5.1.3 Influence of Extrinsic Motivations**

The role of extrinsic motivations was also significant, particularly in the technological domain. With a mean score of 3.21 (SD = 0.851), technological factors

such as the widespread use of mobile payments and online shopping platforms were found to be the most influential external motivators. This reflects the broader trend of digitalization in consumer behavior, where convenience and ease of access drive purchasing decisions. Given the increasing reliance on technology in everyday life, students' consumption habits are increasingly influenced by the tools they use to shop rather than by traditional retail experiences.

Economic factors ( $M = 3.05$ ,  $SD = 0.735$ ) also significantly impacted consumption behavior, with students from wealthier backgrounds showing greater consumption diversity. The data suggest that students with higher incomes have more disposable income to spend on discretionary items, which leads to broader consumption patterns. Social and cultural factors ( $M = 2.92$ ,  $SD = 0.827$ ) were less influential but still significant, especially in the context of peer pressure and social media influence. Students are often influenced by social networks and trends, particularly through platforms like Douyin (TikTok) and Xiaohongshu (RED), where peer recommendations and celebrity endorsements shape purchasing decisions.

#### **5.1.4 Overall Impact and Theoretical Implications**

This study's findings underscore the importance of both intrinsic and extrinsic motivations alongside demographic factors in shaping consumption behavior among college students. The multiple regression analysis confirmed that these factors collectively explain a significant portion of the variance in consumption behavior, with the adjusted R-squared value for the influence of extrinsic motivations on consumption purposes reaching 0.509.

The results highlight the growing impact of technological advancements on consumption and the critical role of personal values in guiding ethical, responsible purchasing decisions. From a theoretical perspective, this study contributes to the literature on consumer behavior by underscoring the importance of integrating both internal (e.g., personal attitudes and values) and external (e.g., technological and economic factors) drivers to understand modern consumption patterns.

For educators and policymakers, the findings suggest the need for targeted interventions that promote financial literacy and responsible consumption among students. Marketing professionals can also leverage these insights by developing campaigns that align with students' ethical values and capitalize on the convenience of digital shopping platforms. Future research should explore how these influences evolve, particularly as new technologies emerge and societal norms continue to shift.

## **5.2 Discussion**

This section compares the findings of this study with existing literature on consumption behavior and examines possible reasons for similarities or differences. The results offer significant insights into how demographic variables, intrinsic motivations, and extrinsic motivations affect college students' consumption behavior at Quanzhou College of Technology, contributing to a growing body of research on consumer behavior in the context of higher education and digitalization.

### **5.2.1 Demographic Influences**

The significant impact of gender on consumption behavior, where female students demonstrated more diverse and consistent purchasing behaviors, is consistent with prior studies. For instance, Smith and Anderson (2020) found that female college students tend to prioritize fashion, beauty products, and social shopping experiences, which explains their greater engagement in varied consumption methods. Similarly, Zhang (2019) noted that women, compared to men, are more likely to engage in online shopping and are influenced by social networks when making purchasing decisions.

However, the finding that age, grade level, and academic major do not significantly affect consumption behavior contrasts with some earlier research. Jones et al. (2019) suggested that younger students typically spend more on social activities and entertainment, while older students focus more on academic expenses. This study, by contrast, found no significant differences based on age or grade level. A possible

explanation is the limited age range and grade-level diversity within the sample, as most respondents were in their early 20s and were primarily first-year students, resulting in less variability. Additionally, the lack of a significant effect of academic major may be due to the relatively similar financial situations and lifestyle expectations among students at Quanzhou College of Technology, regardless of their academic field, as noted by Li and Liu (2018).

The significant effect of monthly income on consumption behavior aligns with Zhang's (2019) findings, which show that students with higher incomes tend to engage in more diverse consumption activities, particularly non-essential goods such as luxury items and entertainment. This supports the economic principle that higher disposable income expands consumer choice and access to a broader range of products and services.

### **5.2.2 Intrinsic Motivations**

The strong influence of personal values on consumption behavior aligns with Deci and Ryan's (2000) Self-Determination Theory (SDT), which emphasizes the role of intrinsic motivations such as ethical considerations and environmental concerns in driving behavior. This study found that students who prioritize ethical values, such as sustainability, are more likely to make consumption choices that reflect those values. Similar findings were reported by Kim et al. (2021), who observed that students with strong environmental consciousness prefer eco-friendly products, supporting the view that personal values are a key driver of responsible consumption.

Personal attitudes also emerged as a significant factor influencing purchasing behavior, consistent with the Theory of Planned Behavior (TPB) proposed by Ajzen (1991). TPB posits that individual attitudes towards a behavior strongly influence the intention to perform that behavior. In this study, students' positive attitudes towards specific products or services, influenced by their beliefs and preferences, led to greater engagement in purchasing those items. This result echoes the work of Huang et al. (2017), who found that students with positive attitudes towards health and fitness

are more likely to spend on health-related products.

However, the weaker impact of personal lifestyle in this study contrasts with previous research. For example, Wang et al. (2017) argued that lifestyle is an important factor that determines students' consumption, particularly in areas such as entertainment and fashion. The lower influence of lifestyle factors in this study may be due to the sample's relative homogeneity, with many students sharing similar financial constraints and daily routines, thereby reducing lifestyle-based consumption differences.

### **5.2.3 Extrinsic Motivations**

The finding that technological factors are the most influential extrinsic motivators for student consumption behavior aligns with the conclusions of Smith and Anderson (2020), who observed a shift in consumer behavior towards digital platforms among younger generations. The widespread adoption of mobile payments and online shopping platforms has reshaped the consumption landscape, making convenience and accessibility primary drivers of purchasing behavior. This study's results further reinforce Zhang's (2019) observation that technological advancements significantly influence the frequency and diversity of purchases, especially in educational settings where students are well-versed in using digital tools.

The influence of economic factors, such as disposable income, supports Ryan and Deci's (2000) argument that financial resources strongly affect discretionary spending. The correlation between higher income and broader consumption patterns is consistent with Wang et al.'s (2017) findings, which showed that students with higher disposable income are more likely to purchase luxury goods and engage in non-essential spending. This study's findings confirm that financial pressures directly influence the variety and frequency of student consumption.

However, the relatively low influence of social and cultural factors ( $M = 2.92$ ) contrasts with the findings of Inayati and Azizah (2019), who emphasized the importance of peer influence and social media in shaping student consumption behavior.

One possible explanation for the lower impact of social factors in this study could be that, while social media and peer influence are important, they may not be as dominant as individual preferences and the availability of technological tools. In the Chinese context, where digital platforms like Douyin (TikTok) and Xiaohongshu (RED) offer a more direct route to consumption than peer recommendations, technology may be a stronger driver than social networks.

#### **5.2.4 Conclusion of Discussion**

Several contextual factors account for the divergence between this study's findings and existing literature. The vocational nature of Quanzhou College of Technology, located in an economically vibrant region, may lead students to prioritize practical consumption over lifestyle-driven spending, which may explain the weaker influence of social factors. Additionally, the rapid digitalization of consumer behavior in China, particularly the widespread use of mobile payments and e-commerce, has likely shifted consumption drivers towards technology-based convenience, reducing the impact of traditional social influences. Cultural and regional factors may also play a role, as China's focus on efficiency and technological adoption may diminish the significance of social and peer influences compared to Western contexts.

In summary, this study enhances the understanding of how personal values, technology, and other factors shape student consumption behavior in a Chinese vocational setting. The evolving nature of consumer behavior in the digital age suggests that future research should further examine the impact of technological advancements and regional variations on consumption behaviors.

### **5.3 Implication for Practice**

The findings of this study provide valuable insights for educators, marketers, and policymakers to influence and guide college students' consumption behavior. By understanding the impact of demographic factors, intrinsic motivations,

and extrinsic motivations on student purchasing decisions, targeted strategies can be developed to promote responsible and effective consumer practices. The implications of this study are discussed based on each of the three key independent variables below.

### **5.3.1 Implications of Demographic Variables**

The significant influence of gender and monthly income on student consumption behavior presents clear opportunities for targeted interventions. Female students exhibited more diverse and consistent consumption behaviors, while students with higher incomes demonstrated broader purchasing patterns. Both educators and marketers can use these insights to design more personalized approaches.

Educators can tailor financial literacy programs to meet the specific needs of different student demographics. For example, since female students tend to engage more in fashion- and social-related shopping, educational programs could focus on teaching budgeting skills related to discretionary spending categories. Programs could also be created to help students from lower-income backgrounds manage their finances more effectively, equipping them with tools to make more responsible consumption decisions based on their financial capacity.

For marketers, segmentation strategies based on demographic characteristics can effectively target student consumers. Marketing campaigns could be designed to resonate with female students' purchasing habits by emphasizing social aspects of consumption, such as group discounts, fashion trends, and beauty products. Marketers could highlight luxury, exclusivity, or convenience in premium products or services for students with higher disposable incomes. Additionally, marketers should consider creating accessible and affordable product lines for students with lower incomes to tap into this segment without alienating them.

Policymakers, particularly in educational settings, can develop support systems that provide financial assistance to students from lower-income backgrounds, enabling them to make better-informed financial decisions. Scholarships, financial aid programs, and even on-campus employment opportunities can help alleviate financial

burdens and positively influence consumption patterns.

### **5.3.2 Implications of Intrinsic Motivations**

Personal values and personal attitudes were found to be strong intrinsic motivators influencing consumption behavior. Specifically, students who prioritize ethical and sustainable consumption were more likely to make purchasing decisions that align with these values. This finding has significant implications for both educators and marketers in promoting ethical consumerism.

For educators, there is an opportunity to integrate sustainability and ethical consumption into the curriculum. Educational institutions can offer workshops, courses, or even entire programs that focus on sustainability, social responsibility, and environmental impact. By raising awareness and equipping students with knowledge about the long-term effects of their consumption choices, educators can encourage more responsible behavior. This is particularly important as younger generations increasingly prioritize ethics in their purchasing decisions.

From a marketing perspective, brands that align their products and services with ethical values can appeal to students who value sustainability and social responsibility. Companies could highlight aspects of their business practices that emphasize fair trade, eco-friendly materials, recyclable packaging, or corporate social responsibility (CSR) initiatives. These campaigns should appeal to students' intrinsic motivations and demonstrate the positive impact of their consumption choices on society and the environment.

Policymakers and educational institutions can also play a role in incentivizing ethical consumption. For example, campus sustainability programs could offer students rewards or recognition for purchasing eco-friendly products or participating in environmental initiatives. Policymakers could also encourage local businesses to adopt more sustainable practices and provide students with incentives to support these businesses.

### 5.3.3 Implications of Extrinsic Motivations

The study found that technological factors, such as mobile payments and online shopping, were the most influential extrinsic motivators for consumption behavior. This suggests that digital convenience has a major effect on how students interact with the marketplace. The increasing reliance on technology in consumption presents clear implications for businesses, educators, and policymakers.

For educators, this emphasizes the need to teach students digital financial literacy. As mobile payment platforms and e-commerce become more integral to daily life, students need to be aware of the potential risks, such as overspending, impulse buying, and data privacy concerns. Courses or workshops on digital financial management would be particularly beneficial, as they cover topics like budgeting for online purchases, using credit responsibly in digital transactions, and protecting personal information.

Marketers should focus on creating seamless, user-friendly digital experiences in response to the growing importance of technology in consumption. This could include optimizing websites for mobile shopping, offering exclusive online promotions, and integrating digital payment options that appeal to tech-savvy students. Additionally, leveraging social media platforms and influencer marketing would be crucial, as students often turn to these platforms for product recommendations and reviews. Engaging with popular influencers on platforms like Douyin (TikTok) or Xiaohongshu (RED) could help brands connect with students in a way that feels authentic and relevant.

Policymakers, particularly those focused on consumer protection, should implement regulations governing digital marketing and mobile payments to ensure that students are not subjected to manipulative marketing practices or unregulated financial products. Additionally, policies could encourage transparency in e-commerce platforms regarding fees, data privacy, and consumer rights.

By understanding the influence of demographic variables, intrinsic

motivations, and extrinsic motivations, educators, marketers, and policymakers can develop targeted strategies that guide students toward more responsible and informed consumption behaviors. Tailoring financial literacy programs to specific demographics, promoting ethical consumerism through education and marketing, and leveraging technology to create engaging digital experiences will be key to addressing the unique needs of student consumers. Moreover, ensuring that policies support responsible digital consumption and protect students from the risks of online shopping will be vital to promoting long-term financial and ethical well-being.

#### **5.4 Recommendation for Future Research**

Building on this study's findings, future research should explore new avenues to deepen our understanding of student consumption behavior, particularly by addressing the limitations of current research. One critical area is the need to broaden the sample population. This study focused solely on students from a single vocational institution, limiting the scope of the results. Future research should include students from various institutions—such as universities with different academic focuses (e.g., liberal arts, engineering, and business schools)—as well as those from different regions and countries. Expanding the demographic range would allow for a more nuanced understanding of how cultural, economic, and academic factors influence consumption behavior across different student groups.

Longitudinal studies should also be prioritized in future research. As consumption behavior is not static, tracking how purchasing habits evolve—primarily as students progress through their academic careers and transition into the workforce—would provide deeper insights. This could also illuminate how external factors, such as changes in economic conditions, employment status, and technological advancements, impact long-term consumption patterns. By adopting a longitudinal approach, future research could offer a more comprehensive view of how students'

motivations and behaviors shift in response to life changes and broader societal developments.

Additionally, future research should explore the impact of emerging technologies on student consumption. The rapid growth of artificial intelligence (AI), virtual reality (VR), and blockchain is reshaping how students interact with the marketplace, particularly through personalized AI-driven recommendations, immersive VR shopping experiences, and the rise of digital currencies. Understanding how these technologies influence purchasing decisions, especially among digital-native students, will be crucial. Finally, psychological factors such as emotional states, impulse control, and the growing influence of social media should be examined more closely, as they play a significant role in shaping purchasing behavior, particularly in online shopping and peer influence.

## **5.5 Limitations of the Study**

This study, while offering valuable insights into students' consumption behavior, has several limitations that should be acknowledged. First, the sample was drawn from a single vocational institution in China, limiting the generalizability of the findings to students in other educational settings, both within and outside China. As vocational students typically have different socio-economic backgrounds and career trajectories than those in traditional universities, this focus may skew the findings. Expanding the sample to include a broader range of educational institutions and diverse student populations would offer a more representative understanding of consumption behavior across different groups.

The study's cross-sectional design is another limitation, as it captures data at a single point in time. This approach does not account for how consumption behavior might change over time due to factors such as life events, economic conditions, or academic progression. A longitudinal design, tracking the same students over several

years, would provide a more dynamic understanding of how consumption patterns evolve, particularly as students move from school to the workforce.

Moreover, the reliance on self-reported data introduces potential biases. Participants may have misrepresented their consumption habits, either intentionally due to social desirability bias or unintentionally due to recall errors. For instance, students may under-report impulsive or irresponsible purchases and over-report ethical consumption to align with perceived social expectations. Future research should consider using objective measures, such as transaction records or behavioral tracking, to provide a more accurate representation of students' consumption behavior.

Lastly, while the study effectively explored demographic, intrinsic, and extrinsic motivations, it did not fully account for psychological and emotional factors that can drive consumption. Variables such as emotional stress, peer pressure, and impulse buying are crucial in understanding why students make certain purchasing decisions, especially in digital environments where immediate gratification is encouraged. Future studies should incorporate these psychological dimensions to provide a more holistic view of the factors influencing student consumption.

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## APPENDICES

### FACTORS INFLUENCING THE CONSUMPTION BEHAVIOR OF COLLEGE STUDENTS AT QUANZHOU COLLEGE OF TECHNOLOGY

Dear respondents,

I am conducting a study to understand the influence of intrinsic and extrinsic motivation on the consumption behavior of college students at Quanzhou College of Technology. I cordially welcome you to take this survey. Your participation in this survey will significantly contribute to understanding the current status of intrinsic and extrinsic motivation. Please answer the questions honestly based on your circumstances and viewpoint. The questionnaire should take approximately 15-20 minutes to complete. No personal data is collected in this questionnaire; it is intended solely for academic research. Your responses will be treated with absolute confidence.

I greatly appreciate your valuable time and insights. Thank you for participating in this study.

Sincerely,

Mrs. Qiaoling Xie

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#### **Part 1: Demographic Information**

Please answer the questions by checking  in the appropriate box.

1. What is your gender?
 

<input type="checkbox"/> 1. Male	<input type="checkbox"/> 2. Female
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2. What is your age?
 

<input type="checkbox"/> 1. 18-19 years old	<input type="checkbox"/> 2. 20-21years old
<input type="checkbox"/> 3. Above 22 years old	
3. What is your grade level?
 

<input type="checkbox"/> 1. Grade One	<input type="checkbox"/> 2. Grade Two
<input type="checkbox"/> 3. Grade Three	

4. What is the major of your study?
1. Food and catering                       2. Engineering
3. Fashion and Arts                       4. Business Management
5. Information Technology                       6. Education
5. What is your monthly income? (total from parent support + sponsorship + part-time job)
1. Less than 1000 RMB                       2. 1000-2000 RMB
3. 2001-3000 RMB                       4. 3001-4000 RMB
5. More than 4000 RMB

### Part 2: Consumption Behavior

Please read the following questions carefully and tick  $\checkmark$  in the boxes according to your opinion on consumption behavior using the following scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

No.	Consumption Methods	1	2	3	4	5
	<b>Online Shopping</b>	1	2	3	4	5
6.	I prefer online shopping for most of my purchases.					
7.	I often shop on e-commerce platforms like Taobao, JD.com, and Pinduoduo.					
	<b>In-store Shopping</b>	1	2	3	4	5
8.	I prefer shopping in physical stores so I can see and touch products before buying.					
9.	Most of my in-store shopping is done at campus stores.					
	<b>Mobile Shopping</b>	1	2	3	4	5
10.	I make purchases using mobile apps at least once a week.					
11.	I frequently use mobile apps for food delivery services.					
	<b>Payment Method</b>	1	2	3	4	5
12.	I use mobile payment methods such as WeChat Pay and Alipay daily.					
13.	I prefer paying in cash or with credit/debit cards for my purchases.					
	<b>Consumption Purposes</b>	1	2	3	4	5
	<b>Basic Needs</b>	1	2	3	4	5
14.	My main expenses are for necessities like food, drinks, and daily essentials.					
15.	I regularly budget to ensure my basic needs are met.					
	<b>Education Needs</b>	1	2	3	4	5
16.	I spend a significant portion of my budget on educational materials such as books and stationery.					
17.	I allocate funds for tuition fees and other educational expenses					

	(e.g., certification, self-improvement).					
	<b>Recreation Needs</b>	1	2	3	4	5
18.	I spend money on leisure activities such as travel, movies, and entertainment products.					
19.	I allocate part of my budget for hobbies and recreational activities.					
	<b>Social Needs</b>	1	2	3	4	5
20.	I spend money on social activities like dining with friends and dating.					
21.	I budget for social events and gatherings with peers, but often exceed my budget.					
	<b>Luxury Needs</b>	1	2	3	4	5
22.	I buy luxury or high-end products occasionally.					
23.	I allocate funds for purchasing branded and luxury items.					

### Part 3: Intrinsic Motivations

Please read the following questions carefully and tick  $\checkmark$  in the boxes according to your opinion of intrinsic motivations using the following scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

No.	Personal Attitude	1	2	3	4	5
24.	I prefer buying products that reflect my personality.					
25.	I believe the quality of the product and service is very important.					
26.	I think shopping can relieve stress and anxiety.					
	<b>Personal Lifestyle</b>	1	2	3	4	5
27.	I enjoy recreational activities and love sports.					
28.	I like challenges and trying new products and brands.					
29.	I prefer quiet time alone, reading books or listening to music.					
	<b>Personal Values</b>	1	2	3	4	5
30.	I prefer buying environmentally friendly and sustainable products.					
31.	I regularly save money and consider my future financial status.					
32.	I tend to choose products that align with social responsibility and ethical standards.					

#### Part 4: Extrinsic Motivations

Please read the following questions carefully and tick  $\checkmark$  in the boxes according to your opinion of extrinsic motivations using the following scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

No.	Economic Factors	1	2	3	4	5
33.	Family income significantly affects my consumption behavior.					
34.	My personal income (such as from part-time jobs or scholarships) influences my consumption choices.					
35.	I use online credit tools (such as Huabei and Jiebei) for advanced consumption.					
36.	Changes in price levels affect my consumption behavior.					
37.	Discounts and promotions influence my purchase decisions.					
	<b>Social and Cultural Factors</b>	1	2	3	4	5
38.	Social media advertisements and recommendations influence my purchase decisions.					
39.	I often buy products based on recommendations from friends and classmates.					
40.	Campus culture and activities influence my consumption behavior.					
41.	Endorsements by internet celebrities and stars influence my purchase choices.					
	<b>Technological Factors</b>	1	2	3	4	5
42.	The convenience of mobile payments and e-commerce affects my consumption behavior.					
43.	Technological innovations (such as smart devices, virtual reality, and electronics upgrades) attract me to consume.					
44.	The development of various shopping and service apps (such as Pinduoduo, Douyin, food delivery platforms, Didi, etc.) increases my consumption frequency.					

## 泉州轻工职业学院学生消费行为调查问卷

尊敬的受访者：

我正在进行一项研究，以了解内在动机和外在动机对泉州轻工职业学院大学生消费行为的影响。我诚挚地邀请您参加此次调查。您对这次调查的参与将对理解当前内在动机和外在动机的现状做出重要贡献。请根据您的实际情况和观点诚实地回答问题。完成问卷大约需要 15-20 分钟。本问卷不收集任何个人数据，仅用于学术研究。您的回答将被绝对保密。

非常感谢您宝贵的时间和见解。感谢您参与本次研究。

此致

谢巧玲

管理科学硕士学生

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### 第一部分：个人基本信息

请在适当的方框中打√

1. 性别

1. 男

2. 女

2. 年龄

1. 18-19 岁

2. 20-21 岁

3. 22 岁以上

3. 年级

1. 大一

2. 大二

3. 大三

4. 专业

1. 食品餐饮类

2. 工程制造类

3. 时尚艺术类

4. 商务管理类

5. 信息技术类

6. 教育教学类

5. 你的月收入是多少? (生活费+奖学金+兼职工作的总金额)

1. 1000 元以下                       2. 1000-2000 元  
 3. 2001-3000 元                       4. 3001-4000 元  
 5. 4000 元以上

## 第二部分：消费行为

请仔细阅读以下问题，并根据您的消费行为意见在方框中打√，使用以下评分标准：1=非常不同意，2=不同意，3=中立，4=同意，5=非常同意

No.	消费方式	1	2	3	4	5
	<b>在线购物</b>	1	2	3	4	5
6.	我的大部分购物都是网上购物。					
7.	我经常在淘宝、京东、拼多多等电商平台购物。					
	<b>实体店购物</b>	1	2	3	4	5
8.	我喜欢在实体店购物因为可以看到和触摸商品。					
9.	我在实体店消费大部分是在校园商店消费					
	<b>移动购物</b>	1	2	3	4	5
10.	我每周都使用手机 app 进行消费					
11.	我经常用手机 app 叫外卖					
	<b>支付方式</b>	1	2	3	4	5
12.	我每天使用微信支付和支付宝等移动支付方式。					
13.	我更喜欢使用现金或银行卡支付。					
	<b>消费用途</b>	1	2	3	4	5
	<b>基本需求</b>	1	2	3	4	5
14.	我的主要支出是基本生活需求，如食品、饮料和日用品。					
15.	我每个月都会留出预算以确保满足基本生活需求。					
	<b>教育需求</b>	1	2	3	4	5
16.	我有一大部分预算用于教育材料，如书籍和文具等。					
17.	我除了学费，还会为其他教育支出分配资金。（如考证、提升自我）					
	<b>娱乐需求</b>	1	2	3	4	5
18.	我花费在休闲活动上，如旅行、电影和娱乐产品。					
19.	我将部分预算用于个人兴趣爱好上。					
	<b>社会需求</b>	1	2	3	4	5
20.	我花费在社交活动上，如与朋友一起吃饭和约会。					
21.	我为社交活动和同伴聚留预算，但经常超出					
	<b>奢侈品需求</b>	1	2	3	4	5
22.	我偶尔购买奢侈品或高端产品。					
23.	我追求品质和高端享受，会为购买品牌和奢侈品分配资金。					

### 第三部分：内在动机

请仔细阅读以下问题，并根据您的内在动机意见在方框中打√，使用以下评分标准：1=非常不同意，2=不同意，3=中立，4=同意，5=非常同意。

No.	个人态度	1	2	3	4	5
24.	我喜欢购买反映我个性的产品。					
25.	我认为产品和服务的质量非常重要。					
26.	我认为购物能缓解压力和焦虑。					
	<b>个人生活方式</b>	1	2	3	4	5
27.	我喜欢运动，热爱参与各项活动					
28.	我喜欢挑战，尝试新产品和品牌。					
29.	我喜欢安静独处，看书听音乐。					
	<b>个人价值观</b>	1	2	3	4	5
30.	我倾向于购买环保和可回收利用的产品。					
31.	我定期存钱，并考虑未来的财务状况。					
32.	我愿意购买各种公益产品和惠农产品，支持社会发展					

### 第四部分：外在动机

请仔细阅读以下问题，并根据您的外在动机意见在方框中打√，使用以下评分标准：1=非常不同意，2=不同意，3=中立，4=同意，5=非常同意

No.	经济因素	1	2	3	4	5
33.	家庭收入对我的消费行为有显著影响。					
34.	我的个人收入（如兼职收入、奖学金）影响我的消费选择。					
35.	我会使用网络信贷工具（如花呗、借呗）进行超前消费。					
36.	物价水平的变化影响我的消费行为。					
37.	折扣和促销活动影响我的购买决策。					
	<b>社会文化因素</b>	1	2	3	4	5
38.	社交媒体上的广告和推荐影响我的购买决策。					
39.	我经常在朋友和同学的影响下购买商品。					
40.	校园文化和活动影响我的消费行为。					
41.	网红推荐和明星代言影响我的购买选择。					
	<b>技术因素</b>	1	2	3	4	5
42.	移动支付和电子商务，互联网的便利性影响我的消费行为。					
43.	技术创新（如智能设备、虚拟现实技术、电子产品升级换代等）吸引我进行消费。					
44.	各种购物和服务 app 的开发(拼多多、抖音、各种外卖平台、滴滴等)增加了我的消费频率。					

Table 3.2 IOC Validity Table for Questionnaire Items

Item No.	Expert 1 Rating	Expert 2 Rating	Expert 3 Rating	$\Sigma R$ (Total Rating)	IOC Index	Validity Decision
Q1	1	1	1	3	1.00	Valid
Q2	1	1	0	2	0.67	Valid
Q3	1	-1	1	1	0.33	Revise
Q4	0	1	1	2	0.67	Valid
Q5	1	0	1	2	0.67	Valid
Q6	1	1	1	3	1.00	Valid
Q7	1	1	0	2	0.67	Valid
Q8	1	0	1	2	0.67	Valid
Q9	1	-1	1	1	0.33	Revise
Q10	1	1	1	3	1.00	Valid
Q11	1	0	0	1	0.33	Revise
Q12	1	1	1	3	1.00	Valid
Q13	1	1	1	3	1.00	Valid
Q14	1	0	1	2	0.67	Valid
Q15	1	1	1	3	1.00	Valid
Q16	1	0	1	2	0.67	Valid
Q17	1	1	0	2	0.67	Valid
Q18	1	1	1	3	1.00	Valid
Q19	1	-1	1	1	0.33	Revise
Q20	1	0	1	2	0.67	Valid
Q21	1	1	1	3	1.00	Valid
Q22	0	1	1	2	0.67	Valid
Q23	1	0	0	1	0.33	Revise
Q24	1	1	1	3	1.00	Valid
Q25	1	1	1	3	1.00	Valid
Q26	1	0	1	2	0.67	Valid
Q27	1	1	1	3	1.00	Valid
Q28	1	0	1	2	0.67	Valid
Q29	1	-1	1	1	0.33	Revise
Q30	1	1	0	2	0.67	Valid
Q31	1	1	1	3	1.00	Valid
Q32	1	0	1	2	0.67	Valid
Q33	1	1	1	3	1.00	Valid
Q34	1	1	0	2	0.67	Valid
Q35	1	-1	1	1	0.33	Revise
Q36	1	1	1	3	1.00	Valid
Q37	1	1	0	2	0.67	Valid
Q38	1	0	1	2	0.67	Valid
Q39	1	-1	1	1	0.33	Revise

Item No.	Expert 1 Rating	Expert 2 Rating	Expert 3 Rating	$\Sigma R$ (Total Rating)	IOC Index	Validity Decision
Q40	1	1	1	3	1.00	Valid
Q41	1	1	1	3	1.00	Valid
Q42	1	1	0	2	0.67	Valid
Q43	1	1	1	3	1.00	Valid
Q44	1	0	1	2	0.67	Valid

Table 3.2 indicates that most items achieved an IOC index of 0.67 or higher, suggesting that they are valid and consistent with the research objectives. However, a few items scored below 0.5, suggesting they may not fully align with the intended objectives and should be revised for greater clarity and consistency. Overall, the majority of the items are well-aligned, contributing to the questionnaire's robustness in measuring the constructs of interest.

