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《社会科学与管理》是泰国正大管理学大主办的中文版学术期刊，创刊于 2017 年，于当年 6 月正式出版，2025 年已被列入 TCI 1（泰国期刊引文索引一区）。所有期刊皆可在本刊官网 https://so01.tci-thaijo.org/index.php/CJSSM/index 查阅。

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语言：中文与英文

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The Chinese Journal of Social Science and Management (CJSSM) is a Chinese-language academic journal which is owned by Panyapiwat Institute of Management. It was published in 2017 and officially certified by the Thai Journal Citation Index Centre Index as being in the first tier of Journals in Humanities and Social Sciences (TCI 1) in June of 2025. It is an online journal and published at https://so01.tci-thaijo.org/index.php/CJSSM/index

Objectives

The objectives of the CJSSM are to promote research study and development in the area of social science and management, and to provide a platform for researchers and academics to exchange their views and publish the results of their studies. It was designed specifically to help produce clear and concise article, publish original and leading-edge academic research, and disseminate these research results to the global community.

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1. Management: Business Management, Marketing, Management and Accounting, Human Resource Management, Organizational Management, Strategic Management, Logistics Management, Arts Management, and Tourism Management

2. Education: Teaching Curriculum, Educational Techniques, Measurement and Assessment, and Educational Management

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- Issue 2: July-December

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The institute reserves the right to refund the article publication fee in all cases.

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主编寄语

尊敬的读者：

我们非常荣幸地向您呈现《社会科学与管理》（CJSSM）2026 年 1-6 月刊，第 10 卷第 1 期。本期是本刊发展历程中的一个重要里程碑，标志着期刊在学术影响力与国际化发展方面迈上新的台阶。

在荣获泰国学术期刊引文中心（TCI）第一等级（TCI1）期刊认证的基础上，《CJSSM》始终致力于推动高质量、跨学科研究的发展，促进理论与实践的融合，并加强区域经验与全球视野之间的联系。本期尤为重要之处在于，本刊**首次正式刊登英文稿件**，体现了我们拓展国际学术交流与提升全球可及性的战略方向。

本期共刊登**二十篇经严格同行评审**的学术论文，作者来自泰国与中国多所知名高校及研究机构。研究主题涵盖广泛，主要包括：

- **教育与人才发展：**职业教育、心理需求与学生发展、教师领导力、高校辅导员体系以及人工智能在教育中的应用；
- **工商与组织管理：**领导力、心理安全、员工创新行为、资质过剩问题以及高校孵化器发展模式；
- **消费者行为与市场研究：**计划行为理论的拓展应用、植物基食品消费、Z 世代低酒精饮品消费行为，以及医疗服务中的信任与忠诚关系；
- **经济与社区发展：**基于充分经济理念的家庭储蓄模型以及后疫情时代侨民餐饮业的韧性与文化适应；
- **科技与社会：**人工智能辅助翻译及数字化转型对教育与社会的影响；
- **旅游、文化与语言研究：**旅游服务质量、跨文化适应、语言对比研究以及国际中文教育发展。

值得注意的是，本期多篇研究采用结构方程模型、混合研究方法及数据驱动分析等先进研究方法，体现出该领域研究在方法论上的不断深化与成熟。

总体而言，这些研究成果充分展现了东南亚地区中文及双语学术研究的蓬勃发展态势。不仅丰富了相关领域的理论体系，也为教育实践、政策制定及行业发展提供了重要参考与启示。

随着《CJSSM》不断拓展其国际影响力，我们将继续秉持学术诚信、出版伦理与全球学术合作的原则，致力于打造一个具有学术价值与思想深度的国际交流平台，促进跨学科、跨文化与跨语言的学术对话。

在此，我们谨向所有作者、审稿专家及读者致以诚挚的感谢，感谢您们一直以来的信任与支持。

谨致问候，

Asst. Prof. Dr. Pak Thaldumrong（何荣良）

主编

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Editor's Note

Dear Esteemed Readers,

It is with great pleasure that we present **Volume 10, Issue 1 (January–June 2026)** of the *Chinese Journal of Social Science and Management (CJSSM)*—A milestone issue that marks the journal's continued growth in both academic scope and international engagement.

Building upon our recognition as a Tier 1 journal (TCI1), *CJSSM* remains committed to fostering high-quality, interdisciplinary scholarship that bridges theory and practice, while strengthening connections between regional insights and global perspectives. This issue is particularly significant as it represents the journal's **first volume welcoming English-language submissions**, reflecting our strategic effort to expand international accessibility and scholarly collaboration.

This issue features **twenty peer-reviewed articles** contributed by scholars from leading institutions in Thailand and China. The collection reflects a rich diversity of contemporary research topics, including:

- **Education and Human Development:** Vocational education, psychological needs and student development, teacher leadership, counselor systems, and AI integration in education;
- **Business, Management, and Organizational Studies:** Leadership styles, psychological safety, employee innovation, over qualification, and business incubation models;
- **Consumer Behavior and Marketing:** Applications of the Theory of Planned Behavior, plant-based consumption, low-alcohol beverage trends among Gen Z, and trust-loyalty dynamics in healthcare services;
- **Economics and Community Development:** Household savings models based on the Sufficiency Economy Philosophy and post-COVID resilience in diaspora businesses;
- **Technology and Society:** AI-assisted translation and digital transformation in education and society;
- **Tourism, Culture, and Linguistics**: Tourism service quality, cross-cultural adaptation, comparative linguistics, and international Chinese language education.

Notably, many contributions employ advanced empirical methods, including structural modeling, mixed-method approaches, and data-driven analysis, demonstrating the increasing methodological rigor and academic maturity of research in this field.

Collectively, these studies highlight the dynamic evolution of Chinese-language and bilingual scholarship in Southeast Asia. They not only advance theoretical discourse but also provide

practical implications for educators, policymakers, and industry practitioners navigating complex social and economic transformations.

As *CJSSM* continues to expand its international reach, we reaffirm our commitment to academic integrity, ethical publishing, and meaningful global engagement. We will continue to serve as a platform for impactful research, fostering dialogue across disciplines, cultures, and languages.

We extend our sincere appreciation to all authors, reviewers, and readers for their invaluable contributions and continued support.

With warm regards,

Asst. Prof. Dr. Pak Thaldumrong

Editor-in-Chief

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Abstract

Purpose: This research aimed to examine saving and spending behaviors, household items usage, and identify factors influencing the amounts of savings, spending, and household item usage. It also examines household saving patterns in Bangkok communities based on the Sufficiency Economy Philosophy.

Study Design/Methodology/Approach: This study employed a mixed-methods approach, combining quantitative and qualitative methods. The sample included 60 residents and workers from Bangkok communities. Quantitative data were collected via questionnaires and analyzed using descriptive statistics, including percentages, means, and standard deviations. Qualitative data were collected through group and in-depth interviews and analyzed using content analysis, interpretation, and conclusion drawing aligned with the research objectives.

Findings: Research findings indicate that age and financial discipline influence savings decisions. As people age, they tend to save more and withdraw less. However, part of the sample group lacked savings due to insufficient income was not enough to cover their expenses. Consequently, they withdraw their savings, which typically lasted no more than two years, a period not considered true retirement planning. A key issue was a lack of knowledge about asset investment and how to balance between savings and investments. Therefore, education about savings from government agencies, local politicians, and external organizations involved in community economic development is crucial.

Originality/Value: People with heavy debt feel ashamed and avoid seeking help; city living and high costs make life difficult for low earners; saving money cuts expenses or raises income; paying debts reduces creditors and debt value; incentives must boost savers' benefits; budgeting and household accounts help repair debt; excessive lending-driven consumption is the main root cause.

Keywords: Saving, Household, Principle of Self-Sufficiency Economy

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Introduction

In 2022, Thailand's economic landscape confronted multifaceted challenges in the aftermath of the COVID-19 pandemic. These included pervasive unemployment, a discernible decline in household incomes, and a notable escalation in the cost of living, primarily driven by inflated oil prices attributed to the conflict between Russia and Ukraine, as well as geopolitical tensions between China and the United States. Concurrently, the proliferation of disruptive technologies and the advancements in Artificial Intelligence (AI) have increasingly supplanted traditional labor forces. Despite the prevailing adherence to the Sufficiency Economy Philosophy and the principles of New Theory Agriculture among the Thai populace, household incomes in Bangkok have not demonstrated a sufficiently robust increase.

A survey conducted by the Government Savings Bank Research Center in the fourth quarter of 2020 revealed that 74.10 percent of grassroots households made concerted efforts to save; however, a predominant behavioral pattern involved prioritizing immediate consumption, with savings being accumulated only from residual funds. Households typically earmarked these savings for contingencies such as old age/retirement, emergencies, and periods of business inactivity. While Thailand holds the second position in savings among Southeast Asian nations, trailing only Singapore, a significant 62.00 percent of Thai households continue to contend with insufficient income. This financial precarity necessitates the adoption of various coping mechanisms, including expenditure reduction, drawing upon existing savings, borrowing, and leveraging online credit services (Government Savings Bank Research Center, 2018). Furthermore, data from the National Statistical Office in 2021 indicate a continuous and concerning escalation in average household debt in Bangkok. This trend leaves Thai households vulnerable, devoid of adequate savings, and compelled to rely on debt during economic crises, consequently precipitating conditions of poverty (National Statistical Office, 2021).

In recent years, the community has assimilated the prevailing cultures of competitiveness and consumerism, alongside the forces of globalization. This assimilation has profoundly impacted the community's traditional way of life. Consequently, local traditions and cultural practices have been altered through the increasing adoption of urban societal values. This shift has contributed to a state of rising indebtedness among community members, leading to heightened stress and anxiety over the potential loss of assets due to debt obligations (Chumchue et al., 2012).

A community survey revealed that a majority of members have precarious and low incomes, lacking effective strategies for expenditure reduction and income augmentation. This compels a reliance on loans from formal banking institutions and informal credit sources. The situation is exacerbated by a high cost of living and prevalent unemployment. Within the community, civil servants—Predominantly teachers—Are perceived as having a stable profession, which facilitates their access to credit. Consequently, this demographic exhibits high levels of debt. The combination of a high cost of living and expenditure exceeding income results in a lack of savings and precarious household financial stability for these educators.

In light of these preliminary findings, the researchers identified a need within the Khlong Sam Wa District of Bangkok. Therefore, it is proposed that a research project be implemented to provide knowledge and practical training for household members and teachers at local community schools in this district. The primary objective is to investigate and develop a suitable household saving model, grounded in the principles of the Sufficiency Economy Philosophy, that is appropriately tailored to the contemporary lifestyles of residents in this metropolitan district of Bangkok.

Objectives

1. To investigate the saving and spending behaviors and the utilization of household goods among target households.
2. To identify factors associated with household saving levels, financial expenditure, and resource utilization.
3. To develop and propose a household saving model grounded in the principles of the Sufficiency Economy Philosophy.

Scope of Research

Population Scope: The target population for this research is situated in the Khlong Sam Wa District of Bangkok, which consists of households and local schools, totaling 120 people.

Sample Selection: A purposive sampling methodology was employed for sample selection. The researchers established specific selection criteria based on community characteristics, occupational profiles, and household living conditions to ensure the sample's relevance to the research objectives. A total sample of 60 participants was selected from these households and schools within the Khlong Sam Wa District.

Content Scope: The content scope of this research is centered on the investigation of saving behaviors and their correlated factors. Established principles and theories of saving inform the theoretical framework, the savings guidelines articulated by His Majesty King Bhumibol Adulyadej the Great (Rama IX), the 5S principles, and tenets of orderly household management. Furthermore, the study encompasses the domain of personal and family financial management to facilitate the development of a suitable household saving model.

Geographical Scope: The geographical scope of this study is confined to communities within the Khlong Sam Wa District, Bangkok, Thailand.

Literature Review

Saving is defined as the act of reserving surplus resources essential for subsistence from present consumption for future utilization. The motivations for saving encompass several objectives, including: (1) for unforeseen contingencies and emergency expenditures; (2) for educational expenses; (3) for the

acquisition of goods; (4) for housing or accommodation; (5) for retirement or old age; (6) for establishing financial security; (7) to seek returns or profits from the saved capital; (8) as capital for business ventures; (9) for social activities and obligations; (10) as an inheritance for descendants; and (11) for other significant life events, such as tourism, wedding ceremonies, childbirth, and child-rearing costs (Nuchnum & Siriwong, 2015).

The forms of saving can be categorized into three primary types. First, saving in the form of fixed assets involves allocating surplus income to purchase tangible assets. These assets are typically held as a hedge against future risks, despite their very low liquidity. Second, saving in the form of financial assets involves holding wealth in financial instruments. The rationale for choosing this form varies, influenced by factors such as high liquidity, the potential for high returns, and associated risk levels. Third, saving through formal institutions. These are entities established under legal regulations and operating under specific legislation about savings. Consequently, the saving models offered by these institutions are legally regulated and structured (Namboonmee, 2020).

Theories of Saving

Topothai (2021), Pakdee (2009), and Tawichsri (2019) stated that theories of saving are fundamentally based on theories of consumption. While numerous frameworks exist, this review focuses on four seminal hypotheses that explain the determinants of saving: (1) The Absolute Income Hypothesis: Developed by Keynes (1936), this hypothesis posits that consumption increases as income rises; however, the increase in consumption is not proportional to the increase in income. Consequently, saving is defined as the difference between income and consumption. (2) The Relative Income Hypothesis: This theory, attributed to Duesenberry (1949) argues that an individual's consumption is determined not by their absolute income level, but by their income relative to others. This comparison occurs in two forms: First, income relative to that of other individuals within the same social group. This leads lower-income individuals to have a higher average propensity to consume as they attempt to maintain consumption levels comparable to those of others in their society. Second, current income relative to past income levels, as Duesenberry posited, that consumption habits are persistent and influenced by past behavior. (3) The Permanent Income Hypothesis: A theory developed by Friedman (1986), which is based on two key premises. First, current income is disaggregated into two components: permanent income, which is the long-term, stable income a household expects to receive, and transitory income, which represents unforeseen and uncertain windfalls or losses. Transitory income thus constitutes the volatile component of current income that deviates from the long-term trend. Second, the true relationship between consumption and income is primarily driven by permanent income. Saving, therefore, arises from both permanent and transitory income components. (4) The Life-Cycle Hypothesis: Initially developed by Modigliani and Brumberg (1955) and subsequently refined by Ando and Modigliani (1963), this theory emphasizes consumption smoothing over an individual's lifetime to maximize utility. This is achieved by planning consumption based on total lifetime resources, which include both current and expected future income derived from

labor and assets. Saving patterns are thus a function of income and consumption across different life stages. Typically, savings are negative during the early stages of life (often involving borrowing) and late stages (dissaving or drawing down on accumulated wealth during retirement). (5) The concept emphasizing the significance of high-interest rates for savings mobilization is attributed to R.I. Mckinnon (Pakdee, 2009). (6) This refers to the life-cycle model of household consumption and savings, based on the Permanent Income Hypothesis under Rational Expectations. (7) Risks associated with saving and investment arise from three main factors: (1) Inflation risk: This occurs when the return on savings or investments falls below the inflation rate, leading to a decrease in the real value of assets after accounting for inflation. (2) Liquidity risk: This pertains to the investor's ability to access funds from their invested assets in alignment with their investment objectives. (3) Environmental risk: This encompasses the impact of various external factors on returns, such as political and economic conditions.

The Philosophy of Sufficiency Economy

Development based on the Sufficiency Economy Philosophy (SEP) is predicated on the principles of moderation and prudence. It emphasizes sufficiency, reasonableness, and self-immunity, all underpinned by knowledge and morality (The Royal Encyclopedia of His Majesty the King, 2009).

Saving under the Philosophy of Sufficiency Economy was guided by His Majesty King Bhumibol Adulyadej the Great's seven principles of saving: (1) Self-management of finances, avoiding unnecessary extravagance for saving money to purchase desired items independently. (2) Consistently saving money in a bank account. (3) Practicing frugality and valuing possessions. (4) Maintaining household income and expenditure accounts. (5) Considering appropriate moderation and reasonableness, ensuring neither too little nor too much, without imposing on oneself or others, and ensuring items are of suitable value and cost-effective for use, living within one's means without extravagance or luxury. (6) Investing saved money concurrently. (National Savings Fund, 2020). (7) Donating a portion of savings for social benefit.

Factors Contributing to Household Debt

Several environmental factors increasingly influence household purchasing decisions, potentially leading to debt: (1) Competition in the credit market. (2) Government economic stimulus measures that encourage household spending, often promoting consumption beyond necessity. (3) Access to technology, which amplifies exposure to consumerism.

Nevertheless, household consumption decisions remain primary, and these factors can lead to reduced savings. Coupled with a lack of financial discipline, households that fail to budget future income and expenses may find that daily income and expenditure tracking significantly enhances saving behavior and outcomes.

5S Activities

5S activities aim to improve work processes and maintain a healthy workplace environment, thereby enhancing organizational efficiency. The five Ss are: (1) Seiri (Sort): Distinguishing between necessary and unnecessary items, and discarding the latter. (2) Seiton (Set in order): Arranging necessary items in

their proper places for easy access and organization. (3) Seiso (Shine): Regularly cleaning and maintaining the workplace, including items, equipment, and machinery. (4) Seiketsu (Standardize): Maintaining the practices of Sort, Set in order, and Shine consistently. (5) Shitsuke (Sustain): Cultivating these practices as a habitual routine (Division of the University Council Secretariat, Office of the University Council, Maejo University, 2021).

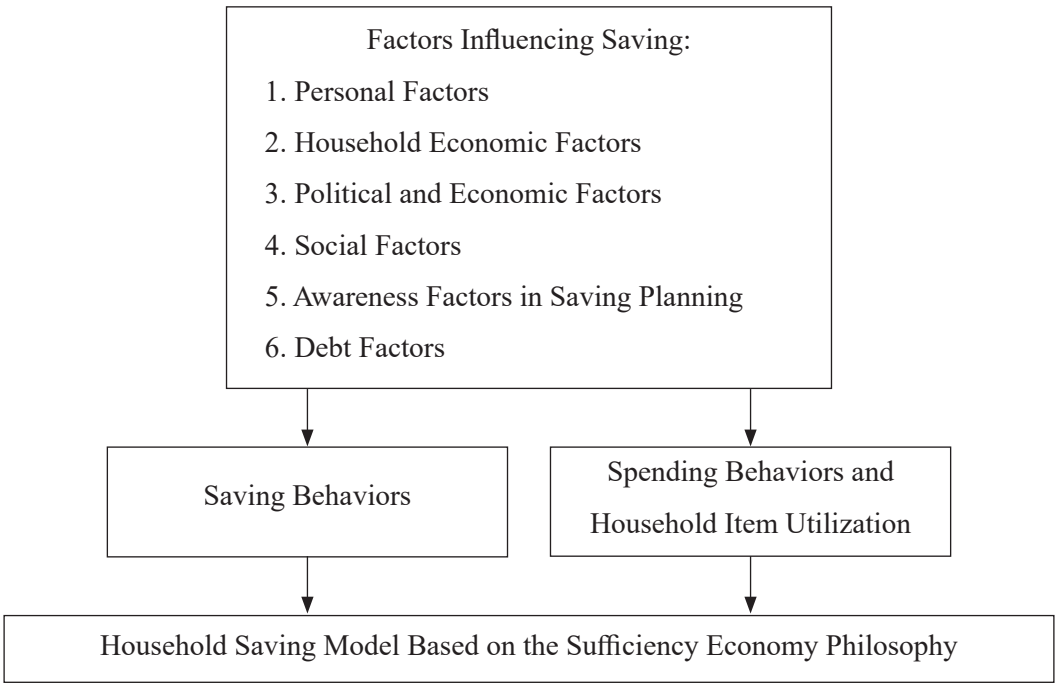


Figure 1 Conceptual Framework

Methodology

This research employed a quantitative approach, collecting data through questionnaires distributed to residents within the community and school personnel. The aim was to gather insights on household savings aligned with the Sufficiency Economy Philosophy (SEP) and to identify related and influential factors. This quantitative data was used to propose guidelines for community savings. Concurrently, qualitative data were collected through in-depth interviews and focus group discussions with community members and school teachers regarding household saving patterns under SEP.

Research Population

The study's population included 120 individual households within the community and 60 school personnel.

Sample

The researcher selected a sample group from individuals who work or reside in the community using questionnaires. The researcher obtained permission from the community leader and the abbot of Wat Phraya Suren before distributing the questionnaires to every household through purposive random sampling, with one representative per household. The researcher distributed the questionnaires

door-to-door in the community, but some houses were empty. Most houses had elderly residents who were alone and refused to answer the questionnaires. The questionnaires were also distributed to school staff after obtaining permission from the school principal to distribute them to everyone in the school, following ethical principles in human research to achieve objectives 1 and 2. Afterward, the researcher returned the savings model based on the philosophy of sufficiency economy to the sample group of 60 people and collected data from 50 people using purposive random sampling for objective 3. The questionnaire included ethical principles stating that if any question made the respondent uncomfortable, they could refuse to answer.

Data Collection

Data for objectives 1 and 2 were collected using questionnaires, and data for objective 3 were collected through structured interviews.

Sampling

Purposive random sampling was used to collect questionnaires for objectives 1 and 2, selecting one person per household and school personnel, totaling 60 people. For objective 3, data were collected after presenting the household savings model based on the philosophy of sufficiency economy. The researcher used purposive sampling to select 50 informants to gather their opinions.

Part 1: Demographic Factors included sex, age range, education level, marital status, occupation, duration of occupation, existence of savings, and borrowing practices.

Part 2: Household Economic Factors encompassed income, primary financial responsibility for household expenses, number of family members, total household income, and total household expenses. Political and Economic Factors included deposit interest rates, cost of living, personal income tax, and government policies affecting savings. Social Factors included upbringing related to saving and valuing money, financial planning education, teaching of frugality, community adherence to SEP, sharing and mutual assistance, and the use of branded products.

Part 3: Money Saving Behaviors covered the type of savings (e.g., formal/informal), life insurance for managing savings risk, objectives of saving, financial problems, financial problem-solving methods, methods of saving for old age, financial security, personal income-expenditure accounting, financial planning for old age, and satisfaction with financial status. Spending and Household Item Usage Factors included repairing broken items for reuse, purchasing discounted goods, monthly installment payments for goods, living within one's means, purchasing fashionable advertised goods, and income from legitimate occupations. Debt Factors included sources of borrowing, the highest interest rate paid on loans, total outstanding debt value, and monthly debt repayment value. Financial Planning Awareness Factors included methods of allocating savings, consistent monthly savings amounts, current savings, household accounting practices, future savings planning, existence of emergency funds, and knowledge of household saving (e.g., applying 5S principles for household organization to reduce waste, expertise in household accounting, ability to analyze investment value, various types of insurance, investment in debt instruments, equity instruments, open-end funds, real estate, valuable assets, and digital currency).

The researcher evaluated the content validity of the questionnaire using IOC by 3 experts in public administration. The questionnaire consisted of 62 items and gave a score of 0.80. However, the questions could not be evaluated with reliability because only some factors were on a 1-5 scale. The data obtained from the questionnaire were distributed in communities and schools, and specific interviews were conducted with 5 people living in the community and 1 teacher at the school. The data were compiled and a household savings model was developed according to the philosophy of sufficiency economy. The research results were reported by analyzing descriptive statistics including percentage, mean, and standard deviation.

For the third objective of data collection, the researchers initially provided education on savings, followed by the presentation of the household savings model based on the Sufficiency Economy Philosophy. A three-week period was then allocated for the samples to implement the proposed savings model. Subsequently, the samples were invited to provide feedback on the household savings model, and data were collected through both in-depth and group interviews. A structured interview format, comprising seven questions, was employed: (1) What are your opinions regarding the details of the household savings model based on SEP? (2) What were the outcomes after you implemented the household savings model based on SEP? (3) Are you satisfied with this household savings model based on the Sufficiency Economy Philosophy? Please provide reasons. (4) Which steps of the savings model, when implemented, did not yield results or were impractical? Please elaborate with reasons. (5) Do you agree that the household savings model based on SEP should be integrated into daily life to improve quality of life? Please provide reasons. (6) What are your opinions regarding the strengths, weaknesses, opportunities for implementation, and obstacles to implementation (SWOT analysis) of the household savings model based on SEP? (7) What are your financial goals in accordance with the household savings model based on SEP?

The collected data were analyzed and refined based on the feedback from the sample group. Certain aspects of the data were summarized using descriptive quantitative statistics. This process led to the finalization of the household savings model based on Principle of Self-Sufficiency Economy and a SWOT analysis identifying the strengths, weaknesses, opportunities, and threats of household savings based on this philosophy.

Results

The research results found that savings behavior found that (1) the sample group saved less than 5,000 baht per month, 51 people out of 60 people, or 85.00 percent, saved more than 5,000 baht, 9 people, or 13.40 percent, and did not respond, 1 person, or 1.70 percent, and those with total savings less than 50,000 baht, 39 people, or 65.00 percent, and those with total savings of 50,001-100,000 baht, 10 people, or 16.70 percent, and those with more than 100,000 baht, 9 people, or 15.00 percent, did not respond, 2 people, or 3.30 percent, with a Standard Deviation of 0.62. (2) Spending money and using things in the home of the households found that saving after spending, 26 people, or 43.30 percent, and saving

before spending, 24 people, or 40.00 percent, answered uncertainly, 8 people, or 13.30 percent, did not answer, 2 people, or 3.30 percent, with a Standard Deviation of 0.71. (3) Financial planning to save money for future spending. It was found that 29 respondents, or 48.30 percent, did not plan their finances for savings. Preparing reserve funds for future use, less than 1 year, was found by 31 respondents, or 51.70 percent, with a Standard Deviation of 2.08. (4) Method of saving money, found that 34 respondents, or 56.70 percent, saved in cash, with an average of 1.13 and a Standard Deviation of 0.41. Household savings came from salary, with 32 respondents, or 51.70 percent. (5) Regularity of saving, found that 31 respondents, or 51.70 percent, saved every month, 7 respondents, or 11.70 percent, saved every year, 2 respondents, or 3.30 percent, were uncertain, 5 respondents, or 8.30 percent, and did not respond, with a Standard Deviation of 1.06. (6) Duration of saving money, not more than 1-2 years, was found by 32 respondents, or 53.30 percent. 19 people or 31.70 percent had saved money for more than 2 years and 9 people or 15.00 percent had never saved money, with a Standard Deviation of 1.35. (7) The problem of insufficient money to spend and how to solve the problem of insufficient money found that if there was insufficient money to spend, the problem would be solved by withdrawing money from the account for use by 34 people or 56.67 percent and by cutting expenses and spending less by 27 people or 45.00 percent and by selling their assets by 9 people or 15.00 percent and by borrowing money from family, friends or acquaintances by 17 people or 28.33 percent, by borrowing from lenders by 14 people or 23.34 percent and by other methods by 2 people or 3.33 percent. This item has no Standard Deviation. (8) The sample group had savings and debts by 21 people or 35.00 percent, and had no savings and debts by 6 people or 10.00 percent, and had no savings and debts by 12 people or 20.00 percent, and had savings and debts. The Standard Deviation is 1.29.

Debt behavior found that the total sample group of 60 people (1) 30 people in debt, representing 50 percent, were found to have debts valued at no more than 100,000 baht, 15 people, representing 25.00 percent, had debts valued at more than 100,001-1,000,000 baht, 14 people, representing 23.34 percent, and had debts of 1,000,001 baht or more, 10 people, representing 6 percent, and did not respond, 26 people, representing 43.33 percent, with a Standard Deviation of 0.50. (2) Sources of loans for the sample group: commercial banks, 17 people, representing 28.30 percent; formal financial institutions, 6 people, representing 9.90 percent; informal loan sources, 19 people, representing 31.70 percent; and 18 people, representing 30.10 percent, did not respond. Loan interest rates not more than 10.00 percent, 12 people, representing 20.00 percent; interest rate 11.00-20.00 percent, 6 people, representing 10.00 percent; interest rate 21.00-200.00 percent, 5 people, representing 8.33 percent; and interest rate 200.00 percent or more, 6 people, representing 10.00 percent; and did not answer the interest rate of the loan received, 30 people, representing 50.00 percent, with a Standard Deviation of 0.22.

Factors related to the size of savings and spending and household items include the first factor, personal factors, which have the most influence. They include (1) age: 15 sample groups aged 60 and over, representing 25.00 percent, have more savings than people in other ages and are debt-free,

with a Standard Deviation of 1.47; (2) education level: 17 sample groups with bachelor's degrees, representing 28.30 percent, have more savings than samples with other education levels, with a Standard Deviation of 2.03; (3) occupation: 23 sample groups, representing 38.40 percent, are civil servants, state enterprise employees, government officials, and private employees, with more savings than other occupations. Freelance or hired or private business and others, 34 people, representing 56.70 percent, retired, 2 people, representing 3.30 percent, and did not answer, 1 person, representing 1.70 percent, with a Standard Deviation of 1.72; (4) The length of employment was not more than 5 years, 19 people, representing 31.70 percent, the length between 6-15 years, 17 people, representing 28.30 percent, and the length of more than 15 years, 19 people, representing 31.70 percent, and did not answer, 5 people, representing 8.40 percent, with a Standard Deviation of 1.40.

The second factor is household economic factors. (1) The household has the highest income not exceeding 15,000 baht per month, 23 households or 48.94 percent, which is equivalent to the highest income between 15,001-50,000 baht per month and the lowest income not exceeding 15,000 baht per month, there were 30 respondents or 75.00 percent. And the required income that is expected to be sufficient for expenses is not exceeding 50,000 baht per month, there were 44 respondents or 89.80 percent. This item has no Standard Deviation. (2) Household income is sufficient for expenses. It was found that there is enough income from month to month, there were 21 respondents or 35.00 percent. The average monthly income of 5,000-10,000 baht, there were 19 respondents or 31.70 percent, with a Standard Deviation of 1.25. (3) The burden of supporting household members who have no income and need a caregiver household savings as follows: 14 households had the burden of supporting 1 member, accounting for 23.30 percent, and households with 2 members who had no income and needed a caregiver, with 12 respondents, accounting for 20.00 percent. This meant that there were 3 members that needed to be supported in 7 households, accounting for 11.70 percent, and 4 or more members that needed to be supported in 13 households, accounting for 21.67 percent. 14 did not respond, accounting for 23.30 percent, with a Standard Deviation of 2.43. Regarding knowledge about saving, it was found that the sample group was interested and wanted to learn more. There were 3 rankings with similar means regarding reducing household expenses by keeping the house clean and tidy according to the 5S principles, with an average of 6.69, followed by life insurance with an average of 6.59, and household accounting with an average of 6.51.

Household Savings Models Based on the Principle of Self-Sufficiency Economy

Based on data collection on savings behavior, spending, and household consumption, the data analysis led to the proposal of household savings models based on the Sufficiency Economy Philosophy. The economic environment, such as inflation and deflation, the technological and communication environment (e.g., smartphones and tablets), and the social environment, such as the use of brand-name products to create a luxurious and wealthy image, and the political environment, such as government policies on livelihoods, all influence household savings based on the Sufficiency Economy Philosophy.

This begins with individuals being aware of their own financial status, engaging in financial planning, recording income and expenses, preparing a six-month budget, reducing expenses by organizing household items and reducing fixed expenses, and managing financial risks, such as purchasing life insurance, accident insurance, health insurance, and retirement savings insurance. Financial discipline is then developed according to the plan, and financial planning and savings are established for a secure retirement.

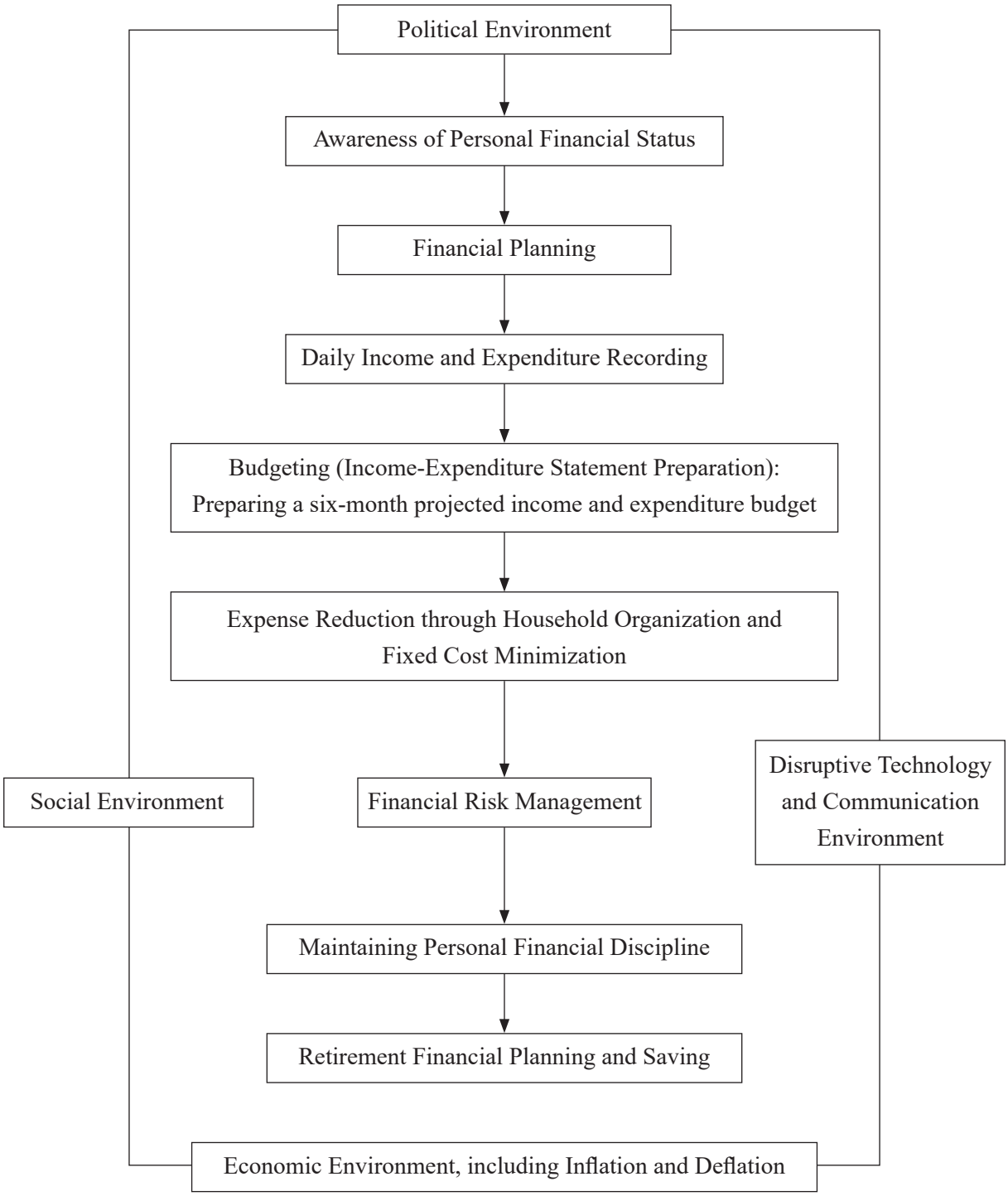


Figure 2 The Savings Model in Households according to the Sufficiency Economy Philosophy (SEP)

Discussion

The research found that saving behavior depends on age, with those aged 60 and above having more savings than other age groups, and that gender also affects the saving behavior of the sample group. This aligns with the study by Chuadchapoh et al. (2020), which showed that different age groups have statistically significant differences in saving behavior at the 0.01 level, with an average monthly saving amount of 1,501-2,000 baht. Students, however, save less than 500 baht per month. Financial discipline and age influence saving decisions, consistent with the research of Jumroon, (2017), which identified factors affecting saving decisions in the National Savings Fund among informal workers in Bangkok. Personal factors such as gender, age, marital status, education level, monthly income, and number of dependents varied but did not significantly change overall saving behavior.

Additionally, attitudes toward saving showed that 56.70 percent preferred keeping cash, and 51.70 saved money monthly. However, in reality, many respondents did not save because the research found that when money was insufficient, they withdrew from their accounts and then cut expenses, resulting in savings lasting no more than two years. Moreover, 48.30 of respondents had no financial planning for retirement, which affected saving behavior, consistent with the findings of Sereetrakul (2014). The sample group tended to borrow money when needed, with 28.30 percent borrowing from commercial banks, 9.90 percent from formal financial institutions, and 31.70 percent from informal lenders. About 8.33 percent of respondents paid very high interest rates ranging from 21.00 to 200.00 per year, and 10.00 percent chose informal loans with interest rates exceeding 200.00 percent per year. Saving and investing for retirement were related to learning about investing in high-risk assets and the ratio of saving to investing, consistent with the research of Champatem and Samphanwattanachai (2019) corresponds with the Life-Cycle Hypothesis theory by Ando and Modigliani (1963), which states that as people age, they accumulate more savings and then use those savings later.

Household economic factors revealed that 85.00 percent of the sample households' income was insufficient to cover expenses, leading to inconsistent savings. A campaign to encourage savings starting at a minimum of 1,000 baht per month, based on research by Suwanluen (2019) and by Chuadchapoh et al. (2020), encourages savings of at least 1,000 baht per month, which is a large sum for those with variable incomes, presents challenges in maintaining consistent household savings. Successful savings projects based on the Sufficiency Economy Philosophy include the "One Baht a Day" (Satja) project, previously implemented in the Bang Bua community along the Bang Bua Canal, or the Bang Bua Model, to build secure housing. The Ministry of Social Development and Human Security supported this project. The researcher interviewed community leaders, local government officials, and local politicians, and found that this community often lacked coordination and cooperation with government agencies seeking to develop the area. Instead, the community relied primarily on temples and temple patrons, as the community was located within the temple grounds. The analysis suggests that community development mechanisms should collaborate with government agencies, such as the Non-Formal Education Office, the Community

Development Office, the Khlong Sam Wa District Office, and local politicians. Members of the Khlong Sam Wa District Council, Bangkok Council members, or House of Representatives members who will systematically the community economy. This research is inconsistent with other research projects in that government officials are unable to coordinate for the development of local communities, as with other research projects.

Household debt is a major factor in reducing savings and potentially losing existing assets due to debt. Research findings indicate that 6 percent of the sample had debts of 1 million baht or more. This aligns with the online research of Tangkanchanapas (2019). The study found that desires, beliefs, living conditions, and the loan system according to the lender's policy, among other factors, are all caused by the impact of debt. This impact causes villagers suffering, including physical hardship, increased workload, and mental distress. They fear others knowing they are in debt and feel embarrassed or afraid to talk to others about their debt. A total of 42.33 percent of the sample did not respond to the value of their debt. This community problem is consistent with the relative income hypothesis, a theory developed by Duesenberry (1949), which posits that community members tend to spend similarly to inner-city Bangkokians, a consumerist society. Despite their low incomes, they consume as much as their peers. Therefore, savings based on SEP are applied by setting goals to reduce unnecessary expenses, increase income, and have a clear goal of reducing debt sources and/or reducing the amount of debt. Interviews with the sample revealed that the sample was familiar with SEP and believed they had adopted it. But they feel that they have low income and high expenses and feel that they spend on important and necessary things, which is in line with the research of Singtanasarn et al. (2024) and found that providing financial knowledge and motivation to save people about long-term savings through the National Savings Fund (NSF) or saving in other ways makes the savings of self-employed people in line with the research results of Taemboonlertchai et al. (2018) and the research of Suwanluen (2019) that proposed to find measures to stimulate more savings by possibly increasing the benefits from saving to motivate this population group to want to save more.

The saving patterns based on SEP proposed for the sample group to apply were found that the group had knowledge about saving according to the Sufficiency Economy Philosophy. Reducing household expenses by managing the home to be clean and orderly according to the 5S principle had an average score of 6.69. Having life insurance to manage risks in living had an average score of 6.59. Keeping a household account had an average score of 6.51.

When the sample group applied the household saving model, it was found that financial planning and keeping household accounts helped save money, promote more careful spending, and develop good financial discipline, which in turn reduced household debt. If households maintain financial discipline, manage income and expenses appropriately, and decide to incur debt only when ready and capable of repayment or when necessary, while being aware of their financial status, repayment ability, and capacity to handle financial risks in emergencies, such debt will not cause long-term problems. This aligns with the

research of Tangkanchanapas (2019). However, unresolved saving problems remain, such as debt issues and living paycheck to paycheck. Some respondents said that keeping household accounts increased their awareness of living expenses, enabling better saving plans, sufficient money for living, and leftover savings, emphasizing mindful spending and thinking before using money. Conversely, some felt the model was ineffective because spending behaviors remained unchanged. Household debt problems significantly reduce saving capacity and risk asset loss due to indebtedness. It was also found that desires, beliefs, lifestyle, and borrowing systems aligned with the research of Topothai (2021), which discussed the Life-Cycle Hypothesis by Ando and Modigliani (1963), stating that consumption maximizes satisfaction by using current and future income, leading to debt. This causes villagers physical hardship, increased work, mental distress, unhappiness, fear of others knowing about their debt, shame, and reluctance to discuss debt problems. Using saving methods based on the Sufficiency Economy Philosophy by setting goals to reduce unnecessary expenses, increase income, and clearly aim to reduce or eliminate debt corresponds with the research of Chumchue et al. (2012). It was also found that providing financial knowledge and saving motivation to the public about long-term saving through the National Savings Fund (NSF) or other saving methods increased savings among many self-employed groups, consistent with the findings of Taemboonlertchai et al. (2018) and aligned with the research of Sereetrakul (2014).

Conclusions

In conclusion, research findings indicate that age and financial discipline influence savings decisions. As people age, they tend to increase their savings and make withdrawals. However, a portion of the sample group lacks savings due to insufficient income to cover their expenses. Consequently, they withdraw their savings, which typically last no more than two years, a period that is not considered true retirement planning. A key issue is the lack of knowledge about asset investment and how to balance the proportion between savings and investments. Therefore, education on savings from government agencies, local politicians, and external organizations involved in community economic development is essential. Furthermore, heavy debt burdens create feelings of embarrassment, discouraging individuals from discussing or seeking solutions to their debt problems. Additionally, living in an urban society with high costs and consumption levels makes life difficult for low-income individuals. Savings means reducing expenses, increasing income, decreasing the number of creditors, and lowering the value of debt. To encourage savings, benefits for savers need to be increased. Meanwhile, financial planning and household accounting can help address debt issues. However, a key challenge lies in credit policies that focus on stimulating consumption.

The saving according to the philosophy of sufficiency economy can occur only if one is determined to reduce unnecessary expenses for living. This can be addressed by organizing household items neatly, recording income and expenses to learn about one's spending behavior, financial planning, and looking ahead to the future by setting financial goals and developing and maintaining personal financial discipline. Sufficiency means moderation; if we live by the middle path principle, our financial status will be strong.

Recommendations

Policy Recommendations

1. Livelihood Development: Implement programs focused on occupational development for households to ensure income is sufficient to meet expenses.

2. Local Government Support: Local administrative organizations should collaborate with temples and communities with disadvantaged individuals in their areas to promote livelihood development initiatives.

3. Incentivized Savings Programs: The government should introduce incentive measures to encourage public savings, offering special welfare benefits in exchange.

4. Temple-Centric Development: Establish temples as development hubs, where temples are responsible for maintaining drug-free zones in the areas surrounding them and for creating job opportunities and livelihoods for residents in the vicinity.

Recommendations for Future Research

1. Household Occupation Model: Research the development of household occupation models in urban areas to strengthen communities.

2. Temple-Centered Development Management: Research the management of temples to serve as development centers for communities.

3. Poverty Alleviation Networks: Investigate the formation of groups and networks for sustainable poverty alleviation in urban community areas.

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高职教育者视角下心理需求满足影响学生工匠精神培育的实证研究

AN EMPIRICAL STUDY ON THE IMPACT OF PSYCHOLOGICAL NEED SATISFACTION ON THE CULTIVATION OF STUDENTS' CRAFTSMANSHIP SPIRIT FROM THE PERSPECTIVE OF HIGHER VOCATIONAL EDUCATORS

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摘要

研究目的：本研究立足新质生产力对新型劳动者的战略需求，针对当前工匠精神培育“重外部、轻心理”的实践瓶颈，以自我决定理论为框架，将高职学生的心理需求满足作为重要的变量，实证检验其对工匠精神培育的促进作用，为构建“以心理需求为内在驱动力”的培育模式提供理论依据和实证支持。

研究设计/方法/途径：本研究以贵州 8 个地市 136 位长期从事高职教育、教学的工作者为调研对象，采用基于协方差的结构方程模型作为核心分析方法，结合信效度检验、验证性因子分析及 Bootstrap 稳健性检验，以保障结果的可靠性。

研究结果：研究显示模型拟合良好，心理需求满足显著正向预测工匠精神培育（$\beta = 0.40$, $p < 0.01$）且其三个维度的影响均显著。

创新性与价值：本研究弥补了工匠精神培育研究忽视心理机制的不足，通过 Structural Equation Modeling（SEM）验证了心理需求三维度的差异化作用，揭示了心理需求满足促进工匠精神内化的路径，为心理需求导向的工匠精神培育提供了实证支持。

关键词：高职学生 心理需求满足 工匠精神培育 结构方程模型 自我决定理论

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Abstract

Purpose: Based on the strategic demand for new types of workers resulting from new quality productivity, this study addresses the current practical bottlenecks in the cultivation of craftsmanship spirit caused by an emphasis on external factors while neglecting the psychological aspects. By utilizing Self-Determination Theory as the framework, it considers the satisfaction of students' psychological needs as an important variable in the examination of the promoting effect of psychological need satisfaction on the cultivation of craftsmanship among vocational college students, thereby providing a theoretical basis and empirical support for the construction of a cultivation model driven by internal psychological needs.

Study Design/Methodology/Approach: In this study, 136 educators who have been engaged in higher vocational education over a long time period in eight cities in Guizhou were selected as the research subjects. The structural equation model based on covariance was used as the core analysis method, combined with reliability and validity testing, confirmatory factor analysis and bootstrap robustness tests to ensure the reliability of the results.

Findings: The results show that the model fits well and that the satisfaction of psychological needs significantly and positively predicts the cultivation of craftsmanship ($\beta = 0.40$, $p < 0.01$). Also, the influences of its three dimensions were all found to be significant.

Originality/Value: This study fills the gap in the research on the cultivation of craftsmanship spirit caused by neglecting the psychological mechanism. Through SEM, it verified the differentiated roles of the three dimensions of psychological needs and revealed the path through which the satisfaction of psychological needs promotes the internalization of craftsmanship spirit, thus providing empirical support for the cultivation of craftsmanship spirit oriented by psychological needs.

Keywords: Higher Vocational Students, Psychological Needs Satisfaction, Craftsmanship Spirit Cultivation, Covariance-Based Structural Equation Modeling (CB-SEM), Self-Determination Theory (SDT)

引言

在国家“加快培育新质生产力”的战略指引下，职业教育作为培养多样化人才、传承技术技能、促进就业创业的重要途径，其核心使命已从单纯的技能传授升级为培育能够适应新质生产力发展的“新型劳动者队伍”。新质生产力以“高科技、高效能、高质量”为特征，既需要科技创新突破，更需要“熟练掌握新质生产资料的应用型人才”作为支撑 (Hu et al., 2024)，而“执着专注、精益求精、一丝不苟、追求卓越”的工匠精神 (Liu & Xu, 2023) 正是这类人才的核心特质。只有将工匠精神内化为职业自觉，才能更有效地推动技术成果转化为现实生产力，从而实现职业教育与产业发展的深度融合。

关于工匠精神的培育，学术界主要从政府、社会、学校、企业和个人层面对工匠精神的培育路径进行了广泛探讨，探讨的重点集中于技术、文化、教材、产教融合、诚信体系建设等“外部因素”，并意识到仅依赖外部机制，难以从根本上保障工匠精神的内化与稳定生成 (Lv et al., 2025; Xue & Eng, 2024)，因此部分学者已开始转向关注工匠精神内化的“心理土壤”，即学生的基本心理需求，如 Xia 和 Tan (2019) 在研究中指出的，工匠精神培育需激发学生的内在动力，要通过改变劳动认知、提升专业兴趣、涵养内在特质等路径，从学生心理层面破解工匠精神培育内在动力不足的问题，有的学者也在研究中提及，在培育机制上强调要增强理性认知（改变对工匠职业的偏见）、引发情感认同（建立对职业的心理归属）、强化心理调适（培养耐挫的意志品质），从心理维度系统构建工匠精神培育路径 (Zhang, 2018)。但现有的这些研究多以定性分析或传统回归的方法为主，鲜有使用基于结构方程模型（Structural Equation Modeling: SEM）等量化的方法，系统性地检验心理需求满足与工匠精神内化的因果路径及各维度的差异化影响，导致“心理需求如何作用于工匠精神培育”的内在机制缺乏扎实的实证支撑。事实上，工匠精神的培育本质是一个“外在职业精神向内在心理特质转化”的过程，若忽视学生自主、胜任、归属等核心心理需求的满足，任何外部培育措施都难以形成持续效果。

基于此，本研究以 136 位从事高职教学、管理与实训指导的教育者为调研对象，使用结构方程模型（SEM），系统性探究心理需求满足（自主、胜任、归属需求）对高职学生工匠精神培育的影响机制。理论价值在于，依托自我决定理论、成就动机理论等的理论，弥补工匠精神培育领域“心理机制——行为内化”的理论缺口；实践价值则体现为，可以为高职教育构建一个较为清晰的“心理需求导向”的工匠精神培育路径，从而助力“准工匠”群体的全面发展。

研究目的

基于以上的分析，针对当前有关工匠精神培育的实践多聚焦外部因素、忽视学生心理需求不足现状，本研究以自我决定理论、成就动机理论、社会认同理论等理论为依据，对贵州省 8 个地州市 136 位高职教育者展开调研，采用成熟的结构模型分析方法（SEM）对数据进行分析，旨在验证心理需求满足对高职学生工匠精神培育显著、正向的影响，从而为构建高职教育“心理需求导向”的工匠精神培育路径提供实证支持。具体的研究目的如下：

1. 验证心理需求满足对高职学生工匠精神培育的总体正向影响；

2. 比较基本心理需求的三个维度（自主、胜任、归属需求）对工匠精神培育的差异化作用；

3. 揭示心理需求满足影响工匠精神培育的内在作用机制，为构建“心理需求满足→工匠精神内化”的路径提供实证依据。

文献综述

职业教育如何破解自身的育人困境以适应新质生产力的发展需求，已成为国内很多学者的研究重点和热点。Hu et al. (2024)、Pang et al. (2025) 等在研究中提出，工匠精神、劳模精神等伟大精神与新质生产力背景下劳动者的精神特质是高度契合的。从这些研究可以看出，培育具有工匠精神的人才是发展新质生产力的内在需求之一。

然而工匠精神的培育却非易事，国内学者因此做了很多的研究和探索。有学者从学习场域入手，比如 Wu 和 Deng (2022) 等从布迪厄的“场域一惯习”理论出发，指出培育场域与惯习涵养间存在“互动困境”，应通过积极建构现代工匠的文化认同、有效促进学习场域的融合衔接，将现代工匠由被社会生产异化的“工具人”还原为学会自我反思的“实践人”。有学者从教材、教师等入手，如 Guo 和 Yin (2023) 等学者对 50 位大国工匠成长实践进行分析，指出培育学生具备大国工匠精神，应鼓励职业院校联合中小学开展职业启蒙教育，将大国工匠精神融入对应课程与教材之中，以大国工匠精神激励职教教师成长并吸纳大国工匠进入职教师资队伍。也有学者提出可以通过开展职业特色校园文化建设、推进产教深度融合、实施课程思政改革等方面培育工匠精神，以期提升高职人才培养质量 (Gu, 2019)。

国外的研究中，工匠精神（Craftmanship）的核心内涵与“职业认同（Vocational Identity）”、“内在动机（Intrinsic Motivation）”等概念高度关联。Sennett (2008) 在《The Craftsman》一书中指出，工匠精神是个体在技能实践中通过“专注投入——克服困难——获得成就”形成的心理特质，其培育离不开对个体自主选择与胜任感的尊重。Ashforth 和 Mael (1989) 的社会认同理论的核心观点是组织认同是社会认同的特殊形式，个体通过将自身与组织的成败紧密关联，形成对组织的归属感和责任感，这与国内学者提出的“归属需求满足——责任意识培育”在逻辑上是一致的。

从以上研究可以看出，国内外的学者均已意识到学生工匠精神的培育，需要将外在的职业精神与价值理念内化成稳定的心理特质和行为习惯。但从现实实践看，大部分的高职院校在实践中，内化的方式依然采用“灌输式”的传统模式 (Li & Xu, 2017)，很多高校将工匠精神作为一套抽象的道德条文和操作规范进行灌输，学生则被动接收。在这种培养模式中，学生被视为技能的“容器”，而非具有主观能动性的、完整的“人”，学生的学习动机主要依赖各式各样的外部考核（如期末考试、技能考证）来激发，而非对技艺本身出自的内心热爱。而且，职业院校的课程设置、人才培养方案、课程标准等与工匠精神的衔接也不足 (Hao & Liu, 2020)，技艺教育、技能教学多停留在“泛泛宣传”层面 (Cui et al., 2025)。

从这些可以看出，传统的教学模式系统地忽视了对学生这个“人”的尊重，压抑了学生的自主性、创造力，使得工匠精神的培育成为无源之水、无本之木。大量的教育工作者，已经认识到了这种模式的不足，并着手进行改进，“现代学徒制”就是一个有益的尝试。作为“校企双

主体育人、工学深度融合”的新型模式，现代学徒制通过“学校 + 企业”双主体协同育人的方式，将工匠精神的价值内核与岗位实操这个技能载体深度绑定 (Chen, 2019)，相比传统的技能传授模式，现代学徒制可以让学生在解决实际问题时去体会工匠精神的内涵。然而以上的设计在实践中却陷入重形式轻本质的误区 (Xie & Li, 2018; Yao et al., 2019)，比如“师徒”关系出现退化，企业导师往往同时指导多名学生，关系呈现契约化、任务化的特点，榜样示范和精神传递的效果大打折扣。另外，现代学徒制中，技能培养的“重复”与“精进”的关系很难把握 (Zhou, 2023)，高职学生多工作在基层岗位，长期从事简单、重复性的操作，如果不做好引导，学生就无法从工作中获得胜任感与成就感，久而久之就会滋生出枯燥和厌倦的情绪，这与工匠精神中的“精益求精”等特质背道而驰 (Fang, 2022)。

综上我们发现，从传统模式到现代学徒制的新探索，“重外在模式设计，轻内在心理机制”的培育模式并没有显著地改进，在这些模式下，学生更像一个被培育的“工具”，“人”的因素被一定程度上弱化了。值得注意的是，已有部分学者尝试运用心理学与社会学理论对工匠精神培育的内在机制进行初步阐释。例如，Deng (2017) 运用精神分析、行为主义、认知主义、人本主义四大经典心理学理论，分析技工学校学生心理发展特征如何影响工匠精神内化过程，提出基于动机激发、习惯养成与自我实现的培育路径。Cheng 和 Xu (2024) 基于计划行为理论和社会认知理论，构建了“认知——情感——行为意向”的三阶段模型，用实证的方式检验了高职学生工匠精神形成的内在心理机制。Ryan 和 Deci (2000) 运用自我决定理论（Self-Determination Theory: SDT）解释了内在动机（如对技艺的热爱、自主性追求）是如何驱动持续精进行为的，是理解“精益求精”心理动因的关键理论。Xia 和 Tan (2019) 的研究中也隐含从自我决定理论的视角，强调通过激发内在动机来培育工匠精神。Sennett (2008) 对“工匠”的论述，实质上描绘了胜任需求与内在动机满足的循环。而 Ashforth 和 Mael (1989) 的社会认同理论常被用于解释职业认同的形成，Guo et al. (2026) 在中国职教情境中的研究也证实了职业认同的中介作用。

总体上，这些理论呈现出明显的“碎片化”特点，其一，这些研究多局限于单一理论概念，没有将自主、胜任、归属三大基本心理需求置于一个统一框架下，进行系统性的考察。其二，相关论述大多停留在理论推演与定性分析层面，未能利用这些理论构建可量化检验的模型。尽管一些学者开发了工匠精神的测量工具，为实证研究奠定了基础，但将心理需求满足与工匠精神进行模型化联结并检验其路径的研究仍属空白。

因此，本研究将以自我决定理论（SDT）为核心框架，结合成就动机理论（AMT）和社会认同理论（SIT），构建一个能够全面反映“心理需求满足→内在动机激发→工匠精神内化”路径的整合模型，并采用结构方程模型（SEM）对工匠精神维度进行实证检验，以弥补当前“实证检验不足”的问题。

1. 理论基础

本研究主要依托三大心理学与社会学理论，探究工匠精神内化的内在机制。

1）自我决定理论（Self-Determination Theory, SDT）：由 Ryan 和 Deci (2000) 提出，强调人类行为受自主、胜任与归属三种基本心理需求驱动。当这些需求得到满足时，个体更易激发内在动机，实现价值观与行为的整合。研究表明，无论在德国双元制、英国学徒制还是美国社区培训等不同职业教育体系中，胜任需求对技术型学习者的技能投入具有显著预测作用 (Becker et al., 2018)。

2）成就动机理论（Achievement Motivation Theory, AMT）：由 McClelland et al. (1953) 于 50 年代开始在一系列文章中提出，指出高成就需求者倾向于设定适度挑战性目标、重视过程反馈，并从克服困难中获得成就感。在其经典专著《Achieving society》(McClelland, 1961) 中，进一步提出了“需求成就”作为衡量个人倾向的重要变量。这一特质与工匠精神所强调的“精益求精”、“持之以恒”的精神高度契合，为理解学生主动投入技艺磨炼的动机提供了理论解释。

3）社会认同理论（Social Identity Theory, SIT）：由 Tajfel 和 Turner (2004) 提出，认为个体通过社会分类、认同与比较，将所属群体（如“工匠群体”）的价值观内化为自我的一部分。学生一旦形成对工匠身份的积极认同，便更可能主动接纳并践行相关行为规范，甚至通过维护群体声誉来强化自身职业伦理。

综上，自我决定理论解释了工匠精神如何从外部要求转化为内在动机，成就动机理论则进一步揭示了持续精进的行为驱动力，社会认同理论则阐明了职业身份认同对价值观内化的关键作用。

2. 研究假设

基于以上的分析，本研究认为，充分考虑学生心理需求的满足是培育工匠精神的一个重要着力点。因此，提出如下总体假设：

H1：高职学生心理需求的满足程度，会显著正向影响学生工匠精神的培育。

由于心理需求的三个维度（自主、胜任与归属）是相互关联又相对独立，因此有必要系统考察各维度对工匠精神培育的独立作用。

1）自主需求满足与工匠精神培育

自主需求的满足体现在学生可以自由选择、自愿参与和自主决策带来的满足感。当教育者鼓励学生自主探索技术方案、尊重其提出的个性化的解决问题的思路时，学生就能体验到学习主人翁的地位，从而将工匠精神的要求从外部的指令转化为发自内心的追求。因此提出以下假设：

H1a：自主需求满足对工匠精神培育具有积极影响。

2）胜任需求满足与工匠精神培育

胜任需求的满足源于学生在应对专业挑战时，所获得的效能感和成就感。当教育工作者通过设置清晰、递进的学习目标，并提供及时、正向的反馈时，就能够帮助学生建立起克服技能学习困难的信心。这种“我能做好”的信念，支撑学生在反复实践中克服枯燥、持续钻研，这也是工匠精神必备的品质。因此提出以下假设：

H1b：胜任需求满足对工匠精神培育具有积极影响。

3）归属需求满足与工匠精神培育

归属感满足与否，会直接影响着学生在师生互动或同伴交往中所体验到的情感联结与关怀感受。当学习环境充满信任与支持时，学生可以真切感受到自己在集体中的价值所在。为了回应团队的期待，这种归属感会自然地转化为对工匠价值观的认同，学生们将更主动地凝聚共识，共同攻克那些富有创新性和挑战性的任务。基于此提出以下假设：

H1c：归属需求满足对工匠精神培育具有积极影响。理论模型如 Figure 1 所示：

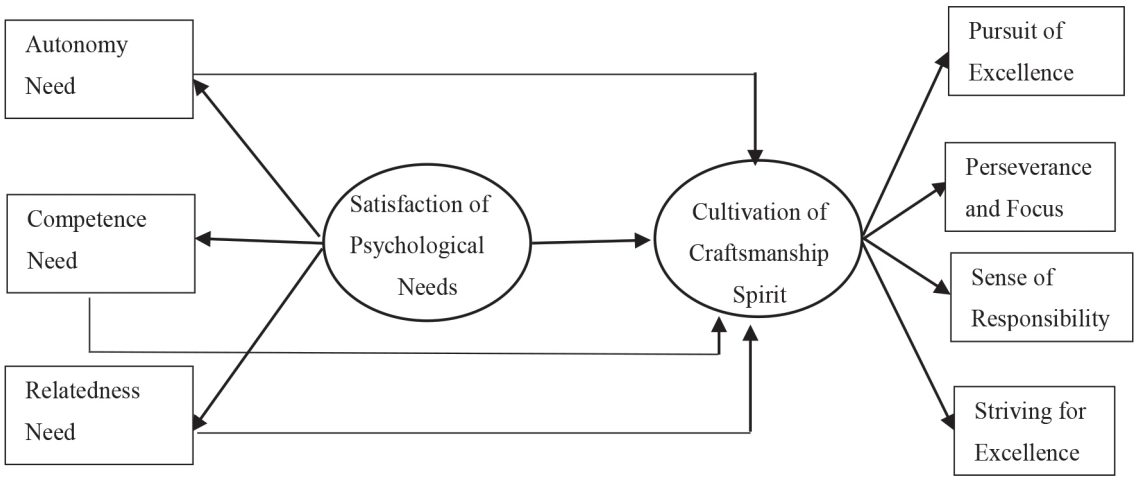


Figure 1 Theoretical Model Diagram

研究方法

1. 数据来源与样本组成

考虑到研究主题与实践的关联性及样本的代表性，我们主要以报名参加“2025 年贵州职业教育评价改革项目”培训的高职教育工作者群体为调研对象。该群体长期从事高职教学、管理或实训指导工作，对学生日常学习行为、实践表现及工匠精神相关特质具备多年观察经验，能够基于客观感知提供有效信息。

样本覆盖贵州省 8 个地州市的所有高职院校，所评价的专业涵盖理工科、财经商贸两大类，尽最大可能避免单一地区或专业的样本偏差，确保样本对贵州省高职教育的代表性。

为保障问卷测量的有效性与准确性，本研究设计题项时，部分量表借鉴了成熟工具，如心理需求满足题项参考了 Ilardi et al. (1993)、Gagné (2003)、Liu et al. (2013) 等研究的《基本心理需求量表（Basic Psychological Needs Scales, BPNS）》，工匠精神题项参考了 Zhao et al. (2020) 等三人编写的工匠精神量表及其他学者的研究。正式发放问卷前，在学院内部，于正式调研开始前 2 周，对每个系分管教学的副主任和教务处负责质量评价的工作人员进行预调研优化，调研以问卷星的方式开展，发放问卷 12 份，回收有效问卷 12 份，基于项目分析删除鉴别力不足的题项，结合预调研对象反馈修订表述模糊题项，最终形成正式问卷。

正式调研以“线下培训现场填写+线上补充”的方式展开，时间开始于培训前一周和培训过程中，从 2025 年 9 月 11 日开始到 26 日结束，采用现场纸质填写加在线收集相结合的方式，全部问卷均已以匿名形式收集。对回收的问卷，如果“答案规律化（如全部选 5）”、“核心信息缺失（主要是纸质问卷）”、“教龄低于 1 年”则按无效问卷进行剔除。经上述筛选，最终回收有效问卷 136 份，正式调研有效回收率为 90.66%。样本基本情况如 Table 1 所示：

Table 1 Sample Distribution Characteristics

Variable	Category	Number (n)	Percentage (%)
Position	College (university)-level leaders in charge of education and teaching evaluation	35	25.74
	Project leaders of completed pilot projects on education evaluation reform in vocational education	21	15.44
	Person in charge of quality evaluation	24	17.65
	Academic affairs office leaders or administrators	24	17.65
	Heads of professional/discipline centers	5	3.68
	Common teachers	27	19.84
Professional Title or Administrative Rank	Intermediate professional title and below	42	30.88
	Associate senior professional title	58	42.65
	Senior professional title	16	11.76
	Section-level administrative rank and below	7	5.15
	Deputy division-level position	6	5.15
	Division-level position and above	7	4.41
Years of Teaching Experience	1 to less than 3 years	5	3.68
	3 to less than 5 years	10	7.35
	5 to less than 10 years	15	11.03
	10 years and above	106	77.94
Disciplinary Field	Science and Engineering	87	63.97
	Finance and Business	42	30.88
	Others	7	5.15

2. 变量测量

本文数据全部是通过调查问卷进行收集，变量测量主要借鉴已有成熟量表，采用 Likert 5-point scale，“1”代表完全不同意，“5”代表非常同意，具体测量题项见 Table 2。

Table 2 Measurement Items of Variables

Main Variable	Observed Variables	Measurement Items
Satisfaction of Psychological Needs	Autonomy Need (m1)	In terms of completing learning tasks, the current evaluation environment supports students in having their own choices and autonomy.
	Competence Need (m2)	The current evaluation environment helps students clearly recognize their own abilities through assessment.
	Relatedness Need (m3)	Through assessment, the current evaluation environment enables students to feel that they are a valued member of the class or learning group.
Cultivation of Craftsmanship Spirit	Pursuit of Excellence (y1)	Rather than being satisfied with “meeting the requirements”, students actively revise and refine their work to achieve higher standards.
	Perseverance and Focus (y2)	When facing complex, demanding, or difficult tasks, students are able to maintain a high level of concentration and patience without giving up easily.
	Sense of Responsibility (y3)	Students treat tools and equipment with care as if they were their own, strictly follow safety operating procedures, and properly maintain equipment.
	Striving for Excellence (y4)	Students are willing to propose new ideas and apply different approaches to solve technical problems.

3. 分析方法选择

本研究主要聚焦高职学生心理需求满足与工匠精神培育之间的关系，以心理需求和工匠精神变量均为教育领域典型的潜变量，结合教育领域实证研究对“潜变量处理、测量误差控制、多变量因果关系检验”的需求，选择基于协方差的结构方程模型（Covariance-Based Structural Equation Modeling, CB-SEM）作为核心分析方法。主要基于以下三点考量：

1）数据特征的适配性

本研究样本量为 136 份，为观测变量数（7 个）的 19.4 倍，满足 CB-SEM 对样本量为观测变量数 5-10 倍的基本要求，且根据分析（见表 3），多数变量近似正态分布（仅 m3、y3 存在轻微非正态，已通过 Bootstrap 法进行修正），满足最大似然（Maximum Likelihood, ML）估计的要求。

2）研究目的适配性

本研究属于理论驱动的验证性研究，核心目标是检验预设的因果路径，而非探索性分析，相较于其他分析方法，CB-SEM 在验证潜变量间因果关系、分离测量误差等方面具有显著优势。

3）测量模型的适配性

所研究的心理需求满足的 3 个维度与工匠精神培育的 4 个维度均为典型的潜变量，使用的量表经过信效度检验（CR＞0.8，AVE＞0.5），均符合 CB-SEM 对测量模型的要求。相较于其他方法，如：WLSMV 更适用于严重非正态数据或二分类、有序变量的因子分析，PLS-SEM 则侧重探索性研究或预测导向的模型，与本研究的验证性、理论检验导向不符。另外，CB-SEM 分析方法可以同时估计“测量模型”和“结构模型”，能够有效的分离测量误差与真实变异，相较于传统回归分析的方法，CB-SEM 能够建立一个或多个清晰的路径，从而检验多变量间的交互作用以及潜变量之间的因果关系，并通过拟合度指标（如 Comparative Fit Index, CFI、Root Mean Square Error of Approximation, RMSEA）来检验理论假设与数据的匹配程度。

按照“定量为主、注重稳健性”的原则，本研究在 CB-SEM 基础上，补充了教育研究常用的信效度检验、验证性因子分析（Confirmatory Factor Analysis, CFA）及 Bootstrap 稳健性检验等，以确保结果的可靠性和可重复性。

研究结果

1. 描述性统计分析及多重共线检验

为初步了解样本数据特征，本研究首先对心理需求满足的 3 个维度：自主需求（m1）、胜任需求（m2）、归属需求（m3）和工匠精神培育的 4 个维度：精益求精（y1）、执着专注（y2）、责任意识（y3）、追求卓越（y4）进行了描述性统计分析，结果如 Table 3 所示。

Table 3 Descriptive Analysis Statistics Table

Variable	Obs	Mean	Std.dev.	VIF
Autonomy Need (m1)	136	3.272059	.8982857	2.32
Competence Need (m2)	136	3.058824	.8412047	2.12
Relatedness Need (m3)	136	3.345588	.8724480	2.64
Pursuit of Excellence (y1)	136	2.955882	.7685257	1.63
Perseverance and Focus (y2)	136	2.882353	.7799223	2.17
Sense of Responsibility (y3)	136	3.411765	.7838234	1.56
Striving for Excellence (y4)	136	2.992647	.7453195	1.84

1）整体分析：所有变量的均值介于 2.88 至 3.41 之间（5 点计分），表明受访的教育者感知“学生心理需求满足与工匠精神培育”的现状处于中等略偏上的水平。

心理需求满足的三个维度中，归属需求的均值最高（M = 3.35），其次是自主需求（M = 3.27），胜任需求的感知满足度相对最低（M = 3.06）。这一结果表明，在当前评价环境下，教育者认为学生感受到的“班级或小组归属感”相对较好，但对于“清晰感知自身能力”的胜任感支持仍有不足，这可能是后续培育过程需要重点关注的环节。

工匠精神培育的四个维度中，责任意识的得分显著高于其他维度（M = 3.41），且其中位数达到 4，说明教育者普遍认为学生在“遵守规程、爱护设备”方面的表现最好。相比之下，执着专注（M = 2.88）与精益求精（M = 2.96）的得分相对较低，反映出学生在面对枯燥、复杂任务时的持久专注力，以及不满足于达标、主动追求卓越的倾向性，是工匠精神培育中更为薄弱的部分。

2）数据分布特征：各变量的标准差在 0.75 至 0.90 之间，数值接近，表明不同教育者对学生状态的评价存在适度的离散程度，数据未出现极端集中或分散的情况。所有变量的均值与中位数均非常接近，初步表明数据分布基本符合正态分布，这与接下来的正态性检验结果相互印证，为使用基于最大似然估计法的结构方程模型提供了初步支持。

3）多重共线分析：为验证心理需求满足三个维度和工匠精神培育的四个维度是否适合作为内、外生变量进行建模分析，本研究进一步进行了多重共线性分析，如表 3 所示。结果表明，7 个变量的方差膨胀因子（Variance Inflation Factor, VIF）介于 1.56 至 2.64 之间，均低于临界值 10 (Belsley et al., 1980)。据此判断，变量间不存在严重的多重共线性问题，满足纳入结构方程模型的前提条件。

4）正态性检验：因本研究使用最大似然估计法的结构方程模型进行分析，数据具有正态性是使用此方法的前提。因此可以对变量的偏度（Skewness）与峰度（Kurtosis）进行分析。如 Table 4 所示。

Table 4 Skewness and Kurtosis of Variables

Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint Test	
				Adj chi2(2)	Prob>chi2
Autonomy Need（m1）	136	0.124	0.586	2.71	0.257
Competence Need（m2）	136	0.357	0.662	1.06	0.589
Relatedness Need（m3）	136	0.005	0.282	8.05	0.018
Pursuit of Excellence（y1）	136	0.709	0.394	0.88	0.644
Perseverance and Focus（y2）	136	0.056	0.700	3.88	0.144

Table 4 Skewness and Kurtosis of Variables (Cont.)

Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint Test	
				Adj chi2(2)	Prob>chi2
Sense of Responsibility（y3）	136	0.019	0.819	5.46	0.065
Striving for Excellence（y4）	136	0.102	0.362	3.57	0.168

从以上的正态性检验结果来看：变量 m1、m2、y1、y2、y4 的联合检验（Prob > chi2）均显著大于 0.05，近似服从正态分布，变量 m3、y3 存在一定程度的非正态性。因此在后续的分析中，我们将使用 Bootstrap 抽样的方法进一步验证结果的稳定性。

2. 信效度检验

本文运用 Stata17 对数据进行信度和效度检验，对研究的两个潜变量进行信效度分析（表 4），两个变量的克隆巴赫系数（Alpha）值和组合信度（CR）值均大于 0.8，说明变量内部一致性良好，表明量表具有较好的信度。效度方面，在探索性因子分析中，KMO 值最小为 0.7316，达到“一般适合”标准；累计方差贡献率值最小为 65.17%，之后通过验证性因子分析（CFA）对各变量的收敛效度进行检验，所有题项的标准因子载荷值（λ）均大于 0.6，平均抽取方差（AVE）值均大于 0.5，说明问卷的聚合效度良好。因此，本研究所用量表的信效度均满足要求，如 Table 5 所示。

Table 5 Reliability and Validity Testing of the Scale

Variable	Alpha	CR	KMO	Bartlett Spherical Test	Cumulative Variance Contribution Rate	Standardized Minimum Factor Loading	AVE
Satisfaction of Psychological Needs	0.8704 (Table 6)	0.871	0.7316	*p*-value = 0.000	79.44%	0.7907	0.653
Cultivation of Craftsmanship Spirit	0.8205 (Table 7)	0.824	0.7886	*p*-value = 0.000	65.17%	0.6572	0.513

Table 6 Reliability Analysis of Psychological Needs Satisfaction Variables

Item	Obs	Sign	Item-test Correlation	Item-rest Correlation	Average Interitem Correlation	Alpha
Autonomy Need (m1)	136	+	0.8884	0.7460	0.6988	0.8227
Competence Need (m2)	136	+	0.8768	0.7226	0.7298	0.8438
Relatedness Need (m3)	136	+	0.9084	0.7876	0.6453	0.7844
Test Scale					**0.6913**	**0.8704**

Table 7 Reliability Analysis of Variables in Cultivating Craftsmanship Spirit

Item	Obs	Sign	Item-test Correlation	Item-rest Correlation	Average Interitem Correlation	Alpha
Pursuit of Excellence (y1)	136	+	0.7752	0.5928	0.5668	0.7970
Perseverance and Focus (y2)	136	+	0.8596	0.7323	0.4760	0.7316
Sense of Responsibility (y3)	136	+	0.7680	0.5816	0.5745	0.8020
Striving for Excellence (y4)	136	+	0.8223	0.6689	0.5162	0.7619
Test Scale					**0.5334**	**0.8205**

3. 拟合优度分析

根据以上分析，本研究所使用的数据基本符合正态分布假设，为评估理论模型与数据的整体拟合程度，我们检验了最大似然估计下的拟合优度指标，表中数据依据 Hu 和 Bentler (1998) 提出的通用标准进行判断。结果如 Table 8 所示：

Table 8 Overall Goodness-of-fit Index

Fit Index	Statistic	Evaluation Criteria (Good Fit)	Model Fit Assessment
Absolute Fit Indices			
χ^2/df	0.534 ($\chi^2 = 6.937$, $df = 13$)	< 3	Excellent
RMSEA	0.000 (90% CI: [0.000, 0.035])	< 0.08	Excellent
SRMR	0.024	< 0.08	Excellent

Table 8 Overall Goodness-of-fit Index (Cont.)

Fit Index	Statistic	Evaluation Criteria (Good Fit)	Model Fit Assessment
Incremental (Relative) Fit Indices			
CFI	1.000	> 0.95	Excellent
TLI	1.024	> 0.95	Excellent
Incremental (Relative) Fit Indices			
p-value (Chi-square test)	0.905	> 0.05	Acceptable

4. 假设检验

由于本研究所使用调查表的核心题项为 Likert 5-point scale，这个量表属于定序非等距数据，基于这一特性，因此在进行 SEM 分析时使用了标准化估计。根据分析，使用 Amos 软件得到了输出路径的各项参数值（如 Figure 2 所示）和结构模型中心理需求满足与工匠精神培育之间的参数估计。

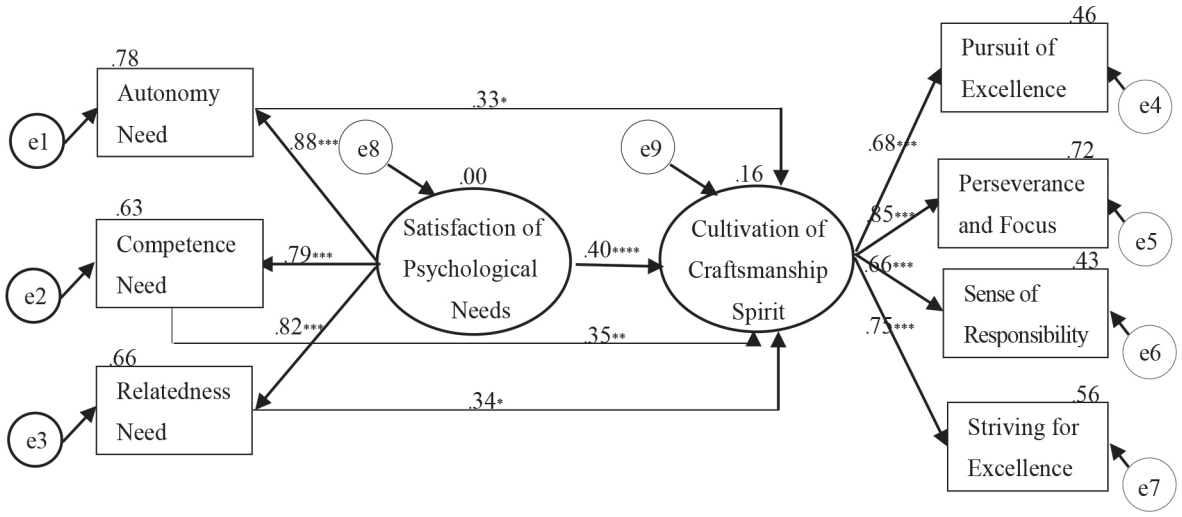


Figure 2 A Standardized Relationship Diagram Between Fulfilling Psychological Needs and Cultivating Craftsmanship

Remarks: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

对数据进行分析可以得出，“心理需求满足”对“工匠精神培育”具有显著的正向影响，其标准化路径系数为 $\beta = 0.40$, $p < 0.01$, 95% 置信区间为 [0.231, 0.570]。这意味着，心理需求满足程度每提升 1 个单位，工匠精神培育水平将相应提升 0.40 个单位。因此，研究数据支持“H1：高职学生心理需求的满足程度，会显著正向影响学生工匠精神的培育。”的假设。

为探究心理需求满足的三个维度（自主需求满足、胜任需求满足、归属需求满足）对工匠精神培育的作用机制，本研究进一步采用结构方程模型展开分析，如 Table 9 所示。

Table 9 Standardized Relationship Analysis of Three Dimensions of "Satisfaction of Psychological Needs"

Variable	Coefficient	std. err.	z	P>|z|	[95% conf. interval]
Autonomy Need	.3272582	.0825069	3.97	0.000	.1655476 .4889688
Competence Need	.3516347	.0807518	4.35	0.000	.1933642 .5099053
Relatedness Need	.3371792	.0817353	4.13	0.000	.1769810 .4973774

从分析结果来看，自主需求满足对工匠精神培育的标准化路径系数为 $\beta = 0.33$, ($p = 0.012 < 0.05$)，95% 置信区间 [0.0717, 0.5827]，表明自主需求满足对工匠精神培育具有显著的正向影响；胜任需求满足对工匠精神培育的标准化路径系数为 $\beta = 0.35$（$p = 0.006 < 0.01$)，95% 置信区间 [0.1027, 0.6059]，说明胜任需求满足对工匠精神培育的正向影响在统计上更为显著；归属需求满足对工匠精神培育的标准化路径系数为 $\beta = 0.34$（$p = 0.011 < 0.05$)，95% 置信区间 [0.0771, 0.5973]，即归属需求满足对工匠精神培育存在显著的正向作用。综上，心理需求满足的三个维度均能显著正向影响工匠精神培育，其中胜任需求满足的影响在统计显著性水平上更为突出，表明研究数据支持"H1a、H1b、H1c"的假设。

5. Bootstrap 稳健性检验

为全面验证模型对核心假设检验的可靠性，本研究通过 Bootstrap 法（重复抽样 1000 次）进行检验，以更准确评估参数估计的稳定性。分析结果如 Table 10 所示：

Table 10 Structural Equation Model Standardized Path Coefficient Estimation Results

Path / Factor Loading	Standardized Estimate	Bootstrap std. err.	z value	*p*-value	95% Confidence Interval
Structural Model					
Satisfaction of Psychological Need → Cultivation of Craftsmanship Spirit	0.400	0.151	2.66	0.008	[0.105, 0.696]
Measurement Model: Craftsmanship Spirit Cultivation					
Pursuit of Excellence (y1)	0.678	0.069	9.83	<0.001	[0.543, 0.814]
Perseverance and Focus (y2)	0.847	0.038	22.10	<0.001	[0.772, 0.922]
Sense of Responsibility (y3)	0.657	0.067	9.79	<0.001	[0.526, 0.789]
Striving for Excellence (y4)	0.748	0.065	11.51	<0.001	[0.621, 0.876]

Table 10 Structural Equation Model Standardized Path Coefficient Estimation Results (Cont.)

Path / Factor Loading	Standardized Estimate	Bootstrap std. err.	z value	*p*-value	95% Confidence Interval
Measurement Model: Psychological Need Satisfaction					
Autonomy Need (m1)	0.822	0.045	18.29	<0.001	[0.734, 0.910]
Competence Need (m2)	0.791	0.051	15.42	<0.001	[0.690, 0.891]
Relatedness Need (m3)	0.884	0.034	26.08	<0.001	[0.818, 0.951]

从表中可以看出：

观测变量 m1、m2、m3 的标准化因子载荷分别为 0.822、0.791、0.884，载荷所对应的 $p < 0.001$，说明这 3 个观测变量能有效反映“心理需求满足”的潜在特征。

观测变量 y1、y2、y3、y4 的标准化因子载荷分别为 0.678、0.847、0.657、0.748，所有载荷的 $p < 0.001$，表明这些观测变量可稳定反映“工匠精神培育”维度。此外，各观测变量的误差方差均为正数且能被有效估计，从而进一步验证了测量模型的合理性。

“心理需求满足”与“工匠精神培育”的标准化系数为 0.400（$p = 0.008 < 0.01$）95% 的置信区间为 [0.105, 0.696]，说明心理需求满足对工匠精神培育具有显著的正向影响，这与未使用 Bootstrap 法得到的结论一致。

综上，通过 Bootstrap 法，进一步支持了分析结论的可靠性，保障了结果的稳健性。

讨论

1. 标准化路径系数（$\beta = 0.4$）解读

本研究得出的心理需求满足对工匠精神培育的标准化路径系数为 0.40，达到了中等效应水平。首先，它符合社会科学中关于个体心理特质对复杂行为预测的普遍规律，表明心理需求满足是工匠精神培育的一个重要的内在因素。其次，该值也真实体现了本研究的理论预设：心理需求是工匠精神内化的“重要因素”而非“唯一成因”。同时，效应量未接近 1，说明工匠精神的最终塑成需要外部的制度、文化氛围、教材教法等与内部的心理需求满足机制的协同作用。

2. 影响机制

本研究基于成熟的理论，结合实地调研的数据进行分析，用实证的方式验证了心理需求满足对高职学生工匠精神的培育具有显著正向影响，这一结果与 Dai 和 Ge (2025)、Yu 和 Lin (2020) 等关于积极心理因素促进工匠精神培育的研究结论，及 Ryan 和 Deci (2000) 的自我决定理论形成呼应，进一步揭示了“内在动机激活→精神特质内化”的作用链条。

从机制层面看，数据揭示了心理需求三个维度对工匠精神培育存在差异化的影响路径和强度。其中，胜任需求的标准化路径系数相对最高，表现出最为重要的驱动作用，深刻反映了高职教育作为“技术技能习得过程”的属性，以及工匠精神“在反复实践中臻于至善”的行为特性。就三者各自的作用而言：

首先，胜任需求的满足是工匠精神得以生发和持续的“心理基石”。胜任感是个体在面对挑战时，确信自己能够掌握并完成任务的信念。在高职教育高密集度、高强度的技能学习过程中，学生要持续面临“操作难关”、“技术瓶颈”与“枯燥重复”的问题，只有当学生通过清晰的阶梯目标，及时的正向反馈和可明确感知的技能精进，累积出“我能做好”的胜任感时，才能将外在的实践要求转化为内在的精进意愿，从而培养出“精益求精”的品质。因此，胜任需求的突出作用，精准对应了工匠精神培育中，需要克服技能习得的惰性，并维持长期投入，这一最普遍、最重要的的心理要求。

其次，自主需求与归属需求则分别从“动力方向”和“动力持久性”两个侧面，与胜任需求协同作用，构成完整的动力系统。其中自主需求的满足，关乎学习与探索的内在动机来源。当学生在学习方式、技术方案上拥有选择权与发言权时，工匠精神的培育便从“服从外部指令”转向“追求自我实现”，就能激发出“追求卓越”的创新性和解决问题的主动性。

归属需求的满足，通过社会认同理论所述的机制，为学生提供了情感依托与价值认同的共同体。当学生感受到自己是班级、团队或未来职业群体中有价值的一员时，对“工匠”身份的认同感和对集体的责任感就会显著增强，从而更主动地内化和践行“责任意识”等群体规范。

三者共同作用构成了一个既有核心支柱（胜任）、又有方向引导（自主）和持久保障（归属）的心理动力系统。理论启示在于，本研究将自我决定理论从普遍性的论述，应用到高职学生工匠精神培育这一特定领域，明确了在技术技能学习的情境下，三大心理需求的满足存在功能上的优先级与分工。实践启示则在于，为高职教育者提供了一个清晰的思路，在培育过程中，应将为学生提供充足的胜任感作为主攻方向，同时要赋予学生学习实践自主性，营造强烈的归属感，从而形成高效、持久的培育合力。

3. 与现有研究对比

当前工匠精神培育研究多聚焦外部培育环境优化，如产教融合深化、思政课程（思政）融入、工匠文化营造等，而本研究则将视角转向被培育主体的内在心理机制，填补了“重外部措施、轻内在激发”的实证研究缺口。与张薇等学者从认知、情感、意志维度构建培育路径的研究相比，本研究通过实证数据明确了心理需求各维度具体的影响效应。相较于夏果平等学者提出的“内在动力激发”理念，本研究使用成熟量表与结构方程模型，为这些研究中提供了量化支撑。与国际相关研究相比，本研究针对高职教育场景，验证了自我决定理论与社会认同理

论在非西方文化背景下的适用性，丰富了工匠精神培育的跨文化研究成果。

本研究主要突破在于构建并验证了一个整合性的心理机制解释框架，通过整合自我决定理论、成就动机理论与社会认同理论，将“自主”、“胜任”、“归属”三类基本心理需求确立为工匠精神内化的重要因素。研究不仅证实了心理需求满足的正向效应，更重要的是，通过结构方程模型揭示了三个维度的差异化路径。这一发现表明，工匠精神的培育实质是一个“需求满足激发内在动机，进而驱动行为特质内化”的深层心理过程，从而将研究视角从外部干预有效引向了对学生内在动力的关注。

同时本研究为“心理需求导向”的培育模式提供了扎实的量化证据。区别于既往的思辨与描述性研究，我们使用结构方程模型及 Bootstrap 稳健性检验，获得了稳定、可靠的研究结论：心理需求满足对工匠精神培育具有中等程度的显著正向影响（$\beta = 0.04$，$p < 0.01$）。更具实践意义的是，通过对需求维度的细化分析表明，提升学生的胜任感可能是培育工匠精神的切入点。这就提示教育者，相较于泛泛而谈的鼓励，通过“阶梯式技能挑战”与“即时性成就反馈”来系统构建学生的成功体验，或许是提高培育效果的策略之一。

4. 研究的局限性与未来展望

本研究仍存在若干可拓展之处，一方面，样本选取的是贵州省 8 个地州市的高职教育工作者，区域代表性有限，未来可向东中西部甚至东南亚、欧美等不同地区或国家扩大研究样本，检验研究结论的跨区域、跨国别的适用性。另一方面，本研究采用横断面数据，未能揭示心理需求满足与工匠精神培育动态演化的关系，可以借鉴 Becker et al. (2018) 的纵向追踪设计研究方法，探索心理需求满足与工匠精神培育的长期动态关系。再者，本研究是基于教师角度进行调研分析的，这与被研究的主体，学生自己的感受可能存在差异，未来需要进一步扩展研究对象，对本研究的结论进行交叉验证。

总结

本研究以自我决定理论、成就动机理论及社会认同理论为支撑，通过对贵州省 8 个地州市 136 位高职教育工作者的调研数据，运用结构方程模型（CB-SEM）及 Bootstrap 稳健性检验，系统探究了高职学生心理需求满足与工匠精神培育的关系。研究表明，当学生的自主、胜任、归属三类基本心理需求得到充分满足时，其工匠精神特质的内化效果更显著。并且心理需求的三个维度均正向影响工匠精神培育，其中胜任需求的作用最为突出。从理论价值看，本研究弥补了当前工匠精神培育研究中“重外部因素、轻心理机制”的一个缺口。依托三大经典理论，系统揭示了“心理需求满足→内在动机激发→工匠精神内化”的作用链条，揭示了关于工匠精神培育的“心理机制——行为内化”的路径，为高职工匠精神培育从“经验探索”走向“实证支撑”提供了关键且坚实的实证依据。

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ATTITUDE AS THE GATEWAY: EXTENDING THE THEORY OF PLANNED BEHAVIOR TO MODEL LOW-ALCOHOL BEVERAGE CONSUMPTION AMONG CHINESE GEN Z

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Abstract

Purpose: This study addressed a critical gap regarding how contemporary lifestyle factors, specifically Health Consciousness, Cultural Trends, and Digital Engagement, affect market demand for low-alcohol beverages among China's digitally native Generation Z. The research expanded the Theory of Planned Behavior (TPB) to examine whether these factors act as direct triggers for behavioral or as upstream antecedents shaping consumer attitude.

Study Design/Methodology/Approach: Using a quantitative, cross-sectional approach, data were gathered through self-administered surveys from Generation Z consumers (n = 397) in China's first-tier cities. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to analyze the structural relationships and mediation pathways between core TPB constructs and extended lifestyle factors.

Findings: Analysis confirmed core TPB antecedents as significant predictors: Attitude (β = .441, p < .001), Subjective Norms (β = .236, p < .001), and Perceived Behavioral Control (β = .162, p < .001). Attitude emerged as the primary factor, accounting for 76% of the variance (R^2 = .76). Critically, Health Consciousness, Digital Engagement, and Cultural Trends showed no significant direct effects. However, Health Consciousness and Digital Engagement were entirely mediated by Attitude, indicating that they shape consumer perception rather than trigger direct action.

Originality/Value: This paper extended the TPB by proposing a hierarchical structure where external influences must first be internalized as favorable attitudes to drive intention. This provides empirical evidence clarifying the role of modern lifestyle variables. Managerially, results suggest focusing on emotional branding to strengthen the dominant Attitude factor, the essential gateway to purchase, over generalized digital promotion. The study also offers culture-specific validation of the TPB within the Chinese context.

Keywords: Theory of Planned Behavior (TPB), Consumer Behavior, Purchase Intention, Low-alcohol Beverages, Generation Z, Digital Engagement, Attitude Mediation

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Introduction

The global beverage industry is undergoing a significant transformation driven by the burgeoning mindful drinking movement, characterized by robust growth in the low- and no-alcohol (LoNo) segment (Nicholls, 2023; Nicholls, 2025). This shift, fueled by escalating global health consciousness and a desire for balanced consumption, is acutely pronounced in the Chinese market, which serves as a critical growth engine due to rapid urbanization and the emerging purchasing power of Generation Z (Gen Z) (Su et al., 2024; Wan Mustaffa & Wan Ismail, 2025). Focused on China's first-tier cities, this landscape is intensely competitive. However, despite the sector's expansion, businesses face a significant challenge: Stakeholders urgently need a precise model to guide investment beyond a generic digital presence, as it remains unclear how contemporary factors such as online trends and wellness pursuits translate into market demand (Yi et al., 2021).

This practical challenge reflects a critical gap in the academic literature. Existing consumer behavior research remains predominantly Western-centric and has not adequately modeled the specific influence of modern lifestyle factors within a collectivist Chinese cultural context (Nicholls, 2025; Piatkowski et al., 2024; Shaw et al., 2023). The core theoretical issue is that traditional applications of consumer models fail to clarify the mechanism by which these modern factors operate (Rachmad, 2024). It remains ambiguous whether digital engagement and health consciousness act as direct behavioral triggers or as upstream antecedents that first shape underlying consumer attitudes, leaving a critical void in strategic marketing knowledge for this segment (Pellegrino, 2024; Sağkaya Güngör & Ozansoy Çadırcı, 2022).

To address this gap, this study extends the Theory of Planned Behavior (TPB) by proposing the TPB-Attitude Precedence Model. The TPB is selected for its robust explanatory power in linking cognitive beliefs to behavioral intentions (Ali et al., 2023; Singh et al., 2025). Our extended model refines this theory by positioning Attitude Toward Low-Alcohol Beverages as the central mediator, asserting that for products driven by social and personal lifestyle benefits, external influences must first be successfully internalized as a favorable attitude before they can effectively drive purchase intention (Machaka-Mare et al., 2023; Oviedo-Trespalacios et al., 2021).

Objectives

The primary objectives of this study are therefore to empirically examine the direct and indirect effects of Subjective Norms, Perceived Behavioral Control, Health Consciousness, and Digital Engagement on Purchase Intention among Gen Z consumers in China's first-tier cities (Tang et al., 2024). This research advances academic knowledge by providing a rigorous, culture-specific validation of the TPB and, crucially, establishes the full mediation of Health Consciousness and Digital Engagement through Attitude (Naga et al., 2025; Yeh et al., 2025). The findings offer critical strategies for industry practitioners, providing clear managerial guidance on prioritizing emotional branding and leveraging peer-to-peer digital advocacy to cultivate the consumer attitude that serves as the essential gateway to purchase.

Literature Review

Theoretical Foundation: The Theory of Planned Behavior (TPB)

The foundation of this research is the Theory of Planned Behavior (TPB), a highly cited and empirically validated framework for predicting human behavior based on cognitive beliefs (Ajzen, 1991). The TPB posits that an individual's intention to perform a behavior is determined by three core constructs: Attitude (their favorable or unfavorable evaluation of the behavior), Subjective Norms (the perceived social pressure from significant others), and Perceived Behavioral Control (the perceived ease or difficulty of performing the behavior) (Bosnjak et al., 2020; Zheng et al., 2017). The TPB is selected for this study because it provides a robust, established model of consumer decision-making, offering a stable framework for integrating novel, context-specific variables (Hojjati et al., 2025; Wei et al., 2025). However, traditional TPB applications often treat external variables as background factors. As consumer environments evolve, particularly in lifestyle products where identity is paramount, the precise roles and functions of these external influences within the TPB require careful re-examination.

The Academic Puzzle: Clarifying the Role of Modern Lifestyle Factors

While the TPB is robust, its application to contemporary lifestyle consumption reveals a critical theoretical ambiguity. The core academic puzzle lies not in whether modern factors, such as Health Consciousness and Digital Engagement, have an effect, but in understanding the mechanism through which they operate (Zhou et al., 2022). The existing literature presents conflicting evidence. Some research in functional product categories suggests Health Consciousness can act as a direct driver of purchase intent (Devi et al., 2023; Iqbal et al., 2021; Kaur et al., 2025; Su et al., 2022). Conversely, studies in lifestyle segments hint that its role is more nuanced, primarily shaping brand perception and favorability before a decision is made (Nguyen Tran Cam, 2023).

A similar debate surrounds Digital Engagement. While a body of work confirms that digital interactions and e-WOM strongly influence consumer choice (Pang & Wang, 2023; Winarno & Indrawati, 2022), the causal pathway remains a subject of contention. Some models treat digital exposure as a direct-to-purchase trigger, akin to traditional advertising (Sharma et al., 2022). However, this view overlooks the social and narrative-building functions of digital media for Gen Z, suggesting that its primary role may be to cultivate a positive attitude that precedes and enables purchasing (Akhmad et al., 2024; Salguero et al., 2024). This inconsistency highlights a critical gap in the literature and underscores the need for a refined model to clarify these mediated pathways, particularly in the collectivist Chinese context, where social and digital validation are critical.

The debate on attitude precedence. The positioning of Attitude as a central mediator is not merely structural but theoretical. Conflicting findings in recent literature necessitate this investigation. For instance, while functionalist studies model health consciousness as a direct driver of intent (Devi et al., 2023), research on "lifestyle" consumption suggests that, for Gen Z, health is an identity marker rather than a purely functional goal. This implies it must first influence one's attitude, or "liking", of the product

before a purchase decision is made (Nguyen Tran Cam, 2023). Similarly, recent extensions of the TPB regarding digital identity suggest that online engagement functions to construct a "self-concept" (Attitude) rather than directly triggering a transaction (Akhmad et al., 2024). This study engages with this debate by testing whether these modern factors exert a direct effect (bypassing attitude) or a mediated effect (working through attitude).

Hypothesis Development: Building the TPB-Attitude Precedence Model

This study addresses the aforementioned gap by extending the TPB to a model in which attitude serves as the central mediator for modern lifestyle inputs, while testing both direct and indirect effects for all antecedents (Anubha, 2021; Han et al., 2018). Based on the literature, we posit the following hypotheses:

The central contribution of our model lies in clarifying the role of Health Consciousness, Cultural Trends, and Digital Engagement as Attitude Antecedents. We posit that Health Consciousness and Digital Engagement represent personalized, actionable cues (self-concept and peer advocacy) that are easily internalized as Attitude. Cultural Trends, however, represent a more abstract, societal awareness of a product's popularity. For a lifestyle product, a consumer must first cognitively process these external cues to form a favorable internal judgment (Attitude) before intent can be formed. Their influence is therefore hypothesized to be primarily indirect.

H1 & H1a: Health Consciousness will have a significant positive indirect effect on Purchase Intention, mediated by Attitude.

H2 & H2a: Cultural Trends will have a significant positive indirect effect on Purchase Intention, mediated by Attitude.

H3 & H3a: Digital Engagement will have a significant positive indirect effect on Purchase Intention, mediated by Attitude.

The foundational relationships of the TPB are expected to hold in this new context. In a collectivist culture, social harmony and peer approval are powerful behavioral drivers, and the practical ability to purchase a product is a necessary condition for intent (Hoffmann et al., 2018; Ky & Ratasuk, 2024; Lyreaksmey & Ratasuk, 2024). Therefore, we hypothesize:

H4: Subjective Norms will have a significant positive direct effect on Purchase Intention.

H5: Perceived Behavioral Control will have a significant positive direct effect on Purchase Intention.

Finally, as the most proximal cognitive cause of intent, an individual's positive feeling toward a product is expected to be the strongest predictor (Ky & Ratasuk, 2024). We posit that both Subjective Norms and Perceived Behavioral Control not only directly influence Purchase Intention but also contribute to the formation of the consumer's core Attitude. This suggests a powerful dual-path mechanism. Therefore, we hypothesize:

H4a: Attitude mediates between Subjective Norms and Purchase Intention.

H5a: Attitude mediates between Perceived Behavioral Control and Purchase Intention.

H6: Attitude Toward Low-Alcohol Beverages will have a significant positive direct effect on Purchase Intention.

Control Variables

To isolate the actual effects of the theoretical constructs, standard demographic control variables (Gender, Age, Education, and Income Level) and behavioral variables (usage experience and frequency) are incorporated into the model. These variables are known to affect consumption patterns systematically and are included to ensure that the observed relationships are not spurious (Guo et al., 2025).

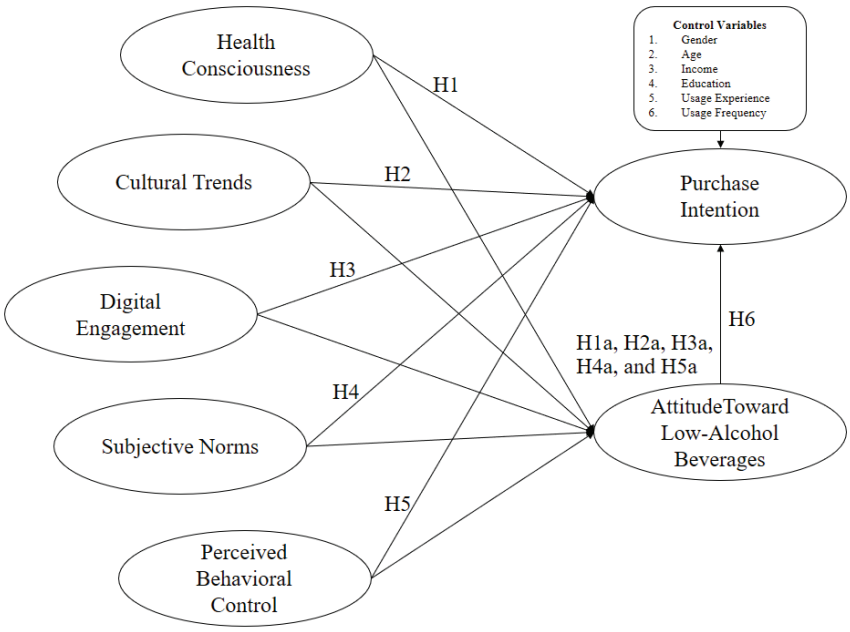


Figure 1 Conceptual Model

Methodology

This chapter outlines the methodological framework for empirically testing the hypothesized relationships within the extended Theory of Planned Behavior (TPB) model.

Research Design and Analytical Approach

This study employs a quantitative, cross-sectional design to collect data from participants at a single point in time. The analytical approach uses Partial Least Squares Structural Equation Modeling (PLS-SEM) via WarpPLS 8.0. PLS-SEM was chosen over Covariance-Based SEM (CB-SEM) for several critical reasons. Given the model's complexity, which includes multiple mediating pathways, and the primary research objective of identifying the key predictive drivers of Purchase Intention (variance maximization), PLS-SEM is the most appropriate analytical tool (Naing & Ratasuk, 2025; Ratasuk & Naing, 2025). This approach is particularly well-suited for exploratory research aimed at extending established theories, such as the TPB, into new, complex contexts where the emphasis is on identifying key drivers and predictive relevance rather than strictly confirming the theory. It also performs more robustly with non-normalized data compared to CB-SEM (Bono et al., 2017; Ratasuk et al., 2025).

Population and Sampling

The target population consists of Generation Z consumers (born 1995-2010) residing in China's highly digitized, developed first-tier cities, including Beijing, Shanghai, Guangzhou, and Shenzhen. Since the exact size of this market segment is unknown, a non-probability purposive sampling strategy was employed to ensure that all respondents met stringent demographic and geographic criteria. The specific inclusion criteria required respondents to be: (1) born between 1995 and 2010 (Gen Z); (2) current residents of Beijing, Shanghai, Guangzhou, or Shenzhen; and (3) consumers who are cognizant of low-alcohol beverage products. Based on established guidelines for achieving sufficient statistical power in PLS-SEM and accommodating the model's complexity, the final sample analyzed consisted of 397 respondents, whose characteristics are presented in Table 1.

Table 1 Respondent Characteristics

Characteristics	Categories	Descriptive Statistics	
		Frequency (f)	Percentage (%)
Gender	Female	235	59.20
	Male	162	40.80
Age	18-20	57	14.40
	21-23	112	28.20
	24-26	99	24.90
	27-29	52	13.10
	30-32	77	19.40
City	Beijing	92	23.20
	Shanghai	102	25.70
	Guangzhou	110	27.70
	Shenzhen	93	23.40
Degree	High School	100	25.19
	Vocational Diploma	62	15.62
	Bachelor's Degree	141	35.52
	Master's Degree	67	16.88
	Doctor's Degree	27	6.80
Income	Less than 5000 RMB	161	40.60
	5000-9000 RMB	143	36.00
	10000-14999 RMB	48	12.10
	15000-19999 RMB	12	3.00
	20000-24999RMB	15	3.80
	25000 RMB or more	18	4.50

Data Collection and Measurement Instrument

Data were collected online via a self-administered questionnaire distributed in popular Chinese social media community groups, a format that facilitates efficient access to the digitally native Gen Z cohort. To ensure sample validity, screening questions regarding the respondent's age and current city of residence were implemented at the beginning of the survey. The data collection took place from July to August 2023. The questionnaire was systematically structured into four sections: (1) screening questions; (2) demographic and control variables; (3) behavioral context related to low-alcohol beverage consumption; and (4) core construct measures. All constructs were measured using 5-point Likert scales (1 = Strongly Disagree, 5 = Strongly Agree) adapted from established literature. Specifically, the scales for Attitude, Subjective Norms, and Perceived Behavioral Control were adapted from Ajzen (1991). The Health Consciousness scale was adapted from Sakib et al. (2020), and the Digital Engagement items were derived from Kim et al. (2021). All scales were translated and back-translated to ensure linguistic and conceptual equivalence for the local context.

Data Analysis

Data analysis was performed using PLS-SEM in a two-stage process. Factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) were tested for convergent validity (Cheung et al., 2023; Ratasuk, 2024; Zhu & Ratasuk, 2024), and the Heterotrait-Monotrait Ratio (HTMT) criterion for discriminant validity (Ab Hamid et al., 2017; Yang & Ratasuk, 2024). CR and Cronbach's Alpha (CA) were used to test reliability. The hypothesized pathways were evaluated using PLS-SEM and bootstrapping (1,000 subsamples) for mediation. Path coefficients (β), p-values, and the model's explanatory power (R^2) were reported. Multicollinearity was assessed using the Variance Inflation Factor (VIF), with values <5 considered acceptable (Kim, 2019; Lyu & Ratasuk, 2024). Mediation analysis was conducted by examining the significance of the indirect effects. Finally, Common Method Bias (CMB) was assessed using the full collinearity VIF approach (Ratasuk, 2023).

Ethical Considerations

Strict ethical guidelines were maintained throughout the study. Participants received an informed consent statement detailing the research purpose, the use of their data, and the duration of the study. Complete anonymity and data confidentiality were guaranteed. Participation is entirely voluntary, and participants retain the right to withdraw at any time without penalty. Data were secured on an encrypted server and used solely for academic purposes.

Results

The measurement model was rigorously assessed for reliability and validity using Partial Least Squares Structural Equation Modeling (PLS-SEM), with the key metrics summarized in Table 2. The internal consistency and reliability of all reflective constructs were strongly confirmed, as the Composite Reliability (CR) values (ranging from .877 to .955) and Cronbach's Alpha (CA) values all significantly exceeded the conventional threshold of .70.

Convergent validity was successfully established through two criteria: First, the majority of item Factor Loadings were well above the ideal .70 benchmark, while three indicators (HealthC 1, Trend 1, and Control 1) exhibited loadings between .50 and .70, they were retained because their removal did not significantly improve the Average Variance Extracted (AVE) and they were deemed essential for preserving the content validity of their respective constructs. Second, the AVE for all constructs ranged from .58 to .81, comfortably surpassing the minimum .50 threshold, confirming that each latent construct explains more than half of the variance of its indicators (Cheung et al., 2023). Furthermore, the model exhibited robust structural integrity: all Variance Inflation Factor (VIF) values, which ranged from 1.624 to 4.677, were well below the critical threshold of 5, confirming the absence of severe multicollinearity. Since all VIF scores were below the critical threshold, these results concurrently indicate that Common Method Bias (CMB) is not a substantial concern in the collected data based on the full collinearity test (Kim, 2019; Kock, 2017; Ratasuk et al., 2025).

Table 2 Data Quality

Construct / Item	Factor Loadings	CR	CA	AVE	VIF
Purchase Intention (Purchase)		.955	.941	.810	3.599
Purchase 1: I intend to purchase low-alcohol beverages in the near future.	.890				
Purchase 2: I plan to buy low-alcohol beverages when I next purchase a drink.	.913				
Purchase 3: I would prefer low-alcohol beverages over traditional alcoholic beverages.	.910				
Purchase 4: I am willing to spend money on low-alcohol beverages.	.889				
Purchase 5: I would recommend low-alcohol beverages to others.	.897				
Health Consciousness (HealthC)		.890	.849	.580	1.624
HealthC 1: I have the impression that I sacrifice a lot for my health.	.509				
HealthC 2: I consider myself very health-conscious.	.813				
HealthC 3: I think that I take health into account a lot in my life.	.767				
HealthC 4: I think it is important to know how to eat healthily.	.852				
HealthC 5: I am prepared to make significant sacrifices to eat as healthily as possible.	.817				
HealthC 6: I am aware of my health status throughout the day.	.762				
Cultural Trends (Trend)		.902	.862	.653	2.665
Trend 1: Low-alcohol beverages are becoming trendy in society.	.592				
Trend 2: People in my cultural background are increasingly consuming low-alcohol beverages.	.823				
Trend 3: I believe consuming low-alcohol beverages is considered fashionable.	.868				
Trend 4: Media and influencers promote low-alcohol drinks as part of modern lifestyle trends.	.874				
Trend 5: Consuming low-alcohol beverages reflects a modern, responsible choice.	.848				

Table 2 Data Quality (Cont.)

Construct / Item	Factor Loadings	CR	CA	AVE	VIF
Digital Engagement (Digital)		.925	.903	.673	3.290
Digital 1: I often read online reviews before purchasing low-alcohol beverages.	.811				
Digital 2: Social media platforms influence my choice of low-alcohol drinks.	.833				
Digital 3: I frequently engage with content related to low-alcohol beverages online.	.813				
Digital 4: Digital advertisements affect my intention to buy low-alcohol beverages.	.844				
Digital 5: I follow social media accounts that promote low-alcohol beverage brands.	.797				
Digital 6: I use search engines to find information about new low-alcohol beverage products.	.823				
Subjective Norms (Norms)		.948	.934	.752	4.595
Norms 1: People important to me think I should drink low-alcohol beverages.	.873				
Norms 2: My family and friends encourage me to choose low-alcohol beverages.	.890				
Norms 3: Most people I know approve of consuming low-alcohol beverages.	.832				
Norms 4: I feel social pressure to choose low-alcohol beverages over regular alcoholic drinks.	.880				
Norms 5: My peers often choose low-alcohol options when we socialize.	.880				
Norms 6: The decision to purchase low-alcohol beverages is positively viewed by my social circle.	.846				
Perceived Behavioral Control (Control)		.877	.824	.591	2.697
Control 1: I can easily access low-alcohol beverages when I want.	.648				
Control 2: I have control over whether I consume low-alcohol beverages.	.717				
Control 3: I can easily substitute regular alcoholic beverages with low-alcohol beverages.	.830				
Control 4: I am confident I can regularly choose low-alcohol beverages.	.823				
Control 5: I find it easy to maintain my consumption of low-alcohol beverages.	.808				
Attitude Toward Low-Alcohol Beverages (Attitude)		.947	.930	.781	4.677
Attitude 1: Consuming low-alcohol beverages is a positive choice for me.	.868				
Attitude 2: I enjoy drinking low-alcohol beverages.	.916				
Attitude 3: Low-alcohol beverages suit my lifestyle preferences.	.910				
Attitude 4: Drinking low-alcohol beverages is beneficial for my social activities.	.857				
Attitude 5: Overall, I have a very positive attitude towards low-alcohol beverages.	.866				

Remarks: CR = Composite Reliability, CA = Cronbach's Alpha, AVE = Average Variance Extracted, and VIF = Variance Inflation Factor.

The measurement model assessment concluded with a rigorous evaluation of discriminant validity using the Heterotrait-Monotrait Ratio (HTMT) criterion, as detailed in Table 3. To establish validity, all HTMT ratios must ideally be below .85. The results confirm this, as every inter-construct value (ranging from .341 to .841) fell well beneath the threshold, thereby confirming that all latent variables are empirically distinct and measure unique phenomena (Ab Hamid et al., 2017; Naing & Ratasuk, 2025). Furthermore, the dataset's systematic nonparametric nature provides strong justification for the choice of analytical technique. The normality checks (Normal-JB and Normal-RJB, shown as "No" across all constructs in Table 3) confirm that the data are significantly non-normally distributed. Given this non-normal structure, Partial Least Squares Structural Equation Modeling (PLS-SEM) is definitely the appropriate and robust statistical tool, as it is a distribution-free technique ideally suited for handling nonparametric data while simultaneously prioritizing the maximization of explained variance (R^2) and predictive relevance in the target construct (Bono et al., 2017; Ratasuk & Naing, 2025).

Table 3 HTMT Ratios

	Purchase	**HealthC**	**Trend**	**Digital**	**Norm**	**Control**	**Attitude**
Purchase							
HealthC	.341***						
Trend	.616***	.708***					
Digital	.73***	.578***	.795***				
Norm	.838***	.413***	.739***	.806***			
Control	.796***	.495***	.74***	.813***	.841***		
Normal-JB	No	No	No	No	No	No	No
Normal-RJB	No	No	No	No	No	No	No

Remarks: *= $p \leq .05$, **= $p \leq .01$, ***= $p \leq .001$, Purchase = Purchase intention, HealthC = Health consciousness, Trend = Cultural trends, Digital = Digital engagement, Norm = Subjective Norms, Control = Perceived behavioral control, and Attitude = Attitude toward Low-Alcohal Beverages

The overall quality and fit of the proposed conceptual framework were rigorously assessed, yielding strong evidence of robustness. The Tenenhaus Goodness of Fit (GoF) was .813 (classified as large, threshold > .36), confirming high global model validity and predictive relevance. This excellent fit is underpinned by the model's strong explanatory power, evidenced by the Average R^2 (ARS) of .792 ($p < .001$) and Average Adjusted R^2 (AARS) of .787 ($p < .001$), indicating that the model successfully explains a significant portion of the variance in the dependent constructs. Furthermore, model integrity was confirmed by the low collinearity observed: the Average Block VIF (2.322) and Average Full Collinearity VIF (2.348) were both significantly below the critical threshold of 5.0, mitigating concerns over multicollinearity and supporting the consistency of the structural paths. Additional indices, including

the Sympson's Paradox Ratio (SPR = .882), R^2 Contribution Ratio (RSCR = .993), and Statistical Suppression Ratio (SSR = 1.000), all met or exceeded their respective acceptable thresholds, affirming the directional validity and stability of the relationships derived from the PLS-SEM approach.

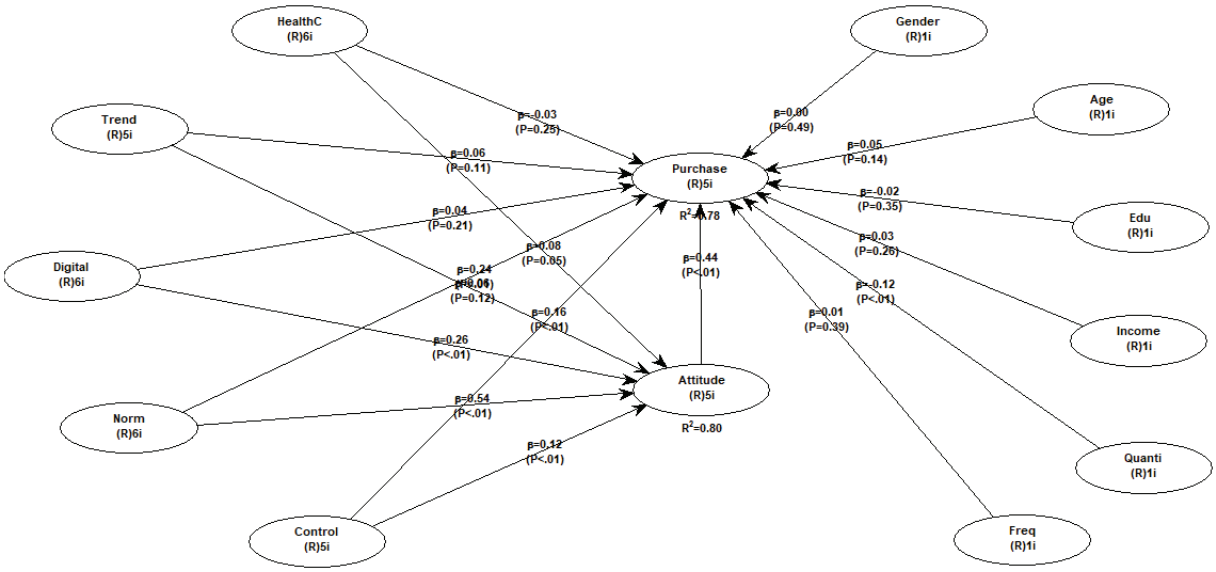


Figure 2 Direct Effects from PLS-SEM Analysis

Table 4 Direct Impacts

	HealthC	Trend	Digital	Norm	Control	Attitude
Beta	-.033	.062	.041	.236	.162	.441
P-Value	.252	.108	.207	< .001	< .001	< .001

Remarks: Purchase = Purchase Intention, HealthC = Health Consciousness, Trend = Cultural Trends, Digital = Digital Engagement, Norm = Subjective Norms, Control = Perceived Behavioral Control, and Attitude = Attitude toward Low-Alcohol Beverages

Shown in Table 4, the hypothesis testing confirmed that the core elements of the Theory of Planned Behavior were the dominant predictors: Attitude (H6: β = .441, p < .001), Subjective Norms (H4: β = .236, p < .001), and Perceived Behavioral Control (H5: β = .162, p < .001 from Table 4) were all highly significant direct drivers of Purchase Intention. In contrast, Health Consciousness (H1), Cultural Trends (H2), and Digital Engagement (H3) had no significant direct effect.

Table 5 Mediation of Attitude between the Variable and Purchase Intention

Predictor	HealthC	Trend	Digital	Norm	Control
Beta	.036	.026	.117	.238	.055
P-Value	.008	.125	<.001	<.001	.019
St.Er.	.015	.022	.034	.047	.026
Effect Sz.	.012	.015	.079	.187	.038

Remarks: Purchase = Purchase intention, HealthC = Health Consciousness, Trend = Cultural trends, digital = digital engagement, Norm = Subjective norms, Control = Perceived behavioral control

Crucially, Table 5 shows that the mediation analysis revealed a full mediation effect for both Health Consciousness (H1a: $p = .008$) and Digital Engagement (H3a: $p < .001$) through Attitude, confirming that their influence must first be internalized as a favorable perception before affecting purchase intent. Finally, Subjective Norms (H4a) and Perceived Behavioral Control (H5a) partially mediated.

Analysis of Control Variables To ensure robustness, the influence of demographic and behavioral control variables was analyzed. Quantitative usage experience was the only control variable with a significant effect ($\beta = -.119$, $p = .008$), indicating a slight reduction in future purchase intent among users who used the product more frequently. All other demographic controls (Gender, Age, Education, Income) were non-significant ($p > .138$), validating that the theoretical effects are independent of the sample's basic profile.

Discussion

This study aimed to resolve a key ambiguity in consumer behavior theory: understanding the precise mechanism by which modern lifestyle factors, such as digital engagement and health consciousness, influence purchase intention. The empirical results provide substantial evidence that their influence is not direct, but is fully mediated by Attitude, a finding that forms the cornerstone of the proposed extended TPB model.

The analysis supported the TPB's foundational elements, with Attitude toward low-alcohol beverages (H6) emerging as the dominant psychological predictor ($\beta = .441$), alongside significant direct effects of Subjective Norms (H4) and Perceived Behavioral Control (H5). These findings support the classic TPB model (Ajzen, 1991) in this novel context. Specifically, the observed strength of Subjective Norms ($\beta = .236$) aligns with prior research highlighting the enduring influence of social compliance and peer approval in collectivist Chinese culture, where external validation is often paramount to personal choice (Hoffmann et al., 2018). This highlights the crucial role of social pressure, market accessibility, and personal preference.

Conversely, the rejection of Health Consciousness (H1), Cultural Trends (H2), and Digital Engagement (H3) as direct drivers was a pivotal finding. Their role was clarified through mediation analysis, which revealed that the impact of Health Consciousness and Digital Engagement must first be cognitively processed and integrated into a favorable Attitude before motivating purchase intent. This result addresses the existing theoretical ambiguity in the literature. While some studies in functional product categories posit a direct link from health consciousness to intention (Devi et al., 2023; Iqbal et al., 2021), our findings align with research suggesting that in lifestyle segments, these inputs function as upstream antecedents that primarily shape brand perception and favorability (Nguyen Tran Cam, 2023). Similarly, we clarify that digital interaction does not act as a direct-to-purchase trigger, as some models suggest (Sharma et al., 2022), but rather as a mechanism to cultivate the positive Attitude that precedes and enables purchase (Akhmad et al., 2024).

Notably, Cultural Trends (H2/H2a) failed to show a significant direct or indirect effect. A rival explanation for this non-significance is that generalized societal awareness or perception of "trendiness" is too abstract to be internalized as a personal attitude or a direct behavioral trigger. For Gen Z, the specific, peer-driven validation found in Digital Engagement and the personal, self-directed motivation of Health Consciousness are likely more salient precursors to attitude formation than a broad cultural trend.

This finding is best understood through the lens of the product's function as lifestyle iconography. For Chinese urban Gen Z, a low-alcohol beverage is not merely a drink but a component of identity construction. External information from social media or health trends serves as raw material to build a favorable, "responsible indulgence" self-concept (Attitude), with the final purchase serving as validation of that identity.

The partial mediation of Subjective Norms (H4a) and PBC (H5a) is further reinforced by the confirmation of the structural paths leading to Attitude (Norms-Attitude, H4b: $\beta = .54$, $p < .01$; Control-Attitude, H5b: $\beta = .12$, $p < .01$). This structural confirmation reveals a powerful reinforcing loop: peer approval and ease of access directly strengthen the core positive Attitude, which then drives the final intention, underscoring the interconnected nature of social influence and self-efficacy in this consumer segment.

Conclusions

Theoretical Contributions

This study provides three key contributions to consumer behavior theory. First, it offers a robust cultural refinement of the TPB by confirming the strong, enduring direct effect of Subjective Norms (H4) within the digitally connected, collectivist Chinese context. Second, it provides empirical clarity in the literature by establishing that Health Consciousness, Cultural Trends, and Digital Engagement fully mediate through Attitude, clarifying their function as antecedents of Attitude rather than direct behavioral triggers. Third, based on these findings, we propose the TPB-Attitude Precedence Model. The significance

of this model lies in its formal assertion that, for identity-relevant, lifestyle-driven consumption, Attitude is not merely one of three predictors but a critical gateway through which external marketing and cultural inputs must pass. This refines the classic TPB by adding a hierarchical dimension to its predictive structure in such contexts, offering a more nuanced framework for the digital age.

Practical Implications

The findings offer actionable managerial strategies for the low-alcohol beverage industry. First, Prioritize Emotional Branding (Attitude): Marketing budgets should focus on aesthetic design and emotional positioning, treating the product as a trendy lifestyle accessory rather than just a functional low-alcohol alternative, thereby building the dominant Attitude factor. Second, Strategic Digital Advocacy: Digital efforts must use platforms like Douyin (TikTok) and Xiaohongshu not for direct sales but to create peer-based social proof and narrative justification. Firms must invest in content that fosters a positive Attitude and leverages the strong Subjective Norms by showcasing group consumption. Third, Optimize Convenience: The significant role of Perceived Behavioral Control necessitates a strategic investment in seamless e-commerce integration and rapid fulfillment logistics in first-tier cities, treating low-friction accessibility as a core product feature.

Limitations and Future Research

The study is limited by its cross-sectional design, which cannot fully confirm if stated intentions translate into actual sales behavior, and by its reliance on convenience sampling exclusively in first-tier Chinese cities, which limits generalizability. Additionally, data were collected in August 2023; given the rapid evolution of digital trends and consumer emotions in China, the influence of specific digital platforms may have shifted since then. Future research should prioritize longitudinal studies to definitively close the intention-behavior gap. Additionally, it should conduct cross-cultural comparisons of the TPB-Attitude Precedence Model in both collectivist markets, such as Vietnam, and individualistic markets, such as Germany, to isolate the differential impact of cultural norms on the model. Further moderation analysis, focusing on variables such as product experience and income level, is recommended to refine segmentation strategies.

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医药类大学生思政课吸引力要素及构成研究

DETERMINANTS AND STRUCTURAL DIMENSIONS OF THE ATTRACTIVENESS OF IDEOLOGICAL AND POLITICAL COURSES AMONG MEDICAL STUDENTS

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摘要

研究目的：提升思政课吸引力是强化高校思想政治工作成效、确保社会稳定的关键。本研究针对医药类大学生这一特定群体，旨在系统探究其思政课吸引力的要素构成及其内在结构，并编制标准化的测量工具。

研究设计/方法/途径：研究采用质性与量化相结合的混合设计。首先，对 26 名医药类大学生进行深度访谈，利用文本分析法提取核心要素并构建初步理论模型；随后，基于访谈结果编制测量量表，对 500 名学生开展问卷调查，并运用 SPSS 27.0 和 AMOS 24.0 进行探索性与验证性因素分析，检验工具的信效度。

研究结果：研究发现，医药类大学生思政课吸引力由价值内驱力、认知建构力、情境嵌入力和教学支持力 4 个维度构成。实证结果显示，该量表的 Cronbach’s α 系数为 0.981，各拟合指标均符合测量学要求。

创新性与价值：数据表明，医药类大学生对思政课吸引力的感知在认知建构力维度更为看重。研究所编制的工具具有良好的可靠性，为医药类高校精准评价并优化思政教学质量提供了科学依据与实践参考。

关键词：思政课吸引力 价值内驱力 认知建构力 情境嵌入力 教学支持力

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Abstract

Purpose: Enhancing the appeal of ideological and political courses is pivotal for strengthening the effectiveness of ideological and political work in universities and ensuring long-term social stability. Focusing on the specific cohort of medical and pharmaceutical students, this study aims to systematically investigate the constituent elements and internal structure of the appeal of these courses and to develop a standardized measurement tool.

Study Design/Methodology/Approach: A mixed-methods research design was employed. First, in-depth interviews were conducted with 26 medical and pharmaceutical students, and text analysis was used to extract the core elements and construct a preliminary theoretical model. Subsequently, a measurement scale was developed based on the interview findings. A survey was then administered to 500 students, and Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed using SPSS 27.0 and AMOS 24.0 to test the reliability and validity of the instrument.

Findings: The results indicate that the appeal of ideological and political courses for medical and pharmaceutical students comprises four dimensions: Value-driven Force, Cognitive Constructive Force, Situational Embeddedness Force, and Teaching Supportive Force. Empirical evidence showed that the Cronbach's alpha coefficient of the scale was 0.981, and all fit indices met the requirements of psychometrics.

Originality/Value: Data analysis further revealed that medical and pharmaceutical students place significantly higher importance on the dimension of Cognitive Constructive Force. The instrument developed in this study demonstrates high reliability and provides a scientific basis and practical reference for medical colleges to accurately evaluate and optimize the quality of ideological and political teaching.

Keywords: Ideological and Political Course Attractiveness, Internal Value Drive, Cognitive Constructive Ability, Situational Embedding Ability, Teaching Support Ability

引言

医药类高等教育的核心使命是培养兼具专业诊疗能力与职业伦理素养的医疗卫生人才，其人才培养质量是保障国民健康福祉的重要基础。思想政治理论课（以下简称“思政课”）作为医药类大学生价值塑造与职业精神培育的核心载体，其吸引力直接影响学生的课程参与度、价值认同度与学习获得感，进而制约思政课育人功能的有效发挥。当前，医药类思政课普遍面临“课程吸引力不足”的现实挑战，而现有研究对医药类思政课吸引力的核心要素、维度构成缺乏系统界定，且缺乏适配医药类专业特性的标准化测量工具，导致思政课教学改革缺乏明确的靶

向性。基于此，本研究以“医药类大学生思政课吸引力要素及构成”为核心议题，通过访谈法系统识别吸引力关键要素、界定维度框架，进而开发并验证吸引力评价量表的信效度，为精准把握医药类思政课吸引力现状、开展针对性教学优化提供理论依据与测量工具支撑。

研究目的

本研究立足医药类高等教育的专业特性与思政课的育人定位，围绕“吸引力要素识别——维度构建——量表验证”的核心逻辑，明确以下研究目标：第一，通过深度访谈系统梳理医药类大学生思政课吸引力的核心影响要素，厘清各要素的内涵与表现形式；第二，基于访谈结果构建医药类大学生思政课吸引力的维度框架，明确各维度的核心构成与逻辑关联；第三，依据维度框架开发医药类大学生思政课吸引力量表，通过实证调查检验量表的信度与效度，形成标准化的测量工具；第四，通过量表验证结果明确医药类思政课吸引力的关键维度与核心要素，尤其关注中华优秀传统文化与医学伦理、职业精神的融合路径对吸引力的影响，为后续开展思政课吸引力影响因素分析、教学效果评估及针对性改革提供理论基础与实践参考。

文献综述

“吸引力”是一个多学科研究的概念，涉及哲学、心理学、社会学等多个领域。哲学视吸引力为内在目的性力量，心理学强调其源于个体情感与偏好，社会学凸显其与社会关系、结构的关联性，多学科视角的交叉融合，为构建全面系统的吸引力理论框架提供了重要支撑。

课程吸引力（Course Attractiveness）是思想政治理论课实现“立德树人”关键目标的前提条件，也是衡量教学供给侧改革成效的核心指标。近二十年来，中国学者围绕“如何让有意义的内容变得有意思”持续探索，已形成以内容、方法、教师、环境为主线的多元研究格局。然而，现有成果尚未在专业维度上细化到医药类大学生，亦缺乏基于严格测量学的量表开发与验证。以 CNKI 为数据源，检索式为：主题 =（“课程吸引力”OR“教学吸引力”）AND（“思政课”OR“道德与法治”OR“形势与政策”OR“当代资本主义”OR“新闻观”OR“公共选修”OR“MOOC”），时间跨度 1996-2021 年，语种 = 中文，文献类型 = 同行评议期刊论文。依据“研究主题聚焦、研究方法明确、数据结果完整”三准则，最终纳入 10 篇文献，覆盖基础教育、中职、本科与在线开放课程四类场景。

采用内容分析法对样本进行编码，析出“研究设计”“样本特征”“维度框架”“测量工具”“主要结论”5 个一级节点。结果显示：①方法论层面，7 篇为纯定量问卷，1 篇为纯定性访谈，仅 1 篇采用混合方法；②样本规模介于 40-13417 人，但医药类学生数量为 0；③测量工具均为自编问卷，未报告探索性因素分析（EFA）或验证性因素分析（CFA）结果，信度指标仅提及 Cronbach’s α，缺乏组合信度（CR）与平均变异数抽取量（AVE）等聚合效度证据。通过元结构

分析（Meta-structure Analysis），将 10 篇文献出现的 29 个初始范畴归并为“五阶吸引力模型”：（1）感官吸引力：即时注意捕获，依赖多媒体、案例、微视频等刺激性材料 (Yun & Wang, 2019)。（2）认知吸引力：内容与学生、专业、社会三维度贴近，呈现“前沿——挑战——实用”特征 (Hu, 1996；Jiang, 2020)。（3）情感吸引力：正向情绪、价值共鸣与身份认同的激活 (Ran, 2012)。（4）行为吸引力：可观察的课堂参与、社会实践与项目任务投入 (Liu, 2019)。（5） 转化吸引力：课程对专业理想、职业自我与核心价值观的长期重塑 (Yang, 2009)。

影响因素的“供给——需求——环境”三维框架：供给端：教师理论深度与人格魅力、教学内容“三贴近”、互动/专题/案例教学方法、个性化考核方式显著正向预测吸引力 (Tan, 2021; He, 2017)。需求端：学生先备经验、学习动机（工具——文化 vs. 应试——拿学分）、专业认同对吸引力感知具有统计显著性 (Leong & Li, 2011)。环境端：班级规模、信息化手段、行业情境缺失构成显著负向调节 (Yun & Wang, 2019; Yang, 2009)。

综上发现，现有模型与框架虽具启发意义，但因其源于通识教育或一般课程情境，未能将医药类专业特有的高伦理负载、强实践导向、生命关怀至上等情境特质充分纳入。因而，直接套用于医药类思政课吸引力研究可能存在解释力不足的风险，亟需进行情境化修正与检验。测量工具专业性缺失，现有测量工具普适性强而专业性弱，未报告严格的因子分析与完备的信效度指标，更无针对医药语境的题项开发，难以进行精准评估。因此，亟需在专业情境下，通过扎实的混合方法研究，开发一套概念清晰、结构明确、测量科学的医药类思政课吸引力分析框架与评估工具。

尽管西方无专门针对思政课吸引力的研究，但其相关成果为中国提供了借鉴，如吸引力法则在心理学、教育学中的应用，凸显了吸引力对个体行为的引导作用 (Byrne, 2008)。西方现有研究虽不直接针对思政课，但其对“教师角色”“职业认同”及“学习环境公平性”的关注，为本研究思考医药类专业背景下思政课吸引力的教学支持、认知关联与情境安全等维度提供了跨文化理论参照。

Liu 和 Tomasi (2015) 研究在线课程中教师吸引力的影响，且教师吸引力与学生学习动机、判断及整体体验相关，强调其对提升学习满意度与效果的重要性。Simiyu (2018) 聚焦技术与职业教育培训机构（TVET）吸引力，通过问卷与访谈发现，课程多样性与实用性、支持服务质量、校长管理能力是关键影响因素，并提出校长需具备高资质、明确目标框架等提升建议。Parks 和 Kennedy (2007) 探讨种族、外貌吸引力、性别对教育者认知学生能力的影响，指出这些因素可能引发评估偏见，强调教育领域需提升公平意识、减少偏见。

Weiss et al. (2024) 研究苏黎世医学院本科生对医学职业吸引力的变化及职业决定因素，并探讨其对医学教育的启示与未来研究方向。Amos et al. (2021) 以普遍设计学习（UDL）原则为指导，探索如何构建包容平等的学习环境，以提升残疾学生对工程课程的兴趣与出勤意愿。

基于以上综述，本研究认为医药类大学生思政课吸引力是一个多维构念，其提升可能关乎学生内在价值的激发、专业认知的建构、职业情境的融入以及教学过程的支撑。后续将通过对医药类学生的质性访谈，对此构念进行本土化界定与维度探索。

研究方法

本研究使用混合方法共分为两个阶段。第一阶段是以质性研究方法对医药类大学生思政课吸引力的要素和结构进行探索。主要是通过访谈收集资料并使用质性编码来进行资料处理与分析，以探索思政课吸引力的要素和结构，并编制测量工具；第二阶段使用定量研究方法，验证医药类大学生思政课吸引力量表的信效度。采用经过检验的研究工具来调查医药类大学生思政课吸引力及其各维度的总体状况。

本研究中，量化与质性部分的混合贯穿于整个研究过程。在研究设计阶段，以理论框架为指导，综合考虑质性与量化方法的优势，制定出合理的混合方法研究方案。在数据收集阶段，质性研究通过访谈、观察等方式收集定性数据，量化研究则通过问卷调查等方式收集定量数据，两者相互补充，为后续分析提供全面的数据支持。量化与质性部分的混合可能发生在由理论框架所指导的整个研究设计中，也可能发生在数据收集的方法和分析的方法之中，或发生在结论阐释的过程中 (Creswell & Clark, 2016)。本研究中量化方法所占比重较多，且在回答研究问题的过程中发挥主要作用。

访谈对象选取的 26 名在校大学生均来自医药类不同专业，不同年级的 5 所高校，在确定人员后，首先搜集了研究对象的基本信息，这类信息包括研究对象的姓名、性别、年龄、专业以及学历年级等方面的基本内容。医药类专业招生，在中国高校中，从高职高专到本科、研究生均有设立。由于研究者在高职高专类院校工作，受条件制约，为全面了解学生真实信息，访谈对象尽可能全面化，其中高职高专大学生 14 人，本科生 8 人，硕士研究生 3 人，博士研究生 1 人。在此将 26 位受访对象最为基本的五项情况做表格（表 1）所示梳理，在姓名一栏中为隐私考虑选取了编号替代并排列，排序不分先后。

Table 1 Demographic Information of Interviewees

No.	Gender	Age	Major	Education Level
01	Female	19	Nursing	Freshman
02	Female	19	Nursing	Freshman
03	Female	20	Nursing	Sophomore
04	Female	20	Nursing	Sophomore

Table 1 Demographic Information of Interviewees (Cont.)

No.	Gender	Age	Major	Education Level
05	Male	19	Rehabilitation Therapy Technology	Freshman
06	Female	22	Clinical Pharmacy	First-year Postgraduate
07	Female	25	Clinical Medicine	Third-year Postgraduate
08	Male	18	Clinical Medicine	Freshman
09	Female	20	Sports Health and Rehabilitation	Freshman
10	Female	19	Sports Health and Rehabilitation	Freshman
11	Female	22	Pharmacy	First-year Postgraduate
12	Female	22	Pharmacy	Freshman
13	Female	18	Pharmacy	Sophomore
14	Female	19	Pharmacy	Sophomore
15	Male	19	Medical Laboratory Technology	Freshman
16	Female	20	Medical Laboratory Technology	Sophomore
17	Male	20	Acupuncture and Massage	Freshman
18	Female	20	Acupuncture and Massage	Freshman
19	Male	19	Acupuncture and Massage	Freshman
20	Female	22	Integrated Traditional Chinese and Western Clinical Medicine	Junior
21	Male	20	Chinese Materia Medica	Freshman
22	Female	20	Chinese Materia Medica	Freshman
23	Male	19	Chinese Materia Medica	Sophomore
24	Female	26	Chinese Materia Medica	First-year Doctoral Student
25	Male	20	Traditional Chinese Medicine	Sophomore
26	Female	19	Midwifery	Freshman

Sources: Compiled by the researcher

以下是对学生进行访谈的初始记录举例：

1. 你怎么看待思政课？你认为思政课有什么价值？

生 01：“医学是科学与人文的交汇，而思政课提供了一种“系统思维”的训练——就像诊断时需要同时考虑病理生理和社会心理因素一样。执业医师考试中的医学伦理、卫生法规占比约 8%，早期重视思政课能为考试打下基础；在诊治肿瘤患者时，面对是否告知晚期患者

真实病情的两难，思政课中“社会主义核心价值观”关于“诚信”的讨论，与《希波克拉底誓言》产生了奇妙共振。这让我意识到：思政提供的是社会共同遵守的价值基线，而医学伦理是在此基础上的专业延伸。其实思政课的内核社会道德价值观和我们的爱情观，恋爱观，都会让我们个人有所领悟，对我们个人成长有实质性的关联.....”

2. 抛开考试要求，作为医药专业学生，思政课的哪些具体内容或观点曾让您真切感受到与您的专业学习、未来职业（如医德伦理、科研诚信、公共卫生责任）或个人成长有实质关联？

生 05：“我认为小组讨论最能帮助我理解抽象理论、激发思考、让我与思政共鸣。因为在讨论过程中，我会更加专心思考问题，多听多想多吸取同学意见，我的收货自然而然也就更多更深刻.....

当时匿名给同学写信的时候，确实情绪是比较积极的，因为这次实践活动主题真的太好了。不知道写信的是谁，单纯以一种旁观者的角度来切入对方，现场课堂的氛围是很轻松的，因为可以自由向对方投射自己的目光，虽然自己也会紧张，但也会观察其他人，同时也知道自己在被观察。可是还是有自由和被关注的感觉。”

3. 在您的专业课程中（如解剖、药理、临床课等），老师是否有将医德医风、生命伦理、科学精神、社会责任等思政元素融入教学？请描述一个您认为融入最自然、效果最好的例子，并说明关键成功因素（如内容结合点、教师引导方式）。

生 13：“.....我还记得当时是有一个中药学课程，老师讲牛黄的时候，说到 2025 年某药企用人工牛黄冒充天然牛黄被处罚，然后说作为中药人一眼辨别真假，是对患者用药的安全负责，也是守住中药的信誉，把科学精神，社会责任融入专业知识，关键是老师用真实的造假案例当影子，然后还让我们模拟、鉴别真假牛黄，而不是干巴巴的说教。我们了解药材的时候都特别认真，感觉不是单纯的学技能，是在守护中药质量，感觉融入的特别自然.....”

通过对思政课吸引力访谈文本进行译码，基本确定医药类大学生思政课吸引力的要素。通过对文本的初始译码确立范围，选择性译码明确关键概念、主轴式译码确定概念类属，将质性研究部分的材料进一步分析与整合，把主轴译码整合而成的关键概念类属即要素进行归类，确立医药类大学生思政课吸引力的结构维度的模型。价值内驱力、认知建构力、情境嵌入力、教学支持力各包括三个关键概念类属。

在访谈资料方面，本研究对 26 名医药类大学生进行了访谈，访谈完成后，对音频资料进行了逐字转录，最终得到超过 8 万字的文字文本。通过对文本的细致阅读、比对与整理，从中筛选出与吸引力相关的文本信息共计 312 条。然而，在这 312 条信息中，存在部分表意相近或相似的内容。因此，研究者进一步对文本信息进行了比较、合并相似表述以及剔除重复内容的操作，最终得到有效文本信息 239 条，并以此为基础开展初级编码工作。

为进一步论证访谈文本资料初步达到饱和，每个概念都有相应的文本证据，6 名学生的访谈文本共出现 66 个概念，概念频次从“3”到“17”不等，其中出现频次为 3 的概念为“情景描绘与价值共鸣”，可视为访谈资料中新涌现的概念，其比例为 3/66，约为 4.55%。此时，新涌现概念相较于之前访谈的比例小于 5% (Guest et al., 2020)，因此可以判定访谈资料达到了编码饱和。

量表编制

本研究初始编制了包括 29 个题项的医药类大学生思政课吸引力初始量表，对初始题项进行调整和完善。试测过程中，通过项目分析、信度分析、效度分析、探索性因子和验证性因子分析，最终删除了 13 个题项，形成了 4 个维度 16 个题项的正式量表。

Table 2 Items of the Ideological and Political Course Attractiveness Scale for Medical College Students

Variable NameCodeQuestion Item	Variable NameCodeQuestion Item	Variable NameCodeQuestion Item
Ideological and Political Course Attractiveness of Medical College Students	X1	The medical ethics emphasized in the ideological and political course is highly consistent with the professional philosophy I identify with
	X2	The role models in the medical and pharmaceutical industry presented in the ideological and political course make me feel a sense of professional mission
	X3	The classroom topics are exactly the growth issues I care about in my heart
	X4	Classroom discussions prompt me to reflect on the relationship between my professional goals and social responsibilities
	X5	The content of the ideological and political course has deepened my understanding of the policies and systems of the medical and pharmaceutical industry
	X6	I can apply the ethical analysis tools learned in the course to the thinking of professional practice
	X7	Through the course, I have a clearer understanding of how to deal with potential ethical dilemmas in my career
	X8	The ideological and political course has expanded my cognitive perspective on public decision-making in the medical and pharmaceutical industry
	X9	The situational simulation design in the ideological and political course gives me an immersive learning experience
	X10	When participating in role-playing or case discussions, I often think about problems from the perspective of the role in the scenario
	X11	The real industry cases told by teachers arouse a strong sense of professional identification in me
	X12	The practical tasks in the ideological and political course make me feel the content is close to reality
	X13	Even when expressing different opinions, I can still gain respect from others

Table 2 Items of the Ideological and Political Course Attractiveness Scale for Medical College Students (Cont.)

Variable NameCodeQuestion Item	Variable NameCodeQuestion Item	Variable NameCodeQuestion Item
	X14	When discussing sensitive topics, I still feel safe to express my own views
	X15	Teachers respect diverse viewpoints and do not impose a "standard answer"
	X16	The ideological and political classroom encourages students to think and discuss issues critically

Sources: Compiled by the researcher

研究结果

量表信度检验

对正式量表的信效度检验，主要采用克隆巴赫 α 系数、区分效度、收敛效度等方法。

Table 3 Reliability Test of Each Dimension of the Ideological and Political Course Attractiveness Scale for Medical College Students (N = 412)

Variable	Item	N	M	S.D.	Cronbach's Alpha	Cronbach's Alpha if Item Deleted
Value		412	17.52	2.798	0.929	
Internal	1	412	4.41	0.764		0.911
Drive	2	412	4.41	0.748		0.903
	3	412	4.33	0.782		0.912
	4	412	4.36	0.788		0.903
Cognitive		412	17.43	2.954	0.950	
Constructive	1	412	4.37	0.801		0.935
Ability	2	412	4.36	0.797		0.937
	3	412	4.33	0.804		0.933
	4	412	4.37	0.764		0.934
Situational		412	17.49	2.962	0.942	
Embedding	1	412	4.35	0.810		0.923
Ability	2	412	4.39	0.805		0.923
	3	412	4.38	0.775		0.928
	4	412	4.36	0.818		0.922
Teaching		412	17.56	2.845	0.935	
Support	1	412	4.39	0.770		0.910
Ability	2	412	4.33	0.829		0.929
	3	412	4.42	0.742		0.918
	4	412	4.42	0.765		0.906

Table 3 Reliability Test of Each Dimension of the Ideological and Political Course Attractiveness Scale for Medical College Students (N = 412) (Cont.)

Variable	Item	N	M	S.D.	Cronbach's Alpha	Cronbach's Alpha if Item Deleted
Ideological and Political Course Attractiveness		412	69.99	11.101	0.981	

Sources: Compiled by the researcher

对《医药类大学生思政课吸引力量表》的信度进行检验，Cronbach's Alpha 系数为 0.981，高于 0.9，说明量表信度较高。量表中各题项删除后的 Cronbach's Alpha 系数的检验结果最小值为 0.903，最大值为 0.937，说明量表中的每一个题项与整个量表的一致性较高，删除其中任意一题都有可能造成量表整体信度的降低。因此，《医药类大学生思政课吸引力量表》试测版确定的 16 个题项都应予以保留。

量表效度检验

区分效度采用 AVE 方法根来评估潜变量之间是否具有区分度。收敛效度采用因子载荷、组合信度和 AVE 来对样本数据进行检验。所有测量指标的标准化因子载荷都高于 0.5，组合信度（CR）都高 0.6，平均方差提取量（AVE）都高于 0.5 的情况下，表明该维度中的各个变量具有良好的收敛效度 (Hair et al., 1998)。

Table 4 Discriminant Validity of the Ideological and Political Course Attractiveness Scale for Medical College Students

	Discriminant Validity			
Dimensions	**Value Internal Drive**	**Cognitive Constructive Ability**	**Situational Embedding Ability**	**Teaching Support Ability**
Value Internal Drive	**0.939**			
Cognitive Constructive Ability	0.924**	**0.933**		
Situational Embedding Ability	0.915**	0.915**	**0.923**	
Teaching Support Ability	0.875**	0.850**	0.900**	**0.916**

Remarks: The values on the diagonal are the square roots of AVE.

表中对角线上的数值为各潜变量的 AVE 的平方根，分别是 0.939、0.933、0.923、0.916，均高于对角线以外的数值所表示的它们与其他变量之间的相关系数，表明各潜变量之间具有良好的区分效度。换句话说，这些潜变量能够有效地区分彼此，说明量表中各构念之间具备较高的独立性。

Table 5 Model Fit Indices of Confirmatory Factor Analysis for the Ideological and Political Course Attractiveness Scale

Fit Indices	χ^2	***df***	χ^2/df	**RMSEA**	**SRMR**	**TLI**	**CFI**
Calculation Results	159.41	62	2.571	0.080	0.043	0.918	0.935

Sources: Compiled by the researcher

检验结果表 5 可见，χ^2/df 为 2.571，达到适配标准，RMSEA、SRMR、TLI、CFI 等指表达到拟合标准，量表的信度指标保持稳定，而效度得到了显著提升。这一过程增强了量表的科学性和实用性，为其在实际应用中的有效性提供了坚实的基础。

Table 6 Convergent Validity of the Ideological and Political Course Attractiveness Scale for Medical College Students

Convergent Validity				
Variable	**Item**	**Factor Loading**	**CR**	**AVE**
Value Internal Drive	1	0.902	0.950	0.825
	2	0.917		
	3	0.899		
	4	0.915		
Cognitive Constructive Ability	1	0.933	0.964	0.871
	2	0.928		
	3	0.937		
	4	0.934		
Situational Embedding Ability	1	0.925	0.958	0.852
	2	0.924		
	3	0.915		
	4	0.927		
Teaching Support Ability	1	0.926	0.954	0.839
	2	0.891		
	3	0.913		
	4	0.934		

Sources: Compiled by the researcher

结果表明，各题项的因子载荷均在 0.891 至 0.937 之间，符合收敛效度要求，即应超过 0.5 的标准。且各题项的因子载荷较为接近，表明每个题项对其潜变量的贡献相对均衡，能够稳定反映其所属的潜在结构。此外，四个潜在变量的 AVE 值分别是 0.825、0.871、0.852、0.839，均超过了 0.5 的临界值，表明各潜在变量能够有效地解释其相关题项的方差，进一步支持了量表的收敛效度。结果表明医药类大学生思政课吸引力量表各个变量的收敛效度良好。

讨论

本研究采用定性和定量研究方法，系统地检验并验证了医药类大学生思政课吸引力的结构维度以及《医药类大学生思政课吸引力量表》的信效度。在正式测试阶段，收集了 412 名研究被试的有效数据，运用科学的统计分析方法，验证了医药类大学生思政课吸引力包含四个核心维度：价值内驱力、认知建构力、情境嵌入力和教学支持力。这一发现清晰地勾勒出了医药类大学生思政课吸引力的内在结构框架，为后续研究提供了明确的方向指引。然而，吸引力四个维度之间存在高度相关（$r = 0.85 \sim 0.92$）。这在一定程度上反映了价值内驱、认知建构、情境嵌入与教学支持在吸引学生过程中协同共生、相互强化的事实，符合吸引力生成的整体性规律。

最终，对《医药类大学生思政课吸引力量表》进行全面的信效度检验。检验结果显示，该量表的题项区分度及测量信度表现优异，各维度题项与总量表之间呈现出高度的一致性，且量表的结构效度良好，能够准确地反映出医药类大学生对思政课吸引力的多维度感知与评价。

总结

医药类大学生思政课吸引力的概念和结构是本研究分析思政课吸引力影响因素的前提和基础，研究采用质性和量化相结合的方法，对医药类大学生思政课吸引力的结构维度进行了建构，开发了相应的测量工具并进行验证，对以往思政课吸引力相关的理论及文献进行了梳理与分析，作为研究思政课吸引力的基础。由于思政课吸引力的复杂性和综合性等特点，以往思政课吸引力未专门聚焦于要素与构成领域，所以本研究在对质性研究部分的访谈文本进行分析时，尽量对思政课吸引力的要素进行深入的剖析，以提取更有针对性的内涵表述，贴近医药类大学生的学习环境。

本研究编制的《医药类大学生思政课吸引力量表》具有较高的科学性和可靠性，可以作为研究医药类大学生思政课吸引力的重要数据收集工具，为后续深入探究医药类大学生思政课吸引力的影响因素、作用机制以及优化策略等提供有力的实证支持，助力提升医药类大学生思政课的教学质量与育人效果。

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DEVELOPING A BUSINESS INCUBATION MODEL FOR UNIVERSITY INCUBATORS IN THE UPPER CENTRAL REGION OF THAILAND'S HIGHER EDUCATION NETWORK

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Abstract

Purpose: This research aimed to develop a business incubation model for university incubators in the upper central region of Thailand's higher education network.

Study Design/Methodology/Approach: Data were collected from a purposive sample of 400 executives, managers, and staff at UBI centers. Using Structural Equation Modeling (SEM), the study analyzed the factors influencing business success.

Findings: The results revealed that selecting incubators, managing incubators, providing incubator services, and financial support all influence the creation of entrepreneurs. This relationship is mediated by the technology development within the incubated businesses. Of these factors, managing incubators had the greatest influence, followed by selecting incubators.

Originality/Value: University business incubators can use the findings to guide policy development and implementation, thereby fostering the growth of successful businesses and cultivating sustainable entrepreneurs.

Keywords: Business Incubation Model, University Business Incubators, Higher Education Institutions, Thailand

Introduction

Higher education institutions have a key mission to cultivate and develop entrepreneurs and promoting and supporting new entrepreneurs to achieve business success and compete at the national level; promoting and developing students and faculty to develop entrepreneurial potential and skills; encouraging students and faculty to develop research for commercial use; and establishing student entrepreneurship clubs to serve as learning centers and exchange diverse experiences across disciplines and with outside entrepreneurs. Business incubators within higher education institutions aim to support and encourage faculty, students, college personnel, entrepreneurs, and external stakeholders to recognise

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the importance of entrepreneurship and the commercialisation of research. Promoting the integration of research/innovation development, technology, and academic potential within higher education institutions into the business and industrial world; developing new entrepreneurs; and cultivating new entrepreneurs with the potential to seek business development support from government agencies and other financial institutions through government policy and developing competitiveness and robust business growth. The expected outcomes of higher education institutions serving as business incubators include creating new entrepreneurs and strengthening existing entrepreneurs through the incubation of student and faculty research, enabling them to further develop their ideas into commercial products or solutions; and increasing the number of student and faculty projects and research that are notified and patented. However, current data indicate that some higher education institutions are successful in incubating new entrepreneurs and business ventures.

In contrast, others fail to create new ventures that benefit society and the nation. Many institutions have had to close their incubators and ultimately abandon their mission of nurturing new entrepreneurs and supporting the creation of new businesses. Therefore, this research aims to study and develop a successful business incubation model for future application to other business incubators in Thailand.

Objectives

1. To study the business incubation model for business incubator centres of higher education institutions under the Upper Central Network of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation (OPMHESI) in Thailand.
2. To study the factors affecting the development of the business incubation model for business incubator centres of higher education institutions under the Upper Central Network of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation (OPMHESI) in Thailand.
3. To develop the business incubation model for business incubator centres of higher education institutions under the Upper Central Network of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation (OPMHESI) in Thailand.

Literature Review

Incubator Selection

Hackett and Dilts (2004) suggested that the selection policy is related to the way the incubator will provide incubation. Therefore, the selection of incubators must be consistent with the incubator's incubation methods. Incubators that are unclear about the selection of incubators and incubation methods from the beginning often lead to the incubation process failing in the end. However, in terms of responsibility and incubation methods, the incubator will have a structure with a board of directors and an incubator manager who must have expertise in the field of study to provide advice and incubation in line with the

incubator's needs. Most of the selection is conducted through the incubator's website or by utilizing the Canvas Model to transform ideas into businesses (Carvalho & Galina, 2015). Therefore, the process of selecting incubators for business incubators has a significant impact on creating entrepreneurs through the development of information technology, ultimately leading to business success.

H1: The incubator selection process is likely to have a positive impact on creating entrepreneurs through technology development as a business focus.

Incubator Management

The incubator has set its objectives to act as an agency that supports and promotes the incubators to realize the importance of being entrepreneurs and the application of research results to commercial use, promotes the application of research results to the development of innovations, technology, and the academic potential of higher education institutions to connect with the business and industrial world to develop new entrepreneurs, opens up opportunities for the incubators to participate in the activities of the business incubators that have been established and develops them into high-potential entrepreneurs, strengthens and cultivates new entrepreneurs to have the potential to request support for business development from other government agencies and financial institutions according to government policies to develop competitive capabilities and strong business growth. The expected results from the management of the incubators include making the incubators new entrepreneurs and strengthening the original entrepreneurs from the incubation, exchanging perspectives and changing their status to entrepreneurs, increasing the research results of the incubators to commercial production or problem solving, and increasing the number of projects and research results of the incubators to be registered and patented, and cultivating businesses that have an impact on the public in order to reduce social problems (Alzaghal & Mukhtar, 2017). Therefore, the management process of incubators has a significant impact on creating entrepreneurs by leveraging information technology to achieve business success.

H2: The incubator management is likely to have a positive impact on creating entrepreneurs through technology development as a business focus.

Incubators Providing Services

Bergek and Normann's (2008) study found that physical resources, such as physical space and furniture, are one of the most important services offered, especially in the past and continue to be so today. Along with other support services, incubators must provide tenants with affordable office space, as well as support services, both through internal and external affiliates, to increase the chances of business survival. Elmansori's (2014) study stated that incubators provide services to small businesses and offer physical facilities such as offices, warehouses, and production areas, as well as general loading docks, common boardrooms or meeting areas, kitchens, and common reception areas. These facilities also often include photocopiers, fax machines, audio-visual equipment, and computers. Therefore, the services provided and supported to students have an impact on creating entrepreneurs through the development of information technology, which helps achieve business success.

H3: Incubators providing services are likely to have a positive impact on creating entrepreneurs through technology development as a business focus.

Financial Support

Access to financial resources is one of the key factors for the survival of most startups and the booming business of incubators. It is considered a crucial factor in the effectiveness of these organizations (Grimaldi & Grandi, 2005). The classification of incubator services can be divided into four types of organizations:

1. for-profit organizations involved in incubation, job creation and potential, focusing on entry criteria for incubator companies;
2. public, non-profit or government organizations focused on job creation and economic development and limiting the length of stay of tenants;
3. educational institutions; and
4. hybrid public/private partnerships.

In the conceptual model of effective incubators proposed by Dee et al. (2011), several indicators are used to measure factors of access to finance, such as the ability to access sources of capital or networks of capital sources, the ability to access venture capital, access to internal investment, financial assistance in accessing commercial loans, assistance with accounting or financial management, assistance in accessing specialized funds, and economic knowledge training.

H4: The financial support is likely to have a positive impact on creating entrepreneurs through technology development as a business focus.

Creating Entrepreneurs through Technology Development as a Business Focus

Hoffman (1985) argues that the introduction of ICT tools can significantly enhance an organization's international competitiveness. The use of ICT tools can help expand an organization's business boundaries and enable it to provide more comprehensive customer service and functions. Bafoutsou and Mentzas (2002) note that the use of ICT tools in an organization's processes can save a significant amount of time and money, reduce the need for travel, and enhance the efficiency and effectiveness of decision-making processes. Nowadays, information is a vital component of any organization's processes, encompassing details about customers, markets, competitors, processes, and products. The use of ICT tools can help organizations collect, process, store, and share this information effectively. Previously, ICT tools were divided into three categories: computer technology, internet and telecommunications. Now, ICT encompasses hardware, communication, software, and office equipment, which is a vast domain, as evident from the literature. Li (2012) categorizes ICT tools into five categories: (1) communication, which is divided into two types: synchronous, such as Skype, MSN, etc., and asynchronous, such as email, wiki, etc.; (2) processing, such as spreadsheets, data mining, etc.; (3) course management, such as learning management systems, content management systems, etc.; (4) social networks, such as Facebook, Twitter, etc.; and (5) collaboration, such as project management systems, workflow systems, etc.

Business Incubator Success

Literature review on the success factors of business incubators. From the literature review, it was found that there are important factors as follows:

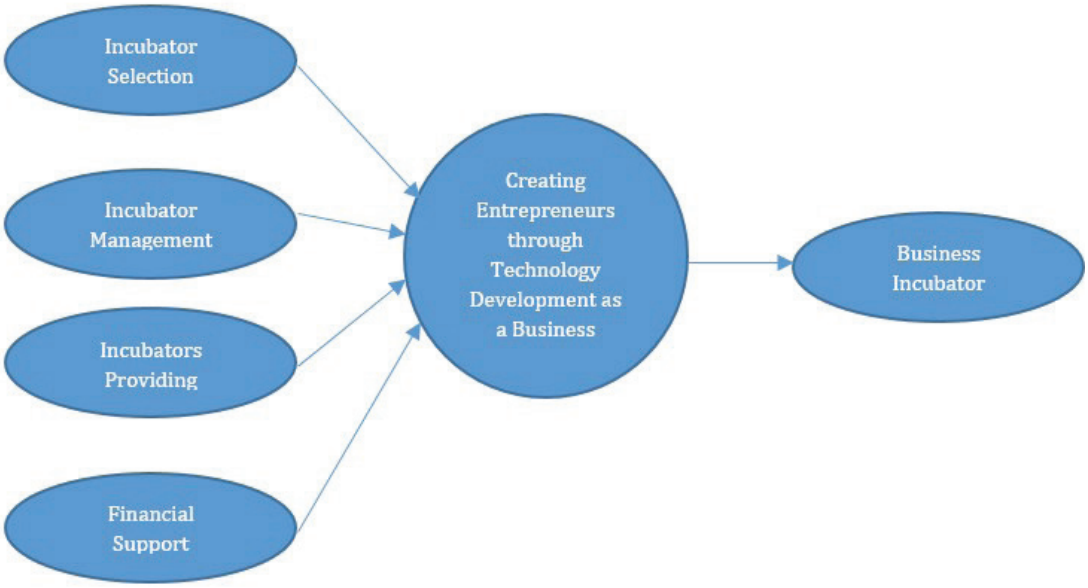
1. Selection Policy: One of the most important processes in the success of a business incubator is the incubation method, the selection of companies to be incubated, which may vary depending on the mission and objectives of the incubator. The proposed business incubation model suggests the selection and monitoring of various business services. Any business incubator that aims to be successful and create sustainable companies must have a robust selection policy and criteria for evaluating, recommending, and selecting incubators, which are approved by the board of directors, managers, and the incubator committee's selection process (Smilor, 1987).

In terms of the selection criteria for incubators, there are differences between each type of business. There are no fixed selection criteria. However, the study's results found that the incubator's variability in the screening and selection process can lead to the incubation process failing. In terms of responsibility and methods for evaluating new incubators, it is stated that most of the selection process is conducted through the incubator's website or by using the Canvas Model to turn the idea into a business. In some cases, it is supplemented with additional measures.

2. Collaborative Networking Services: Due to the development and dissemination of ICT, networking is considered to be one of the most important factors in the success of an incubator. Campbell et al. (1985) explained that the proposed business incubation model includes providing access to the incubator network, which helps the incubator or entrepreneur achieve their business objectives. Entrepreneurship is a dynamic process that requires connections or relationships not only between individuals but also between institutions. Entrepreneurs can access more resources through networks and have a faster chance of correcting mistakes as a result. In support of this view, Hansen et al. (2000) stated that networks are based on the individual or personal constraints of the entrepreneurs who are connected to the network, but can be expanded to include many other companies or organizations, such as regulators, policymakers, and research institutions, across various sectors. Networking is defined as the facilitation of interconnected relationships, where these relationships are considered a set of connections that may be formed between individuals or organizations. Therefore, different types of networks can be defined by playing different roles in the dimensions of network relationships. It is crucial for the survival and growth of new business creation. It provides knowledge, expertise and information as well as reduces the uncertainty that companies face. In addition, networking is a foundation and mechanism for entrepreneurs to maintain relationships that provide access to essential resources, which can be leveraged as part of the incubation, operation, and promotion of business relationships.

H5: Focusing on technology development as a business strategy to create entrepreneurs is likely to have a positive impact on business incubator success.

Conceptual Framework



Unit of Analysis

Business incubator centers in higher education institutions under the upper central region network of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation (OPMHESI) in Thailand

Methodology

Quantitative research methods use survey methods by creating measures, such as questionnaires, with an emphasis on designing research instruments. A good measure must be able to measure what it is intended to measure, and must have both validity and reliability in terms of content. The reliability coefficient of the scale used in this research, from a total of 24 questions, using a structured questionnaire with 40 samples from groups that are not the sample groups used in this research, namely executives, managers, and staff of the business incubator center. The Cronbach's Alpha coefficient, which is the value used to measure the reliability or internal consistency of the scale used in this research, has an average correlation value of .980 to .990. The 24 questions have a Cronbach's Alpha coefficient of .988, which means that the scale used as a questionnaire in this research has a high level of reliability and can be used in this research in the future.

Population and Sample

The population consists of executives, managers, and staff of business incubator centers in both public and private higher education institutions under the Upper Central Network, totaling 44 institutions, with Chulalongkorn University as the host institution, according to the list of university business incubators in higher education institutions under the network of the upper central region of Office of the Ministry of Higher Education, Science, Research and Innovation in Thailand.

In considering the sample size for the analysis of causal structure models with latent variables, Hair et al. (2010) proposed that the sample size for the structural equation modeling analysis should not be less than 100 samples and the proportion of the sample size to the number of parameters to be estimated should be 10-12 samples per 1 parameter. The condition is to determine the minimum sample size for the analysis of latent variables ≤7 variables and each latent variable is measured from >3 observable variables. The minimum sample size should not be less than 150 samples. In addition, Wiratchai (1999) proposed to consider the Hoelter Value that should be more than 200, then the equation model is considered to be consistent with the empirical data. Therefore, in this research, a sample of 400 samples will be used, which will cover the criteria. In this research, the sampling method was used from executives, managers, and staff of business incubator centers in both public and private higher education institutions under the upper central region network, totaling 44 institutions, in order to obtain a sample size of 400 samples. The calculation of the appropriate number of samples was based on the general rules for selecting the level of confidence coefficient (Alpha Level) and the acceptable error value, which is Alpha = 0.05 and the acceptable error value is 5%, which is considered an appropriate value (Krejcie & Morgan, 1970). Since the exact population size was not known in this research, the proportion of the population to be randomly selected was set at 20% or 0.2 at a 95% confidence level and an error value of 5% or 0.05, using the formula for calculating the appropriate number of samples using the Cochran (1977) formula. The appropriate sample group was 384 samples. However, this research will use a sample size of 400 samples, which will cover the appropriate number of samples according to the Cochran (1977) formula. At the same time, a larger sample size will be obtained, which has advantages in terms of reliability and population representativeness according to the concept of Neuman (1997).

Sampling Techniques

Using the non-probability sampling method, using the purposive sampling method, by selecting samples from the population of executives, managers, and staff of the business incubator centers in both public and private higher education institutions under the Upper Central Network in 44 public and private higher education institutions under the Upper Central Network, and selecting samples to meet the required number without any criteria for choosing a total of 400 samples.

Research Tools

The research tools are questionnaires that are continuous in the form of Likert-Type Scales (Likert, 1932), which classify the scale values as follows: “Strongly agree” is given a score of 5, representing the highest relationship; “Agree” is given a score of 4, representing a high relationship; and “Unsure” is given a score of 3, representing a low relationship; and “Disagree” is given a score of 2, representing the lowest relationship; and “Strongly disagree” is given a score of 1. The questionnaire was tested for the reliability of each question using 40 samples, which differed from those used in this research, by analysing the correlation coefficient with the Cronbach’s Alpha method (Nunnally, 1978). The reliability coefficient of the scale used in this research was calculated from a total of 24 questions using a structured questionnaire

with a sample of 40 samples from groups that were not the sample group used in this research, namely executives, managers, and staff at the business incubator center. Cronbach's Alpha coefficient, which is a value used to measure the reliability or internal consistency of the scale used in this research, had an average correlation value of .980 to .990. For all 24 questions, the Cronbach's Alpha coefficient was .988, which means that the scale used as a questionnaire in this research has a high level of reliability and can be used in this research further.

The questionnaire was also tested for validity by three executives from the business incubator centre, experts, and entrepreneurs to verify its content validity.

Statistics Analysis

1. Descriptive stage

In this research, the researcher will use statistics to describe variables, including percentages, means, maximums, and minimums, to describe independent variables and a single dependent variable (univariate statistics).

2. Analysis and modelling stage

Use statistics to analyze structural equations (Structure Equation Model) to create a model for testing that with independent variables as latent variables, including selection of incubators, management of incubators, services for incubators, financial support, through mediating variables as latent variables, including entrepreneurship creation through technology development as a business focus, to predict the influence on the dependent variable, which is a latent variable, including the success of business incubators in higher education institutions, to use the model to explain the appropriateness of predicting the influence of independent variables on the dependent variable, how much? Exploratory Factor Analysis (EFA) was used by selecting the Common Factor Analysis (Principal Axis Factoring) method to study and analyze using Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity. Then, the χ^2, χ^2/df, CMIN/DF, GFI, TLI, AGFI, CFI, and RMSEA statistics were used to assess the structural validity of the empirical model. Finally, the structural equation model was analyzed to create a forecasting model.

Results

Exploratory Factor Analysis (EFA) by using Common Factor Analysis, Principle Axis Factoring (PAF) method to study and development of a business incubation model for university business incubators in higher education institutions under the network of the upper central region of Office of the Ministry of Higher Education, Science, Research and Innovation in Thailand.

Table 1 Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity, where the KMO value is 0.979 and Sig. = .000 < 0.05, where the value of $0 \leq KMO \leq 1$ is close to 1, meaning that all variables are highly related and can be grouped into factors for further factor analysis. Standard components can explain the relationship between variables at a reasonable level (Wanichbancha, 2013).

Table 1 Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity

Kaiser-Meyer-Olkin (KMO)	0.979
Barlett's Test of Sphericity	
Approx. Chi-Square	652.770
df	365
Significant	.000

Table 2 Statistical Values Assessing the Structural Validity of the Empirical Model.

Index Value	Standard Criteria	Statistical Values
p-value	Greater than or equal to 0.05 (Schumacker & Lomax, 2010)	.055
χ^2 = 652.770, df. = 365, χ^2/df. = 1.788	Should not exceed 2.0 (Schumacker & Lomax, 2010)	1.788
CMIN/DF	less than 2.0 (Schumacker & Lomax, 2010)	1.998
GFI	more than 0.95 (Kelloway, 2015)	.974
TLI	more than 0.95 (Kelloway, 2015)	.998
AGFI	more than 0.95 (Kelloway, 2015)	.974
CFI	more than 0.95 (Kelloway, 2015)	.966
RMSEA	less than 0.05 (Kelloway, 2015)	.049

From Table 1-2, the value of χ^2 = 652.770, df. = 365, the value of χ^2/df. = 1.788, p-value = .055, and CMIN/DF = 1.998, which are all less than 2.0, indicate a good level of fit (Schumacker & Lomax, 2010), suggesting that the structural equation model is consistent with the empirical data. In addition, the values of GFI = .974, TLI = .998, AGFI = .974, and CFI = .966 are all greater than 0.95, indicating a good level of model fit. Moreover, it was found that RMSEA = .049 and PCLOSE or p-value = .055, thereby accepting the hypothesis that RMSEA is less than 0.05 (Kelloway, 2015). It can be concluded that the index of consistency between the model and empirical data is by the standard criteria and is at a good consistency level.

Table 3 Regression Weights

Relationship of Variables			Estimate	S.E.	C.R.	P	Label
INFORM	<---	INCUB	.174	.078	2.240	.025	
INFORM	<---	FUND	.535	.053	10.043	***	
INFORM	<---	SELECT	.185	.065	2.846	.004	
INFORM	<---	MANAGE	.207	.065	3.166	.002	
PERFORM	<---	INFORM	.925	.046	20.151	***	
SL1	<---	SELECT	1.000				
SL2	<---	SELECT	.938	.059	15.947	***	
SL3	<---	SELECT	1.077	.071	15.203	***	
SL4	<---	SELECT	1.013	.065	15.501	***	
MS1	<---	MANAGE	1.000				
MS2	<---	MANAGE	1.007	.065	15.512	***	
MS3	<---	MANAGE	1.037	.069	15.026	***	
MS4	<---	MANAGE	.647	.076	8.454	***	
IM1	<---	INCUB	1.000				
IM2	<---	INCUB	1.139	.067	17.097	***	
IM3	<---	INCUB	1.090	.059	18.398	***	
IM4	<---	INCUB	.800	.057	14.033	***	
FS1	<---	FUND	1.000				
FS2	<---	FUND	1.043	.063	16.458	***	
FS3	<---	FUND	1.234	.064	19.204	***	
FS4	<---	FUND	1.245	.065	19.294	***	
ICT1	<---	INFORM	1.000				
ICT2	<---	INFORM	.939	.043	21.970	***	
ICT3	<---	INFORM	.974	.039	24.697	***	
ICT4	<---	INFORM	.987	.040	24.473	***	
UIP1	<---	PERFORM	1.000				
UIP2	<---	PERFORM	.826	.043	19.357	***	
UIP3	<---	PERFORM	1.017	.040	25.521	***	
UIP4	<---	PERFORM	.764	.040	18.921	***	

Table 3 C.R. value > 1.96 indicates that the factor weight is not equal to 0 or P = p-value < 0.05, which is very close to zero. Therefore, it can be concluded that all factor weights are not equal to zero.

Table 4 Covariances

Relationship of Variables			Estimate	S.E.	C.R.	P	Label
SELECT	<-->	MANAGE	.183	.026	7.056	***	
SELECT	<-->	INCUB	.213	.025	8.574	***	
SELECT	<-->	FUND	.076	.024	3.169	.002	
MANAGE	<-->	INCUB	.173	.023	7.600	***	
MANAGE	<-->	FUND	.164	.026	6.369	***	
INCUB	<-->	FUND	.114	.022	5.280	***	

Table 4 shows the covariance between each pair of latent factors, along with testing the hypothesis that the covariance is zero or not. The C.R. value is > 1.96, and the P = p-value is less than 0.05. Therefore, the covariance between the variables, the selection of incubators, the management of incubators, the provision of incubation services, and the financial support is not equal to zero.

Therefore, the correlation coefficient between each pair of latent variables is positive, indicating that they are related in the same direction. The factor of incubator selection and provision of incubation services has the highest correlation, with a correlation coefficient of .213, followed by the selection of incubators and the management of incubators, with a correlation coefficient of .183.

In conclusion, the model in Figure 1 is consistent with the empirical data at a significance level of 0.05 (as shown in Figure 1) (Wanichbancha, 2013).

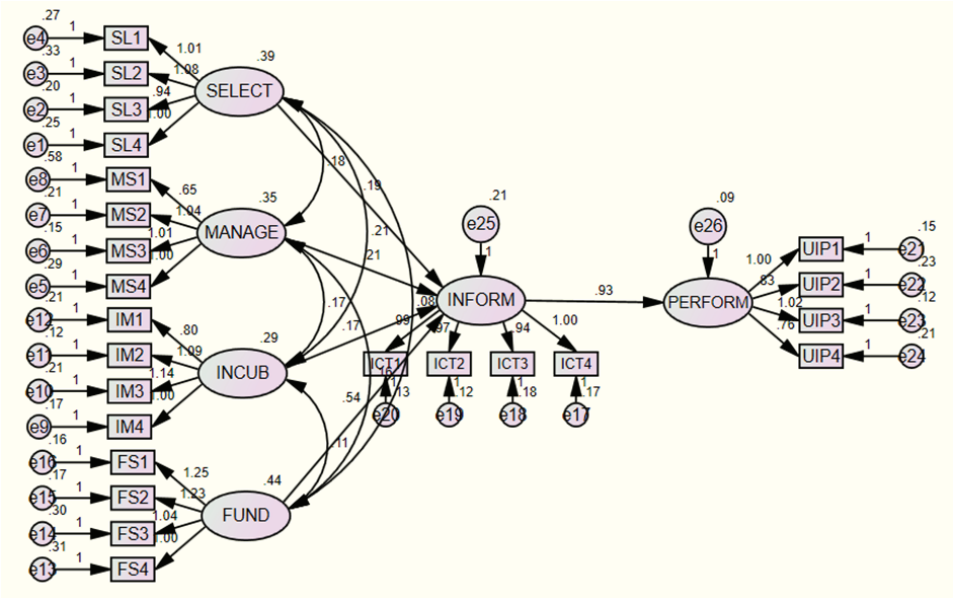


Figure 1 Structural Equation Model

Remaks: $\chi 2$ = 652.770, df. = 365, $\chi 2$/df. = 1.788, p-value = .055, CMIN/DF = 1.998, GFI = .974, TLI = .998, AGFI = .974, CFI = .966

Table 5 presents the results of the path coefficient test for the factors influencing the development of the business incubation model in business incubator centres at higher education institutions. This study focuses on those under the network of the upper central region of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation in Thailand. Additionally, it examines the consistency of the model with empirical data.

Table 5 The Path Coefficient Test of the Variable

Latent Variable (Independent Variable)	Latent Variable (Outcome Variable)	Estimate	S.E.	Z-test	*p*	R^2
X_1 = Incubator Selection	Y = Creating Entrepreneurs through Technology Development as a Business Focus	.185	.065	2.846	.004	79.8
X_2 = Incubator Management		.207	.065	3.166	.002	
X_3 = Incubators Providing Services		.174	.078	2.240	.025	
X_4 = Financial Support		.535	.053	10.043	***	
Y = Creating Entrepreneurs through Technology Development as a Business Focus	Z = Business Incubator Success	.925	.046	20.151	***	77.7

From Table 5 results of the covariance test between each pair of latent variables, along with testing each hypothesis for each pair to see if the covariance is zero or not. The test results are consistent with all hypotheses. In conclusion, the covariance between the latent variables (independent variables) namely X_1 = selection of incubators, X_2 = management of incubators, X_3 = services for incubators, X_4 = financial support has an influence on the latent variable (median variable), Y = creation of entrepreneurs through technology development as a business focus, with the variable X_2 = management of incubators having the highest influence, followed by X_1 = selection of incubators. The three independent variables can explain the mediating variable by 79.8%. The latent variable Y, which represents entrepreneurship creation through technology development as a business focus, influences Z, the success of higher education institution business incubators, and can explain the latent variable, serving as the mediating variable and dependent variable, by 77.7 percent.

Discussion

A study on the business incubation model for business incubator centres of higher education institutions under the Upper Central Network of the Office of the Permanent Secretary of the Ministry of Higher Education, Science, Research and Innovation in Thailand found the following:

1. The selection, management, and services for incubators influence the creation of entrepreneurs through the development of technology that is the focus of the business. The management of incubators has

the highest influence, followed by the selection of incubators. This is consistent with the study of Campbell et al. (1985) who found that the policy of selecting students and alums to participate in the incubation is considered the most important process in the success of the incubator center, including the incubation method, the selection of students, alumni, interested persons, or companies that want to be incubated, which may differ according to the objectives of each incubator center. However, with the mission and objectives of the incubator center in the business incubation model that suggests that the selection and monitoring of the application of various business services, one of the key points of successful incubation is the incubator must have a good selection policy and rules for evaluating, recommending and selecting incubators through a selection process by interview and approval from the incubator board and by the study of Hackett and Dilts (2004) who suggested that the relevant selection policy is related to the way the incubator will provide incubation. Therefore, the selection of incubators must be consistent with the incubator's incubation methods.

2. Creating entrepreneurs through the development of Information and Communication Technology (ICT), which is a business focus, has an influence on the success of the incubator of higher education institutions, which is consistent with the study of the World Bank (2009) who proposed a survival model for startups in the development of information and communication technology which is a business focus. The success factor is "ICT startups are important for business development because they are necessary for the progress of all industries. It is a worthwhile investment and takes less time to implement." In addition, Hoffman (1985) reasoned that the use of ICT tools can enhance the competitiveness of entrepreneurs by leveraging these tools to expand the organisation's size. Therefore, the university's business incubator should promote the development of entrepreneurs by focusing on technology that is central to their businesses, thereby enhancing the incubator's success and helping entrepreneurs achieve success in their ventures.

3. The selection of incubators consists of observed variables, including the selection policy of the business incubator centre, the selection method, the qualifications of the incubator, and the incubator's intention. The selection method has the highest influence, followed by the selection policy of the business incubator centre. This finding is consistent with the results of Smilor (1987) study, which stated that one of the most important processes in the success of a business incubator centre is the incubation method, specifically the selection of companies to be incubated, which may vary depending on the mission and objectives of the incubator centre. The suggested business incubation model involves selecting and monitoring various business services. Any business incubator aiming to succeed and foster sustainable companies must have a robust selection policy and clear rules for evaluating, recommending, and selecting incubatees. The board should approve these rules for the selection of directors, managers, and the incubator centre's selection committee.

4. Management, promotion, and development of incubators consisting of observation variables: management of incubation activities for incubators, further development of research and development

of incubator products, management of patents and trademarks, with the management of incubation activities for incubators having the highest influence value, followed by further development of research and development of incubator products. This is consistent with Alzaghal and Mukhtar (2017) who presented the results of the study that the incubator center acts as an agency that supports and promotes incubators to realizerealize the importance of being entrepreneurs and applying research results to commercial use, promoting the application of research results to develop innovations, technologies, and academic potential of higher education institutions to connect with the business and industrial world to develop into new entrepreneurs. In addition, it is consistent with Campbell et al. (1985) who proposed that the business incubator center has a mission to manage incubators, such as providing opportunities for incubators to participate in the activities of the incubator center that have been established and develop them into high-potential entrepreneurs, strengthening and nurturing new entrepreneurs to have the potential to request support for business development from other government agencies and financial institutions by government policy to develop competitive capabilities and strong business growth. As for the expected results from management such incubators include making incubators into new entrepreneurs and strengthening existing entrepreneurs from incubation, exchanging perspectives and changing their status to entrepreneurs, resulting in incubators' research work being further developed into commercial production or problem solving, and having more projects and research work of incubators being registered for patents, and incubating businesses that have an impact on the public in order to reduce problems.

5. Providing incubation services consisting of observed variables: physical services, consulting services, business space services, entrepreneurial network services, with the provision of business space having the highest influence value, followed by consulting services. Consistent with the study by Bergek and Normann (2008), physical resources, such as physical space and furniture, are among the important services offered, especially in the past and continuing to the present, along with other support services. The incubator must provide affordable office space to tenants, as well as space and support services to both internal and external groups through affiliated companies, to increase business opportunities and enhance the survival of these entities. In addition, the study of Elmansori (2014) stated that the incubator has provided services for small businesses and provided physical facilities such as offices, warehouses and general loading areas, ports, common board or meeting areas, kitchens and common reception areas, as well as photocopiers, faxes, audio-visual equipment, and often computers, which are developments that promote the growth and advancement of incubators for entrepreneurial success. There is also a study by Navavongsathian and Rungruang (2020) that found all incubators will offer consulting services. As a mentor or advisor, he is a senior with diverse perspectives and valuable work experiences that can positively influence people in the early stages of their professional lives. Moreover, show a different role from colleagues or advisors. In addition, Lichtenstein (1992) commented that mentoring is very important because entrepreneurs need to be trained and taught how to "play" the game and how to use information technology tools effectively. Consulting experts in the incubator allows entrepreneurs to receive new

ideas and suggestions from mentors and incubator managers, considered one of the most effective ways to develop entrepreneurial needs and ideas. De Beer (2012) noted that mentoring involves an informal process of communication, often characterised by face-to-face interactions and sustained over the long term. The time between the advisor, who is a person with knowledge, wisdom, entrepreneurial skills, and relevant experience, and the incubator, as an entrepreneur who will receive the transfer of knowledge, experience, and entrepreneurial strategies that will be successful in the future, is a "short-cut" learning method to pave the way to success in a short time.

6. Financial support, with observed variables including support for incubators to be able to access sources of funds, introducing networks of sources of funds to support access to businesses, investors to access investment within the organizationorganization, helping to find funds and access commercial credit by assisting in preparing loan proposals to financial institutions, helping to manage finances to access specializedspecialized funds, with support for incubators to be able to access sources of funds. The highest influence value, followed by the introduction of a network of financial sources, supporting access to businesses, allowing investors to access investment within the organizationorganization, has the highest influence value, consistent with the study of Grimaldi and Grandi (2005) who found that access to financial resources is an important factor for the survival of most startups for the booming business of the incubator center and is considered one of the effectiveness factors of the incubator center. The study results are consistent with Dee et al. (2011) who stated that the conceptual model of the success indicators of an effective business incubator includes indicators of access to finance of the incubator participants, such as the ability to access sources of funds or networks of financial sources, the ability to access businesses, allowing investors to access investment within the organizationorganization, capital assistance in accessing commercial loans, assistance with accounting or financial management, assistance in accessing specializedspecialized funds, and economic knowledge training, etc.

Conclusions

1. Business incubator selection, management, and services influence entrepreneurship through the development of technology that businesses focus on. Business incubator management has the most significant impact, followed by incubator selection and incubator location. Business incubators must have sound selection policies and criteria to assess, recommend, and select incubators. These selection policies are related to how the incubator will provide incubation services. Therefore, incubator selection must be consistent with the incubator's incubation methods.

2. Entrepreneurship creation through Information and Communication Technology (ICT) development, a business focus, influences the success of higher education incubators. The survival model for startups developing information and communication technology, a business focus, is a key success factor: "ICT startups are crucial for business development because they are essential to the advancement of all industries. They represent a worthwhile investment and require minimal time to implement." Using

ICT tools can enhance entrepreneurial competitiveness by leveraging them to expand the organisation's scale and reach. Therefore, university incubators should promote entrepreneurship development, focusing on technology that is central to the business. This will enhance the success of the incubator and help entrepreneurs succeed in their own businesses.

3. Business incubator selection policies, selection methods, and qualifications of business incubators and the incubator's intentions. The selection method has the highest influence, followed by the incubator's selection policy. One of the most crucial processes in the success of a business incubator is the incubation method, specifically the selection of companies to be incubated. This can vary depending on the incubator's mission and objectives. This recommended incubation model involves selecting and monitoring various business services. Any incubator that aims to be successful and build sustainable companies must have strict selection policies and criteria for evaluating, referring, and selecting incubatees. The board should approve these criteria for selecting directors, managers, and committee members of the incubator.

4. Management of incubation activities for the incubator: Development of incubator product research and development; Management of patents and trademarks. The management of incubation activities for the incubator has the most significant influence, followed by the further development of the incubator product and research and development. Business incubators serve as agencies that support and encourage entrepreneurs to recognise the importance of entrepreneurship and the commercialisation of research results. They promote the use of research results to develop innovation, technology, and the academic potential of higher education institutions. They connect with business and industry to create new entrepreneurs. Business incubators' missions include providing opportunities for incubators to participate in the activities of established incubators and develop them into successful businesses.

Recommendations

The results of the study on the business incubation model for business incubator centres of higher education institutions in the upper central region of the Office of the Ministry of Higher Education, Science, Research, and Innovation in Thailand. Led to the following suggestions from the research:

1. Selection and monitoring of the application of various business services: One of the key points of successful incubation is that the incubator must have a robust selection policy and clear rules for assessing, recommending, and selecting incubators through a thorough selection process, including interviews and approval from the board of the business incubator centre. The selection policy is related to the method the incubator will provide business incubation. Therefore, the selection of incubators must be consistent with the incubation method used by the incubator centre.

2. The use of Information and Communication Technology (ICT) tools can improve the competitiveness of entrepreneurs. Using ICT tools can help expand the organization's size. Therefore, university business incubators should promote the development of entrepreneurs by focusing on technology that is central to their business, thereby enhancing the success of incubators and helping entrepreneurs achieve success in their ventures.

3. One of the most important processes in the success of the business incubator centre is the incubation method, which involves selecting companies to be incubated. This process may vary depending on the incubator's mission and objectives. The proposed business incubation model suggests the selection and monitoring of various business services. Any incubator that aims to be successful and create sustainable companies must have a robust selection policy and criteria for evaluating, recommending, and selecting incubators, which are approved by the board of directors, managers, and the incubator committee's selection process.

4. The incubator has a mission to manage incubators, such as providing opportunities for incubators to participate in the activities of the incubator that have been established and develop them into high-potential entrepreneurs, strengthening and nurturing new entrepreneurs to have the potential to request support for business development from other government agencies and financial institutions by government policies to develop competitive capabilities and strong business growth. The expected results from the management of incubators include making incubators new entrepreneurs and strengthening existing entrepreneurs from incubation, exchanging ideas and changing their status to entrepreneurs, increasing the research results of incubators to commercial production or problem solving, and increasing the number of projects and research results of incubators to file patents, and incubating businesses that have an impact on the public in order to reduce social problems.

5. The incubator must provide inexpensive office space for tenants. Areas and support groups, both internally and externally, to increase business opportunities and enhance survival. Additionally, the incubator offers services to small businesses. It provides physical facilities such as offices, warehouses, and production areas, general loading docks, common board or meeting areas, kitchens, and common reception areas, as well as photocopiers, fax machines, audio-visual equipment, and often computers, which are designed to promote the growth and advancement of the incubators, ultimately supporting entrepreneurial success. All incubators offer mentoring services, featuring senior mentors or advisors who bring diverse perspectives and extensive work experience. These individuals can influence people in the early stages of their working lives and play a distinct role compared to their peers or advisors. Mentoring is very important because entrepreneurs need to be trained and taught how to "play" the "game" and how to use information and technology tools effectively. Consulting with experts in the incubator to receive new ideas and suggestions from mentors and incubator managers is one of the most effective ways for entrepreneurs to develop their needs and ideas. Mentoring refers to an informal process of communication, often involving face-to-face and long-term contact, between a mentor—a person with knowledge, wisdom, entrepreneurial skills, and relevant experience—and an entrepreneur who will receive knowledge, experience, and entrepreneurial strategies that will lead to future success. It is a "short-term" learning method to pave the way to success in a short time.

6. Access to financial resources is an important factor for the survival of most startups. For the booming business of the incubator, it is considered one of the key factors of effectiveness. The conceptual model of the success indicators of an effective business incubator includes indicators of the incubator's

access to finance, such as the ability to access sources of funds or networks of sources of funds, the ability to access businesses, investors can access internal investment, capital, assistance in accessing commercial loans, assistance in accounting or financial management, assistance in accessing specialized funds, and economic knowledge training, etc.

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EXTENDING THE THEORY OF PLANNED BEHAVIOR: THE ROLE OF ANTICIPATED NEGATIVE EMOTIONS IN PLANT-BASED FOOD PURCHASE INTENTIONS IN THAILAND

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Abstract

Purpose: This study aims to extend the Theory of Planned Behavior (TPB) by integrating Anticipated Negative Emotions (ANE) to improve the prediction of consumers' purchase intentions toward plant-based foods. Understanding these intentions is crucial for promoting sustainable dietary transitions and responsible consumption behavior. While TPB provides a strong theoretical foundation, it often overlooks the emotional influences that play a critical role in ethical and sustainability-related food choices.

Study Design/Methodology/Approach: A quantitative survey was conducted among 400 Thai consumers who had previously purchased plant-based foods. Data were collected through online questionnaires distributed across relevant social media communities during February and March 2025. Multiple and hierarchical regression analyses were employed to examine the influence of the demographic variables, TPB constructs, and ANE on purchase intention, and to compare the predictive power of the traditional and extended TPB models.

Findings: The extended TPB model accounted for 44.9% of the variance in purchase intention, representing a significant improvement over the traditional TPB model (41.8%). Subjective norms emerged as the most influential predictor, followed by ANE. Unexpectedly, positive attitudes were positively associated with ANE, whereas subjective norms and perceived behavioral control negatively affected ANE.

Originality/Value: The study underscores the importance of emotional mechanisms—particularly anticipated guilt and regret—in understanding sustainable food decisions. By incorporating emotional dimensions into TPB, this research contributes new theoretical insights and provides practical implications for designing marketing strategies that integrate both rational and emotional elements to promote responsible and sustainable consumption.

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Keywords: Theory of Planned Behavior, Anticipated Negative Emotions, Plant-based Food Purchase Intentions

Introduction

Plant-based foods have gained remarkable traction worldwide as consumers increasingly seek sustainable and health-conscious dietary alternatives, supporting both sustainable food systems and responsible consumption patterns. This shift reflects growing awareness of interconnections between food choices and broader societal challenges, including public health concerns, environmental degradation, and animal welfare issues (Godfray et al., 2018; Willett et al., 2019). The global plant-based food market is projected to expand from USD 51.88 billion in 2024 to USD 238.9 billion by 2035, representing a Compound Annual Growth Rate (CAGR) of 10.7-14.9% (Market Research Report, 2025). Regional adoption patterns vary considerably based on cultural, economic, and demographic factors. North America leads the market with USD 5.02 billion in 2024, driven primarily by Generation Z and Millennial consumers (Precedence Research, 2025). Europe follows with USD 3.76 billion, while the Asia-Pacific region, though smaller at USD 2.88 billion, shows promising growth potential with forecasted annual increases of 11-14% through 2030 (Mobility Foresights, 2025). Future expansion is anticipated to focus on Asia-Pacific, where rapid urbanization and rising health consciousness drive adoption, with China leading regional development.

The rapid expansion of the global plant-based food market is driven not only by product innovation but also by profound shifts in consumer values. Three interrelated dynamics underpin this growth: health consciousness, ethical concern, and sustainability. Health-oriented consumers increasingly seek alternatives to processed and red meat to reduce the risk of non-communicable diseases, while ethically motivated consumers pay greater attention to animal welfare and wish to reduce their complicity in intensive livestock systems. At the same time, environmentally conscious consumers view plant-based foods as a way to lower resource use and carbon footprints compared with conventional animal-based products. These motivations are no longer limited to strict vegetarians or vegans; rather, an emerging flexitarian segment, who intentionally reduce meat consumption without eliminating it entirely, has become a key mass-market driver of plant-based food adoption worldwide (CCPA Group, 2024)

The drivers behind this industry expansion are complex and interconnected, reflecting global commitments to sustainable development. The livestock sector contributes approximately 60% of food system greenhouse gas emissions, playing a substantial role in climate change (González et al., 2020). Simultaneously, epidemiological evidence links high meat consumption with increased risk of non-communicable diseases (Chung et al., 2021; World Health Organization, 2025). International organizations, including the FAO and UN, have endorsed dietary transitions toward plant-based consumption as essential for addressing climate change and promoting sustainable consumption patterns, contributing to the emergence of flexitarian consumers who now represent nearly half of global consumers

(CCPA Group, 2024). Despite these global trends toward sustainable consumption, research on plant-based food consumption remains geographically skewed toward Western markets (Faber et al., 2020), creating significant knowledge gaps in Asian contexts where plant-forward eating has deep cultural roots supporting sustainable food systems. This disparity is particularly notable given that countries such as Thailand, China, and India have historically incorporated plant-based foods as fundamental components of their traditional cuisines.

According to Kasikorn Research Center, more than 7.2 million Thais do not consume meat, and the alternative protein market derived from new food innovations is valued at THB 9.7 billion, growing by 3.2% in 2024 (Kasikorn Research Center, 2024). The plant protein market in Thailand has expanded robustly during 2020-2024, registering a Compound Annual Growth Rate (CAGR) of 27.1%. This upward trajectory is expected to persist, with forecasts indicating a CAGR of 18.9% for the period 2025-2029. By the end of 2029, the market is projected to grow from a valuation of 53.1 million USD in 2024 to approximately 161.2 million USD (Research and Markets, 2025). This growth trajectory is not confined to strictly vegetarian or vegan consumers but is strongly propelled by the emerging "flexitarian" segment, which accounts for a substantial share of Thai consumers who intentionally reduce meat consumption to promote better health outcomes and to mitigate adverse ecological impacts. The rapid expansion of Thailand's plant-based food market is significantly associated with more sustainable consumer behavior, particularly among health-conscious individuals and those concerned with environmental responsibility. However, impressive market growth figures alone do not guarantee sustained consumer adoption. Effective market penetration requires elucidating the psychological mechanisms—Particularly emotional determinants—That translate purchase intentions into actual behavior beyond mere product availability (Escadas et al., 2019). Thailand faces a critical research gap regarding the psychological factors influencing consumer intention to purchase plant-based foods within sustainable food systems. Existing studies have predominantly focused on rational factors such as health benefits and environmental concerns, yet awareness alone does not consistently predict responsible consumption (Schuitema & de Groot, 2015). The translation from intention to action proves more complex than traditional models suggest, as food choices are inherently personal and culturally embedded, involving emotional responses that may be as influential as rational considerations in sustainable consumption decisions (Wang & Scrimgeour, 2021). This study uses the Theory of Planned Behavior (TPB) as its main framework, but addresses a limitation: TPB typically overlooks emotions, treating them as background factors rather than direct influences on behavior (Ajzen & Schmidt, 2020). Evidence highlights the role of Anticipated Negative Emotions (ANE), such as guilt and regret, especially in moral decisions involving environmental sustainability, health, and animal welfare (Rivis et al., 2009; Escadas et al., 2019). The innovation here expands TPB by including ANE, which motivates actions to ease guilt or regret in sustainable consumption contexts (Escadas et al., 2019). Adding ANE improves predictive accuracy, increasing explained variance from 47.5% to 61% for eco-friendly purchase intentions supporting responsible consumption (Koenig-Lewis

et al., 2014). This has not been systematically tested in the context of plant-based foods within sustainable food systems, especially in Asian cultures.

Objectives

This study examines plant-based food purchase intentions in Thailand using an extended TPB framework that incorporates Anticipated Negative Emotions, comparing its explanatory power with that of the traditional model while accounting for demographic influences.

Literature Review

Sustainable Consumption and Plant-based Purchase Behavior

Sustainable consumption represents a fundamental paradigm shift in production and consumption patterns, aligned with UN SDG 12, and plant-based dietary transitions serve as critical pathways for simultaneously addressing multiple SDGs. The environmental imperative is substantial: the livestock sector contributes 11-17% of global greenhouse gas emissions, while plant-based protein production requires 47% less energy, 99% less water, and 93% less land compared to beef production, with the potential to reduce global emissions by up to 70% by 2050 (Good Food Institute Europe, 2022). Asia is projected to account for 50% of global consumption growth over the next decade (Tonby et al., 2021), rendering the region's dietary transitions pivotal for achieving global sustainability targets. Consumer research highlights a substantial level of sustainability consciousness, with 44.9% of Asia-Pacific consumers prioritizing environmentally friendly products. Emerging plant-based trends further demonstrate that consumers in the region are increasingly emphasizing preventive health measures; notably, 60% are willing to pay a premium for plant-based products that offer additional health benefits. A recent survey indicates that 58% of Asian consumers perceive plant-based products as a pathway toward a more sustainable lifestyle (Rakuten Insight, 2024; Innova Market Insights, 2024). Moreover, a cross-national survey conducted in 53 countries found that Asian consumers place greater importance on eco-friendly packaging than the global average of 22% (Fleck, 2025).

Despite positive trends in sustainable consumption, significant barriers remain. Cost remains the primary obstacle (35.7%), followed closely by a lack of information (35.2%) (Rakuten Insight, 2024). A critical discrepancy persists between consumer intentions and actual purchasing behavior, often referred to as the 'say–do gap.' While 54.6% of Asia-Pacific consumers report making sustainable choices, translating attitudes into behavior varies considerably across countries. Indonesia (68%), Thailand (62%), the Philippines (61%), and Vietnam (61%) demonstrate the highest levels of action orientation (Rakuten Insight, 2024). Among those who do not purchase sustainable goods, 15% attribute their reluctance to insufficient information or distrust, whereas 10% cite limited availability (Lightowler et al., 2022) . These findings underscore that awareness alone does not consistently predict behavior.

Recent empirical studies have explicitly linked sustainable consumption with plant-based purchase behavior. Research in both Western and Asian contexts shows that environmental and health values, attitudes, and social norms significantly predict intentions to adopt plant-based foods and plant-based alternative products, positioning these behaviors as concrete expressions of sustainable consumption. However, most studies still focus on Western markets, and evidence from Southeast Asia—Particularly Thailand—Remains limited, reinforcing the need for context-specific investigations of plant-based purchase intentions within a sustainable consumption framework (Sawatraungkid, 2022; Nakhonchaigul & Siriyota, 2024). These findings suggest that while sustainability awareness and positive attitudes toward plant-based products are rising in Asia, structural barriers and the say–do gap persist, indicating that cognitive factors alone cannot fully explain behavior. This underscores the need for psychological models such as the Theory of Planned Behavior and its emotional extensions to better capture how intentions and anticipated emotions shape actual plant-based purchase decisions in Asian contexts.

The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), is a key framework for understanding consumer behavior in the context of sustainable consumption. It posits that behavioral intention arises from three constructs: attitude toward the behavior, subjective norms, and perceived behavioral control. TPB effectively predicts plant-based food purchase intentions, essential for responsible consumption. Attitude is often the strongest predictor of purchase intentions. When consumers view plant-based foods as healthy and environmentally responsible, positive attitudes encourage stronger intentions to buy. However, this effect varies with familiarity; highly health-conscious individuals tend to rely more on their attitudes (Ricci et al., 2018; Luong et al., 2024). Subjective norms, or perceived social pressure from peers, significantly influence the adoption of plant-based diets. Family and social networks increase the likelihood of this adoption, particularly in cultures where collective decision-making is essential (Le & Nguyen, 2022). Additionally, endorsements from health professionals shape these intentions (Shin et al., 2024). Perceived behavioral control reflects how easy or difficult consumers perceive it is to adopt the behavior. Those who feel they can easily access plant-based foods are more likely to intend to purchase them. Addressing structural barriers, such as price and availability, can enhance the adoption of sustainable food (Moon, 2021; Carfora et al., 2019).

Limitations of Traditional TPB: The Emotional Gap

Although the Theory of Planned Behavior (TPB) is useful in predicting behavior, it has a key limitation when addressing moral and ethical issues in sustainable consumption, as it downplays emotional factors. In sustainable food systems, decisions often involve ethical considerations related to animal welfare, environmental protection, and health, which elicit strong emotional responses such as guilt or pride. These emotions can significantly influence behavioral intentions beyond what traditional TPB constructs measure. Research shows that including emotional variables can enhance TPB's explanatory power, with some studies reporting increases in variance from 47.5% to 61% (Koenig-Lewis et al., 2014).

Anticipated Negative Emotions: Theoretical Foundation

Anticipated Negative Emotions (ANE), derived from Anticipatory Emotion Theory (AET), influence decision-making in sustainable consumption. AET suggests that individuals forecast their feelings regarding behaviors that support sustainability, motivating them to pursue actions that elicit positive emotions while avoiding those that may lead to negative ones, like guilt or regret (Rivis et al., 2009; Escadas et al., 2019).

ANE is particularly relevant in contexts of sustainable consumption, where ethical behavior aligns with personal moral standards. For instance, individuals with positive attitudes toward plant-based foods may anticipate guilt or regret if they fail to consume them, motivating responsible choices (Lu et al., 2020). This process is driven by cognitive appraisal, as consumers consider the consequences of their food choices, such as health and environmental impacts, leading to emotional anticipations that promote sustainable behaviors (Chi et al., 2020).

Loss Aversion and Emotional Motivation in Sustainable Food Systems

Loss Aversion Theory (LAT) supports the motivational impact of avoiding losses in sustainable consumption. It suggests that the pain from losing something is felt more acutely than the pleasure from gaining it (Kahneman & Tversky, 1984). In the realm of plant-based foods, consumers may perceive not purchasing these products as a "loss" of health benefits, environmental contributions, or ethical standards. This perspective heightens negative emotions around responsible consumption decisions. For consumers who favor plant-based options or adhere to strong social norms, failing to purchase these products can feel like a tangible loss rather than just a missed opportunity. Consequently, Anticipated Negative Emotions may drive ethical consumption more powerfully than positive feelings (Escadas et al., 2019; Wang & Basso, 2019).

Integrating Emotions into TPB: The Extended Model for Sustainable Consumption

Recent research shows that the Theory of Planned Behavior (TPB) constructs directly predict intentions and influence the likelihood of experiencing Anticipated Negative Emotions (ANE) in sustainable food systems. Individuals with favorable attitudes, perceived social approval, and high behavioral control may feel greater guilt or regret for failing to act responsibly (Ibrahim et al., 2021). The extended model suggests that positive attitudes toward plant-based foods can reduce negative emotions, while stronger social expectations can heighten guilt for not conforming. Additionally, perceived behavioral control can reduce anxiety or guilt related to sustainable consumption.

Cultural Context: Asian Perspectives on Plant-based Consumption

The integration of emotional factors is crucial in Asian contexts where food choices hold significant cultural meaning related to sustainability. Traditional Asian cuisines often emphasize plant-based ingredients, but modern trends show a rise in meat consumption as economies develop (Mishra, 2025; Deng et al., 2025). This shift may create tension between traditional values and contemporary practices, influencing emotional responses to plant-based food. Research primarily from Western contexts may

overlook these cultural dynamics. In collectivistic cultures (Yang et al., 2024; Qiu, 2025), Asian consumers might experience distinct relationships between social norms and emotions, with concepts such as guilt manifesting in unique ways. This suggests that the Theory of Planned Behavior (TPB) and Anticipated Negative Emotions require cultural validation in the context of sustainable consumption. An extended framework will be tested through an empirical investigation in the Thai market.

Demographic Variables and Plant-based Food Purchase Intentions

Traditional demographic variables—Age, gender, education, and income—Have long been fundamental predictors of consumer food choices. However, their role in plant-based food adoption presents a more nuanced picture that challenges conventional demographic determinism. While earlier studies documented significant demographic influences on sustainable food choices (Pandey et al., 2021), recent research reveals a more complex pattern in which conventional socioeconomic factors show limited direct effects on purchase intentions. First, expenditure patterns—Rather than income alone—Emerge as a significant predictor, reflecting a critical distinction between "purchasing power" and "willingness to pay" (Sawatraungkid, 2022). Consumers with higher expenditure levels perceive themselves as able to absorb the cost premiums associated with plant-based alternatives, aligning with perceived behavioral control within TPB. Second, consumer typology significantly moderates intentions, with flexitarians showing lower purchase intentions than vegans and vegetarians (Luong et al., 2024). This disparity stems from flexitarians' retention of partial meat consumption and their preference for gradual reduction over complete dietary transformation. Theoretically, this phenomenon reflects both lower perceived behavioral control—Where strict dietary changes are perceived as overly challenging—And Anticipated Negative Emotions, as flexitarians may anticipate anxiety associated with radical behavioral shifts, prompting adoption of "reduction strategies" rather than complete substitution.

The diminishing influence of traditional demographics suggests that plant-based adoption is increasingly driven by value-based motivations—Health, sustainability, and ethics—Rather than socioeconomic profiles. This shift may reflect the mainstreaming of plant-based foods across demographic segments and varying levels of market maturity. The weak explanatory power of demographics challenges traditional market segmentation approaches, suggesting that while demographic variables may function as enabling or constraining factors, they no longer function as primary drivers.

Methodology

Research Design and Approach

This study employed a quantitative, cross-sectional survey design to examine the relationships between demographic variables, Theory of Planned Behavior constructs, Anticipated Negative Emotions, and plant-based food purchase intentions within sustainable food systems. A deductive approach was adopted to test the theoretical framework developed from the literature review, using structured equation modeling principles to examine both direct and indirect relationships among constructs. The research

design was chosen for several reasons. First, quantitative methods allow for the statistical testing of theoretical relationships and the generalization of findings to the broader population interested in sustainable consumption. Second, cross-sectional data collection is appropriate for examining consumer intentions at a specific time, which aligns with TPB's focus on proximal predictors of behavior in sustainable food systems. Third, the survey approach enables systematic data collection from a large sample while maintaining standardized measurement across respondents interested in responsible consumption.

Conceptual Framework and Research Hypotheses

Based on the theoretical integration discussed in the literature review, Figure 1 presents the conceptual framework guiding this investigation. The model extends the traditional TPB by incorporating Anticipated Negative Emotions as both consequences of TPB constructs and predictors of purchase intentions in sustainable food systems.

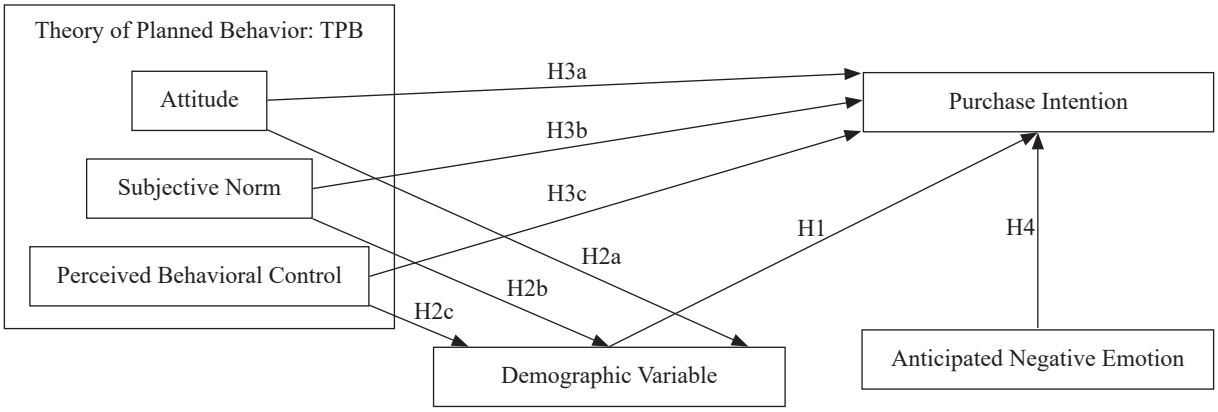


Figure 1 Conceptual Framework - Extended TPB Model

The following hypotheses were developed to test the proposed relationships in sustainable consumption contexts:

H1: Demographic variables are positively associated with purchase intention toward plant-based foods supporting sustainable food systems.

H2a: Positive attitudes toward plant-based foods are negatively associated with Anticipated Negative Emotions.

H2b: Subjective norms are positively associated with Anticipated Negative Emotions.

H2c: Perceived behavioral control is negatively associated with Anticipated Negative Emotions.

H3: Anticipated Negative Emotions positively influence purchase intention toward plant-based foods, supporting sustainable consumption.

H4: Incorporating Anticipated Negative Emotions into the TPB enhances its explanatory power for predicting purchase intentions for plant-based foods in sustainable food systems, compared to the traditional model.

H5: Demographics, TPB constructs, and Anticipated Negative Emotions together explain significant variance in purchase intention toward plant-based foods supporting responsible consumption.

Sampling Method and Size Determination

A convenience online sampling targeted early adopters of plant-based foods, mainly young, digitally engaged individuals interested in sustainability. While not fully representative, it suited this exploratory study of psychological aspects in sustainable food systems. The sample size was based on regression needs: at least 114 for six predictors, with G*Power indicating 146 for medium effects at $\alpha = 0.05$ and 0.80 power. Aiming for 400 respondents exceeded this, ensuring sufficient power. Participants were recruited through social media groups such as "Vegan Thailand" and local vegetarian communities focused on sustainable living, with clear messages outlining the study aims and voluntary participation. Data were collected from Feb 1 to Mar 15, 2025, via Microsoft Forms, shared on social media with explanations of the purpose, confidentiality, and the absence of incentives to reduce bias. The survey, estimated to take 8-10 minutes, included attention checks and response-time monitoring, excluding responses under 3 minutes, resulting in 400 valid questionnaires. Participants consented to voluntary participation and data use, with anonymity maintained and no personal information collected. They were informed they could withdraw at any time without penalty.

Scale Development and Adaptation

Measurement scales, adapted from validated TPB and consumer behavior research, were modified for plant-based food and Thai culture. Items were initially in English, then translated and back-translated into Thai to assess equivalence. The TPB constructs included: Attitude (3 items, $\alpha = 0.758$) from Chen (2022), evaluating views on plant-based foods; Subjective Norms (4 items, $\alpha = 0.779$) from Chen (2022) and refined with Suphasomboon and Vassanadumrongdee (2022), assessing social pressure; Perceived Behavioral Control (4 items, $\alpha = 0.726$) from Chen (2022), measuring ease of purchasing; Anticipated Negative Emotions (2 items, $\alpha = 0.903$) from Suphasomboon and Vassanadumrongdee (2022), measuring guilt and regret (e.g., I would feel guilty if I did not choose plant-based food options), Purchase Intention (3 items, $\alpha = 0.703$) from Chen (2022), predicting future purchase likelihood. Demographics collected included age, gender, education, income, consumer type, and monthly expenditure.

Construct Validity

Construct validity was evaluated through Exploratory Factor Analysis (EFA) using principal axis factoring to test the unidimensionality of each construct. Before extraction, we checked the sampling adequacy with the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. All constructs showed acceptable to good sampling adequacy, with KMO values ranging from 0.500 to 0.761, while Bartlett's tests were significant ($p < .001$) across the board, confirming that the correlation matrices were appropriate for factor analysis.

As shown in Table 1, the EFA results supported the unidimensional structure of all five constructs. Each construct produced a single-factor solution, with eigenvalues exceeding 1.0. Factor loadings varied from 0.537 to 0.907, with most items surpassing the recommended threshold of 0.50 (Hair et al., 2019). The construct for Attitude was measured using three items (loadings: 0.537-0.847), Subjective Norms with

four items (loadings: 0.539-0.826), Perceived Behavioral Control with four items (loadings: 0.575-0.685), Anticipated Negative Emotions with two items (loading: 0.907), and Purchase Intention with three items (loadings: 0.661-0.723). Internal consistency was confirmed with Cronbach's alpha coefficients ranging from 0.703 to 0.903, all of which exceeded the acceptable threshold of 0.70 (Nunnally & Bernstein, 1994).

To evaluate discriminant validity, the bivariate correlations among all constructs were examined. The inter-construct correlations ranged from -0.008 to 0.646, all below the threshold of 0.850 recommended by Kline (2015), indicating that the constructs were empirically distinct. Together, these findings provide solid evidence for the adequate construct validity and reliability of the measurement instrument.

Table 1 Construct Validity and Reliability Results

Construct	Items	KMO	Factor Loadings	Cronbach's α
Attitude	3	0.651	0.537-0.847	0.758
Subjective Norms	4	0.729	0.539-0.826	0.779
Perceived Behavioral Control	4	0.761	0.575-0.685	0.726
Anticipated Negative Emotions	2	0.500	0.907	0.903
Purchase Intention	3	0.687	0.661-0.723	0.703

Remarks: Extraction method: Principal Axis Factoring. All Bartlett's tests significant at $p < .001$. Inter-construct correlations ranged from -0.008 to 0.646, all below the 0.850 threshold for discriminant validity.

Results

The final sample comprised 400 Thai consumers who had previously purchased plant-based foods supporting sustainable consumption. Table 2 presents the demographic profile of respondents. The sample was predominantly female (51.2%), with males representing 33.25% and other gender identities 15.5%. This gender distribution aligns with research indicating higher female engagement in sustainable consumption behaviors. Monthly income distribution showed the largest group earning 15,000-25,000 THB (30.25%), representing middle-income consumers. Educational attainment was high, with 67.25% holding bachelor's degrees and 79.25% completing undergraduate education, indicating a well-educated sample typical of early adopters of sustainable food products. Regarding consumption behavior, the majority identified as vegetarian (57.25%), followed by flexitarian (30.25%) and vegan (12.5%). This distribution reflects the Thai context, where vegetarianism has cultural roots, but strict veganism remains less common.

Tables 2 and 3 show the results of the hypothesis testing. In H1, demographic and consumption-related variables in Model 1 accounted for 8.0% of the variance in purchase intentions ($R^2 = 0.080$, Adjusted $R^2 = 0.057$, $F = 3.398$, $p < 0.001$). Only flexitarian consumer type exhibited a significant negative association compared with vegans ($\beta = -0.189$, $p < 0.001$), while plant-based food expenditure showed a

positive association with intentions ($\beta = 0.160$, $p < 0.001$), whereas gender, age, income, and education were not significant predictors (all $p > 0.05$), indicating limited influence of traditional sociodemographic characteristics once consumption-related factors are considered. Regarding H2a-H2c (Table 2), the TPB constructs together explained 35.1% of the variance in ANE ($R^2 = 0.351$, $F = 71.252$, $p < 0.001$). Contrary to H2a, attitudes toward plant-based foods were positively associated with ANE ($\beta = 0.164$, $p < 0.001$), and in contrast to H2b, subjective norms showed a significant negative effect on ANE ($\beta = -0.161$, $p < 0.001$), while consistent with H2c, perceived behavioral control exhibited the strongest negative association with ANE ($\beta = -0.601$, $p < 0.001$). In line with H3 (Table 2, Model 3), simple linear regression indicated that ANE had a significant positive effect on purchase intentions ($\beta = 0.166$, $R^2 = 0.028$, $F = 3.368$, $p < 0.001$), suggesting that higher anticipated negative emotions are associated with stronger intentions to purchase plant-based foods supporting sustainable consumption. For H4 (Table 2, Model 2 and Model 2+ANE), the traditional TPB model explained 41.80% of the variance in purchase intentions ($F = 94.918$, $p < 0.001$). Attitude ($\beta = 0.180$, $p < 0.001$) and subjective norms ($\beta = 0.567$, $p < 0.001$) were significant positive predictors, whereas PBC was not significant ($\beta = 0.048$, $p = 0.233$). When ANE was added in Model 2+ANE, the explained variance increased to 44.9% ($\Delta R^2 = 0.031$, $F = 21.940$, $p < 0.001$). In this extended model, all TPB constructs and ANE became significant predictors of purchase intentions (attitude: $\beta = 0.145$; subjective norms: $\beta = 0.602$; PBC: $\beta = 0.178$; ANE: $\beta = 0.217$; all $p < 0.001$), supporting H4 and indicating that ANE provides additional explanatory power beyond the traditional TPB variables. Finally, for H5, the comprehensive model with all predictors (Table 2, Model 4) accounted for 49.9% of the variance in purchase intentions ($R^2 = 0.499$, $F = 27.364$, $p < 0.001$). Subjective norms emerged as the strongest predictor ($\beta = 0.613$, $p < 0.001$), followed by ANE ($\beta = 0.140$, $p < 0.001$), PBC ($\beta = 0.125$, $p < 0.001$), and attitude ($\beta = 0.114$, $p < 0.001$). Flexitarian consumer type showed a significant negative association with purchase intentions ($\beta = -0.166$, $p < 0.001$), whereas other demographic variables, including gender, age, income, education, and vegan consumer type, were not significant (all $p > 0.05$). These results partially support H5 by highlighting the dominant role of psychological variables over demographic characteristics in predicting purchase intentions.

Table 2 Standardized Beta Coefficients of Models 1 To 4

Indices	Model 1	Model 2	Model 2+ANE	Model 3	Model 4
Male	$\beta = 0.009$	-	-	-	$\beta = -0.014$
	$p = 0.870$				$p = 0.722$
LGBPQ	$\beta = -0.028$	-	-	-	$\beta = -0.010$
	$p = 0.602$				$p = 0.809$
Age	$\beta = 0.006$	-	-	-	$\beta = -0.033$
	$p = 0.908$				$p = 0.420$
Middle Income	$\beta = -0.035$	-	-	-	$\beta = -0.028$
	$p = 0.570$				$p = 0.552$

Table 2 Standardized Beta Coefficients of Models 1 To 4 (Cont.)

Indices	Model 1	Model 2	Model 2+ANE	Model 3	Model 4
High Income	$\beta = 0.035$ $p = 0.609$	-	-	-	$\beta = 0.078$ $p = 0.126$
Bachelor's Degree	$\beta = 0.087$ $p = 0.184$	-	-	-	$\beta = 0.064$ $p = 0.203$
Postgraduate Degree	$\beta = 0.061$ $p = 0.355$	-	-	-	$\beta = -0.003$ $p = 0.961$
Flexitarian Consumer	$\beta = -0.189$ $p = 0.027$*	-	-	-	$\beta = -0.166$ $p = 0.010$*
Vegetarian Consumer	$\beta = -0.161$ $p = 0.710$	-	-	-	$\beta = -0.106$ $p = 0.112$
Plant-based Food Expenditure	$\beta = 0.160$ $p = 0.014$*	-	-	-	$\beta = 0.125$ $p = 0.011$*
Attitude	-	$\beta = 0.180$ $p < 0.001$*	$\beta = 0.145$ $p < 0.001$*	-	$\beta = 0.114$ $p = 0.006$*
Subjective Norm	-	$\beta = 0.567$ $p < 0.001$*	$\beta = 0.602$ $p < 0.001$*	-	$\beta = 0.613$ $p < 0.001$*
Perceived Behavioral Control	-	$\beta = 0.048$ $p = 0.233$*	$\beta = 0.178$ $p < 0.001$*	-	$\beta = 0.125$ $p = 0.014$*
Anticipated Negative Emotions	-	-	$\beta = 0.217$ $p < 0.001$*	$\beta = 0.166$ $p < 0.001$*	$\beta = 0.140$ $p = 0.005$*
R^2	0.080	0.418	0.449	0.028	0.499
Adj. R^2	0.057	0.414	0.443	0.025	0.481

Sources: Authors' calculation

Table 3 TPB Predictors of Anticipated Negative Emotions (ANE)

Indices	*β*	*p*-value
(Constant)	-	-
Attitude	0.164	0.001
Subjective Norm	-0.161	0.001
Perceived Behavioral Control	-0.601	0.001
$R^2 = .351$, Adjusted $R^2 = .345$		

Sources: Authors' calculation

Discussion

The findings of this study highlight the critical role that Anticipated Negative Emotions (ANE) play in shaping consumers' purchase intentions toward plant-based foods, effectively extending the Theory of Planned Behavior (TPB). As global interest in sustainable dietary choices grows, understanding emotional influences becomes essential for fostering responsible consumption. The integration of ANE offers valuable insights into how emotions can serve as significant drivers of decision-making, particularly in ethical and sustainable food choices.

The findings from H1 indicate that behavioral and psychographic factors, such as dietary identity and prior expenditure on plant-based alternatives, are superior predictors of purchase intentions than traditional demographic variables. This shift suggests that demographics are less critical than lifestyle and consumption habits in the context of sustainable food choices (Krispenz & Bertrams, 2020). Consequently, these findings diverge from traditional studies that emphasize demographic segmentation (Pandey et al., 2021; Moon, 2021). Ultimately, marketing strategies for plant-based products should pivot from broad demographic targeting to value-based and behavioral segmentation to more accurately capture consumer intent.

The results from H4 indicate that the extended TPB model, which incorporates ANE, provides a more robust framework for predicting purchase intentions than the traditional TPB model, accounting for an additional 3.1% of variance in intentions ($\Delta R^2 = 0.031$, $p < 0.05$). This fits with what Koenig-Lewis and others have suggested over the years: negative emotions are motivators (Koenig-Lewis et al., 2014; Graham-Rowe et al., 2015; Lam et al., 2022). Subjective norms emerged as the strongest predictor of purchase intention, with a beta coefficient of $\beta = 0.600$ ($p < 0.001$), indicating that social approval and expectations from significant others more powerfully drive decisions to purchase plant-based products than personal attitudes or perceived behavioral control alone. When individuals perceive that important referents endorse or regularly practice plant-based consumption (Luong et al., 2024; Nakhonchaigul & Siriyota, 2024; Drolet-Labelle et al., 2023; Shin et al., 2024). Particularly in collectivist cultures such as Thailand, where community and familial opinions significantly impact individual choices, subjective norms may exert an even stronger influence on purchase intention for plant-based products.

Interestingly, our analysis revealed that positive attitudes toward plant-based foods were positively associated with Anticipated Negative Emotions, with a beta coefficient of $\beta = 0.164$ ($p < 0.05$). This counterintuitive result suggests that consumers with favorable attitudes may experience increased awareness of their ethical responsibilities, thereby heightening their sensitivity to the emotional consequences of their choices. These findings are consistent with research showing that Anticipated Negative Emotions operate as self-regulatory signals that are strengthened when people hold strong positive attitudes or moral commitments toward a behavior, making the interplay between TPB constructs and anticipated emotions inherently complex (Bohon et al., 2016; Kobbeltved & Wolff, 2009). Such dynamics are crucial for marketers and policymakers aiming to promote sustainable diets, as they indicate the potential of

emotional appeals to enhance consumer engagement and motivation. With respect to H3, Anticipated Negative Emotions were positively associated with purchase intentions, although the effect size was modest. This pattern suggests that Anticipated Negative Emotions as additional motivational forces that encourage consumers to select plant-based options beyond the influence of traditional TPB cognitions motivators (Koenig-Lewis et al., 2014; Graham-Rowe et al., 2015; Lam et al., 2022). Such a finding is consistent with prior research showing as individuals seek to avoid future emotional discomfort arising from acting in ways that conflict with their internalized values and moral standards

Moreover, the negative relationship between subjective norms and ANE (β = -0.161, $p < 0.05$) suggests that when social norms surrounding plant-based consumption are strong, individuals may experience reduced negative emotions regarding their dietary choices. Conversely, a lack of supportive social norms may exacerbate feelings of guilt or regret, deterring individuals from pursuing plant-based options (Onwezen et al., 2013; Krettenauer & Lefebvre, 2021; Barbeta-Viñas, 2023). This highlights the importance of cultivating a cultural environment that supports sustainable food choices, fosters positive emotional reinforcement and encourages broader dietary shifts.

Ultimately, the empirical evidence confirms H5 within this framework, subjective norms exert the most potent influence, followed sequentially by ANE, perceived behavioral control, attitude, and flexitarian dietary identity. Conversely, traditional sociodemographic factors are not statistically significant. This hierarchy is consistent with prior research on sustainable food choices and alternative proteins, which has repeatedly shown that in collectivist cultural settings (Le & Nguyen, 2022; Yang et al., 2024; Luong et al., 2024), subjective norms often constitute the primary driver of intention, reflecting the centrality of social approval and perceived expectations of significant others. Furthermore, the additional predictive contribution of Anticipated Negative Emotions supports the view that extending the TPB with affective components enhances its explanatory power, as anticipated feelings of guilt, regret, or self-blame provide an emotional motivational layer beyond the traditional cognitive determinants of behavior (Koenig-Lewis et al., 2014; Ibrahim et al., 2021).

Conclusions

This study extends the Theory of Planned Behavior (TPB) by integrating Anticipated Negative Emotions (ANE) to enhance the understanding of consumers' purchase intentions for plant-based foods. Our findings reveal that Anticipated Negative Emotions, particularly guilt and regret, play a significant role in shaping consumer behavior alongside traditional TPB constructs. With the extended model accounting for 44.9% of the variance in purchase intention compared to 41.8% for the traditional model, we provide empirical support for the inclusion of emotional dimensions in predicting sustainable consumption behaviors.

The analysis highlighted subjective norms as the most substantial predictor of purchase intentions, underscoring the importance of social influence in guiding consumer choices toward plant-based diets.

Furthermore, it was noteworthy that positive attitudes were positively associated with Anticipated Negative Emotions, suggesting a complex interplay between feelings and decision-making processes. Conversely, the negative correlations among subjective norms, perceived behavioral control, and ANE warrant further exploration, indicating that certain social pressures could potentially induce negative emotional responses that deter sustainable consumption.

Recommendations

Given the implications of this research, we recommend several avenues for future studies. First, longitudinal research is essential to examine how Anticipated Negative Emotions and other psychological factors evolve over time among consumers transitioning to plant-based diets. By tracking these trends, researchers can better understand the dynamics of consumer behavior and the stages of adopting sustainable consumption practices.

Second, qualitative studies could provide richer insights into the emotional landscape surrounding plant-based food choices. Focus groups or in-depth interviews may reveal the underlying motivations and anxieties that shape consumer behavior, particularly in non-Western contexts where cultural perceptions of food and sustainability may differ markedly.

Third, targeted marketing strategies should leverage the insights gained from this study. Marketers promoting plant-based foods should consider integrating emotionally resonant messaging that addresses potential guilt or regret associated with traditional diets. Campaigns that emphasize positive outcomes, personal health benefits, and community support can create a more conducive environment for adopting plant-based diets.

Additionally, public policy interventions could benefit from this research. Policymakers should consider initiatives that not only promote plant-based foods but also address the psychological barriers consumers face. Educational programs that illuminate the emotional and ethical dimensions of food choices could foster greater consumer awareness and acceptance of sustainable diets.

Lastly, given the increasing globalization of food systems, further research should examine the contextual factors shaping plant-based food consumption across diverse cultures, particularly in Asian markets, where plant-based eating is historically entrenched. Understanding these factors will help bridge the existing knowledge gap and contribute to the development of region-specific strategies that promote sustainable food systems globally.

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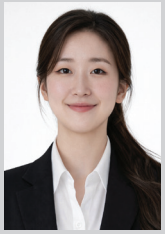
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高职院校二级学院院长变革型领导力的需求识别——以红河职业技术学院为例

NEEDS IDENTIFICATION FOR TRANSFORMATIONAL LEADERSHIP OF SECONDARY COLLEGE DEANS IN VOCATIONAL COLLEGES—A CASE STUDY OF HONGHE VOCATIONAL AND TECHNICAL COLLEGE

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摘要

研究目的：在高职教育转型与“双高计划”背景下，以红河职业技术学院为例，融合本土化变革型领导力四维度与领导力五力模型，构建九维度分析框架，识别二级学院院长变革型领导力关键需求并提出改进建议。

研究设计/方法/途径：采用混合研究方法，基于 TLQ 四维度与五力模型设计量表，分层目的抽样获取有效问卷 419 份，运用 SPSS 进行信效度、描述统计、相关与多元回归分析；并访谈校级领导、中层干部、教师与企业代表共 20 人，主题分析补充解释。

研究结果：院长整体变革型领导力处于中等水平（M＝4.03），“德行垂范”最高（M＝4.14），“影响力”最低（M＝3.94）。回归分析显示“领导魅力、决断力、个性化关怀、德行垂范与影响力”显著正向预测领导效能（β＝0.202-0.281，p＜0.001）。访谈揭示制度执行、沟通反馈、资源外联与教师支持等薄弱环节。

创新性与价值：构建并验证九维度整合测量框架，为边疆高职中层治理提供可量化诊断工具与改进依据，支撑院长能力培养与政策落地。

关键词：高职院校 二级学院院长 变革型领导力 需求识别

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Abstract

Purpose: Amid the transformation of higher vocational education and the "Double-High Plan", this study used Honghe Vocational and Technical College as a case, integrating the localized four dimensions of transformational leadership with the Five-Forces Leadership Model, and developing a nine-dimensional analytical framework to identify key leadership needs of secondary college deans and propose targeted improvement suggestions.

Study Design/Methodology/Approach: A mixed-methods approach was used. A measurement instrument was developed based on TLQ's four dimensions and the Five Forces model. Using stratified purposive sampling, 419 valid questionnaires were collected. SPSS was used to conduct reliability and validity tests, descriptive statistics, correlation analysis, and multiple regression analysis. Additionally, semi-structured interviews were conducted with 20 participants, including senior leaders, middle-level administrators, teachers, and enterprise representatives; thematic analysis was used to further interpret and supplement the quantitative findings.

Findings: The overall level of deans' transformational leadership was moderate (M = 4.03). "Moral Modeling" scored the highest (M = 4.14), while "Influence" scored the lowest (M = 3.94). Regression results implied that "Leadership Charisma, Decisiveness, Individualized Consideration, Moral Modeling, and Influence" significantly and positively predicted leadership effectiveness ($\beta = 0.202\text{-}0.281$, $p < 0.001$). Interview data further revealed weaknesses in policy implementation, communication and feedback, external resource linkages, and teacher support.

Originality/Value: This study developed and validated an integrated nine-dimensional measurement framework, offering a quantifiable diagnostic tool, an evidence base for improving middle-level governance in border-region vocational colleges, and supporting leadership development and policy implementation.

Keywords: Higher Vocational Institutions, Secondary College Deans, Transformational Leadership, Needs Identification

引言

在职业教育改革深化与“双高计划”实施背景下，高职院校被赋予服务区域产业、推动治理现代化的重要使命。特别是在民族地区，职业教育不仅承担着技能人才培养任务，更是推动教育公平与区域协调发展的关键力量 (Zhang & Madina, 2023)。作为院校治理体系中的中坚力量，二级学院院长需统筹教学、专业、队伍与资源，是学校战略落地与高质量发展的关键推动者 (Li & Zhao, 2024)。近年来，国家高度重视职业教育中层干部能力建设，强调“健全治理体系”和“提升中层治理能力”(Ministry of Education of the People's Republic of China, 2020)。然而现实中，院长群体普遍存在战略感知不足、资源整合乏力、制度执行力薄弱等问题，亟需构建科学的能力评价工具与成长路径 (Li & Zhao, 2024；Liu & Tong, 2023)。尽管变革型领导力已广泛

应用于教育领域，但在中国高职语境下，尤其是在院系管理层的本土化研究仍较薄弱，理论适配性与实证依据均显不足 (Tang, 2023)。本研究尝试融合 Li 和 Shi (2005) 提出的本土化变革型领导力模型和中科院“领导力五力模型”构建九维度能力分析框架，兼顾情感支持与制度执行两个维度，回应高职治理复杂性。以红河职业技术学院为案例，采用问卷与访谈结合的混合研究方法，识别二级学院院长变革型领导力的需求，旨在丰富中国高职院校中层干部能力研究，拓展理论外延，为边疆地区职业教育治理能力现代化提供理论支持和实践参考。

研究目的

1. 调查红河职业技术学院二级学院院长变革型领导力的表现水平。
2. 识别影响红河职业技术学院二级学院院长变革型领导力提升需求的关键维度。
3. 探索提出提升高职院校二级学院院长变革型领导力的优化建议。

文献综述

高职院校二级学院院长的角色定位及其领导特征

在中国高职教育体系中，二级学院作为院校内部治理的基本单元，其院长在教学组织、专业建设和师资管理中发挥着重要作用。研究指出，二级学院兼具行政与学术职能，院长需在党政体制下协调教学、科研与管理事务 (Ruan et al., 2024)。其职责不仅包括资源调配、教师发展与制度执行，还需推动学院的学术引领与内部治理现代化 (Liu & Tong, 2023)。国内外研究逐渐聚焦于院长的“领导风格”及其对教师绩效、组织氛围的影响。例如，变革型领导可有效提升组织绩效、员工满意度、创新行为及教师组织承诺 (Jing & Wang, 2024)。Jung (2022) 则指出，真实型领导能增强教师组织认同。Ballena (2022) 的研究进一步表明，院长在任务导向与关怀导向上的平衡行为，对教师满意度具有积极影响。综上，二级学院院长需具备战略视野与人文关怀双重能力，其领导特征直接关系到学院运行效能和组织发展水平。

变革型领导力理论的发展及其在教育领域的应用

变革型领导力理论由 Burns (1978) 提出，强调通过激发成员使命感实现组织变革。Bass (1985) 在此基础上构建了四维模型：领导魅力、感召力、智力激发与个性化关怀，并开发了广泛应用于领导效能测评的 MLQ 问卷。然而，西方模型在中国文化中的适应性受到质疑。Li 和 Shi (2005) 基于实证研究提出了更契合中国语境的四维模型：德行垂范、愿景激励、领导魅力和个性化关怀，并开发 TLQ 量表。后续研究 Huang (2011)、Meng et al. (2013) 进一步丰富了本土模型结构，构建了“二阶四因素 + 八子维度”体系，突出了儒家文化中对道德示范、愿景引导和人际关怀的高度重视。在教育领域，变革型领导力也得到广泛应用。Liu et al. (2024) 综述认为变革型领导可增强教师动机与组织承诺，但受限于资源支持与制度环境。Jing 和 Wang (2024)

与 Weng et al. (2023) 的研究进一步证实在高职院校情景中，变革型领导力能够提升教师敬业度、创新氛围及组织绩效，表明四维模型在价值引导与关系构建层面能够有效适配职业教育场景。综上，变革型领导理论已成为教育改革与治理实践的重要理论支撑。

领导力五力模型的结构扩展与融合趋势

尽管变革型领导强调价值引领与激励机制，但其在制度执行与战略规划方面相对薄弱 (Tang, 2023)。为更好反映中国组织管理情境的结构复杂性，Research Group on Leadership, Chinese Academy of Sciences (2010) 提出“领导力五力模型”，包括前瞻力、感召力、影响力、决断力与控制力，系统强调管理者的战略洞察、组织协调与制度执行能力，该模型在干部胜任力评价与组织治理研究中被广泛应用。近年来，学界不断拓展其边界，如 Zhang 和 Zheng (2023) 开发了基于 “数字认知——资源整合——伦理共情” 的数字领导力测量模型，体现了对能力结构量化趋势的响应，凸显领导力研究的本土拓展与多元路径。Li 和 Zhao (2024) 以高职院校二级学院院长为研究对象，明确指出传统理论难以完全覆盖实际管理情境中的多维要求，亟需构建更具情境适应性与综合能力导向的本土模型。在理论结构上，变革型领导力四维度主要侧重于对追随者的情感激励与价值引领，而五力模型则强调领导者的执行逻辑与制度落实，两者在功能维度上高度互补。例如，“德行垂范”与“感召力”强调价值示范，“领导魅力”与“影响力”对应人格感召与资源动员，“愿景激励”与“前瞻力”契合战略导向，“个性化关怀”则通过“决断力”与“控制力”在决策与执行中落地。因此，将两者融合能够同时捕捉价值引领与组织执行两个维度，变革型领导力提供领导者“为何引领”的价值理念基础，五力模型则提供“如何落实”的治理工具和策略路径，这种融合有助于增强领导者在组织治理中的适配性。

双理论融合的张力与交互分析

尽管“变革型领导四维模型”与“领导力五力模型”在实践中具有互补性，但其融合尚存在理论张力。需要注意以下几点：个性化关怀 vs 决断力/控制力：前者注重情感支持，侧重“软治理”；后者强调制度规范与效率，强调“强治理”。两者在价值观、权力关系与文化期望上可能存在冲突（如过度控制导致团队信任下降)。愿景激励 vs 执行力：愿景型领导营造创新氛围，制度执行导向更强调规范与流程，二者需权衡弹性与管控力度。前瞻力 vs 智力激发：前者关注组织战略定位，后者偏重于创新思维与系统学习理念，二者的同步要求提出领导者具备更高的认知与执行一体化能力。Jun 和 Lee (2023) 也指出，教师组织中应变型领导与执行能力兼备，才能真正促进改革成效。这些理论张力验证了混合模型设计的必要性，并为九维度评估框架提供批判视角，使研究更具有理论深度与实践解释力。

研究提升空间与本研究切入点

目前已有大量关于四维变革型领导力在教育领域的应用研究，亦有针对五力模型中制度维度的探索，但两者在职业院校中层治理中的整合、冲突与协同作用尚未系统研究。特别是在

红河职业技术学院这一典型边疆办公高职院校中，关于院长领导力的本土实证研究仍属空白。因此，本研究基于双理论整合的九纬度框架设计调查问卷和访谈提纲，通过混合研究法识别红河职业技术学院二级学院院长变革型领导力的需求，在为院校中层干部能力建设提供参考。

研究方法

本研究采用定量与定性相结合的混合研究方法，系统识别以红河职业技术学院为代表的高职院校二级学院院长变革型领导力的需求。

定量研究：问卷调查

调查问卷分为三个部分：第一部分：受访者基本信息；第二部分：变革型领导力需求现状评估，采用李克特五级量表，涵盖九个维度：领导力五力模型量表 15 题、变革型领导力四个核心维度量表（TLQ）26 题，共计 42 题。第三部分：针对变革型领导力提升的意见建议。问卷初稿经 5 位教育管理专家进行内容效度评估，IOC 指数均 > 0.6，确保测量内容科学有效。样本采用分层目的抽样，以红河职业技术学院校级领导、中层干部、教师及企业代表为调查对象，通过“问卷星”发放问卷，收回有效问卷共 419 份。

定性研究：半结构化访谈

基于问卷分析结果，设计访谈提纲，重点围绕领导力的需求、影响因素及改进建议，特别关注问卷得分最高和最低的维度。访谈对象包括校级领导 2 人、职能部门干部 5 人、二级学院干部 8 人、普通教师 3 人、合作企业代表 2 人，共 20 人。访谈结果通过主题分析法整理归纳。

研究结果

通过 SPSS 29.0 对调查问卷的数据进行统计分析，包括描述性分析（如平均值、标准差等)、信度效度检验、因子分析、相关性分析、回归分析等。

1. 信度检验

信度是衡量研究工具稳定性与一致性的重要指标。本研究采用 Cronbach’s α 系数对实际样本数据进行信度检验。Cronbach’s α 值介于 0-1 之间，通常 α > 0.7 表示内部一致性良好，α > 0.9 说明信度极高 (Nunnally & Bernstein, 1994)。信度检验结果见下表：

Table 1 Overall Sample Consistency Analysis Results

Reliability Statistics		
Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	N of Items
0.994	0.994	42

调查问卷数据分析结果显示，整体样本的克隆巴赫 Alpha 系数和标准化后的 Cronbach's α 均为 0.994，这表明所测量的量表具有“非常好”的内部一致性。

2. 效度检验

效度是指研究工具能够准确测量目标概念的程度。本研究主要采用了结构效度的验证方法，结构效度检验是通过因子分析（Factor Analysis）来验证调查提纲中各问题的结构是否符合理论假设 (Kline, 2016)，通常用 Kaiser-Meyer-Olkin 取样适切性量数（即 KMO 值）来评估数据适合进行因子分析的程度。效度检验结果见下表：

Table 2 KMO and Bartlett's Test Analysis Results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.964
Bartlett's Test of Sphericity	Approx. Chi-Square	5705.362
	df	36
	Sig.	<.001

Table 3 Total Variance Explained

Component	Initial Eigenvalues			Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.819	86.880	86.880	7.819	86.880	86.880	1.317	14.637	14.637
2	0.268	2.978	89.858	0.268	2.978	89.858	1.314	14.602	29.238
3	0.206	2.286	92.144	0.206	2.286	92.144	1.270	14.113	43.352
4	0.150	1.670	93.814	0.150	1.670	93.814	1.107	12.300	55.652
5	0.141	1.562	95.376	0.141	1.562	95.376	0.978	10.867	66.519
6	0.123	1.369	96.745	0.123	1.369	96.745	0.957	10.636	77.155
7	0.103	1.145	97.889	0.103	1.145	97.889	0.802	8.916	86.072
8	0.099	1.104	98.993	0.099	1.104	98.993	0.699	7.767	93.838
9	0.091	1.007	100	0.091	1.007	100	0.555	6.162	100

Extraction Method: Principal Component Analysis.

Table 4 Rotated Component Matrix[a]

Variable	Component								
	1	2	3	4	5	6	7	8	9
Foresight	0.275	**0.717**	0.259	0.298	0.236	0.264	0.225	0.216	0.179
Inspirational Power	0.336	0.331	0.295	0.314	0.228	**0.641**	0.233	0.205	0.181
Influence	0.267	0.346	0.265	**0.671**	0.270	0.285	0.237	0.214	0.181
Decisiveness	0.290	0.360	0.326	0.301	0.303	0.259	0.264	**0.566**	0.198
Control	0.337	0.326	0.302	0.303	0.274	0.272	**0.595**	0.238	0.193
Moral Modeling	**0.714**	0.275	0.318	0.240	0.244	0.267	0.231	0.193	0.188
Leadership Charisma	0.394	0.328	0.338	0.288	0.284	0.266	0.246	0.231	**0.525**
Visionary Motivation	0.299	0.288	0.364	0.297	**0.640**	0.229	0.237	0.231	0.190
Individualized Consideration	0.325	0.264	**0.708**	0.241	0.285	0.246	0.217	0.208	0.183

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

综合分析表 2、3 和 4 结果显示，在前期基于“变革型领导力四维度”与“领导力五力模型”构建了包含九个变量的二级学院院长变革型领导力测量工具，并采用主成分分析法对其结构效度进行验证。结果显示，KMO 检验值为 0.964，巴特利特球形度检验显著（$\chi^2 = 5705.362$, $df = 36$, $p < .001$），表明数据适合进行因子分析。随后通过主成分提取并采用最大方差法（Varimax）进行正交旋转，共提取出 9 个主成分，累计方差解释率为 100%，前六个因子累计解释 77.155% 的总方差，结构合理。结合旋转后的成分矩阵，各变量在所属因子上的主载荷均大于 0.5，且无交叉载荷，表明变量归属明确、结构清晰。因子命名依据理论维度进行归类：其中“德行垂范”“个性化关怀”“愿景激励”“领导魅力”归属于变革型领导力四维度模型，“前瞻力”“感召力”“影响力”“决断力”“控制力”归属于领导力五力模型，整体结构与理论模型保持一致，显示测量工具具有良好的结构效度。因此，本研究构建的“二级学院院长变革型领导力”测量框架在理论逻辑与统计结构上均具备较强一致性，可作为后续实证研究的基础测量工具。

3. 相关性分析

Table 5 Correlation Analysis by Dimension

Variable	Foresight	Inspirational Power	Influence	Decisiveness	Control	Moral Modeling	Leadership Charisma	Visionary Motivation	Individualized Consideration	Overall Evaluation
Foresight	1									
Inspirational Power	.852**	1								
Influence	.861**	.869**	1							
Decisiveness	.869**	.856**	.866**	1						
Control	.851**	.864**	.864**	.889**	1					
Moral Modeling	.803**	.854**	.803**	.833**	.857**	1				
Leadership Charisma	.853**	.866**	.856**	.884**	.881**	.888**	1			
Visionary Motivation	.820**	.825**	.853**	.883**	.864**	.831**	.874**	1		
Individualized Consideration	.793**	.830**	.803**	.855**	.841**	.847**	.867**	.875**	1	
Overall Evaluation	.819**	.834**	.849**	.875**	.849**	.861**	.892**	.843**	.863**	1

Remarks: ** Correlation is significant at the 0.01 level (2-tailed).

皮尔森相关分析结果显示，各变量间相关系数介于 0.793-0.892 之间，表明九个维度间高度协同，整体结构具有良好一致性。综合评价指标（即二级学院院长变革型领导力水平）与所有维度均呈显著正相关（$p < 0.01$），验证其对各项能力表现的整体反映效能。其中，领导魅力（r＝0.892）、决断力（r＝0.875）与个性化关怀（r＝0.863）关联性最强，突显人格感召、果断决策与情感支持在院长领导效能中的关键作用。同时，决断力与控制力高度相关（r = 0.889），反映出决策与管理执行的紧密联动。愿景激励、感召力与控制力的正相关性进一步支持激励与制度执行并重的多维能力结构在提升变革型领导力中的重要价值。

4. 描述性统计

通过描述性统计分析，了解红河职业技术学院二级学院院长变革型领导力的现状和关键需求。调查量表各维度的平均值均在 3.80 以上（见表 6），总平均值 4.03。根据实际情况划定参考标准为：较低平均值（＜4.00）：认可度低，表明提升需求较大；中等平均值（4.00-4.10）：认可度中等，提升需求一般；较高平均值（＞4.10）：认可度高，提升需求较小。

Table 6 Descriptive Statistics

Dimension	N	Mean	Std. Deviation	Evaluation Result
Foresight	419	3.98	0.790	Low
Inspirational Power	419	4.04	0.830	Medium
Influence	419	3.94	0.858	Low
Decisiveness	419	3.98	0.832	Low
Control	419	3.99	0.830	Low
Moral Modeling	419	4.14	0.794	High
Leadership Charisma	419	4.06	0.816	Medium
Visionary Motivation	419	4.03	0.821	Medium
Individualized Consideration	419	3.99	0.832	Low
Overall	**419**	**4.03**	**0.858**	**Medium**

根据表 6 数据分析，二级学院院长变革型领导力的整体水平处于中等（M = 4.03, S.D. = 0.858），表明院长在变革型领导力方面已取得一定成效，但仍有提升空间。在九个维度中，“德行垂范”得分最高（M = 4.14, S.D. = 0.794），受访者对院长的职业道德和行为规范认可度较高，评价结果为“高”。而“影响力”得分最低（M = 3.94, S.D. = 0.858），评价结果为“低”，反映院长在学院文化建设、资源整合、外部合作方面能力较弱，亟需加强校企合作、政策争取和行业影响力的提升。此外，“前瞻力”“决断力”“控制力”“个性化关怀”等维度得分均低于 4.00，提示院长在政策规划、执行管理、团队协作、教师职业发展支持等方面仍存在改进空间。

5. 回归分析

Table 7 ANOVA Analysis

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	255.915	9	28.435	273.827	<.001[b]
	Residual	42.472	409	0.104		
	Total	298.387	418			

Remarks: a. Dependent Variable: Transformational Leadership of Secondary College Deans.

b. Predictors: (Constant), Foresight, Inspirational Power, Influence, Decisiveness, Control, Moral Modeling, Leadership Charisma, Visionary Motivation, Individualized Consideration

表 7 显示，回归模型整体显著（F = 273.827, p < .001），说明九个维度对二级学院院长变革型领导力具有显著影响。

Table 8 Model Summary

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.926[a]	0.858	0.855	0.322

Remarks: a. Predictors: (Constant), Foresight, Inspirational Power, Influence, Decisiveness, Control, Moral Modeling, Leadership Charisma, Visionary Motivation, Individualized Consideration

b. Dependent Variable: Transformational Leadership of Secondary College Deans.

表 8 显示，模型拟合良好（R = 0.926，R^2 = 0.858，调整后 R^2 = 0.855），表明九个预测变量可解释 85.8% 的二级学院院长变革型领导力变异，具有较强解释力与稳健性。标准误差为 0.322，预测偏差较小，进一步验证模型拟合效果优良。

Table 9 Coefficients[a]

Coefficients[a]								
Model	**Unstandardized Coefficients**	**Standardized Coefficients**	**t**	**Sig.**	**Correlations**			**VIF**
	B	**Beta**			**Zero-order**	**Partial**	**Part**	
1 **(Constant)**	0.013		0.150	0.881				
Foresight	-0.013	-0.012	-0.265	0.791	0.819	-0.013	-0.005	5.656
Inspirational Power	-0.046	-0.045	-0.952	0.341	0.834	-0.047	-0.018	6.538
Influence	0.199	0.202	4.273	<.001	0.849	0.207	0.080	6.423
Decisiveness	0.231	0.228	4.312	<.001	0.875	0.209	0.080	8.004
Control	-0.026	-0.026	-0.509	0.611	0.849	-0.025	-0.009	7.324
Moral Modeling	0.211	0.199	4.316	<.001	0.861	0.209	0.081	6.095
Leadership Charisma	0.281	0.272	4.998	<.001	0.892	0.240	0.093	8.505
Visionary Motivation	-0.057	-0.056	-1.130	0.259	0.843	-0.056	-0.021	6.962
Individualized Consideration	0.223	0.220	4.844	<.001	0.863	0.233	0.090	5.906

Remarks: a. Dependent Variable: Transformational Leadership of Secondary College Deans.

表 9 回归分析显示，领导魅力（β = 0.281）、决断力（0.231）、个性化关怀（0.223）、德行垂范（0.211）与影响力（0.202）对变革型领导力均具有显著正向影响（p < 0.001），为关键预测因素。相比之下，前瞻力、感召力、控制力与愿景激励回归系数不显著（p > 0.05），对领导

力的直接贡献有限。偏相关与部分相关系数进一步验证上述结果，且所有变量 VIF 均小于 10，说明无严重共线性，模型稳健有效。

Table 10 Collinearity Diagnostics[a]

Collinearity Diagnostics[a]													
Model	Dimension	Eigenvalue	Condition Index	Variance Ratio									
				(Constant)	Foresight	Inspirational Power	Influence	Decisiveness	Control	Moral Modeling	Leadership Charisma	Visionary Motivation	Individualized Consideration
1	1	9.921	1	0	0	0	0	0	0	0	0	0	0
	2	0.032	17.546	0.88	0	0	0.01	0	0	0	0	0	0
	3	0.011	30.396	0.01	0.13	0.02	0.16	0	0	0.05	0.01	0.03	0.21
	4	0.008	35.502	0.03	0	0.19	0.03	0.06	0	0.22	0.01	0.19	0.02
	5	0.006	40.077	0.01	0.29	0.12	0.39	0.11	0.05	0	0.02	0.02	0.04
	6	0.006	41.916	0.01	0.26	0.09	0.03	0	0.35	0.05	0.01	0.02	0.30
	7	0.005	44.741	0.02	0.07	0.21	0.08	0.08	0.29	0.12	0.19	0.05	0.06
	8	0.004	48.445	0	0.15	0.18	0.05	0.42	0.26	0	0.02	0.06	0.25
	9	0.004	50.059	0.03	0.10	0.11	0.16	0.20	0.01	0.01	0.12	0.63	0.11
	10	0.003	53.267	0.01	0.01	0.08	0.07	0.13	0.04	0.54	0.61	0	0

Remarks: a. Dependent Variable: Transformational Leadership of Secondary College Deans.

为验证模型稳健性，本研究开展了共线性诊断。表 9 显示，所有变量的方差膨胀因子（VIF）均低于 10（最大为 8.505），无严重共线性风险。进一步结合表 10 条件指数与方差比例分析，在最大条件指数（CI = 53.267）维度下，“领导魅力”和“愿景激励”方差贡献分别为 0.54 和 0.61，提示两者结构重叠；“控制力”在另一高 CI 维度中方差比例达 0.42，也可能存在功能交叉。尽管部分变量间存在中度共线性，但模型整体拟合良好（$R^2 = 0.858$, $F = 273.827$, $p < .001$），不影响核心结论。回归结果显示，“影响力”“决断力”“德行垂范”“领导魅力”和“个性化关怀”为关键预测因素，表明战略执行力、道德示范力、人格影响与情感关怀是构建院长变革型领导力的核心路径。

6. 访谈数据质性分析

为补充量化调查结果，本研究对学校校级领导、中层干部、专任教师及企业代表共 20 人开展半结构化深度访谈，并对访谈数据进行主题分析。访谈结果统计整理如下：

Table 11 Thematic Analysis of Interview Results

Dimension	Sub-theme	Representative Quote	Interpretation
Foresight	Insufficient grasp of reform trends	"Most of the development plans now are set from above, and secondary colleges basically just follow along."	Indicates insufficient strategic foresight; difficult for grassroots to take initiative in planning, relying on policy push to judge trends.
Foresight	Weak regional industry linkage	"We have plans here, but local industry chains are still incomplete."	Reflects weak linkage with local economic and industrial resources, limiting the optimization and upgrading of professional services.
Inspirational Power	Demonstration effect is significant	"Our deans often give public lectures themselves, and teachers are also willing to invest more."	The deans set a positive example for teachers through their own participation in teaching, serving as effective demonstration behavior.
Inspirational Power	Insufficient participation and feedback channels	"We participate in reforms but have little chance to really express our views."	Feedback channels for "frontline" and "participating" staff are lacking, limiting cooperative problem-solving.
Influence	Ineffective publicity and branding	"Many of our results are real, but outsiders don't know about them."	Publicity platforms are inadequate, brand influence and industry recognition are low.
Influence	Insufficient industry exchange channels	"There are still few opportunities for personal interaction with industry; mechanisms for introducing external resources are lacking."	External exchange channels are underdeveloped; lack of industry-academia cooperation mechanisms and resource introduction hinders development.
Decisiveness	Lack of data support and verification	"Our research is not deep enough, verification is weak, and scientific decision-making is not guaranteed."	Quick decisions but insufficient data validation; scientific decision-making capacity needs improvement.
Decisiveness	Low efficiency in multi-party coordination	"It's hard to get everyone on board, and it's slow to reach consensus."	Coordination efficiency is low; reaching consensus in complex affairs takes too long.
Control	Weak supervision and feedback mechanism	"Our supervision system is weak, and enforcement mechanisms are lacking."	Weak internal supervision and poor implementation of rules; management effectiveness is insufficient.
Control	Inconsistent execution standards between secondary and higher vocational levels	"Secondary and higher vocational programs in the same college have different management models and standards; it's hard to align."	Different backgrounds under integrated secondary and higher vocational programs lead to inconsistent execution standards, making unified management difficult.

Table 11 Thematic Analysis of Interview Results (Cont.)

Dimension	Sub-theme	Representative Quote	Interpretation
Moral Modeling	High recognition of clean image	"He has good personal conduct; rewards go where they're due, punishments where deserved; no favoritism."	The dean is widely recognized as having a good public image and possesses moral integrity, which helps build organizational trust.
Moral Modeling	Award transparency is controversial.	"Some awards are still based on relationships, and transparency can be improved."	Award distribution transparency is insufficient, affecting trust and fairness perception.
Leadership Charisma	Recognition of professional prestige	"He understands teaching and management; we respect him."	The dean has professional expertise and influence, serving as a typical "competence-based charismatic leader".
Leadership Charisma	Limited emotional appeal and communication	"We have few occasions to communicate emotionally; exchanges are mostly work-related."	Lack of emotional penetration weakens the depth and breadth of leadership charisma's influence.
Visionary Motivation	Vague vision goals and weak penetration	"We have vision goals, but after they're announced, there's no follow-up; we don't know how to participate."	Vision incentive mechanisms are unclear; teachers' role recognition and participation channels in cooperation with external partners are insufficient.
Visionary Motivation	Weak vision-based incentive mechanism	"The vision is set, but there's no co-design; follow-up is lacking."	Lack of shared vision-building mechanisms, low vision recognition rate, and difficulty in translating the vision into team action.
Individualized Consideration	Weak psychological and emotional support	"We have little psychological support; many teachers feel isolated."	Weak emotional and psychological support, lacking targeted relationship-building mechanisms.

访谈结果经 Nvivo 编码与主题归纳，进一步印证并丰富了定量研究发现。在“前瞻力”方面，多数受访者指出院长战略意识不足，缺乏主动谋划与区域联动，反映其在趋势判断与政策解读方面存在短板。“感召力”虽体现一定的以身作则，但教师普遍缺乏参与感，沟通机制滞后，影响改革共识与组织认同。“影响力”与“决断力”是反馈频率最高、问题集中度最大的两个维度。前者表现为资源整合乏力、外联依赖个人，缺乏制度化机制；后者则涉及决策依据不足、跨部门协同效率低。这与回归分析中两者对领导力效能的显著正向预测一致。“控制力”方面，制度落实薄弱、中高职执行标准不统一等问题普遍存在，影响管理一致性与执行力。“德行垂范”获得普遍肯定，院长被认为具备廉洁自律的良好形象，但奖惩机制尚存主观性，透明度有待提升。“领导魅力”方面，院长的专业能力与管理水平受到认可，具备一定权威性，但在情绪感染力与团队凝聚力方面尚有欠缺。“愿景激励”虽被理解与支持，但由于缺乏目标共建与

落地机制，难以形成实际行动力。“个性化关怀”频繁被提及，教师普遍反映心理支持与制度性关怀不足，呈现出被压抑的真实需求，提升空间巨大。值得注意的是，部分受访者指出：“院长思路清晰、有愿景，但中间执行层资源支持不到位，导致改革推进‘空转’”。这进一步解释了“领导魅力”评分较高而“影响力”得分较低的背后逻辑，表明真正的影响力依赖于组织授权、机制保障与资源统筹，而非单一的个人魅力。总体来看，质性数据明确支持“领导魅力、决断力、影响力、德行垂范、个性化关怀”作为院长变革型领导力的关键要素，并为后期提出提升二级学院院长变革型领导力的优化建议提供了扎实的实践依据。

讨论

本研究验证了中国本土领导力理论的适切性，并与国际研究结论形成一定呼应，同时凸显了边疆高职院校管理的独特实践特征。首先，“德行垂范”（M = 4.14, β = 0.211）在模型中的关键作用，印证了 Li 和 Shi (2005) 所强调的“道德引领”在中国变革型领导中的核心地位，也与 Ling et al. (2000) 提出的内隐领导理论相契合，体现出“以德服人”文化传统在组织信任与权威构建中的深远影响。红河职业技术学院可通过“师德文化月”等活动，将廉洁理念与民族文化融合，进一步强化道德示范的本土实践基础。

其次，“领导魅力”（β = 0.281）和“决断力”（β = 0.231）显著影响领导效能，支持了五力模型中“感召与控制协同驱动组织绩效”的观点 (Research Group on Leadership, Chinese Academy of Sciences, 2010)，也与 Özdemir et al. (2024) 关于“魅力与激励机制提升教师满意度”的发现相一致。边疆高职院长多以专业能力与执行力兼具的“双带头人”形象发挥作用，校企合作与项目管理成为其重要抓手。

再次，“影响力”（β = 0.202）与“决断力”联合作为变革成功的基础，验证了 Bass 和 Avolio (1994) 关于“领导影响力”核心作用的判断，同时契合五力模型中对不确定性应对能力的强调。而“个性化关怀”（β = 0.223）对领导效能的积极作用，突显了边疆院校亟需完善教师支持机制，如弹性坐班、心理驿站等人本关怀举措，这与 Wang (2016) 强调“人本管理稳固组织基础”的观点一致，也得到了 Liu et al. (2024) 关于情感激励与教师忠诚关系的实证支持。

此外，本研究发现“愿景激励”（β = -0.057）未呈现显著影响，可能与边疆院校行政事务繁重、院长精力分散，难以持续开展愿景传播有关。这一结果虽不符 Bass 和 Avolio (1994) 提出的“理想化影响”假设，但与 Zhang 和 Liu (2018) 关于“高职院校重执行轻愿景”的判断相一致。

值得关注的是，“前瞻力”“控制力”虽在模型中不具显著性（均值分别为 3.98、3.99），但作为治理基础能力，仍应通过战略分解和数字化管理予以强化，例如设立“政策研究专班”、建设“数字治理平台”等，契合五力模型对前瞻力的界定 (Research Group on Leadership, Chinese

Academy of Sciences, 2010) 与 Hrebiniak (2006) 关于组织变革成功依赖战略与执行有效衔接的观点。

研究还揭示了一项值得探讨的现象：尽管“领导魅力”得分较高，但“影响力”维度得分最低。这一看似矛盾的结果实际上与 Engelbert et al. (2024) 和 Da’as (2023) 的研究相呼应，即领导者的魅力不必然转化为组织影响力，其影响效果更依赖于制度支持、沟通机制和执行传导。

局限性：本研究整合定量与定性数据以提升解释力，但仍存在以下局限：第一，研究以红河职业技术学院为单一院校案例，虽具有边疆高职情境的典型性，但样本范围与区域文化差异可能限制结论的外推性与普适代表性；第二，数据主要来源于校内群体与内部治理情境，外部主体证据相对不足，可能带来共同方法偏差或社会期许影响；第三，回归模型中个别维度（如“领导魅力”与“愿景激励”）可能存在概念边界与功能交叉，提示九维度结构仍需在后续研究中进一步区分与验证。

总结

本研究基于“变革型领导力四维度”与“领导力五力模型”的整合框架，聚焦红河职业技术学院二级学院院长的领导力现状与关键需求，通过定量问卷分析与定性访谈归纳相结合的方法识别其变革型领导力的核心构成。研究表明，该校二级学院院长的整体变革型领导力处于中等偏上水平，在“德行垂范”方面表现较好，但在“影响力”“个性化关怀”等关键维度存在较大提升空间。回归分析进一步指出，“领导魅力、决断力、影响力、德行垂范、个性化关怀”五个维度对院长变革型领导力具有显著正向影响，是提升其领导效能的关键因素，而“前瞻力、感召力、控制力、愿景激励”等维度的影响则不显著，提示应重新审视其在高职管理实践中的作用边界。共线性诊断揭示出部分维度功能重叠，反映出管理行为中存在维度融合和认知模糊的问题。访谈结果则从教师视角进一步验证了定量发现，特别是在“影响力、决断力、关怀支持”等维度中反馈集中，强调制度建设、沟通机制、资源统筹等方面的现实困境。总体而言，本研究确认了当前院长变革型领导力的基本构成与优先发展维度，并为未来高职院校中层管理者能力建设提供了数据基础和理论支撑。

建议

基于研究发现，建议高职院校在二级学院院长队伍建设中着重强化五个关键维度的能力提升：一是加强领导魅力塑造，通过组织培训、战略沟通与公共表达等手段提升院长的专业感召力和文化引领力；二是系统提升影响力水平，鼓励院长主动链接行业资源，拓展校企合作广度与深度，提升组织外部形象与政策争取能力；三是优化决策与执行机制，构建以数据驱动、跨部门协同为核心的决策体系，增强院长的决断效率与应变能力；四是丰富个性化关怀机制，

在教师职业发展支持、心理健康关注、制度性激励等方面提升管理温度；五是规范领导力结构边界，在干部培训中明确各维度功能定义，减少管理实践中角色模糊与职责交叉。此外，建议后续研究在跨区域、多类型高职样本与多源数据基础上检验九维度框架的稳健性，并进一步厘清相近维度的边界及其作用机制，为职业教育领域的院长领导力发展提供更具推广性的实证支持与实践参考。

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POST-COVID-19 RESILIENCE AND CULTURAL ADAPTATION AMONG THAI–CHINESE DIASPORA RESTAURANTS IN BANGKOK

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Abstract

Purpose: This study examines how Thai-Chinese diaspora restaurants in Bangkok navigated the post-COVID landscape while upholding cultural identity through cuisine, language, family ownership, and community rituals. It conceptualizes these establishments as embedded cultural enterprises whose competitive advantage stems from co-producing authenticity and community belonging.

Study Design/Methodology/Approach: Adopting a qualitative multiple-case design, the study combined secondary analysis of scholarly literature, policy documents, and industry reports (2020-2025) with field research. Primary data came from case vignettes and semi-structured interviews (conducted in 2022-2023) with owners and staff of 12 emblematic restaurants in Yaowarat and nearby districts. This was supplemented by participant observation during major festivals. Cross-case pattern analysis synthesized operational and cultural response patterns.

Findings: Pandemic disruptions accelerated digital adoption (e.g., delivery platforms, cashless payments, and social-media outreach) and intensified cost pressures (ingredients, rent, and labor). A bifurcated outcome emerged: heritage operators with strong name recognition survived by doubling down on signature dishes and festival-linked practices, whereas less-differentiated venues struggled with shortened life cycles. Cultural preservation efforts were evident in three interrelated domains: (1) culinary continuity, by safeguarding intergenerational techniques and "house" recipes (for example, Teochew oyster omelets, Cantonese roasts, and Hainanese sauces); (2) heritage branding, through bilingual signage, origin narratives, and restored shophouses that foreground Thai-Chinese history; and (3) community support, via kin-based management, association networks, and temple/festival participation (e.g., Lunar New Year and the Vegetarian Festival) anchoring restaurants in community life. Government tourism incentives (visa waivers and heritage-themed events) aided the recovery of customer traffic, though macroeconomic headwinds (sluggish growth, uneven Chinese tourism rebound, and supply-chain volatility) continue to squeeze profit margins.

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Originality/Value: This paper provides a novel, empirically grounded account of post-pandemic adaptation in an urban diaspora foodscape. It refines theory by linking cultural heritage, family-business succession, and place-based competitiveness in the context of crisis recovery. We introduce a three-pillar resilience framework comprising cost discipline, cultural differentiation, and community linkages, and identify practical levers (e.g., menu engineering, bilingual heritage branding, apprenticeship pipelines, festival programming, and micro-grants for retrofitting) for sustaining diaspora restaurants. While centered on Bangkok's Chinatown, the findings offer insights into evolving recovery dynamics. Future studies could incorporate longitudinal sales data or comparative analyses across Southeast Asian Chinatowns to test the generalizability of these resilience strategies and to quantify the effects of heritage signaling.

Keywords: Thai-Chinese Diaspora, Bangkok Chinatown, Post-COVID Recovery, Culinary Heritage, Family-owned Restaurants

Introduction

Bangkok's Yaowarat (Chinatown) is home to one of the world's largest and oldest overseas Chinese communities (Skinner, 1957; Wongsurawat, 2019). Chinese migration to Siam began in the 18th-19th centuries, and by the early 20th century, Thai-Chinese entrepreneurs had become deeply integrated into Bangkok's economy, notably through shophouse restaurants and street food stalls that transmitted Chinese culinary techniques across generations. Such eateries historically provided a semi-public refuge where Chinese heritage could be affirmed through cuisine, even during eras of Thai nationalist assimilation (Wongsurawat, 2019; Kitiarsa, 2012). By the 21st century, although most Thai-Chinese are linguistically and socially assimilated, elements of Chinese culture remain visible in Bangkok's food scene. From bilingual signage and red-gold shopfronts in Yaowarat to iconic dishes (roast duck, dim sum, oyster omelets, and Hainanese chicken rice) that have been adapted into Thai cuisine. These heritage restaurants collectively form a "living culinary heritage" of the Thai-Chinese diaspora (Mintz & Du Bois, 2002), blending into Thai society while preserving distinct traditions. However, understanding their post-2020 trajectory requires first outlining the pandemic's impact and subsequent recovery.

During the early stages of COVID-19 in 2020, Chinese-owned businesses experienced virus-related stigma and a sharp decline in patronage even before official lockdowns were imposed (Tanakasempipat, 2022). As public concern about the virus intensified, many customers avoided Chinese-owned restaurants and shops in Bangkok's Chinatown, foreshadowing worse to come. By late March 2020, Thailand's lockdowns forced all dine-in services to halt. Thailand's lockdown measures in March 2020 forced restaurants to suspend dine-in services, wiping out revenues almost overnight (Tanakasempipat, 2022). Many decades-old family eateries, which had survived wars and economic crises, found themselves empty for weeks. Some could pivot to takeaway/delivery, but older proprietors often lacked the skills or infrastructure for rapid digital adoption. One Bangkok restaurateur lamented losing 70% of income

during a 40-day closure, with international tourism halted-Chinese tourists accounted for more than one quarter of Thailand's nearly 40 million international arrivals before the pandemic (Ministry of Tourism & Sports (Thailand), 2023; Reuters, 2023), Yaowarat's streets fell quiet and several establishments-especially those reliant on tour groups or large banquets-shuttered permanently. Even as Thailand cautiously eased restrictions in mid-2020, and again amid oscillating partial re-openings in 2021, Chinatown restaurants survived on razor-thin margins, relying on family savings and community support.

By late 2021 and into 2022, conditions began to improve. Younger-generation restaurateurs helped their family businesses adopt food delivery platforms, online marketing, and cashless payment systems, expanding customer reach despite lingering dine-in restrictions (Kasikorn Research Center, 2024). Many eateries also implemented visible safety measures (hygiene stations, spaced seating, and mask requirements) to restore customer confidence. These adaptations had mixed success until widespread vaccinations in 2022 gradually eased public anxiety. Nevertheless, by 2022, Bangkok's food and beverage sector was rebounding, and customer foot traffic in Chinatown gradually recovered as dining activities resumed (Kasikorn Research Center, 2023; Euromonitor International, 2024).

Post-2020 Challenges and Adaptations

In the post-COVID era (roughly 2022-2025), Thai-Chinese restaurants face a profoundly altered business climate. On one hand, tourism and domestic dining bounced back significantly in 2022-2023. On the other hand, new economic headwinds have in many cases been as challenging as the pandemic itself. Industry analyses in 2025 warn of a "triple crisis" of sluggish economic growth, cautious consumer spending, and an uneven foreign tourism recovery, which together place significant pressure on profit margins in the F&B sector (Kasikorn Research Center, 2025). For small family-run Chinatown eateries, rising costs (ingredients, energy, labor, and rent), key inputs such as pork and cooking oil nearly doubled in price between 2022 and 2023, further increasing operating costs for restaurants (Tanakasempipat, 2022; Food Industry Asia, 2024). Labor shortages also emerged as older cooks retired and younger workers left the hospitality sector for more stable jobs, forcing many restaurants to rely increasingly on unpaid family labor (LH Bank Business Research, 2023; Kasikorn Research Center, 2024). Commercial rents in traditional Chinatown areas spiked in anticipation of a tourism rebound, and new "New Chinatown" districts like Huai Khwang saw rent inflation from an influx of well-funded competitors. These pressures have forced some long-established restaurateurs to relinquish prime locations despite their historical significance.

Consumer preferences have also evolved. Post-pandemic diners, especially younger ones, demand more novelty, healthfulness, and experiential value in their dining choices. While heritage restaurants benefit from authenticity and famous signature dishes, some potential patrons perceive traditional no-frills venues as dated. Thus, a key challenge is to market classic offerings (e.g., renowned roast duck or oyster omelets) to a new generation of customers and convert one-time curiosity seekers into loyal regulars. At the same time, competition has intensified: many new restaurants launched during the recovery,

resulting in an oversaturated market by 2023. According to industry reports, about 60% of new restaurants closed within a year, even before COVID-19, and this cycle accelerated to less than eight months in the post-pandemic period (LH Bank Business Research, 2023), established Chinatown institutions have some cushion in their loyal followings, but even they have felt the impact of fickle consumer trends and the proliferation of alternatives.

Government policy has played a dual role in Chinatown's recovery. On one side, the return of Chinese tourism has been actively promoted. Thailand introduced temporary visa exemptions for Chinese travelers in late 2023 to stimulate tourism recovery (Tourism Authority of Thailand, 2025). and heritage festivals (especially Chinese New Year 2025, marking 50 years of Thai-Chinese diplomatic ties) were heavily publicized to draw visitors back to Yaowarat. These measures led to surges in foot traffic during event periods and offered short-term boosts for local eateries. On the other side, reliance on tourism remains risky. External factors such as China's economic slowdown in 2024 and rising geopolitical tensions dampened outbound travel demand, resulting in a weaker-than-expected rebound in Chinese tourist arrivals to Thailand by mid-2025 (Chandak, 2024). Recognizing this volatility, many diaspora restaurants have sought to broaden their customer base by cultivating domestic patrons. For instance, some shifted marketing to local social media and adjusted hours to attract weekend family crowds. Long-standing stalls and shops also embraced online delivery platforms and Facebook/Instagram promotions to reach younger Thai clientele beyond the Chinatown neighborhood. These post-2020 adaptations illustrate how heritage restaurants have had to become more agile and tech-savvy, without sacrificing their core cultural identity, in order to survive.

Research Aim and Paper Outline

In light of the above context, this study sets out to investigate how Thai-Chinese diaspora restaurants in Bangkok have balanced economic recovery and cultural preservation in the post-COVID era. Against this backdrop, this study contributes to the literature by offering an empirically grounded examination of how Thai-Chinese diaspora restaurants in Bangkok have navigated post-COVID recovery while sustaining cultural identity. By integrating perspectives on diaspora studies, family business, and cultural heritage, the research provides insights into the adaptive strategies that underpin resilience in heritage-based food enterprises. The findings not only enrich academic understanding of diaspora entrepreneurship in times of crisis but also offer practical implications for policymakers and cultural organizations concerned with sustaining urban culinary heritage. Following this introduction, Section 2 reviews relevant literature and theoretical perspectives, Section 3 explains the methodology, Section 4 presents the results, Section 5 discusses the findings in light of prior studies, Section 6 concludes the paper, noting limitations, and suggesting directions for future research.

Objectives

The primary objective of this study is to examine how Thai-Chinese diaspora restaurants in

Bangkok have navigated the post-COVID recovery period while maintaining cultural identity and business sustainability. Specifically, the study seeks to:

1. Identify the key economic and operational challenges faced by Thai-Chinese heritage restaurants in the post-pandemic context.

2. Analyze the strategies through which these restaurants preserve and express Chinese cultural identity, particularly through cuisine, branding, language use, family ownership, and ritual practices.

3. Explore the role of intergenerational succession and family dynamics in shaping adaptation strategies and long-term resilience.

4. Assess the influence of external factors, including government tourism policies, recovery measures, and community networks, on restaurant survival and recovery.

5. Develop an integrated analytical framework that links cost management, cultural differentiation, and community embeddedness as core pillars of post-COVID resilience for diaspora restaurants.

Literature Review

Diaspora, Food, and Identity

Foundational diaspora scholarship argues that migrant communities maintain cohesion through symbolic cultural practices that transcend borders. Food is a particularly portable form of heritage: it adapts to the host country while keeping ancestral memories alive (Mintz & Du Bois, 2002). Restaurants thus become semi-public cultural spaces where identity is enacted and affirmed. In the Thai-Chinese case, historical studies show a pattern of both deep assimilation and persistent distinction. Skinner (1957) documented how Chinese immigrants to Thailand integrated linguistically and politically, yet retained key cultural practices via clan associations, temples, and especially cuisine. Even under mid-20th-century assimilationist pressures, Chinese rituals continued in enclaves such as Yaowarat (Wongsurawat, 2019). As Kitiarsa (2012) notes, Thai street food culture is inseparable from Chinese influence, demonstrating how diaspora cuisines became embedded in national culture.

Chinatowns in Comparative Perspective

Research on Chinatowns globally provides context for Bangkok's experience. In North America and Europe, Chinatowns have been described as "contested spaces" balancing authenticity and commercialism (Anderson, 1987; Lin, 1998). Recent studies of the COVID-19 era report that Chinatowns worldwide suffered sharp downturns due to xenophobia, lockdowns, and the collapse of tourism. Bangkok's Yaowarat exhibited similar vulnerabilities during 2020-2021, with business revenues plummeting and some century-old establishments closing. However, Bangkok's Chinatown also differs from Western counterparts in its scale and integration: rather than a marginalized enclave, Yaowarat is central to a majority Thai-Chinese community, which may afford it different resilience dynamics.

Cultural Preservation in Restaurants

Literature suggests diaspora restaurants act as custodians of cultural heritage, especially through

cuisine, and ritual. In Bangkok, this is evident in multiple dimensions. First, culinary continuity ensures the passing down of "secret" family recipes and cooking techniques, helping sustain culinary authenticity and lineage (ASAI Hotels, n.d.). Second, symbolic branding (signage in Chinese characters, ancestral decor, and red-gold color schemes) projects a distinct cultural identity within the urban landscape. Third, festivals and rituals such as elaborate Lunar New Year and Vegetarian Festival celebrations anchor these businesses in community life and reaffirm cultural traditions (Tanakasempipat, 2022). Finally, family ownership structures themselves are vehicles of preservation, as intergenerational succession carries forward not just the business but also values of filial piety and continuity (Sanguankiattichai, 2017). Taken together, prior studies indicate that diaspora restaurants serve as both economic enterprises and living cultural institutions, though how these roles have been challenged or reinforced by the pandemic remains an open question.

Family Businesses and Succession

The sustainability of these heritage restaurants is closely tied to family enterprise dynamics. Chinese diaspora businesses are often characterized by strong family networks and filial obligations (Guanxi), but also experience generational tensions between tradition and modernity (Benton & Gomez, 2008). In Bangkok's Chinatown, succession can be a double-edged sword: some venerable restaurants have thrived under committed heirs, while others have closed when younger generations opt for different careers. Emerging research notes that many younger Thai-Chinese restaurateurs innovate with digital marketing, modern branding, or new fusion concepts, yet still capitalize on perceptions of cultural authenticity (Wongsurawat, 2019). Our study builds on this literature by examining how such generational transitions played out during the COVID crisis and recovery.

Role of Government and Policy

Lastly, the literature highlights external factors, especially tourism and state policies, that influence diaspora restaurant viability. In Thailand, Chinatown is actively promoted as a cultural tourism asset. The Tourism Authority of Thailand actively promotes Yaowarat's culinary heritage through tourism campaigns and cultural events aimed at attracting international visitors (Tourism Authority of Thailand, 2025). Government measures like visa waivers for Chinese tourists and small-business relief programs during COVID provided support to the sector. At the same time, increased regulatory scrutiny (health inspections, street vending regulations) has imposed new compliance costs. These studies suggest that the government can be both a patron and a regulator of diaspora foodspaces. Our conceptual framework takes into account how public policy and community networks intersect to impact restaurant resilience. In summary, existing research establishes that diaspora restaurants operate at the nexus of economic adaptation and cultural preservation. However, there is a paucity of scholarship specifically examining how Bangkok's Thai-Chinese restaurants negotiated this balance in the unprecedented context of the COVID-19 pandemic. This study bridges that gap by integrating the above strands of literature. On diaspora identity, family business, and external support: into a framework for analyzing post-COVID resilience. Our approach

is informed by the notion that resilience in diaspora enterprises is multidimensional, encompassing cost-management strategies, cultural differentiation, and community linkages. The following sections will apply these concepts to the empirical case of Bangkok's Chinatown.

Methodology

We employed a qualitative multiple-case study approach. Data collection focused on 12 restaurants in Bangkok (mainly Yaowarat Chinatown and the nearby Huai Khwang District) selected for diversity in age, size, and adaptation strategies. The cases ranged from century-old family eateries and street food stalls to contemporary "heritage revival" projects.

Primary data came from semi-structured interviews with owners, managers, and staff at these restaurants. In total, we conducted 15 interviews (at least one per restaurant, with additional interviews for some key cases) between mid-2022 and late 2023. The interviews probed experiences during the pandemic, adaptation strategies, and perspectives on cultural preservation. We also carried out participant observation during major community events, notably the Vegetarian Festival in October 2022 and the Lunar New Year in January 2023, to observe rituals, customer behavior, and the restaurants' roles in these festivities. Field notes and informal conversations with patrons and suppliers further enriched the data.

Secondary sources (2020-2025) were used to triangulate and contextualize findings. These included academic studies, policy documents, industry analyses (LH Bank Business Research, 2023), and media coverage from news outlets (Reuters). Triangulating interviews, observations, and secondary data enhanced the validity of our insights by cross-verifying key patterns.

Data analysis was conducted using thematic coding with the aid of NVivo software. We began with a deductive code structure aligned with the research objectives (focusing on economic challenges, cultural practices, family dynamics, policy environment, and community factors). We then refined the coding inductively as new themes emerged from the interviews and observations (for example, digital adaptation, intergenerational conflict, and heritage branding). We performed cross-case comparisons to identify common patterns as well as divergent strategies among the restaurants.

Ethical Considerations

All participants provided informed consent before interviews. Anonymity was offered to participants; in our reporting, we use pseudonyms or generic descriptors for interviewees unless they agreed to be identified (some owners welcomed being named for publicity, while others preferred anonymity). We also remained sensitive to cultural contexts, conducting interviews in Thai or Teochew Chinese with bilingual assistance when necessary. The qualitative and case-based scope of this research means the findings are interpretative and context-specific. We acknowledge the limitations of this approach, including the focus on a single city's diaspora community and the evolving nature of the post-COVID situation. These limitations are balanced by the depth of insight obtained; however, they suggest caution in generalizing the results beyond similar urban contexts.

This qualitative design is appropriate for capturing the nuanced cultural meanings and adaptive practices embedded in family-run diaspora restaurants.

Results

1. Economic and Operational Challenges

Recovery after 2020 was hampered by persistent cost and labor issues. Nearly every restaurateur we interviewed reported soaring ingredient prices and supply chain disruptions. For example, pork prices doubled from pre-pandemic levels by 2023, straining the margins of noodle and barbecue shops. Such accounts were corroborated by industry reports identifying food inflation and energy costs as major burdens on the F&B sector. Additionally, many restaurants faced staff shortages. The pandemic saw some veteran chefs retire, and younger workers shift to gig economy jobs (e.g., delivery services), leaving family businesses short-handed. Owners described relying more on unpaid family members to fill staffing gaps. Field observations in 2023 noted shortened operating hours and pared-down menus at several eateries, reflecting strategic cost-cutting and labor constraints. On the operational side, an important positive adaptation was the embrace of technology. Many second- or third-generation family members introduced online ordering systems, QR Code payments, and delivery app partnerships. Our observations confirmed that venues active on social media and delivery platforms recovered revenue more steadily than those depending solely on walk-in customers. In sum, the data indicate that post-COVID economic resilience in these diaspora restaurants required tight cost discipline, creative use of family labor, and digital adaptation of services to new market conditions.

2. Cultural Preservation and Culinary Identity

Despite economic struggles, all case-study restaurants emphasized preserving their Chinese culinary heritage as a core principle. Interviewees consistently described maintaining ancestral recipes as a moral duty and a source of pride. “If we change the flavor, we lose part of who we are,” explained one third-generation owner, underscoring how recipes function as repositories of cultural memory. Across Yaowarat, we witnessed heritage dishes like Cantonese roast duck, Teochew oyster omelets, and Hainanese chicken rice being prepared with techniques passed down over decades. Even when facing pressure to streamline operations, most owners resisted altering key ingredients or cooking methods, opting instead to cut peripheral menu items. Beyond food, restaurants also preserve culture through ambiance and ritual. We observed bilingual Chinese-Thai signs, ancestral altars, and traditional décor (red lanterns and gold calligraphy) adorning many establishments, signaling their dual identity to patrons. During the Vegetarian Festival and Lunar New Year, these restaurants prominently displayed festival banners and offered special menus, actively participating in community-wide traditions. Such practices reinforce cultural identity not only for proprietors but for staff and customers, creating a sense of continuity with the past. Our findings confirm that, even under post-pandemic pressures, culinary authenticity and ritual practices remained resilient pillars of Thai-Chinese identity in Bangkok’s dining scene.

3. Family Ownership and Generational Transitions

Generational change emerged as a pivotal theme affecting both business adaptation and cultural continuity. In our interviews, elder proprietors and their heirs often described the restaurant as "part of the family lineage," highlighting a shared belief that continuing the business honors one's ancestors. This strong sense of filial responsibility helped sustain several enterprises through the crisis. For instance, in one case a son returned from a different career to help run the 80-year-old family restaurant during the pandemic downturn. However, tensions between old and new approaches were common. Younger family members tend to push for modernization (digital marketing, updated décor, and health-oriented menu items) whereas the older generation insists on preserving time-tested recipes and techniques. We observed that the most successful family firms found compromises: elders remained guardians of the kitchen and quality control, while the younger generation handled innovations like social media outreach, online delivery coordination, and introducing new product lines (e.g., ready-to-eat sauces and merchandise). In contrast, in families where no younger heir was willing to take over, the businesses either closed or were sold off, sometimes being reinvented by non-family entrepreneurs. Overall, our case studies illustrate that managed intergenerational adaptation, with open communication and division of roles. Can ensure both business survival and the preservation of heritage. This aligns with the notion that these restaurants evolve through negotiated change rather than abrupt rupture.

4. Community Networks and Policy Supports

The wider community and policy environment played a significant role in the recovery trajectory. On the community side, we found evidence of robust mutual aid networks within Bangkok's Chinese diaspora. Several interviewees recounted how, at the height of the pandemic, nearby restaurant owners and local association members shared resources and labor. For example, in one instance when a shop was short on staff, neighboring vendors volunteered help in the kitchen, an anecdote that exemplifies the long-standing cooperative ethos (often along dialect lines) in Yaowarat. Such grassroots support, also noted in local media, functioned as informal insurance during the crisis. The community's temple organizations and business associations additionally coordinated charity meals and bulk purchasing of ingredients, which helped smaller eateries stay afloat. On the government side, policy measures provided important but limited relief. All owners welcomed the Thai government's stimulus programs and the later visa-free entry scheme for Chinese tourists (launched in late 2023), which brought an uptick in customers. The Tourism Authority's promotion of Chinatown cultural events (like the 2025 New Year festival) also gave businesses a short-term boost in visibility and sales. However, these benefits were tempered by challenges such as stricter health regulations introduced post-COVID (which increased compliance costs) and crackdowns on street stalls lacking permits. In summary, state, and community supports together helped buttress the Chinatown restaurant ecosystem: government initiatives jump-started tourist patronage and offered financial aid, while community solidarity and networks provided day-to-day resilience, and reinforced trust within the diaspora.

5. Integrated Resilience Framework

Drawing together the above findings, we identify three interconnected pillars that have underpinned the resilience of Thai-Chinese diaspora restaurants in Bangkok's post-COVID recovery: cost discipline, cultural differentiation, and community linkages. Cost discipline refers to strategies that tighten operational efficiency and financial management, for example, simplifying menus to focus on profitable signature dishes, leveraging unpaid family labor, and selectively adopting digital technologies to expand sales channels. We observed that restaurants that rigorously controlled costs and modernized operations (e.g., joining delivery apps) tended to achieve greater stability in the aftermath of the pandemic. Cultural differentiation involves leveraging unique cultural assets, proprietary recipes, historic ambiance, and bilingual branding to stand out in a crowded market. Our cases demonstrate that an emphasis on authenticity and heritage can attract customers seeking an "authentic" dining experience, thereby creating a loyal niche following even when trends shift. Finally, community linkages encompass the social capital and support derived from being embedded in local networks (family networks, neighborhood associations, temple communities, and partnerships with local authorities). These linkages provided crucial lifelines during the crisis and continue to offer advantages like shared resources and collective marketing during recovery. The three pillars reinforce one another: for instance, community support helps reduce costs (through shared resources), and cultural distinctiveness can be a marketing advantage that improves revenues. Together, they form a framework for understanding how diaspora restaurants can be resilient, balancing the need to adapt economically with the imperative to preserve cultural identity. This integrated framework, distilled from our Bangkok case studies, offers a potential model for diaspora restaurant recovery in other urban contexts as well.

To further illustrate these themes, we compiled short vignettes (based on composites of our cases and interview data) showing how different Thai-Chinese heritage restaurants adapted and thrived post-COVID:

- Case A: A 50-year-old noodle shop was taken over by the founder's son during the pandemic. He introduced online ordering and social media promotions in both Chinese and Thai, dramatically widening the customer base, while his father continued to supervise the broth and noodle preparation to ensure the traditional taste remained unchanged. This collaboration allowed the business to modernize without "diluting" its culinary heritage.

- Case B: A young entrepreneur revitalized his grandparents' teahouse by merging traditional Chinese tea service with a modern café concept. During lockdowns, he pivoted to selling packaged teas and hosting virtual tea workshops. After reopening, the teahouse became a curated cultural space featuring tea ceremonies and tie-ups with traditional pastry vendors, successfully attracting Gen Z and young professionals interested in heritage culture.

- Case C: Two sisters reopened their family's famed Cantonese restaurant (closed in 2020) as a heritage pop-up. They carefully documented old recipes and revived vintage branding elements in the

decor and menu storytelling. By positioning the restaurant as a mid-range "retro" dining experience, they managed to draw back loyal older customers and intrigue new diners. The revival's success underscored the draw of nostalgia combined with savvy marketing.

- Case D: A third-generation dim sum shop gained unexpected popularity after being featured on a Thai food blog. The family capitalized on the media exposure by adding afternoon tea-style dim sum sets and offering occasional hands-on dumpling workshops. They printed bilingual menus and renovated slightly for comfort, but crucially kept their classic recipes (har gow and siu mai) unchanged. The result was an influx of younger patrons curious to experience "authentic" dim sum, demonstrating that modernization can go hand-in-hand with authenticity.

Across these vignettes, common threads include youth involvement, digital and media engagement, and careful product innovation that does not compromise core recipes or traditions. These examples reinforce our finding that Thai-Chinese restaurant heritage can endure and even flourish when adaptation strategies amplify rather than replace the authenticity that makes these businesses culturally unique.

Discussion

Our findings paint a picture of resilience through balance. Thai-Chinese diaspora restaurants in Bangkok have shown that survival in a crisis does not mean abandoning one's roots; rather, it involves creatively adapting business practices while reinforcing cultural foundations. In line with diaspora theory (Safran, 1991; Cohen, 2008), these restaurants exemplified how migrant communities leverage culture as a resource for cohesion and endurance. For instance, maintaining "authentic" recipes and participating in Chinese festivals provided not just a marketing edge but also a morale boost for the community, validating what Safran described as a diasporic commitment to cultural continuity. Our results also echo Mintz and Du Bois (2002) argument that food is a vital conduit of identity: even amid economic strain, proprietors upheld culinary traditions, thereby offering familiar comfort to their patrons and preserving a sense of normalcy and identity during turbulent times.

Importantly, this study builds on prior work on family-run Chinatown restaurants by revealing how deeply family and culture intertwine as twin pillars of resilience. We observed scenarios very much like those described by Gersick et al. (1997), where generational succession can rejuvenate a business if handled well. In our cases, when younger family members were willing to continue the enterprise, they often introduced innovations, but crucially, they did so with respect for elder wisdom. This synergy between generations allowed some restaurants to modernize operations (web presence and new products) without eroding the traditional character that older generations cultivated. Conversely, our findings confirm concerns from Sanguankiattichai (2017) and Tan (2012) that if the next generation opts out, even legendary establishments may vanish. Thus, the presence of a committed heir has been a decisive factor in post-COVID recovery, underscoring theoretical models of family business continuity in diaspora contexts.

Comparing Bangkok's Chinatown to global cases highlights both common patterns and unique circumstances. Consistent with observations from New York, London, and Sydney Chinatowns, we found that xenophobic stigma and tourism collapse initially dealt severe blows to diaspora businesses. However, Bangkok's Chinese community, being a large and well-integrated majority-minority, could rally substantial local support. This somewhat parallels the situation in other Asian Chinatowns (less studied in Western literature), where the diaspora is not marginalized but forms an influential part of society. The intense mutual aid we documented supports the idea that strong social networks (Guanxi) in diaspora communities can buffer external shocks. Bangkok's case exemplifies how these networks, coupled with targeted government interventions, created a safety net that many Western Chinatowns lacked. In essence, the hybrid identity of Bangkok's Chinatown, simultaneously a tourist destination and a living community may have conferred a resilience advantage not present in more isolated enclaves.

The integrated resilience framework we propose (cost discipline, cultural differentiation, and community linkages) offers a lens to interpret our case findings and situate them in broader theoretical discussions. Cost discipline resonates with classic business recovery strategies, yet in this context, it was often achieved through culturally specific means (like family labor or community pooling of resources) rather than impersonal layoffs or outsourcing. Cultural differentiation aligns with theories of ethnic entrepreneurship, which posit that leveraging one's cultural niche can be a competitive strength; our study provides concrete evidence of this in action, showing that authenticity and storytelling became valuable "commodities" in re-attracting customers post-pandemic. Community linkages highlight social capital theory in practice, the idea that relationships and networks carry tangible economic value (confirmed by instances of shared labor and cooperative promotions we saw). Together, these pillars integrate economic and cultural perspectives, suggesting that any comprehensive theory of diaspora business resilience must account for both dimensions. The framework also complements recent academic discussions on heritage resilience, extending them by providing empirical detail on how exactly cultural assets (recipes, language, and rituals) can be strategically mobilized to weather crises.

In comparison with previous studies of Bangkok's Chinatown, which documented the cultural role of family restaurants pre-pandemic, our research captures the dynamic changes and innovations that occurred because of the pandemic. It shows that while many fundamentals remain the same, family ownership, cultural menus, and community centrality, the post-COVID era demanded accelerated innovation. For example, our documentation of the swift adoption of delivery technology and online engagement by even very traditional restaurants adds to the literature a case of rapid modernization under duress. This adds nuance to the narrative of Chinatown preservation: it is not a static preservation but an adaptive one, where continuity is achieved through selective change. The fact that these adaptations largely succeeded without diluting cultural authenticity is a noteworthy insight, suggesting that "innovation anchored in tradition" can be a viable strategy for diaspora businesses.

Our findings also have practical implications for policymakers and cultural organizations. They underscore the effectiveness of measures like tourism promotion and SME support in revitalizing heritage districts. The rebound of Bangkok's Chinatown once travel resumed (boosted by visa exemptions and cultural festivals) mirrors patterns observed in other tourism-reliant heritage sites. However, our study cautions that such recovery is fragile: lingering economic uncertainties and shifts in consumer behavior mean that continuous adaptability is required. In particular, sustaining heritage restaurants will likely depend on nurturing the next generation of entrepreneurs who are both culturally knowledgeable and business-savvy. Initiatives like heritage cooking apprenticeships, grants for digitization of traditional businesses, or even including Chinatown cuisine in urban cultural heritage programs could address some of the challenges identified (such as generational succession and marketing to new audiences). These suggestions align with broader calls in the literature for supporting "cultural SMEs" as carriers of intangible heritage.

In conclusion, Bangkok's Thai-Chinese restaurants in the post-COVID period exemplify a form of resilience that is multidimensional, weaving together economic agility, cultural tenacity, and community solidarity. They have proven that preserving tradition can go hand in hand with embracing change. While our study is context-specific, the themes likely resonate in diaspora communities elsewhere: the balancing act of staying true to one's roots while navigating new realities is a common story. By documenting this balance in detail, we contribute to a deeper theoretical understanding of diaspora enterprise resilience and provide a reference point for future comparative studies.

Conclusions

In summary, the post-COVID period has been a severe test of the endurance and adaptability of Bangkok's Thai-Chinese diaspora restaurants. Our study shows that, on the whole, they passed this test: despite unprecedented economic shocks, these establishments affirmed that a strong cultural identity embodied in cherished recipes, rituals, and family traditions can be a source of resilience. These restaurants are more than businesses; they function as living museums of diaspora heritage and as bridges between the past and present. Enjoying a bowl of old-style noodles on a Yaowarat sidewalk or a mooncake from a century-old recipe is not only a culinary experience but also a direct engagement with history and community. The fact that such experiences persist and even flourish in Bangkok signals the successful integration of the Chinese diaspora without a loss of cultural distinctiveness.

Going forward, significant challenges remain. Economic pressures (rising costs, labor shortages, and shifting consumer habits) and uncertainties in global tourism will continue to demand agility from these family-run restaurants. Moreover, the succession question looms large: the continuity of many establishments hinges on younger generations' willingness to take up the mantle. There is also the constant need to balance authenticity with innovation to stay relevant to evolving customer expectations. These are inherent limitations of the present study as well our qualitative, case-based focus on one city means the

findings must be generalized with caution. The situation in Bangkok's Chinatown may not fully represent other diaspora communities or future conditions as the recovery continues to evolve.

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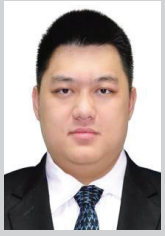
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职业院校“双师型”教师变革型领导力发展需求的优先级识别与分层策略：基于 AHP 与访谈的混合研究

PRIORITIZATION AND STRATIFICATION STRATEGIES FOR THE DEVELOPMENT NEEDS OF ‘DUAL-QUALIFIED’ TEACHERS’ TRANSFORMATIONAL LEADERSHIP IN VOCATIONAL COLLEGES: A MIXED-METHODS STUDY BASED ON AHP AND INTERVIEWS

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摘要

研究目的：精准识别该群体变革型领导力发展需求的优先级，解决培训体系中需求模糊、策略同质化问题，为构建分层发展策略提供依据。

研究设计/方法/途径：采用“量化先行、质性解释”的混合研究设计。量化阶段基于修订版变革型领导力问卷框架，结合层次分析法，对 5 所职业院校 215 份样本进行优先级指数构建；质性阶段通过 7 个典型个案访谈，深度剖析需求排序差异背后的机理。

研究结果：需求呈现“规范先行”特征：德行垂范与个性化关怀最优先，愿景激励与领导魅力相对滞后。机制分析显示，制度供给不足、导师制缺失及项目压力是核心因素。据此，研究提出“三条主线、关键绩效指标牵引”的分层策略，涵盖制度闭环、导师工时反馈及项目实战培养。

创新性与价值：研究实现了从“需求普查”到“优先级精准识别”的突破。所提策略为院校优化培训方案、精细化资源配置提供了科学的实证指南。

关键词：职业院校 双师型教师 变革型领导力 需求优先级 混合研究

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Abstract

Purpose: This study aimed to accurately determine the priority levels of transformational leadership development issues among "dual-qualified" teachers, addressing the problems of unclear demand positioning and homogenized training strategies, and offering evidence for constructing a stratified development framework.

Study Design/Methodology/Approach: A mixed-method design combining "quantitative priority-setting and qualitative interpretation" was used. In the quantitative phase, a revised transformational leadership questionnaire framework was applied, along with the Analytic Hierarchy Process (AHP), to construct a priority index based on 215 samples from five vocational colleges. In the qualitative phase, seven typical case interviews were conducted to examine the underlying mechanisms behind differences in demand ranking.

Findings: The results showed a "norm-first" pattern in leadership development needs: moral role modeling and individualized consideration ranked highest priorities, whereas inspirational motivation and leadership charisma lagged behind. Mechanism analysis further reveals that insufficient institutional support, the absence of a mentoring system, and project-related pressures are key contributing factors. Accordingly, this study proposes a stratified development strategy guided by "three main lines and Key Performance Indicator (KPI) alignment", covering institutional feedback loops, mentoring workload evaluation, and project-based practical training.

Originality/Value: This study moved from a broad needs assessment to precise priority identification. The proposed strategy offers scientific and empirical guidance for vocational institutions to enhance teacher-training programs and allocate resources more efficiently.

Keywords: Vocational Colleges, "Double-qualified" Teachers, Transformational Leadership, Priority of Needs, Mixed-methods Research

引言

在新时代职业教育高质量发展的战略背景下，教师队伍建设已成为政策与实践的核心议题。《国家职业教育改革实施方案》（"职教 20 条"）明确要求加快建设高水平"双师型"教师队伍，以应对产业结构调整与技术迭代带来的挑战。加强"双师型"教师队伍建设，是实现职业教育类型定位的前提和彰显高职院校办学特色、培养学生创新实践能力、开展教育教学深度改革的关键，更是推动职业教育高质量发展的"先手棋"(Liu & Zhao, 2025)。然而，当前"双师双能"改革仍存在教师数量不足、管理理念滞后与发展机制不健全等问题 (Chen, 2025; Kong & Liu, 2023)，导致教师的领导力生成与角色转型受到制约。因此，识别和培育"双师型"教师的变革型领导力，成为推动"双师型"教师队伍建设的战略抓手。

传统意义上的教育领导力聚焦"校长——教师"领导关系，然而领导力不一定集中在正

式领导职位的人身上 (Ye & Zhu, 2018)，教师发挥其领导力至少可以通过作用于学生的学习、学校的整体教学质量和专业同行的教育教学能力等来促进教育变革 (Shen et al., 2020；Supovitz & Comstock, 2023)。本研究聚焦于“双师型”教师作为领导者的角色，强调“双师型”教师通过影响学生、同伴与组织环境发挥领导力 (Grimm, 2024)。研究表明，教师变革型领导力通过愿景激励、智力激发和个性化支持，不仅能够促进学生的学业投入 (Sánchez-García et al., 2024)，还能够推动教师专业学习共同体的协作与课程改革 (Hoekstra, 2023；Oude Groote Beverborg, 2024)。

与普通学科教师相比，“双师型”教师既承担知识技能传授，又需引领学生适应快速变化的产业环境，这与变革型领导力中“愿景激励”“个性化关怀”等维度高度契合；同时，强化教师的变革型领导力有助于推动校企协同、课程创新和团队合作，是建设高水平“双师型”教师队伍的重要抓手。这就说明了“双师型”教师比其他教师更迫切需要变革型领导力，以实现政策目标与产业需求的衔接。在“双师型”教师的岗位特征下，这些维度具有明确的理论——情境耦合：德行垂范→职业伦理与安全规范传承，愿景激励→产业——课程同频的目标牵引，领导魅力 → 工艺改进与教学创新，个性化关怀 → 学徒式精准辅导。这种“理论——情境耦合”不仅为教师领导力的内涵提供了本土化解释，也为发展优先级的识别提供了理论支撑。通过识别各维度的差异化需求，可以揭示“双师型”教师在哪些方面的领导力更为短缺、哪些方面应该优先提升。该识别为培训方案的设计提供精确依据。这正是本研究采用优先级识别逻辑的核心原因：唯有通过维度排序，才能实现有限培训资源的精准投放，真正解决“双师型”教师队伍建设的瓶颈。

研究目的

基于以上逻辑，本文旨在：

1. 识别“双师型”教师在变革型领导力四个维度上的感知现状及短板；
2. 揭示“双师型”教师在变革型领导力四个维度上的需求优先级；
3. 提出基于需求优先级排序的“双师型”教师变革型领导力分层落地策略。

文献综述

变革型领导力的理论脉络与本土化发展

变革型领导力的概念最早由 Burns (1978) 提出，他将领导力区分为交易型与变革型，强调后者通过价值观提升与共同愿景能够促进组织成员的成长与发展。在此基础上，Bass (1985) 对该理论进行了拓展，提出了变革型领导力的四个核心维度：理想化影响（Idealized Influence, II)、鼓舞性动机（Inspirational Motivation, IM)、智力激发（Intellectual Stimulation, IS）

与个别化关怀（Individualized Consideration, IC）。随后，Bass 和 Avolio (1995) 共同开发了多因素领导力问卷（Multifactor Leadership Questionnaire, MLQ），进一步推动了该理论在组织与教育领域的广泛应用。进入 21 世纪以来，学者们在跨文化比较中发现，西方模型在东方教育情境下存在一定局限，例如对伦理规范、集体认同的弱化。为此，Li 和 Shi (2005) 基于中国文化背景修订了变革型领导力量表（TLQ），提出“德行垂范、领导魅力、愿景激励、个性化关怀”四维度，更符合东方语境下的教师领导实践。

教师变革型领导力的研究进展

在职业教育研究的宏观视野中，领导力研究正逐渐从传统聚焦于校长与管理干部的“自上而下”视角，转向教师作为课堂与课程改革关键推动者的“自下而上”视角。已有研究表明，教师领导力在专业学习共同体中所发挥的作用，表现为通过对话与合作带动教学改进与课程改革 (Grimm, 2024)。研究还发现，教师领导者的个体特质通过其变革型领导行为发挥中介作用，进而促进教学创新与团队影响力的提升 (Zadok et al., 2024)。教师层面的变革型领导力不仅体现在其对学生的学业动机与学习投入的直接激发（如愿景激励、智力启发、个性化支持），也对教师运用数字技术教学的技能均具有显著的正向影响 (Schmitz et al., 2023)，还可以通过支持性文化与专业学习共同体间接提升组织学习与课程创新 (Slavich & Zimbardo, 2012; Sánchez-García et al., 2024)。近年来，教师变革型领导力的作用链条得到进一步验证：一方面，其对教师创造力的促进作用往往通过职业韧性与工作满意度实现 (Kaya, 2024)；另一方面，在职业教育情境中，还通过“专业学习——自我效能”的多层中介，增强教师对课程改革与组织变革的认同与执行力 (Özdemir et al., 2024)。系统性综述亦指出，职业院校教师的专业学习兼具学校与行业双重场域，只有在制度保障与协作文化的支持下，教师领导力才能真正转化为推动教学创新的内在动力 (Zhou et al., 2022)。因此，教师变革型领导力已成为连接学生学习、教师发展与组织变革的关键机制，是实现政策中提出的“高水平教师队伍建设”的重要支点。

“双师型”教师与变革型领导力的适配性

与普通教师相比，职业院校“双师型”教师在参与企业合作项目和课程改革时，往往需要兼具专业引领与组织协调能力 (Luo et al., 2024)，同时，他们的发展不仅受制度安排和资源供给制约，也深受教师个体身份认同与职业路径选择影响 (Wang & Ding, 2025)，“双师型”教师处于校——企——行业三元耦合情境，需要兼顾课堂教学与行业实践的双重任务，最新系统综述与实证研究表明，职业院校教师的专业学习与能力提升跨越学校、学术与产业三类场域，并通过岗位实践/顶岗锻炼将所学迁移回校内课堂 (Zhou et al., 2022, 2024)，与变革型领导力的愿景激励——支持文化——智力激发高度契合 (Wilson Heenan, 2023; Kaya, 2024)。

本土研究亦表明，“双师型”教师的能力结构涉及职业伦理传承、工艺改进与教学创新、团队协作与学徒式关怀 (Zhao et al., 2025; Liu & Zhao, 2025)，其内涵与中国语境下经验证的变

革型领导力四维度（德行垂范、愿景激励、领导魅力、个性化关怀）呈现高度契合。这一契合关系为“双师型”教师领导力的发展提供了明确的理论支撑：通过识别不同维度的差异化需求，可揭示“双师型”教师在哪些方面存在短板，哪些方面应该优先提升。据此为培训资源的精准配置提供科学依据。这与本文在引言中提出的研究目标保持一致，即通过优先级排序逻辑，为“双师型”教师队伍建设提供更加可操作的策略指引。

当前研究不足与本研究的切入点

1. 研究不足

1）研究对象聚焦不足：多集中于职务与学术领导者，缺乏对“双师型”教师这一群体变革型领导力的定向研究；2）研究视角单一：现有成果多验证领导力对自我效能或教学创新、组织变革的效应，而缺少从教师群体内部差异出发的分析；3）需求差异未被揭示：多数研究将变革型领导力四维度等量处理，假设教师群体是同质化的，而未考虑到普通教师与“双师型”教师在岗位职责与角色定位上的差异，决定了其在变革型领导力四个维度上可能存在不同权重，例如，普通教师可能更强调“愿景激励与领导魅力”，而“双师型”教师则更突出“德行垂范与个性化关怀”，这种“需求优先级差异”尚缺乏系统性研究。

2. 切入点

基于此，本研究以“双师型”教师为研究对象，采用问卷测评——AHP 排序——质性访谈的混合设计，先识别四维度需求差异与优先级，再据此提出分层策略与实施路径，从而回应职业教育语境下的真实治理需求。

研究方法

1. 研究设计

为识别职业院校“双师型”教师在变革型领导力四个维度中的感知现状与发展需求优先级，本研究采用混合研究法，首先通过问卷调查收集“双师型”教师对变革型领导力各维度的感知数据，随后采用 AHP 层次分析法对专家判断数据进行建模分析，最后据量化结果的高/低进行半结构化访谈，以解释与深化量化发现，实现量——质整合，确保研究的解释力与实践的适用性。

2. 研究对象与抽样

本研究以云南省红河职业技术学院“双师型”教师为研究对象（该学校为中高职一体化办学，包含 1 所高职院校，4 所中职院校），采用分层随机抽样法，分层标准包括教师职称、职务及工作年限，确保样本覆盖多元背景。

3. 测量工具与条目分布

研究采用 Li 和 Shi 在原版 MLQ 基础上本土化修订的修订版 TLQ。该版本继承了 Bass

和 Avolio 原量表提出的四维度结构，即“理想化影响”“愿景激励”“智力激发”“个性化关怀”，又结合中国文化特征进行了概念调整与语言重构，修订为“德行垂范”“领导魅力”“愿景激励”与“个性化关怀”四个维度，其中“德行垂范”包含 6 个条目，“领导魅力”包含 8 个条目，“愿景激励”包含 6 个条目，“个性化关怀”包括 6 个条目，共计 26 个条目，该修订版 TLQ 更契合东方文化中对权威、集体主义与人际关系的理解。Li 和 Shi 验证了修订版 TLQ 具有良好的结构效度、内部一致性与文化适配性，并指出可以供同类研究今后使用。因此，本研究延用该修订版本，并保持量表结构与条目设计的一致性，量表使用五点李克特量表进行评分，以确保研究的信效度。

4. 量化分析

先使用 SPSS 29.0 完成数据整理，剔除明显无效问卷。按 Li 和 Shi 修订版 TLQ 量表计算四维（德行垂范、愿景激励、魅力领导、个性化关怀）得分，然后检验信度和效度，随后报告各维均值、标准差。最后差异检验围绕职务、工作年限、职称三个群体展开。

5. 优先级指数（PI）的计算

本研究在评估教师变革型领导力各维度的“发展需求”时，参考 Borich 需求差值模型 (Borich, 1980) 的经典方法，采用“5-实际得分”方式反向计算需求值，以衡量理想状态与当前能力之间的缺口。然后，邀请 5 名具代表性的专家采用 Saaty 1-9 标度进行 AHP 赋权，形成判断矩阵，根据专家赋权的结果，分别计算特征向量权重并进行一致性检验，满足 $CR = CI/RI < 0.10$ 方为有效；多名专家的判断矩阵以几何平均合成后再求权重，得到四维的 AHP 权重；最后，计算优先级指数 PI = 需求值×重要性权重排序。

为提高权重结果的专业性与可解释性，研究按“理论——实践——管理”三类角色进行目的性遴选，覆盖教师发展研究、校企协同实践与院校治理三条线。入选标准为：职业教育研究者 2 名（副高及以上，研究方向为教师发展或教师领导力），企业导师 2 名（拥有 10 年以上行业经验或三年内参与校企协同），院校管理者 1 名（为教务领导，分管教师发展）。

6. 解释访谈与轻量编码

依据量化结果，从需求值最高的维度中遴选 7 名典型个体开展半结构化访谈，聚焦“具体表现——情境约束——可改进做法”。采用“开放——轴心——选择”的轻量编码，目标 Cohen’s $\kappa \geq 0.80$；记录代表性引语与主题覆盖率。

7. 量——质整合

结果部分以联合显示表并列呈现“量化指标（均值、PI）——质性主题与证据（引语）——机制解释——培训与管理建议”。

研究结果

1. 数据信效度检验

本次研究共发放问卷 220 份，回收 215 份（有效率 97.7%），覆盖 5 所职业院校不同职务、不同年龄、不同职称的群体，样本以一线教师为主：非领导岗 83.26%，职能 10.23%、二级学院 3.72%、校企合作导师 2.79%。年龄 26-40 岁占 80.47%。职称以讲师为主（57.21%），副高及以上 21.86%，助教 17.21%，无职称者占比 3.72%。

对总样本进行信度检验显示，总体样本的 Cronbach's α 值为 0.984，其他四个维度分别为德行垂范（0.953）、愿景激励（0.953）、领导魅力（0.953）和个性化关怀（0.946），均在在 0.70 以上。与此同时，样本的效度检验 KMO 值为 0.967，显著性水平小于 0.01，显示数据具备较好适用性。

2. 描述性统计

基于 215 份样本的数据，通过描述性统计，调查“双师型”教师在变革型领导力发展中的感知现状。

Table 1 Descriptive Statistics Results

Dimension	N	Minimum	Maximum	Mean	S.D.
Moral Exemplification	215	1	5	4.09	0.72
Visionary Motivation	215	1	5	4.12	0.69
Charismatic Leadership	215	1	5	4.10	0.68
Individualized Care	215	1	5	4.06	0.68

四个维度均处于较高水平：愿景激励均值 4.12（S.D.＝0.69）最高、波动较小；领导魅力 4.10（S.D.＝0.68）与其接近；德行垂范 4.09（S.D.＝0.72）略低且离散度最大，显示个体差异较明显；个性化关怀 4.06（S.D.＝0.68）为四维中最低。总体排序为“愿景激励＞领导魅力＞德行垂范＞个性化关怀”。

3. 群体差异分析

采用单因素方差分析检验不同背景变量（职务、年龄、职称）对 Li 和 Shi 修改版 TLQ 四个维度（道德垂范、愿景激励、领导魅力、个性化关怀）评分的群体差异，结果如表 2 所示：

Table 2 One-way ANOVA Results

Subgroup Variable	Dimension	df	F	*p*	Significant
Position	Moral Exemplification	(3, 211)	2.630	0.051	n.s.
Position	Visionary Motivation	(3, 211)	2.563	0.056	n.s.
Position	Charismatic Leadership	(3, 211)	2.216	0.087	n.s.
Position	Individualized Care	(3, 211)	2.817	0.040	*
Age	Moral Exemplification	(4, 210)	1.318	0.264	n.s.
Age	Visionary Motivation	(4, 210)	2.300	0.060	n.s.
Age	Charismatic Leadership	(4, 210)	1.855	0.120	n.s.
Age	Individualized Care	(4, 210)	1.489	0.207	n.s.
Title	Moral Exemplification	(3, 211)	1.872	0.135	n.s.
Title	Visionary Motivation	(3, 211)	1.643	0.181	n.s.
Title	Charismatic Leadership	(3, 211)	2.577	0.055	n.s.
Title	Individualized Care	(3, 211)	1.063	0.366	n.s.

Remarks: *$p < .05$, **$p < .01$; n.s. = not significant

在对职务、年龄与职称三类群体变量进行单因素方差分析后发现，仅部分维度存在统计学显著差异。其中在“个性化关怀”维度上，职务变量呈现显著性差异（F（3, 211）= 2.817, $p = 0.040 < 0.05$），表明“双师型”教师在不同岗位身份下，对情感支持与个体照顾的感知存在统计显著性差异。其余三个维度（德行垂范、愿景激励、领导魅力）虽 F 值接近显著阈值（p 值分别为 0.051、0.056 与 0.087），但未达统计学显著性。就年龄与职称两个变量而言，所有维度均未显示出统计显著性差异（p 值均大于 0.05），提示在本样本结构中，变革型领导力的认知与发展需求并不因年龄或职称而显著不同，反映出当前“双师型”教师领导力发展呈现一定的一致性特征。

4. 优先级指数（PI）

以 5 位专家的判断矩阵得分为依据，分别计算最大特征根与一致性比率（CR），均小于 0.10（见表 3），单人判断一致性合格。

Table 3 AHP Weights and Consistency

Expert	λmax	CI	CR	Weight Vector (D, V, L, C)
E1	4.1042	0.0347	0.0386	(0.460, 0.067, 0.149, 0.325)
E2	4.2542	0.0847	0.0941	(0.499, 0.114, 0.070, 0.317)
E3	4.2404	0.0801	0.0890	(0.619, 0.052, 0.109, 0.220)
E4	4.1981	0.0660	0.0734	(0.271, 0.544, 0.064, 0.122)
E5	4.0104	0.0035	0.0038	(0.496, 0.267, 0.083, 0.154)

Remarks: The CR values of the five experts are all less than 0.10, indicating that the consistency of individual judgment matrices is acceptable.

随后采用几何平均合成群体判断矩阵，得到 λmax = 4.044、CI = 0.0148、CR = 0.016（< 0.10），一致性良好。据此计算并确定四维 AHP 权重为：德行垂范 0.510、个性化关怀 0.235、愿景激励 0.156、领导魅力 0.100，AHP 结果显示，专家对各维度的重要性判断并非同质，提示不同背景专家的关注点存在差别，尽管存在个体差异，各判断矩阵的一致性均满足 CR < 0.10，整体排序在可接受范围内稳定。然后根据 AHP 权重与“需求值”合成优先级指数（PI）进行排序，详见表 4：

Table 4 Priority Index (PI) Results

Dimension	Need Value	AHP Weight	Priority Index (PI)
Moral Exemplification	0.91	0.510	0.46
Individualized Care	0.94	0.235	0.22
Visionary Motivation	0.88	0.156	0.14
Charismatic Leadership	0.90	0.100	0.09

依据优先级指数（PI）= 需求值 × AHP 权重，计算四维 PI 排序为：德行垂范（0.46）> 个性化关怀（0.22）> 愿景激励（0.14）> 领导魅力（0.09）。各维度的需求值区间较窄（0.88-0.94），说明总体改进空间接近； 排序主要由重要性权重驱动而非单纯由现状高低决定。专家赋权显示，德行垂范在“双师型”岗位中承载安全规范执行、质量控制与职业伦理示范等高风险外溢职责，权重最高（0.510），因而即便需求值并非峰值，仍成为首要提升目标。相较之下，个性化关怀虽具有最高需求值（0.94），但权重中等（0.235），综合后位列第二，其短板主要体现为学徒式个别指导与差异化支持的供给不足。愿景激励与领导魅力的需求值相近（0.88/0.90），在高职一线

的任务结构中被赋予较低权重（0.156/0.100），更适宜纳入中长期培育路径。总体上，结果提示：资源配置应优先保障规范与伦理层面的制度化训练，同步通过导师制与过程性评价补强个别化支持，并在专业群与校企项目中稳步培育愿景牵引与影响力。

5. 质性访谈

量化结果显示四个维度的现状均值相近，但由 AHP 权重驱动的 PI 排序差异明显。仅凭均值与 PI 难以解释“为何差在此、困在哪、该怎么改”的问题。因此设置本研究进一步做定性补充：围绕“均值较低/PI 较高”的维度，进一步识别情境——机制——结果链条与可行的行动线索。该做法有以下几个目的：一是为 PI 排序提供组织与情境层面的机制证据；二是为培训与管理决策沉淀可操作的干预点；三是通过三角互证（量化——专家——一线教师）增强结论的解释力与可信度。

为提升质性结果的可检验性与可复现性，本研究遵循 Strauss 和 Corbin (1998) 提出的三阶段编码流程，采用“开放——轴心——选择”三步法，使用 NVivo 记录代码与关系。先对 7 个样本钟的 2 个样本进行编码，计算 Cohen’s κ，结果显示分别为均达到预设阈值：$\kappa \geq 0.80$，如表 5 所示：

Table 5 Consistency Results (Cohen’s κ)

Interviewee ID	Segments	Initial κ	95% CI	Adjusted κ	95% CI	Notes
T2	186	0.73	0.69-0.77	0.84	0.80-0.87	Unified coding boundary for “Mentorship–Part-time Recognition.”
T5	203	0.76	0.72-0.80	0.82	0.78-0.86	Merged codes related to “Goal Setting/Milestones.”
Total Sample	389	0.75	-	0.83	-	Reached the threshold value ($\kappa \geq 0.80$).

Table 6 Qualitative Analysis Results

Dimension	Core Theme	Specific Subthemes	Mechanism Interpretation	Preliminary Action Strategies
Moral Exemplification	System regulation enhancement; Role model influence	Collaboration between schools and enterprises increased, but supervision was weak; inconsistent regulations across departments; lack of exemplary figures and organizational culture transmission	Mechanism: Repeated collaboration but low standardization; weak exemplary leadership and teacher-student relationship; lack of "safety-quality-ethics" linkage, increasing pressure	Establish standardized operation manuals; periodic reviews; transparent payment flows; build a "teacher role model course/ case library"
Individualized Care	Insufficient degree of personalized support	Projects not closely linked with mentoring tasks; unclear role of part-time mentors; scattered student feedback channels	Mechanism: Weak linkage between teaching projects and mentoring; lack of feedback loops; unclear student demand response	Clarify mentor responsibilities and performance evaluation; create student needs system; establish feedback and peer case-sharing
Visionary Motivation	Short-term orientation of goal setting; Weak outcome presentation	Project objectives often fragmented; weak link between outcomes and benchmarks; insufficient motivation and demonstration	Mechanism: Goal setting lacks method; motivation is insufficient; outcome demonstration is weak	Develop goal-setting and motivational courses; embed showcases and peer-review mechanisms in curriculum
Charismatic Leadership	Weak influence of leadership role models	Team goals rely heavily on individual efforts; insufficient role models; lack of professional skill leadership	Mechanism: Team driven by individuals; weak project-based training; insufficient demonstration effect	Conduct leadership workshops; establish project demonstrations; expand dual-mentor and enterprise-linked rotation mechanisms

正如表 6 显示，从主题——机制——行动的链条看，四维并非孤立：德行垂范的优先级最高，实质上对应“规范——风险——示范”的组织防线，需要制度闭环先行；个性化关怀的短板主要源于制度供给不足而非个体意愿，关键在于导师制的工时与考核；愿景激励问题集中在目标系统化与展示场域缺位；领导魅力的改进要点不是“再多经验”，而是把个人影响力转化为团队牵引力（目标、沟通、带教、示范）。这些发现与前述 PI 排序相吻合：优先处理“制度性与安全性风险”与“个别化支持短板”，中长期再通过项目化与挂职机制稳步提升愿景牵引与团队影响力。

6. 量——质联合显示

基于上述定性发现，将量化指标（均值、PI）与“主题——机制——行动”逐项对接，形成联合显示表：在同一行内呈现“量化证据 → 质性主题/原话 → 机制解释 → 培训与管理建议”，以确保结论既可解释、又可执行。如表 7 所示：

Table 7 Joint Display Results

Dimension	M ± S.D. / PI	Qualitative Themes	Mechanism Interpretation	Training/Management Recommendations
Moral Exemplification	4.09 ± 0.72 / PI = 0.46	Teachers' moral integrity is good, but school-enterprise collaboration lacks sufficient standardized mechanisms; cross-disciplinary collaboration awareness is weak.	Mechanism and processes are incomplete; new collaboration formats are limited; collaboration incentives are insufficient.	Establish standardized operation manuals; conduct quarterly reviews; build teacher ethics case libraries; enhance cross-disciplinary collaboration.
Individualized Care	4.06 ± 0.68 / PI = 0.22	Insufficient individualized mentoring; weak responsiveness; mentoring tasks and projects are not well integrated.	Projects and mentoring tasks are separated; limited feedback loops; insufficient part-time mentoring support.	Strengthen one-to-one mentoring and feedback systems; establish student demand feedback mechanisms; expand case-based peer mentoring.
Visionary Motivation	4.12 ± 0.69 / PI = 0.14	Goals often short-term; insufficient long-term vision; weak motivational guidance; limited integration of updated curricula.	Goal setting lacks systematic methods; outcome orientation is insufficient; motivational guidance is weak.	Develop motivational courses and workshops; embed peer demonstration and feedback mechanisms; integrate motivational activities into curriculum.
Charismatic Leadership	4.10 ± 0.68 / PI = 0.09	Industry experience role models exist, but leadership demonstration is weak; team management is not strong enough.	Leadership system training is lacking, and opportunities for demonstration and mentoring are limited.	Conduct leadership verification workshops (goal management, communication, conflict resolution); promote demonstration-based rotation with industry mentors.

讨论

主要发现

本研究显示，职业院校“双师型”教师对变革型领导力四个维度的总体感知水平均处于较高区间，但在将教师需求感知与专家重要性判断整合后，不同能力要素呈现出显著的结构性分化，形成以“德行垂范”为核心的“规范先行”优先序：德行垂范 ＞个性化关怀 ＞愿景激励 ＞领导魅力。该结果表明，在职业教育这一实践责任密度高、风险外溢效应更显著的组织情境中，能力优先序的形成并非单纯由主观评价强度（均值高低）驱动，而更深受岗位责任属性与制度运行逻辑的影响。换言之，当组织面临安全、质量、伦理与协同治理等约束时，能够被复制、可被监督并具有底线意义的规范性领导行为更容易被识别为“先决能力”，进而在资源配置与培训排序中获得优先地位。

进一步分析发现，不同专家群体对各维度的重要性判断存在差异。例如，“德行垂范”在教育领域专家中的权重赋值明显高于企业领域专家（前者最高达 0.619，后者最低仅 0.271），这一差异与其专业经验及目标关注点相关：教育领域更强调价值引领与育人功能，产业界更强调实践胜任、团队绩效与流程效率。需要指出的是，这种差异并不必然意味着评价标准的对立，而更可能反映多元主体在“双师型”教师培养目标中的视角差异与权衡路径差异。由此，优先

序结果在本质上提示：在校企协同持续深化的背景下，教师发展评价与培养方案应在“立德树人”与“岗位胜任”之间形成更精细、可对照的协同框架，使不同主体的关注点能够在同一评价逻辑下实现对齐与整合。

质性证据为上述机制提供了进一步支撑。访谈显示，“德行垂范”之所以在排序中呈现优势，并非因为其“更受欢迎”，而是因为其在安全保障、质量控制、职业伦理与团队规范维系方面具备基础性与底线性意义，一旦缺失可能带来显著的风险外溢与组织成本上升；相较之下，“个性化关怀”“愿景激励”等维度更依赖制度资源供给、实施条件与发展周期积累，其效果常表现为中长期的渐进强化。这说明，在实践密集型的职业教育环境中，规范与文化往往构成变革推进的前置条件，而激励与魅力的发挥更依赖制度基础与平台生态的逐步成熟。

理论对话

在本土职业教育“产教融合深化——实践风险集中——责任外溢显著”的制度情境下，本研究提出变革型领导力发挥作用的一个重要边界条件：当组织治理更强调安全、质量与职业伦理等高责任约束时，以“德行垂范”为代表的规范性示范更可能先于愿景动员与魅力影响发生作用，并通过提升组织信任、降低不确定性与风险成本，促进成员的组织认同与行动一致性。该发现与既有研究强调领导效能常经由组织文化与共同体建构等间接机制产生的观点相呼应 (Leithwood & Sun, 2012)，同时进一步指出：在责任密度高、风险敏感性强的职业教育场域，“可复制的行为规范”可能比“鼓舞性的愿景表达”更具现实动员力。教师层面的经验证据亦支持“规范/资源——效能——承诺”的作用链条：变革型领导与教师组织承诺之间存在显著关联，且其影响可能通过教师自我效能等变量发挥中介作用 (Liu & Kong, 2020)；同时，变革型领导与教师集体效能之间的关系也可能通过工作资源满意度等组织条件间接实现 (Sánchez-Rosas et al., 2023)。在结果变量层面，元分析结构方程研究显示，领导行为与学生学业成绩之间的关系可通过教师表现等变量实现间接影响 (Papadakis et al., 2024)，而教师领导项目的评估研究亦提示，将个人影响力转化为团队牵引力与专业实践改进，可能比依赖短期“魅力效应”更能形成可持续的学习改进 (Supovitz & Comstock, 2023)。由此，变革型领导理论在职业教育场域的适用方式或可从“激励逻辑的优先”转向“规范逻辑的先导”进行再审视，并将“风险责任结构”“制度供给强度”“产教融合深度”等作为后续研究检验其稳定性的关键情境变量。

方法价值

在方法层面，本研究通过构建优先级指数（PI），将教师的需求感知与专家赋权进行整合，形成“诊断——排序——机制解释——行动指向”的连续分析链条，从而实现由数据识别向管理决策的有效转化。相较于仅依据均值判断轻重的常见做法，该方法能够在总体评分普遍偏高、维度差异不显著（容易出现同质高分或“天花板效应”）的条件下，仍识别出更贴近组织治理逻辑的关键能力投放点，减少培训资源配置仅凭均值可能带来的排序失真。同时，通过联合

显示贯通量化结果与质性证据，本研究使“排序结构——形成机制——行动建议”构成闭环，提高了结论解释的整体一致性与可复核性。该方法路径为复杂教育情境下多主体参与的教师发展决策研究提供了可复制的分析范式。

总结

本研究基于问卷——AHP——访谈的混合研究设计，在总体感知水平较高的背景下识别出职业院校“双师型”教师变革型领导力发展需求的结构性差异，形成以“德行垂范”为核心的“规范先行”优先序。研究进一步揭示，该优先序的形成机制与职业教育实践责任密度、制度运行逻辑及风险外溢效应相关，并反映了教育界与产业界在培养目标权衡上的视角差异。基于此，本研究为“双师型”教师发展评价与培训资源配置提供了可操作的排序依据与分层推进思路。

建议

基于优先级排序及其机制证据，本研究提出以下三条可操作建议（形成“证据——建议”闭环）：

1. 以德行垂范为牵引的规范治理优先

鉴于“德行垂范”优先级最高且具有明显的风险外溢特征，建议将资源优先投向安全质量规范、职业伦理与责任追溯等制度闭环建设，形成“制度——流程——督导——问责”的一体化治理机制，并将典型示范行为固化为可观察、可评价、可复制的行为标准，为校企协同与实践教学提供稳定前提。

2. 围绕个性化关怀的导师工坊与分层支持

基于“个性化关怀”居于次优先层级且与师徒带教、成长支持紧密关联的特征，建议完善导师制与岗位实践双通道，推动“带教任务——过程反馈——能力提升”的闭环运行；同时建立青年教师分层培养路径（入职适应——岗位胜任——项目带队），提升关怀支持的针对性与可持续性，增强教师发展共同体的凝聚力与协作效率。

3. 以项目化平台带动愿景激励与魅力的中长期积累

鉴于“愿景激励——领导魅力”更依赖平台、周期与经验沉淀，建议采用渐进策略：通过项目带教、示范课堂、企业实践挂牌、技能竞赛指导等任务型场景，让愿景表达与组织目标嵌入真实工作；并通过阶段复盘与成果共享机制促成影响力扩散，实现从“规范达成”到“激励放大”的递进式提升。

研究局限性

1. 研究设计局限

本研究采用横断面数据并以教师自陈信息为主要来源，可能受到社会期许效应与共同方法偏差影响，且难以揭示优先序随时间与制度供给变化的动态过程，因此在因果解释方面仍有局限。

2. 样本范围与外部效度局限（单一院校情境）

本研究样本来自单一职业院校情境。尽管通过分层抽样尽量保证样本内部多样性，但在区域环境、办学层次、校企合作基础与组织文化等方面可能具有情境特殊性。因此，本研究结论更适合被理解为对特定情境的分析性推广，在外推至其他地区或不同类型院校时需谨慎对照其制度条件与责任结构。

3. 测量工具局限

本研究采用本土化修订的 TLQ 四维结构对变革型领导力进行测量，具有综合性与可操作性，但对维度内部更细颗粒度能力要素的刻画仍有限，亦未进一步检验不同群体之间的测量等值性问题，可能影响跨群体比较的精确性。

4. 结果验证局限

本研究主要围绕“诊断——排序——建议”展开，尚未纳入客观绩效指标（如安全事件、教学质量、学生满意度、企业评价等）对建议路径的实际效果进行验证，因此在“实践成效”证据方面仍有待补强。

未来研究建议

1. 采用纵向或准实验设计检验动态机制

未来可通过纵向追踪、阶段性干预评估或准实验设计，检验“规范先行”的优先序是否随制度供给、校企协同成熟度变化而发生迁移，并增强因果解释的严谨性。

2. 扩展为多区域、多类型职业院校比较研究

建议开展跨区域与跨类型院校（高职/中职/技师学院）多点采样研究，比较不同产教融合深度、不同风险责任结构下的优先序差异，从而系统检验外部效度并识别情境边界条件。

3. 细化测量模型与开展测量等值性检验

未来可在 TLQ 框架下进一步细分能力要素，结合 CFA 与测量等值性检验，提升对领导力能力结构的精细化解释，并支持跨群体（校内教师/企业导师/管理者）比较。

4. 将优先序与客观绩效联结，形成闭环证据链

建议引入多维结果变量（安全质量指标、课程达成度、学生学习体验、企业反馈、团队绩效等），并构建“优先级识别——策略实施——效果验证”的闭环模型，以增强政策建议与实践方案的证据强度。

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利益相关者访谈对昆明市国际中文教育的 SWOT 分析

SWOT ANALYSIS OF INTERNATIONAL CHINESE LANGUAGE EDUCATION IN KUNMING BASED ON STAKEHOLDER INTERVIEWS

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摘要

研究目的：本研究旨在解决昆明市国际中文教育中资源丰富但教育效能转化不足的核心矛盾，探索其战略发展路径。

研究设计/方法/途径：通过对 20 名核心利益相关者（教师、学生、管理者）进行深度访谈，结合扎根理论三级编码与 SWOT 分析框架，系统解构昆明国际中文教育的战略生态。

研究结果：昆明国际中文教育的优势为地理枢纽地位与多元文化资源；关键瓶颈在于设施数字化缺口与师资结构性失衡；机遇来自国家战略支持与国际合作深化；威胁主要为市场竞争加剧与地缘风险传导。

创新性与价值：提出“V-C-B”发展范式，即构建交通价值链、文化认同圈与品牌生态位，为区域性国际中文教育提供了具有创新意义的治理路径与实践参考。

关键词：国际中文教育 利益相关者访谈 SWOT 分析 扎根理论 昆明

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Abstract

Purpose: This study aimed to address the fundamental contradiction of abundant resources but insufficient improvement in educational efficiency in international Chinese education in Kunming, and explore its strategic development path.

Study Design/Methodology/Approach: Through in-depth interviews with 20 key stakeholders (teachers, students, administrators), and by applying grounded theory's three-level coding and SWOT analysis framework, we systematically deconstructed the strategic ecosystem of Kunming International Chinese Education.

Findings: Kunming's strengths in international Chinese education include its strategic geographical location and abundant multicultural resources, while key challenges include insufficient digital infrastructure and structural imbalances in the teaching workforce. The city's opportunities result from national strategic backing and deepening international cooperation, while major threats include the rising market competition and the potential spread of geopolitical risks.

Originality/Value: The "V-C-B" development paradigm is introduced, which creates the transportation value chain, cultural identity circle, and brand ecological niche, offering an innovative governance path and practical reference for regional international Chinese education.

Keywords: International Chinese Education, Stakeholder Interviews, SWOT Analysis, Grounded Theory, Kunming

引言

据中国教育部 2022 年语言生活状况数据显示，全球已有 180 多个国家和地区开展中文教学，其中 81 个国家将中文纳入国民教育体系，相关学校和培训机构超过 8 万所，学习中文人数逾 3000 万 (Su, 2023)。随着“一带一路”倡议的推进，国际中文教育获得前所未有的发展契机，但其高质量发展仍面临诸多挑战 (Chen, 2024a)。昆明作为中国面向南亚和东南亚的门户城市，在服务“一带一路”建设中承担重要战略使命。目前，昆明已建立 8 所省级华文教育基地学校（占全省三分之一），自 2011 年以来累计为缅甸等国培训华文教师 500 余人次，并与东南亚国家开展多层次教育交流。这些实践既体现了中华文化国际传播的“留根工程”，也凸显了昆明在国家战略中的独特地位 (Zhang, 2017)。

然而，现有研究主要聚焦宏观政策，缺乏对多元主体实践的整合性探讨。一方面，研究多依赖政策文本或院校案例，未能深入揭示教师、学生与管理者的真实认知与互动机制 (Zhao, 2021)；另一方面，对区域实践中各主体如何协同应对特有挑战（如地缘优势转化、本土化资源开发）缺乏微观实证分析，呈现“重静态描述、轻动态过程”的倾向 (Wu, 2021)。为弥补这一不足，本研究引入利益相关者深度访谈法，收集教师、学生与管理者三类核心群体的 20 份一手

经验数据，并结合扎根理论三级编码（开放式→主轴→选择性）与 SWOT 分析框架，揭示昆明国际中文教育的内外驱动力系统，为区域性国际中文教育的高质量发展提供实证路径。

研究目的

1. 通过深度访谈与 GT-SWOT 融合分析，整合教师、学生与管理者的多元视角，揭示昆明国际中文教育的内外部动力机制（优势/劣势/机遇/威胁）及认知错位根源（如技术替代焦虑、政策波动担忧、地缘风险警觉）

2. 基于研究发现，提出协同治理路径，以实现战略分析向实践落地的转化，为区域性国际中文教育高质量发展提供可操作方案。

文献综述

在全球中文教育加速发展的背景下，昆明作为面向南亚和东南亚的辐射中心，具有重要战略意义。数据显示，全球 190 多个国家开展中文教学，85 个国家将其纳入国民教育体系，HSK 考生年均增速达 20% (Yin, 2025)。依托“一带一路”区位优势，云南已建立湄公河流域合作机制和友城网络 (Xinhua News Agency, 2024)，其中昆明承担 62.79% 的国际中文教育人才培养，并通过“南亚东南亚国际中文教育研讨会”等平台推动跨境协作 (Chen, 2024b)。但统一规划不足、品牌意识薄弱和人才短缺等瓶颈制约其高质量发展。

SWOT 分析已用于国际中文教育研究，如 Jin 和 He (2022) 对粤港澳资源的评估，Sun 和 Zheng (2023) 的外圈规划建议，以及 Li (2023) 对甘肃教育的梳理。然而，此类研究多停留于宏观层面，缺乏对教师、学生、管理者等主体的微观洞察。扎根理论在从经验数据中生成理论方面具备优势 (Fei, 2025; Li & Wang, 2025)，但现有研究虽尝试结合访谈与 SWOT，却未能通过扎根编码升华质性数据，亦未实现 GT 与 SWOT 的融合。因此，在昆明国际中文教育中构建“GT-SWOT”分析范式仍属空白。

本研究基于利益相关者访谈，采用 GT-SWOT 方法识别昆明在地缘文化、师资结构与教材本土化等方面的矛盾，旨在破解“中文 ＋职业教育”资源整合难题。理论上，通过方法融合与多主体视角弥补单一分析不足；实践上，为昆明建设区域性国际教育中心及同类城市提供可借鉴模型。

研究方法

本研究采用“半结构化访谈——扎根理论——SWOT 分析”三元整合范式，通过深度访谈获取原始数据，再通过扎根理论（Grounded Theory，简称为 GT），对数据进行三级编码，构建概念体系，最终采用 SWOT 分析对数据进行现实战略转化。此方法从现实出发，“聆听”利益相关者真实的声音，从而有效解构昆明市国际中文教育的复杂生态。

1. 扎根理论

本研究基于格拉泽与斯特劳斯的经典扎根理论，对访谈记录进行三级编码，即开放编码（Open Coding）、主轴编码（Axial Coding）和选择性编码（Selective Coding）。其核心在于通过系统的归纳方法，从数据中提炼新的理论框架，为深层次剖析昆明市国际中文教育的发展现状提供了基础理论支持，从而为未来的战略决策提供了重要的实践指导。

1.1 访谈层次分析

笔者对昆明市国际中文教育事业利益相关方中的 20 位志愿者进行了半结构化访谈。其中含有教师 9 名、学生 9 名、管理者 2 名。访谈大纲含有 20 道题目（该访谈大纲经 3 位专家检验，平均效度 78.41 分）通过扎根理论的三级编码技术分析，研究对象在内部和外部元素层次的代表意见详见表 1。

Table 1 Hierarchical Analysis

	Dimension	Status	Interview Information
1	Strengths	Teacher A	Kunming's multi-ethnic culture (e.g., Dai brocade, Yi silver) is a natural textbook. Integrating it into our "ICH Chinese" course boosted Thai student engagement by 40%.
		Teacher B	Developed a high-speed train cockpit VR system for Lao students to learn terms like "switch operation" and "signal debugging" in a China-Laos railway virtual scene–100% hands-on pass rate.
		Teacher C	A flight from Changshui Airport to Bangkok takes just two hours. Our school arranged for us to attend a cross-border customs declaration training in Mandarin at the Mohan Border Crossing—A unique advantage not available in other cities.
		Teacher D	The provincial scholarship covers tuition fees, while the municipal fund subsidizes 'Chinese + Engineering' practical training programs, alleviating financial burdens.
		Controller E	With mutual credit recognition from 18 universities across the five Lancang-Mekong countries, all graduates of the first cohort of the China-Thailand '2 + 2 Dual Degree' program have secured employment at Chinese-funded enterprises.
		Controller F	The dual pathway of 'Silver-Age Teaching + Overseas PhD Studies' annually recruits 30 interdisciplinary faculty members, 81% of whom possess teaching experience in Southeast Asia.

Table 1 Hierarchical Analysis (Cont.)

	Dimension	Status	Interview Information
2	Weaknesses	Teacher G	The standard textbooks lack real-life scenarios from Southeast Asia, leading Thai students to frequently confuse cultural terms such as 'Water Festival' with 'bathing rituals'.
		Teacher H	Only 23% of teachers are qualified to teach cutting-edge courses such as 'Chinese + Photovoltaics,' with the majority lacking an engineering background.
		Student I	Some classrooms still use projectors from a decade ago, with only three VR training labs available—online classes feel like 'visiting an antique exhibition.'
		Student J	The professor explained the concept of a 'live-streaming traffic pool' in the Kunming dialect, but the international students couldn't understand a word.
		Controller E	The city's international student apartments are short of 1,800 beds; the new campus won't be operational until 2026, and this year authorities were forced to reject applications from 300 applicants.
		Controller F	Myanmar language micro-courses total fewer than 150 instructional hours, while there is a 60% gap in advanced terminology courses for the Lao language.
3	Opportunities	Teacher K	The RCEP has fueled demand for 'Chinese-language + live-streaming e-commerce' services, with Thai merchants seeing a 65% surge in order-based training enrollments.
		Student L	The China-Laos Railway is recruiting bilingual technicians; candidates proficient in 'Chinese freight dispatching' can sign contracts directly.
		Controller E	The China-Thailand Railway will be completed in 2028, and the 'High-Speed Rail Chinese' textbook has been designated as a key project by the International Language Cooperation Center.
		Controller F	The Ministry of Education has designated Kunming as a 'Digital Transformation Pilot City,' allocating 100 million yuan in special funds to develop a smart teaching platform.
4	Threats	Teacher M	The AI teacher platform charges as low as 15 yuan per class hour, while private institutions have seen a 30% decline in their core Chinese language student enrollment.
		Student N	Visa restrictions have led to the suspension of short-term programs, while challenges in cross-university recognition of online credits are hindering graduation timelines.
		Controller E	The west is hyping the 'debt trap,' while India is reviewing Chinese projects; a third-party assessment is needed to resolve the trust crisis.
		Controller F	The Myanmar conflict has reduced student enrollment in western Yunnan by 30%, while the depreciation of the Chinese yuan has increased family contribution costs by 15%.

综上，昆明国际中文教育中教师、学生与管理者在宏观层面对“面向南亚东南亚的地缘区位优势”及“由传统语言教学向‘中文 + 职业技能’转型”已形成共识；同时一致指出数字化资源不足（如缅甸语微课总量不足 150 学时、VR 教室覆盖率低于 15%）是制约教学效能的关键瓶颈。

然而，在风险感知上三类主体存在显著差异：教师主要担忧民办机构低价 AI 课程导致的生源流失；学生关注签证政策波动引发的学分认证碎片化与毕业延迟；管理者则将缅甸等地的地缘政治冲突视为招生规模缩减的系统性风险。三方分歧揭示了国际中文教育多维治理的复

杂性：教师的技术理性诉求、学生的体验效率需求与管理者的战略资源逻辑，构成“工具——情感——战略”的三维张力。因而，亟需通过协同机制设计（如学生参与教材开发、教师参与基建规划）弥合认知鸿沟，以实现区位优势向可持续发展效能的转化。

1.2 主轴式编码

主轴编码是指在开放式编码的基础上，根据初始畴间的逻辑关系进行聚类整合，形成更具概括性范畴的过程。本研究运用 Nvivo 14 的节点分类矩阵功能，通过属性过滤（Attribute Filtering）和层次查询（Hierarchical Query），从初始概念中提取关联命题，最终归并出包含 B1 地理枢纽地位（区域辐射力指数）、B5 设施资源缺口等 16 个理论饱和度达 87.4% 的副范畴。研究过程严格遵循“条件——行动——结果”的编码范式，确保数据结构的因果链条显性化。详见表 2。

Table 2 Spindle Code

Subcategory	Initial Category
B1 Geographical hub status	A1 The advantages of coverage by the atmospheric radiation zone, A2 Cross-border high-speed rail network, A3 Regional educational tourism hub
B2 Multicultural resources	A4 Cultural ethnic coexistence ecosystem, A5 Cross-border cultural cooperation mechanism, A6 Festival practice platform
B3 Policy and funding system	A7 Provincial-level special fiscal investment, A8 Performance-based funding mechanism, A9 Government-enterprise cooperation fund
B4 Reserve of teaching resources	A10 A group of teachers with overseas experience, A11 Professional teaching case library, A12 Dual-path teacher training program
B5 Residential resource gap	A13 Insufficient accommodation capacity, A14 There is a shortage of digital resources for less commonly taught languages, A15 The training equipment is outdated
B6 Imbalanced faculty structure	A16 There is a shortage of teachers for less commonly taught languages, A17 There is a shortage of dual-qualified teachers, A18 Training is fragmented
B7 Weaken market competitiveness	A19 The brand lacks sufficient recognizability, A20 The completion rate of online courses is low, A21 Student flow diversion pressure
B8 National strategic empowerment	A22 Belt and Road education hub positioning, A23 digital transformation pilot program, A24 The language dividend of RCEP
B9 Evolving market demand	A25 There has been a surge in demand for Chinese language skills and vocational competencies, A26 National education incorporates opportunities, A27 Industry modular course
B10 International cooperation deepens	A28 A multi-country credit recognition system, A29 International education exhibition platform, A30 Cross-border joint educational programs
B11 Intensified market competition	A31 Online low-price competition, A32 Policy competition among surrounding cities, A33 The pressure from homogeneous courses
B12 Fluctuations in the policy environment	A34 Visa policies have been tightened, A35 Textbook review mechanism, A36 Fiscal dependence risk
B13 Geopolitical risk transmission	A37 Regional political instability, A38 The impact of exchange rate fluctuations, A39 International public opinion risks

Table 2 Spindle Code (Cont.)

Subcategory	Initial Category
B14 Resource integration innovation	A40 Government-enterprise cooperation in infrastructure development, A41 Demand response system, A42 Application of immersive technology
B15 Upgrading the teaching faculty system	A43 Special doctoral training program, A44 Introduction of versatile talents, A45 Interconnection between industry and education positions
B16 Building a brand mechanism	A46 Regional unified brand, A47 The elastic student status system, A48 Risk hedging system

Sources: The data were generated using NVivo 14 software by the author.

1.3 选择性编码

选择性编码是对主轴编码过程中建立的主范畴及其关系的进一步比较分析，挖掘出能将所有范畴有机连接在一起的核心范畴，并通过描述典型范畴关系结构，来分析核心范畴与相应主范畴间的关系，进而发展出新的质性模型。基于上一阶段的主轴编码结果，本研究共得出 C1 内部优势（S）、C2 内部劣势（W）、C3 外部机遇（O）、C4 外部威胁（T）、C5 优化路径这五个核心范畴。主范畴与核心范畴间的作用路径见表 3。

Table 3 Typical Relational Structure of the Main Categories

Typical Relationship Structure	The Essence of the Relationship Structure (Storyline)
C1 Internal Strengths (S) → C5 The foundational support for optimizing paths	Internal strengths such as Kunming's geographic hub status (B1), diverse cultural resources (B2), policy and funding systems (B3), and teacher resource reserves (B4) provide the essential material, cultural, institutional, and talent foundation for implementing optimization pathways including resource integration and innovation (B14), teacher system upgrading (B15), and brand mechanism development (B16).
C2 Internal Weaknesses (W) → C5 The driving forces behind path optimization	Internal weaknesses such as facility resource gaps (B5), teacher structure imbalances (B6), and market competition weaknesses (B7) constitute major bottlenecks to development, directly driving the urgent need to address facility shortcomings via resource integration and innovation (B14), optimize workforce structure via teacher system upgrading (B15), and enhance competitiveness via brand mechanism development (B16).
C3 External Opportunity (O) → C5 The strategic orientation of the optimization path	External opportunities such as national strategic empowerment (B8), market demand upgrading (B9), and deepening international cooperation (B10) indicate that resource integration and innovation (B14) should focus on digital transformation and infrastructure responsiveness, teacher system upgrading (B15) must align with "Chinese + vocational skills" compound talent cultivation, and brand mechanism development (B16) should leverage international cooperation for expansion.
C4 External Threats (T) → C5 Key focuses for risk mitigation in the optimization process	External threats such as intensifying market competition (B11), policy environment volatility (B12), and geopolitical risk transmission (B13) highlight potential risks, compelling the optimization pathways to strengthen brand mechanism development (B16) through unified brand enhancement for recognition, flexible academic systems for attractiveness, and risk hedging systems for stability, thereby effectively responding to external challenges.

Table 3 Typical Relational Structure of the Main Categories (Cont.)

Typical Relationship Structure	The Essence of the Relationship Structure (Storyline)
C1 Internal Strengths (S), C3 External Opportunities (O)→ Development Momentum	The internal unique geographic-cultural resources and policy-teacher strengths (C1), combined with external national strategic support and robust market demand (C3), together form the core driving forces and favorable conditions for advancing Kunming's international Chinese education cause.
C2 Internal Weaknesses (W), C4 External Threats (T)→The primary constraint	The internal facility-teacher shortcomings and market weaknesses (C2), interacting with external intense competition and policy-geopolitical risks (C4), interweave and compound to create the key obstacles and severe challenges restricting the development of Kunming's international Chinese education cause.
C5 optimization path → Reinforcement of C1 (S) and overcoming of C2 (W)	The optimization pathways of resource integration and innovation (B14), teacher system upgrading (B15), and brand mechanism development (B16) aim, through concrete measures such as infrastructure investment, technology application, talent cultivation and attraction, brand shaping, and institutional innovation, to further consolidate and leverage internal strengths (C1) while systematically remedying and overcoming internal weaknesses (C2).
C5 optimization path → Grasp C3 (O) and avoid C4 (T)	The optimization pathways of resource integration and innovation (B14), teacher system upgrading (B15), and brand mechanism development (B16) are designed to closely align with national strategies and market demands (C3), proactively seize external opportunities (C3) via specialized curricula, cooperative education, and platform building, and strategically avoid or mitigate the impact of external threats (C4) through brand differentiation, flexible systems, and risk hedging.

Sources: The data were generated using NVivo 14 software by the author.

2. SWOT 分析

2.1 内部优势（S）：区域性核心竞争力的四维支撑

2.1.1 地理枢纽地位（B1）的交通——教育耦合效应

航空——高铁双网联动（A1＋A2）：昆明长水国际机场开通 50 条南亚东南亚航线，形成覆盖 15 国的“4 小时航空圈”； 中老铁路通车使跨境物流效率提升 35%，直接带动老挝籍学生数量增长 40%（原始数据），印证了“交通基础设施 → 跨境教育流动”的正向传导机制。

研学枢纽实体化（A3）：依托中老铁路研学专列开展“行走的中文课堂”，将普洱茶制作、傣族织锦等文化体验融入语言教学，实现“交通廊道”向“教育廊道”的功能转化。

2.1.2 多元文化资源（B2）的差异化竞争壁垒

民族文化共生系统（A4）：26 个世居民族形成的茶马古道文化、南博会遗产等，构成跨文化教学的“活教材”，使东南亚学生文化亲近感指数达 87%（访谈数据）。

机制化文化输出（A5 ＋ A6）：澜湄合作机制推动中老傣锦联合申遗（A6）；泼水节汉语沉浸周（A6）将民俗节庆转化为语言习得场景，学员满意度 93%（原始数据），形成“文化认同——语言学习”双循环。

2.1.3 政策资金体系（B3）的制度杠杆作用

多元资金池构建（A7 + A9）：省级财政年投入 2.1 亿元留学生奖学金（A7），市级设立 3000 万元专项基金，叠加 2 亿元政企合作基金（A9），形成“财政引导——市场运作”的可持续投入机制。

绩效驱动增长（A8）：2025 年起实行“以奖代补”拨款模式，使国际学生增长率从 2023 年的 12% 提升至 2024 年的 18%（原始数据），验证了政策工具的资源配置效率。

2.1.4 师资资源储备（B4）的人才生态优势

国际化师资结构（A10）：高校中文教师海外经历占比 55%（A10），博士率 41% 居西部首位，国务院特殊津贴专家 8 人，支撑跨文化教学的专业性。

本土化资源开发（A11 + A12）：南亚东南亚教学案例库积累 3.2 万条本土化案例（A11）；“银龄援边 + 青年访学”双循环机制（A12）保障年均师资轮训 800 人。

2.2 内部劣势（W）：可持续发展瓶颈的三重制约

2.2.1 设施资源缺口（B5）的数字化掣肘

硬件容量不足：留学生公寓缺口 400 床位（A13），市区高校宿舍老旧率超 60%（访谈文本 T7），导致 2024 年放弃入学人数占比达 15%。

数字资源短板：缅甸语、老挝语微课资源不足 150 学时（A14），VR 语言实训室仅 3 间（A15），智慧教室覆盖率 45% 低于全国均值（60%），制约“中文 + 电商”等新兴课程开发。

2.2.2 师资结构失衡（B6）的适配性危机

语种与技能双缺口：小语种背景教师占比仅 23%（A16），缅/老/柬语师资不足 10 人；双师型教师缺口 > 60 人（A17），电商、旅游方向师资断层严重。

培训体系碎片化（A18）：针对东南亚学生习得特点的专项培训覆盖率不足 20%，缺乏“岗前——在岗——跟踪”的系统性设计。

2.2.3 市场竞争弱势（B7）的品牌价值衰减

线上转化效能低下：直播课程完课率 76%（A20），AI 口语评测等技术应用不足导致互动缺失。

同质化竞争挤压：面临成都 25% 高额补贴（A21）、泰国本土机构 1/3 低价学费（A21）的双重分流，品牌辨识度不足（A19）加剧生源流失。

2.3 外部机遇（O）：战略窗口期的动力重构

2.3.1 国家战略赋能（B8）的政策红利

数字化转型试点（A23）：教育部专项拨款 2500 万元/年（2024-2026），支持建设“昆明国际中文教育云平台”。

RCEP 语言需求爆发（A24）：协议生效后跨境电商中文需求年增 20%，“中文 + 直播带货”课程报名量 2024 年同比增 65%（原始数据）。

2.3.2 市场需求升级（B9）的结构性机遇

国民教育体系扩容（A26）：老挝、柬埔寨将中文纳入国民教育，催生教材输出需求，预计 2025 年师资缺口达 200 人。

模块化课程革命（A27）：3 个月岗位导向课程（如商务中文、医疗中文）推动中资企业定制培训需求年增 25%。

2.3.3 国际合作深化（B10）的平台效应

学分互认体系（A28）：澜湄职教联盟连接 5 国 18 所高校，中泰“2+2”双学位项目实现零突破。

跨境办学实体化（A30）：与泰国清迈大学共建“中文+农业”联合学院，在老挝万象设立昆明中文师范学院分校。

2.4 外部威胁（T）：系统性风险的传导放大

2.4.1 市场竞争加剧（B11）的立体挤压

线上低价冲击（A31）：悟空中文等平台以 15 元/小时价格分流初级学习者。

政策虹吸效应（A32）：成都提供高于昆明 25% 的政府补贴，南宁依托东盟博览会实现签证便利化。

同质化课程危机（A33）：70% 机构课程重复率超 60%，缺乏“中文 + 普洱茶产业”等地域性特色模块。

2.4.2 政策环境波动（B12）的运营风险

签证壁垒（A34）：东南亚签证收紧致短期生源下降 12%，教学连续性受损。

审查成本激增（A35）：越南、印尼要求教材逐页审核，单项目合规成本增加 30%。

2.4.3 地缘风险传导（B13）的不可控性

政局与汇率动荡（A37+A38）：缅甸冲突导致 2023 年生源减少 18%；泰铢汇率波动使学费支付违约率上升至 12%。

舆论污名化（A39）：西方“债务陷阱”论调使东南亚国家合作信任度下降 15 个百分点（访谈文本 T12）。

研究结果

本研究以哈佛大学安德鲁斯 (Andrews) 1971 在《公司战略概念》中提出的分析框架为理论基础，将 SWOT 分析分为四个部分，即 Strengths（优势）、Weaknesses（劣势）、Opportunities

（机遇）和 Threats（威胁）(He, 2021)。笔者对利益相关方访谈数据进行扎根理论分析并借助 SWOT 理论，构建出昆明市国际中文教育 SWOT 战略矩阵（见表 4）。

Table 4 SWOT Strategic Matrix for International Chinese Education in Kunming City

Internal Factors	External Factors	Strategic Combinations
Internal Strengths (S) S1. Geographic hub status (B1): Transportation-education coupling effect S2. Differentiated competitive barriers of diverse cultural resources (B2) S3. Institutional leveraging effect of policy and funding systems (B3) S4. Talent ecosystem advantages of teacher resource reserves (B4)	**External Opportunities (O)** O1. Policy dividends of national strategic empowerment (B8) O2. Structural opportunities from market demand upgrading (B9) O3. Platform effects of deepening international cooperation (B10)	SO Strategy Leverage internal strengths to seize external opportunities. WO Strategy Utilize external opportunities to remedy internal weaknesses. ST Strategy Use internal strengths to mitigate external threats. WT Strategy Remedy internal weaknesses to avoid external threats.
Internal Weaknesses (W) W1. Digital constraints of facility resource gaps (B5) W2. Adaptability crisis of teacher structure imbalances (B6) W3. Brand value erosion of market competition weakness (B7)	**External Threats (T)** T1. Multi-dimensional squeeze of intensifying market competition (B11) T2. Operational risks of policy environment volatility (B12)	

Sources: This study is based on the Andrews SWOT framework and grounded theory coding.

该矩阵结构化呈现了昆明市国际中文教育事业发展的内外部关键维度（优势 S1-S4、劣势 W1-W3、机遇 O1-O3、威胁 T1-T2）及其交互关系，为后续差异化发展策略的制定提供框架支撑。

讨论

本研究通过利益相关者访谈与 GT-SWOT 融合分析，揭示了昆明国际中文教育在“双核驱动”与“链式风险”并存情境下的复杂生态。其核心矛盾体现为区位文化资源优势与资源转化效能错位、主体认知差异与系统性风险传导的二元张力。因此，本研究将从机制归因、理论创新与实践范式三方面展开讨论：

1. 动力机制的结构性失衡：从“要素富集”到“三链融合”

1.1 动力机制的结构性失衡：

本研究数据显示，昆明依托“航空——高铁双枢纽”（S1）与“26 民族共生文化”（S2）构建的差异化优势，虽形成 73% 东南亚学生的择校动机，却未能充分转化为教育竞争力。其表象在于“交通——文化——数字”三链的功能性割裂，而深层根源则涉及跨部门协同、资源投入偏好与评价体系导向等系统性治理瓶颈。

1.2 交通链的单点突破与教育价值链延伸不足：

中老铁路虽带动跨境研学规模增长 40%（S1），但沿线“中文 ＋物流”等产教融合课程覆盖率不足 15%（W1）。这不仅是课程开发滞后，更深层反映了基础设施规划与教育产业规划之间的制度性脱节。交通部门主导的“廊道经济”侧重于物流与人流效率，而教育部门的教学改革有其固有周期，二者间缺乏有效的跨部门协同机制与利益共享平台，导致交通优势难以自动转化为教育价值链的有机组成部分。

1.3 文化资源的浅层开发与教学 IP 转化机制缺失：

泼水节沉浸教学虽获 93% 满意度（S2），但傣锦织造等非遗技艺仅 3.2% 融入课程标准（B11）。此现象揭示了从文化资源到教育 IP 转化的深层矛盾：一方面，文化活动的展示性、节庆性与教育体系所要求的系统性、标准化之间存在张力；另一方面，缺乏既精通民族文化又熟悉国际中文教育规律的专业人才（W2），以及激励教师进行深度课程创新的评价与回报机制，致使丰富的文化要素大多停留在体验层面，未能体系化地嵌入课程结构与知识生产之中。

1.4 数字链的基础薄弱与结构性投入偏差：

缅甸语微课缺口达 60%（W1），VR 实训室仅覆盖 15% 学生（W1），这与 RCEP 催生的“中文 + 直播电商”需求激增 65%（O1）形成尖锐矛盾。其背后是资源投入的结构性偏差：硬件设施投入因其可见度高而更易获得支持，但与之配套的本土化数字内容研发、可持续运营维护以及教师数字素养提升等长期性、软性投入则显著不足。这种“重硬轻软”的投入模式，使得数字化建设与真实的教学需求之间出现断层。

由此可见，昆明国际中文教育的困境本质上是跨系统协同失灵与资源配置路径依赖的集中体现。先天禀赋需通过有效的治理创新才能释放乘数效应。本研究提出的“V-C-B”范式正是一套治理解决方案，旨在通过机制创新打通交通链、深化文化链、夯实数字链，构建“交通引流——文化增值——数字赋能”的协同治理生态系统。

2. 主体认知错位与风险传导：治理响应滞后性的生成逻辑

研究数据显示，三类主体风险感知的分化（教师重技术替代、学生忧政策波动、管理者警地缘冲突），暴露了现行治理体系的线性响应缺陷：

2.1 微观层技术冲击被低估：

AI 教师平台以 15 元/课时分流 30% 生源（T1），但“双师型教师缺口＞60人”（W2）使院校难以快速迭代混合教学模式；

2.2 中观层政策波动无缓冲：签证收紧致短期班停办（T2），而弹性学籍制度（C5-A47）尚未衔接跨境学分银行（O3-A28），加剧学生毕业延迟风险；

2.3 宏观层风险传导呈指数级：缅甸冲突通过“生源减 18%→学费收入降 15%→设施更新停滞”的负反馈循环（T3），放大了初始冲击效应。

由此可见，这种“认知——响应”断层揭示了区域性教育治理的关键命题：需建立“风险预警——资源调配——主体协同”的动态治理网络。所以，本研究建议“政企基金＋跨国师资联盟”机制，正是通过风险对冲工具（如汇率联动学费定价）与多边组织嵌入（如澜湄职教联盟），将碎片化应对转化为系统性防御。尤其针对地缘风险（B13），笔者认为“中泰铁路教材共研”（O3）模式，以第三方合作降低政治敏感性具有较大的实践意义。

3. “V-C-B” 范式的理论突破：从静态 SWOT 到动态机制设计

对“三链割裂”与“认知——响应断层”的分析揭示了昆明国际中文教育的核心瓶颈，但问题诊断本身难以实现战略向实践的转化。因此，本研究提出“V-C-B”发展范式，其价值在于策略组合与理论整合。该范式整合战略管理、文化地理学与品牌生态学：将波特价值链理论 (Porter, 1985) 情境化为“交通价值链”，转化地理优势（S1）；将文化地理学“文化圈”概念操作化为“文化认同圈”，激活文化资源（S2）；借鉴品牌生态位思想 (Hannan & Freeman, 1977)，提出“春城中文 IP”，以聚合价值、应对竞争威胁（T1）。通过扎根理论提炼的微观实证与 SWOT 宏观战略耦合，构建“双反馈回路”：正循环体现外部机遇（O1）改善内部条件并激发需求（O2），负循环则由内部劣势（W1）与外部威胁（T1）叠加导致效能衰减。具体实践中，“高铁汉语微专业”（V）放大正循环，“中老傣锦申遗”（C）构筑文化壁垒，“春城中文 IP”（B）通过品牌整合增强系统韧性，阻断负循环，从而实现从静态优势与挑战描述向关键干预促进良性发展的动态阐释，为区域教育规划提供可迁移机制设计工具。

总结

本研究通过利益相关者访谈揭示昆明市国际中文教育的复杂生态，发现其发展态势呈现动力机制双核驱动与风险传导链式化并存的显著特征。基于 GT-SWOT 分析框架的融合研究，主要结论可归纳为以下维度：

1. 动力机制的结构化失衡与双核驱动效应

研究证实，政策驱动与文化差异构成昆明国际中文教育发展的核心动能。政策层面，省级财政专项（A7）与教育部试点资金（A23）形成的年均 2.35 亿元资金池，通过 1:5.3 的杠杆效应激活区域性资源整合；文化层面，26 个民族共生的多元环境（A4）贡献了 73% 东南亚学生的择校动机，这一差异化优势成为抗衡成都、南宁等同质化竞争的关键壁垒。然而，地理区位与文化优势尚未充分转化为教育竞争力，突出表现为“交通——文化——数字”三链融合不足，需通过中老铁路汉语微专业、跨境学分银行等创新实践构建协同发展路径。

2. 主体认知差异与风险传导的多维挑战

研究显示，教师、学生与管理者在发展风险认知上存在结构性错位：教师关注 AI 带来的教学替代焦虑，学生担忧签证政策波动导致学历衔接中断，管理者则警惕地缘政治风险外溢

（如缅甸冲突对边境教学的影响）。这种差异导致治理响应滞后，并放大“地缘冲突→签证收紧→生源萎缩”的风险传导链。数据表明，地缘风险（B13）通过两条路径形成跨尺度威胁网络：“汇率波动→支付能力→生源流失”（A38→A21）和“政局动荡→签证收紧→短期课程萎缩”（A37→A34）。为应对，该研究提出构建“三维张力”治理机制，将弹性学籍制度（A47）与签证动态响应结合，并通过政企协同基金及跨国师资联盟实现风险对冲。

3. 理论模型创新与实践范式突破

本研究基于三级编码与双反馈回路构建理论模型，为区域性国际中文教育提供新框架。扎根理论实现了“数据→范畴→理论”的转化，凸显“V-C-B”范式的实践价值。双反馈回路揭示了正循环（内部优势与外部机遇耦合，如高铁网络与 RCEP 催生课程）与负循环（内部劣势与外部威胁叠加，如设施不足与线上竞争分流）的分化逻辑。该模型的贡献在于将 SWOT 的静态分析转化为动态机制设计，实现“风险识别→制度响应”的闭环治理。

建议

最后，尽管本研究初步构建了 GT-SWOT 分析的融合框架，但在动态追踪机制（如生源流动的周期性波动）与多模态证据整合（如政策文本与教学行为的映射关系）层面仍存深化空间。后续研究可引入复杂系统建模与社会网络分析，进一步揭示教育生态中各利益主体的博弈逻辑，为区域性国际中文教育的可持续发展提供更具纵深的学术参照。

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云南体育公园游憩机会谱构建与应用研究

THE CONSTRUCTION AND APPLICATION OF RECREATION OPPORTUNITY SPECTRUM FOR SPORTS PARKS IN YUNNAN PROVINCE

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摘要

研究目的：在全民休闲时代，云南省体育公园规划面临与地域特色及游客体验脱节的问题。为此，本研究基于游憩机会谱（ROS）理论，构建适用于云南地域特色的体育公园游憩环境评价体系，旨在推动其从“单一运动场地”向“复合游憩空间”的精准升级。

研究设计/方法/途径：本研究采用文献分析、专家咨询与实地调研相结合的方法，构建包含 3 个准则层与 18 项指标的评价体系。通过实地数据收集，运用聚类分析将其科学划分为三类，并系统归纳各类特征与问题。

研究结果：构建了云南体育公园游憩环境评价体系，将其划分为滨河型、郊野型与城市型三类，并形成对应的“游憩机会清单”与“现存问题清单”。结果显示，三类公园在生态、活动、设施及文化等方面各具特点与短板，为针对性优化提供了实证依据。

创新性与价值：理论上，拓展了 ROS 理论在西南民族地区的应用，构建了首个云南特色体育公园评价体系。实践上，提出的游憩机会谱与“双清单”工具为管理提供了可操作的诊断与差异化对策，助力公园特色化升级与公众游憩质量提升。

关键词：体育公园 游憩机会谱 游憩环境 游憩体验

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Abstract

Purpose: In the age of nationwide leisure, planning sports parks in Yunnan Province faces challenges in aligning with local characteristics and meeting visitor experience expectations. To address this issue, the study used the Recreation Opportunity Spectrum (ROS) theory to develop an evaluation system customized to Yunnan's regional context for assessing the recreational environment of sports parks. The goal is to support their targeted transformation from "single-purpose sports venues" into "multifunctional recreational spaces".

Study Design/Methodology/Approach: This research employed an integrated approach that combined literature analysis, expert consultation, and field research to construct an evaluation framework comprising three criterion layers and 18 specific indicators. Using systematic on-site data collection, cluster analysis was used to categorize the cases into three distinct groups, followed by a comprehensive summary of the characteristics and challenges associated with each type.

Findings: A system for evaluating the recreational environment of sports parks in Yunnan was developed, classifying them into three types: riverside, suburban, and urban. Corresponding "recreation opportunity profiles" and "existing problem inventories" were developed. The results revealed that each park type has unique characteristics and shortcomings in ecological features, activity offerings, facility provision, and cultural integration, offering an empirical foundation for targeted optimization strategies.

Originality/Value: Theoretically, this study extended the application of the Recreation Opportunity Spectrum (ROS) framework in the multi-ethnic regions of Southwest China and established the first sports park evaluation system tailored to Yunnan's specific context. In practice, the proposed ROS-based tool and dual-list approach provide actionable diagnostic methods and differentiated management strategies, thereby enhancing park distinctiveness and improving the quality of public recreational experiences.

Keywords: Sports Parks, Recreation Opportunity Spectrum, Recreational Environment, Recreational Experience

引言

《"健康中国 2030"规划纲要》确立了到2030年建成覆盖城乡的全民健身公共服务体系的目标，明确构建县、乡、村三级公共体育设施网络，推进健身步道、自行车道、全民健身中心、体育公园及社区多功能运动场等设施建设，打造城市社区"15 分钟健身圈"，推动公共体育设施免费或低收费开放，促进经常参与体育锻炼人数达到 5.3 亿。同时，鼓励符合条件的公共及企事业单位体育设施向社会开放。近年来，全民健身服务体系的建设与发展成为政府之倡导，社会之趋势，群众之需求。建设全民健身服务体系对于全民健康提升、健康中国战略目标实现具有相当的价值贡献。然而，生活水平的改善衍射到具体行为中，使得单一的运动场所已不能完全满足于人们的体育参与感知需求。为此，国家层面陆续出台多项指导文件，持续推进体育

公园等综合性场地设施的建设。National Development and Reform Commission et al. (2021) 联合印发《关于推进体育公园建设的指导意见》，明确提出到 2025 年，全国新建或改扩建约 1000 个体育公园，并对包括云南省在内的多个地区明确了新增建设任务。体育公园作为融合生态、运动与休闲功能的重要载体，正逐步成为完善全民健身设施网络、提升公众参与体验的关键举措。体育公园的建设不仅解决了群众“健身去哪儿”的问题，也为云南打造“健康生活目的地牌”提供了新机遇。合理的规划设计与管理不仅能满足游客多元化的娱乐需求，还对了解体育公园使用者的休闲偏好、优化游憩资源配置，以及评估资源现状具有重要意义。若管理者对游憩资源评估不当，缺乏对使用者环境行为的深入研究，可能导致游憩需求与资源供给不匹配，影响游客体验。

为此，体育公园需要建立有效的游憩需求管理框架，以促进可持续发展、提升游客体验，并协调资源与需求之间的关系。如何建设体育公园，如何对体育公园游憩环境进行合理的管理，创造和配置合适的游憩机会，成为亟待解决的重要课题。当前，大多数相关研究集中于单一方面，缺乏对体育公园游憩管理等多维度的综合探讨，而 ROS 理论恰好能将不同的游憩环境与游客的体验结合，为各类游客提供多样化的休闲体验。在体育公园系统的研究中引入了游憩机会谱（ROS）理论，不仅丰富了体育公园合理规划和管理的理论依据，同时为体育公园的规划与管理提供了科学依据。

研究目的

如今，户外锻炼、放松身心、亲近自然、拓展视野、提升自我满足感，已成为大众重要的休闲方式，体育公园也逐渐成为户外健身和游乐的热门选择。为满足群众日益增长的健身需求并提升生活质量，中国政府提出推进体育公园建设的指导意见，要求各地积极落实创建工作，体育公园的建设推动全民健身休闲产业发展。因此，本文希望借助游憩机会谱理论，分析体育公园的特点，率先探讨其在体育公园中的应用，为管理者提供发展指导，并为游客提供更精细、高品质的服务建议，具体如下：

1. 识别与确立游憩环境因子，改进游憩环境适宜性指标的筛选体系与分类方法，构建了体育公园游憩环境适宜性评价指标体系。

2. 采用聚类分析法划分出云南体育公园的游憩环境类别。

3. 基于体育公园环境因子和游憩环境类别，构建起云南体育公园游憩机会谱。

4. 基于游憩机会谱，对云南体育公园的游憩资源进行全面梳理，为管理者提供发展指导，并为游客提供更精细、高品质的服务建议。

文献综述

有关游憩机会谱（ROS）的研究现状

1. 游憩机会谱（ROS）理论的发展历程

游憩机会谱（Recreation Opportunity Spectrum, ROS）理论起源于 20 世纪中后期的美国，其发展演进与户外游憩资源管理的实践需求密切相关。该理论最初由美国林务局（U.S. Forest Service）主导开发，旨在为国有林地等区域的游憩资源规划与管理提供系统框架 (Warzecha et al., 2001)。

其理念雏形可追溯至 1960 年代。1962 年，美国户外游憩资源调查委员会便倡导建立游憩用地分级制度，以优化资源配置。随后，Wagar (1963) 首次从管理实践角度提出了类似 ROS 的构想，建议通过划分不同类型的营地为游客提供多样化的体验选择。尽管理念先行，但 ROS 的全面推行始于 20 世纪 70 年代末。National Forest Management Act of 1976 (2014) 的推动下，建立统一的 ROS 框架成为明确要求，以期帮助土地管理者提供丰富的游憩机会。

在理论成型阶段，学者们逐步确立了其核心构成要素与分类体系。Brown et al. (1978) 的研究团队率先提出了五个核心评价要素，包括到达难易度、场地规模、通行条件、游客密度及管理强度，并据此将游憩环境划分为从“原始无人区”到“城市区”的六大类型，奠定了 ROS 分类的基础。此后，Clark 和 Stankey (1979) 进一步构建了一个更为完善的理论框架，他们从自然环境、生态特征、社会交互和管理活动四个维度出发，提出了“六类四标”法，使游客能够依据个人偏好选择相应的游憩体验类型，增强了理论的适用性。

至 1980 年代，ROS 理论最终从概念走向了标准化操作。U.S. Department of Agriculture, Forest Service (1982) 正式发布了《ROS 使用者指南》，将适合游憩的区域系统性地划分为乡村、城市、原始、半原始等六种类型，并在全国范围内的林地开展资源调查与分类工作。此举标志着 ROS 从一个学术构想发展成为一套完整的、可应用于实践的资源管理体系。

2. 游憩机会谱（ROS）理论的框架与构成要素

游憩机会谱的构建遵循一个核心逻辑，即个体在偏好的环境（包括自然条件、社会氛围及管理方式）中参与感兴趣的游憩活动，以获得理想的体验。游憩机会谱由活动、环境和体验三个关键要素组成，并划分出六种从城市到原始区域的游憩机会类型：原始、半原始无机动车、半原始有机动车、通路自然区、乡村及城市。每个类别依据环境特征、管理强度、游客互动程度、人为影响程度、区域规模及偏远程度等因素进行界定（见表 1）。

Table 1 Descriptions of the Environmental Settings for the Six-Class Sequence of the Recreation Opportunity Spectrum (U.S. Department of Agriculture, Forest Service, 1982)

Land Type	Description
Primitive	A substantial natural setting that is largely unmodified. Interactions between users are low, with minimal evidence of the presence of other users. Management restrictions and controls are minimally evident. The use of motorized vehicles is prohibited within the area.
Semi-primitive Non-motorized	The area is characterized by a natural setting, moderate to large in scale. User interactions are low, although there is frequent evidence of the presence of other users. Management controls over the site are minimal, but certain restrictions are in place. Motorized vehicle use is prohibited within the area.
Semi-primitive Motorized	The area is a moderate to large, predominantly natural setting. The level of user concentration is relatively low, but encounters with other users are frequent. Management controls over the site are minimal but certain restrictions are present. Motorized vehicle use is permitted within the area.
Roaded Natural	The area is a predominantly natural setting. Evidence of human presence is moderate but largely compatible with the natural environment. User interactions range from low to moderate, and encounters with other users are common. Practices for resource modification and utilization are evident but generally compatible with the natural setting. Standard constructed roads and facilities are provided for motorized vehicle use.
Rural	The area is characterized by a modified natural environment, where utilization and modification practices are implemented to enhance specific recreational activities and maintain vegetation and soil. Evidence of human presence is prominent, and interactions among users are increasing. A considerable number of facilities are provided for visitor use, designed to support specific recreational activities. Less frequented areas exhibit a moderate visitor density. Facilities and parking areas are provided to accommodate intensive motorized vehicle use.
Urban	The setting is predominantly urban, though some natural elements may be present in the background. Modification and utilization practices are applied to enhance specific recreational experiences. Vegetation primarily consists of non-native species and is regularly maintained or trimmed. Human influence is highly evident at the recreation site, with facilities and parking provided for intensive motor vehicle use. Public transit systems provide access to the recreational location.

Remarks: Adapted from ROS Users Guide (U.S. Department of Agriculture, Forest Service, 1982).

3. 游憩机会谱（ROS）理论的进一步完善

游憩机会谱（ROS）理论最初由 Brown et al. (1978)、Clark 和 Stankey (1979) 提出，采用了 5 指标法和 6 指标法等分类方法。随后，美国农业部林务局提出了 7 指标法，并在实践中对其进行了修订。90 年代起，学者们主张根据不同环境条件调整 ROS 的应用，以适应不同游憩空间类型。More et al. (2003) 提出应将 ROS 进行地域化修订。ROS 理论的应用范围逐渐拓展，从大规模国家公园到小型自然区域及人工城市区域，其指标和标准也不断细化，为了更好地适应不同类型的休闲空间。

ROS 理论经过多年发展已经形成一套成熟的分析框架。研究发现，游客的满意程度实际上和选择的游玩项目、所处的自然条件、周围人的互动以及管理方式密切相关。比如有调查显示，当露营地人数达到某个临界值时，露营者的体验感受会出现明显变化 (Manning, 2011)。这些研究成果为 ROS 分类管理方法提供了科学依据。

基于 ROS 理论，经过持续发展，衍生出多个专业应用版本。上世纪 90 年代，有研究者将原始理论延伸至旅游领域，创建了升级版评估框架——ECOS 和 TOS。TOS 增加了游客互动、设施配套、交通便利性等 6 个新评估项，特别适合自然景区规划使用 (Butler & Waldbrook, 1991)。ECOS 在 ROS 和 TOS 的基础上建立在生态旅游领域，学者们又提出强调自然保护的新标准，通过控制游客影响程度和设置干扰指标，形成专门针对生态敏感区的管理方案 (Boyd & Butler, 1996)。这些升级版理论都继承并拓展了原始框架的核心思想，只是根据具体应用场景调整了评估重点 (Fennell & Dowling, 2003)。

体育公园的研究现状

Xie et al. (2003) 在《乡村景观规划设计的相关问题探讨》中指出，日本将体育公园定义为“运动公园”，并将其归类为城市基础公园类型之一。要求面积达到 15 m^2，并需均衡分布。例如，日本山口市的体育公园植被茂密，绿草如茵，园内种植了各种花卉，同时还设有大型运动场。这座公园曾承办全国运动会，兼具休闲和健身功能，深受市民的喜爱。

Xu (2013) 在《芬兰体育公园印象》中的研究显示，芬兰皮尔科拉体育公园由室内综合运动中心与面积相当于标准足球场的硬化场地共同构成。该运动中心包含游泳、冰球及球类等多元化运动场馆，其独特之处在于将自然生态景观与现代体育设施有机融合。研究强调，这座始建于 1965 年的市政项目由赫尔辛基市政府直接投资运营，其建设初衷源于芬兰社会深厚的全民运动传统。数据显示，尽管赫尔辛基常住人口仅 50 万，该公园年接待健身人群却突破百万人次。

Zhao (2010) 在《关于美国体育公园的研究》中构建了系统的分类学研究框架，通过对全美 68 个样本公园的实证调查，将体育公园划分为综合型、专项运动型（含球类/赛车/射击等）、季节限定型（冰雪/滑行）以及群体适配型（家庭/青年/社区）共 9 大类别，研究表明美国体育公园通过“空间——服务——文化”三重维度的协同创新，成功塑造出全民共享的运动生态圈。这种以“运动民主化”为内核的发展模式，不仅实现了 90% 市民步行 15 分钟可达体育设施的城市规划目标，更催生出体育旅游、运动康复等衍生产业，其“体育赋能城市”的实践经验对我国新型城镇化建设具有方法论启示。

在现代欧洲，体育公园随处可见，为不同年龄和需求的居民提供了在优美环境中游憩的空间。通过对欧洲体育公园的研究发现，夏季黄昏和节假日是公园人流量的高峰期。体育公园的规划设计通常以大片林中空地和草地为基础，再结合综合设施和安静的休息区域，满足人们的多样化需求。

Zhang (2008) 在《中国体育公园规划初探》中对中国体育公园的发展现状进行了详细总结：我国体育公园建设呈现显著的空间供给失衡特征，其发展进程凸显出三重结构性矛盾：首先在数量维度，当前人均体育公园存量规模（不足 0.6 个/10 万人）显著低于《全民健身设施建设指南》国际标准；其次在建设模式上，赛事驱动型占比超 68%，导致设施功能配置与日常健身需求错位；再者标准化建设滞后引发同质化现象。

Jiang (2021) 在《生态体育视角下城市体育公园发展路径研究》从生态体育视角提出城市体育公园需协调自然、社会与经济生态矛盾，建议完善配套设施、加强政策供给及智慧化建设，将生态体育理念需融入规划，推动集约化与可持续化发展。

Hu et al. (2022) 在《城市体育公园高质量发展：基本内涵、现实动因与推进路径》提出高质量发展的现实动因包括“全民健身需求倒逼提质增效”及“绿色低碳理念重塑发展样态”，推进路径涵盖用地模式创新、服务场景重构及多主体共享等，得出需通过政策引导与社会资本结合，打造健康环保的公共空间。

游憩机会谱（ROS）在中国的研究与应用

自本世纪初，中国学者开始引入 ROS 理论，国内研究呈现三大特征：1）理论移植阶段（2001-2005 年）以概念引介为主，北京大学团队完成首轮理论译介；2）方法改良时期（2006-2010 年）聚焦自然景观适配，林业院校团队在森林、湖泊等生境建立评估模型；3）创新拓展期（2011 年至今）形成跨学科研究态势，在地质公园、生态敏感区等场域探索出具有中国特色的 CECOS 框架 (Huang et al., 2006)。ROS 研究网络已形成三大核心集群：1）以景观生态学为基础的自然保护区研究；2）融合旅游地理学的目的地规划研究；3）侧重管理科学的资源评估研究。这些研究在方法论层面呈现出从定性描述向空间计量分析的范式转型。尽管 ROS 理念和框架在中国取得一定进展，但其理论研究和本土化应用仍需进一步深入。

研究方法

文献资料法

本研究通过“谷歌学术”、“中国知网 CNKI”、“维普期刊全文数据库”、“万方数据库”以及图书馆等电子检索手段检索“体育公园”“游憩机会谱”“游憩体验”等关键词搜索相关文献，归纳总结分析有关游憩机会谱理论的相关资料，为撰写论文、梳理学习技术路线提供理论依据。

实地调研法

通过实地考察云南各体育公园，整理并分析其游憩环境资源的分布情况，梳理游憩地的资源现状与游客活动特征，以揭示其整体使用规律。

问卷调查法

本研究主要面向体育公园游憩者进行调查，以获取相关数据和分析依据。首先将初选的 30 个环境因子指标编制了预调查问卷《体育公园游憩环境适宜性评价指标调查表》，采用随机抽样，共收集 150 份样本数据，有效问卷 141 份，有效率达 94%。然后根据预调查问卷筛选出的 18 项指标设计了《体育公园游憩环境调查问卷》，调查采取随机抽样方式，在公园的主要活动区域入口处，于工作日和周末进行发放，覆盖不同年龄、性别和活动偏好的游客。共发放 1200 份，回收 1180 份，保留 1170 份有效问卷，样本有效率达 97.5%。

数据统计分析方法

本研究运用了变异系数法、因子分析法、聚类分析法等多种统计分析方法，对收集的数据进行深入解析。

研究结果

ROS 理论在体育公园范围适宜性验证

当前，游憩机会谱（ROS）理论在体育公园场景的应用研究尚未见报道。由于体育公园具有功能复合性（如运动、社交、生态等多重定位）、用户需求异质性（不同年龄、文化背景群体）以及环境设计技术门槛高等特性，亟需通过系统性验证确保 ROS 框架在该场景的科学适配。本研究通过结构化问卷，重点分析游憩者对体育公园环境要素的优先级认知。问卷采用李克特五级量表（“非常重要”至“完全不重要”），量化用户实际体验数据，进而验证 ROS 核心假设——“游憩环境特征直接影响体验质量”的适用性。

Table 2 Statistics on the Importance of the Recreational Environment in Sports Parks (n = 1170)

Recreational Environment Importance	Frequency	%
Very Important	508	43.4
Important	488	41.7
Neutral	113	9.7
Slightly Important	61	5.2
Not Important	0	0
Total	**1170**	**100**

通过表 2 可知，43.4% 受访者认为体育公园环境质量“重要”，41.7% 更强调其“非常重要”，反映超 85% 用户明确感知环境对体验的显著性影响。值得注意的是，仅 9.7% 持“一般”态度，5.2% 认为“较不重要”，且无受访者选择“完全不重要”。数据表明，体育公园

用户普遍认同环境要素的核心价值。该结论为游憩机会谱（ROS）理论的系统化应用提供了实证支撑，其“环境——体验”关联机制可指导体育公园规划设计与服务优化，助力构建需求导向的高质量游憩空间。

云南体育公园游憩环境适宜性评价指标体系的构建

变异系数法筛选指标

在确保指标体系具备科学性、独立性和完备性的基础上，并充分吸收相关理论与实践成果，初步选取了地形形态多样性、水体质量、植被情况、可达性、活动项目丰富度、运动设施、导示系统等 30 个评价指标，并据此建立了预选评价体系，采用变异系数法筛选指标。本研究将初选的 30 个指标编制了预调查问卷《体育公园游憩环境适宜性评价指标调查表》，在工作日及休息日时段对体育公园使用者进行随机抽样，共收集 150 份样本数据，有效问卷 141 份，有效率达 94%。经过变异系数法筛选得出（如表 3），声环境质量、地形形态多样性、景观美景度、景点数量、独处机会、与其他游憩者相遇机会、偏远程度、其他游客干扰、娱乐设施、停车管理、商品购物、员工服务等指标的变异系数大于等于 0.25，因此予以剔除。最终确定 18 项云南体育公园游憩环境适宜性评价指标层的评价因子，分别为水体质量、空气质量、植被情况、生物多样性、拥挤程度、可达性、活动项目丰富度、地方特色、休息设施、运动设施、环卫设施、照明设施、导示系统、警示系统、科普系统、治安维护、清洁维护、植物养护。

Table 3 Coefficient of Variation

Evaluation Indicator	Mean	Standard Deviation	Coefficient of Variation
Water Quality	4.00	0.66	0.16
Air Quality	3.80	0.81	0.21
Acoustic Environment Quality	3.90	1.06	0.27
Topographic Diversity	3.63	1.19	0.33
Vegetation Status	4.04	0.94	0.23
Biodiversity	4.04	0.92	0.23
Landscape Scenic Beauty	4.04	1.08	0.27
Number of Attractions	3.63	0.97	0.27
Opportunity for Solitude	3.78	1.16	0.31
Encounter with Other Visitors	3.61	1.03	0.29
Perceived Crowding	3.78	0.87	0.23
Degree of Remoteness	3.39	0.97	0.29
Accessibility	3.69	0.89	0.24
Diversity of Recreational Activities	3.80	0.86	0.23

Table 3 Coefficient of Variation (Cont.)

Evaluation Indicator	Mean	Standard Deviation	Coefficient of Variation
Distinctive Local Character	3.82	0.86	0.22
Interference from Other Visitors	3.33	1.15	0.34
Seating/Resting Facilities	3.75	0.94	0.25
Recreation Facilities	3.92	0.98	0.25
Sports Facilities	3.90	0.90	0.23
Sanitation Facilities	3.90	0.91	0.23
Lighting Facilities	3.84	0.91	0.24
Signage and Wayfinding System	4.18	0.93	0.22
Safety and Warning System	3.92	0.96	0.24
Interpretation and Education System	4.08	0.93	0.23
Security and Patrol	4.22	0.90	0.21
Cleaning and Maintenance	4.02	0.95	0.24
Landscape Maintenance	4.06	0.95	0.23
Parking Management	3.80	1.15	0.30
Retail and Shopping	3.20	0.91	0.28
Staff Service Quality	3.27	0.86	0.26

因子分析法确定环境因子

根据预调查问卷筛选出的 18 项指标设计了《体育公园游憩环境调查问卷》。采取随机抽样方式，在公园的主要活动区域入口处进行发放，覆盖不同年龄、性别和活动偏好的游客。共发放 1200 份，回收 1180 份，保留 1170 份有效问卷，样本有效率达 97.5%。将收集到的问卷数据利用 SPSS 27.0 进行信度检验，Cronbach α 系数为 0.905，这表明问卷具有较高的内部一致性。对筛选的 18 项游憩游憩环境变量进行 KMO 统计量分析和 Bartlett 球形检验，KMO = 0.811，而 Bartlett 球形检验的结果为 27012.198 (df = 153, $p < 0.001$)，达到了显著性水平。这表明存在共同因素，适合进行因子分析。

本文运用了主成分法来进行因子分析，并以特征根大于 1 作为筛选公因子的依据。为便于解读这些因子，进一步采用最大方差法对其进行正交旋转。表 4 显示，最终提取了 3 个公因子，其累计方差贡献率达到 71.878%，远高于 50% 的标准，完全符合社会科学调研的要求。同时，这表明所保留的题项通过了结构效度检验，具有良好的构念效度。

Table 4 Rotated Component Matrix

Evaluation Indicator	Component		
	F1	F2	F3
Sanitation Facilities	0.900		
Cleaning and Maintenance	0.897		
Lighting Facilities	0.897		
Security and Patrol	0.894		
Sports Facilities	0.893		
Landscape Maintenance	0.892		
Interpretation and Education System	0.821		
Seating/Resting Facilities	0.819		
Signage and Wayfinding System	0.755		
Safety and Warning System	0.643		
Diversity of Recreational Activities		0.896	
Accessibility		0.870	
Perceived Crowding		0.852	
Distinctive Local Character		0.780	
Vegetation Status			0.834
Water Quality			0.794
Biodiversity			0.768
Air Quality			0.734

基于主成分分析法，我们依据各因子中环境变量的组合特征提取了三个公因子，分别命名为 F1 管理环境、F2 社会环境和 F3 自然环境，从而构建了体育公园游憩环境适宜性评价体系的准则层。

云南体育公园评价指标体系的构建

通过科学的筛选和归纳，明确了各指标的内涵及其相互联系，确立了指标层和准则层，基于因子分析建立了云南体育公园游憩环境适宜性评价指标体系（见图 1）。

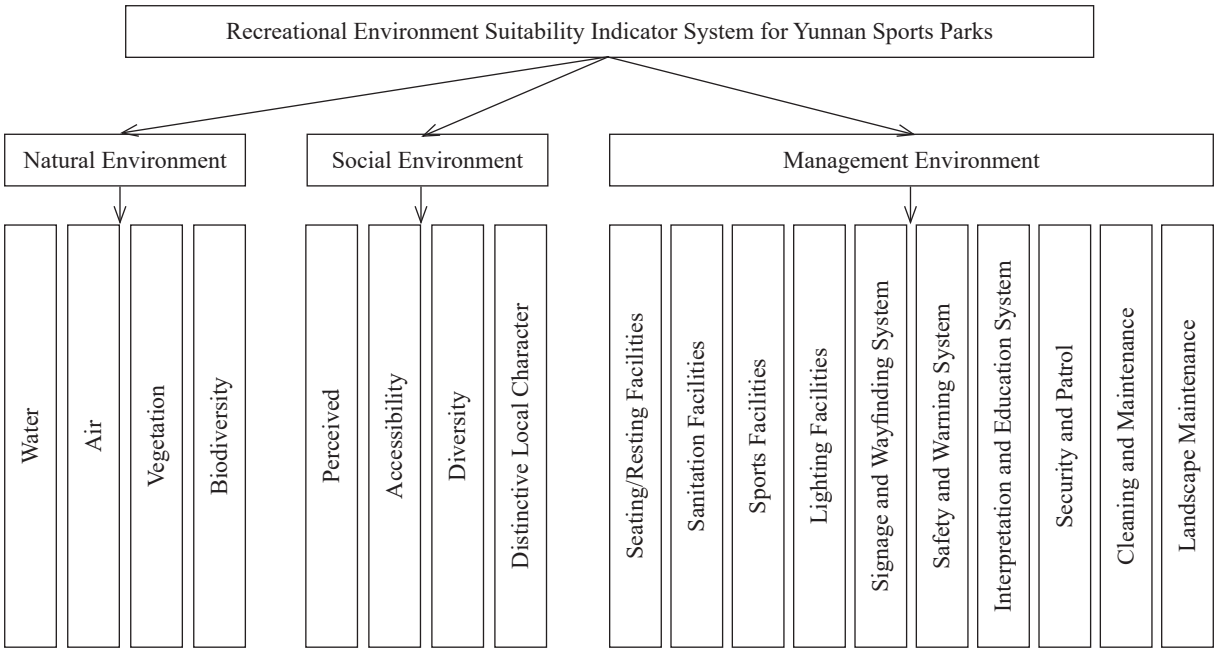


Figure 1 Recreational Environment Suitability Indicator System for Yunnan Sports Parks

云南体育公园游憩环境类型划分

云南体育公园种类繁多，其定位和功能侧重各不相同，导致游憩环境的特征也呈现出显著差异。如果采用统一的权重标准进行评价，将难以确保评价的科学性和客观性。因此，本研究利用各体育公园游憩环境适宜性评分数据，通过聚类分析方法，实现科学合理的类别划分。

Table 5 Average Indicator Scores by Sports Park

List	Haigeng Cultural and Sports Park	Wujiatang Sports Park	Zhongji Lake Sports Park	Shansongyuan Sports Park (Dianzhong New Area)	Qujing Cultural and Sports Park	Wujiaba Sports Park
Water Quality	4.09	4.10	3.98	3.92	3.92	4.02
Air Quality	3.20	3.43	3.30	3.45	3.44	3.40
Vegetation Status	3.87	3.97	3.91	3.83	3.93	3.90
Biodiversity	3.66	3.78	3.63	3.60	3.60	3.76
Perceived Crowding	2.35	2.45	2.61	2.38	2.52	2.57
Accessibility	2.19	2.20	2.33	2.19	2.21	2.27
Diversity of Recreational Activities	2.35	2.39	2.54	2.38	2.41	2.57

Table 5 Average Indicator Scores by Sports Park (Cont.)

List	Haigeng Cultural and Sports Park	Wujiatang Sports Park	Zhongji Lake Sports Park	Shansongyuan Sports Park (Dianzhong New Area)	Qujing Cultural and Sports Park	Wujiaba Sports Park
Distinctive Local Character	2.61	2.78	2.66	2.67	2.65	2.75
Seating Facilities	2.63	2.63	2.72	2.33	2.54	2.42
Sports Facilities	2.77	2.62	2.79	2.37	2.56	2.51
Sanitation Facilities	2.62	2.61	2.64	2.20	2.48	2.40
Lighting Facilities	2.65	2.52	2.68	2.23	2.49	2.40
Signage and Wayfinding System	2.53	2.47	2.54	2.17	2.27	2.36
Safety and Warning System	3.04	2.94	2.88	2.64	2.83	2.80
Interpretation and Education System	2.68	2.63	2.72	2.33	2.54	2.44
Security and Patrol	2.76	2.62	2.79	2.37	2.56	2.53
Cleaning and Maintenance	2.62	2.61	2.64	2.20	2.48	2.42
Landscape Maintenance	2.71	2.52	2.68	2.23	2.49	2.42

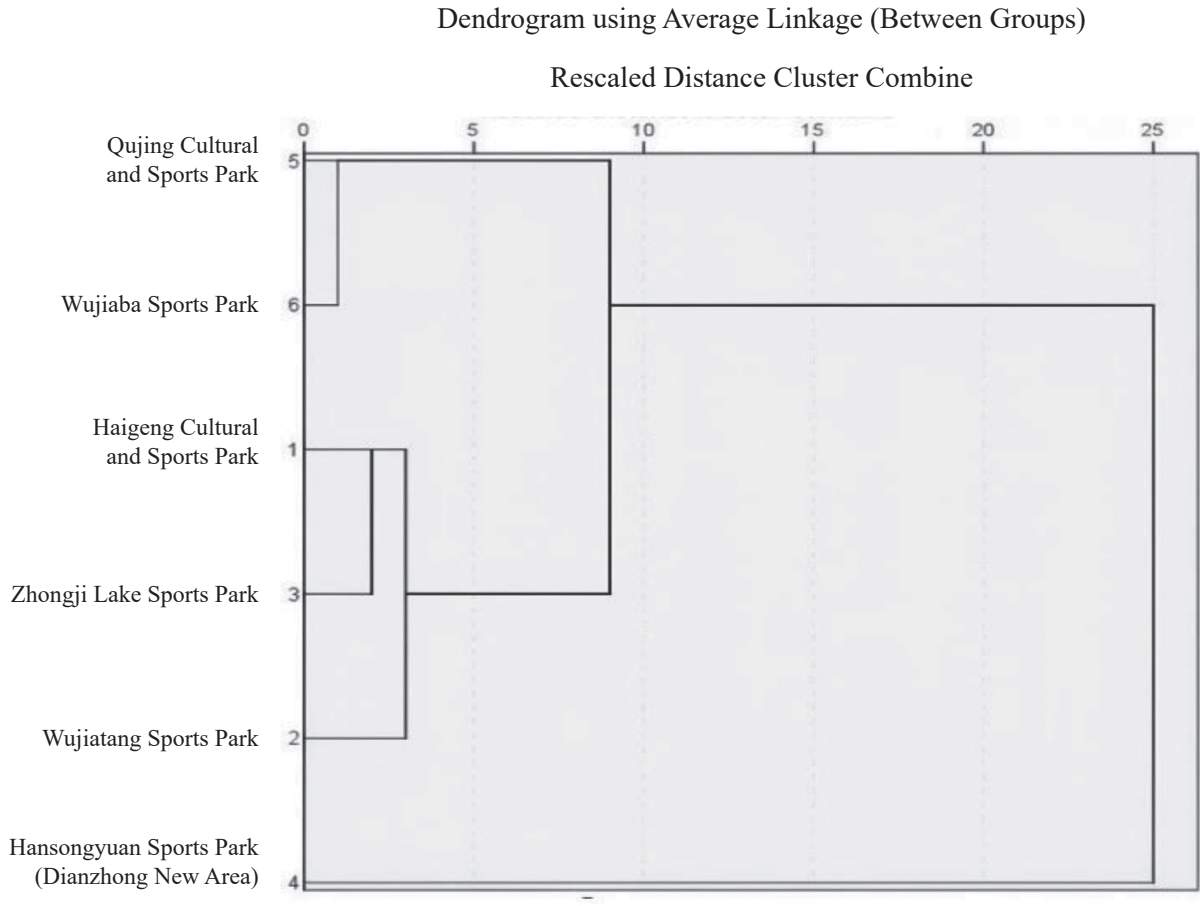


Figure 2 Sports Park Cluster Dendrogram

根据聚类图谱（图 2）显示，当距离系数为 2.5 时，这 6 个体育公园可分为 3 个主要类别。综合考虑各公园的特点与功能，分类结果具体为：第一类为滨河型体育公园，包括海埂文化体育公园、五甲塘体育公园和中济海体育公园；第二类为郊野型体育公园，即滇中新区的杉松园体育公园；第三类为城市型体育公园，涵盖曲靖市文化体育公园和巫家坝体育公园。

云南体育公园游憩机会谱构建

根据美国林业局 ROS 使用者指南，再结合云南体育公园实际情况和优化结果，再结合云南体育公园游憩环境适宜性评价指标体系和游憩活动调查，对三种游憩环境类型的云南体育公园进行以下总结，最终形成了基于游憩环境类型、游憩人群及游憩活动、游憩资源的体育公园游憩机会谱，如下表 6 所示：

Table 6 Recreation Opportunity Spectrum (ROS) for Sports Parks in Yunnan Province

Environmental Setting Type	Park	User Profile & Recreational Activities	Recreational Resources
Riverside	Haigeng Cultural and Sports Park	Children: roller skating, rock climbing and other parent-child activities, flying kites, visiting exhibitions, trampoline jumping. Middle-aged and young people: running, walking, cycling, playing in the water, rowing, taking photos, picnicking, camping, playing musical instruments, watching the water and seagulls. The elderly: walking, sitting and resting, square dancing, playing chess and cards, Qigong and boxing, practicing singing and singing.	Natural Landscape Resources: Dianchi Lake scenery, ecological vegetation, west mountain sleeping beauty, and gull-watching. Cultural Landscape Resources: cloud-viewing dock, sea-viewing corridor, and sculpture landscapes. Sports Facilities: land-based venues (rock climbing wall, speed roller skating rink, walking trails, cycling paths), water sports facilities, camping and sightseeing areas, waterside recreation zones, and children's play areas (temporary). Supporting Services: parking lots, dining options (restaurants, snack stalls).
	Wujiatang Sports Park	Children: wooden slides, seesaws, rocking horses, kite flying. Middle-aged and young adults: running, cycling, basketball, football, tennis, table tennis, using multi-functional fitness equipment, camping, picnicking, photography. Seniors: strolling, flower viewing, water appreciation, square dancing, sitting and resting, smart self-service fitness testing, using multi-functional fitness equipment.	Natural Resources: Dianchi Lake's scenic beauty, lush vegetation, biodiversity, artificial lakes, and ponds. Cultural Landscapes: smart facility landscapes and leisure facilities. Sports Facilities: multi-purpose courts, tennis courts, futsal fields, ping-pong tables, smart basketball courts, intelligent walking paths, and comprehensive fitness zones. Smart Sports Facilities: AI recognition systems, self-service fitness testing, sports data feedback and guidance, and smart basketball court functionalities. Children's Play: interactive play equipment and science-themed walls. Supporting Services: parking lots, rest areas, sanitation facilities, professional lighting, fencing, and smart access control systems.

Table 6 Recreation Opportunity Spectrum (ROS) for Sports Parks in Yunnan Province (Cont.)

Environmental Setting Type	Park	User Profile & Recreational Activities	Recreational Resources
	Zhongji Lake Sports Park	Children: play areas including sandpits, slides, climbing frames, merry-go-rounds, children's sightseeing non-rail mini-trains, happy duck roller coaster, pedal boats, and cartoon-themed electric boats. Youth: ball games like basketball and soccer, cycling, jogging, water activities such as paddling, and picnics or camping. Seniors: relaxation activities like sitting, flower viewing, water appreciation, walking, chess or card games, Qigong and martial arts, vocal exercises, and square dancing.	Natural Landscape Resources: lakes and wetlands, biodiversity, vegetation landscapes, and snow mountain views. Cultural Landscape Resources: rock formations and sculptures, traditional architectural-style buildings. Sports Facilities: ball game fields (basketball courts, soccer fields), roller skating and skateboarding areas, cycling paths, and fitness trails. Recreational Facilities: children's play areas, camping sites, and water-based attractions. Special Events: sports competitions, folk cultural activities, and themed festivals. Supporting Services: park city stations equipped with benches, pavilions, rest areas, sanitation facilities, and parking lots.
Semirural	Shansongyuan Sports Park (Dianzhong New Area)	Children: slide, swing, climbing frame, etc. Middle-aged and young adults: basketball courts, soccer fields, tennis courts, etc. ball games and fitness equipment: fitness training, jogging, camping, picnics, photography, sitting to relax, reading to unwind. Seniors: sitting to rest, admiring flowers and water, walking, playing chess or cards, practicing Qigong or martial arts, vocal exercises, square dancing, and using fitness equipment.	Natural Landscape Resources: green spaces and biodiversity. Cultural and Educational Resources: sports culture exhibitions and health awareness campaigns. Fitness Facilities: ball game venues (basketball courts, soccer fields, tennis courts), multi-purpose fitness equipment, running tracks, leisure plazas, and age-friendly recreational zones. Supporting Services: complimentary facilities (rest areas, locker rooms, restrooms), leisure plazas (seated benches, pavilions), and parking lots.
Urban	Qujing Cultural and Sports Park	Children: slide, climbing frame, trampoline, sandpit, swing, and exhibition visits. Young adults: basketball, tennis, badminton, football, running/walking, rock climbing, cycling, multi-functional fitness equipment, water play, and exhibition visits. Seniors: strolling, flower viewing, water appreciation, exhibition visits, square dancing, Qigong/Kung Fu, and meditation.	Natural Landscape Resources: green spaces and water features. Cultural Facilities: museums, libraries, science museums, and art galleries; cultural plazas (central and themed). Sports Facilities: ball courts, athletic fields, climbing walls, hiking trails, and bike lanes; fitness equipment (aerobic, strength, and functional training devices); children's play areas and fitness zones. Water Sports Center: accompanying services include dining, retail, and sanitation facilities.

Table 6 Recreation Opportunity Spectrum (ROS) for Sports Parks in Yunnan Province (Cont.)

Environmental Setting Type	Park	User Profile & Recreational Activities	Recreational Resources
	Wujiaba Sports Park	Children: slides, seesaws, swings, and visiting exhibitions. Middle-aged and young adults: basketball, tennis, badminton, football, and other ball games. The elderly: walking, square dancing, Qigong and martial arts, and using fitness equipment.	Natural Recreation Resources: green landscape, trees and vegetation, water landscape, legal culture micro landscape. Sports And Fitness Resources: ball sports venues (basketball, tennis, badminton, football), children's play areas. Supporting Service Resources: commercial streets, parking facilities.

云南体育公园游憩现存问题及管理建议

基于游憩机会谱（ROS）框架，本研究系统识别了云南体育公园不同环境类型下的用户特征、活动偏好及资源配置。为实现体育公园的精准化管理，本节将对游憩现存问题进行清查，并提出相应的管理建议，以此推动云南体育公园系统的差异化运营与可持续发展。

Table 7 Inventory of Recreational Issues and Management Recommendations for Yunnan Sports Parks

Environmental Setting Type	Deficiencies	Management Measures
Natural Environment	Water body management and maintenance	1. Upgrade the water circulation facilities in the park, rationally plan the water flow path, and improve the water flow. 2. Clean the sediment and debris at the bottom of the water body regularly to keep it clean.
	Plant maintenance and management	1. Plan the park's greenery layout rationally to increase vegetation coverage. 2. Pay attention to plant combinations and arrangements to create layered and colorful landscapes. 3. Install barriers and warning signs to protect vegetation. 4. Place prominent eco-signs in the park to guide visitors to care for plants and avoid littering.
	Biodiversity is being destroyed	1. Ecological restoration of the damaged habitats in the park, such as wetland and forest. 2. Scientific plan of introducing new species, planning and constructing ecological corridors, strengthening the approval and supervision of introducing alien species.

Table 7 Inventory of Recreational Issues and Management Recommendations for Yunnan Sports Parks (Cont.)

Environmental Setting Type	Deficiencies	Management Measures
Social Environment	The tourist season and holidays are overcrowded, and the design of some areas is not reasonable, resulting in crowded activity areas.	The online reservation system for holidays and time-limited admission will be introduced to reduce crowding.
	Inadequate public transport connectivity and parking difficulties for private vehicles	Collaborate with the bus company to optimize bus routes around the park and establish bus stops nearby, enabling visitors to reach the park directly. Plan parking lots strategically, increase parking capacity, and improve traffic flow around the parking areas.
	Lacking the characteristic elements of Yunnan, the park fails to highlight its regional cultural features.	Deeply excavate and display local culture, fully integrate Yunnan ethnic culture and Dianchi culture elements.
	The road planning is not perfect, and there is no convenient barrier-free passage.	Add accessible ramps, lifts and signage to make it easier for older people and people with disabilities to access the park.
Management Environment	Insufficient and uneven distribution of recreation facilities, especially in more active areas	According to the tourist flow and demand in different areas of the park, facilities such as benches and pavilions are added in the popular activity areas and other areas where tourists gather.
	Insufficient sanitation or untimely cleaning	Increase the number of health facilities in a reasonable way, optimize their distribution, and strengthen health management.
	Warning signs are missing, and directional signs are unclear.	Establish a sign update mechanism to promptly update relevant directional and warning signs.
	The number of science facilities in the park is limited and the forms are relatively simple.	Combined with the natural resources and cultural characteristics of the park, the popular science can be carried out in various forms such as park broadcast, electronic display screen and interactive mini program to increase the fun and interaction of popular science.
	Insufficient cleaning staff and untimely cleaning	During peak tourist seasons or before major events, make advance arrangements for cleaning staff deployment. Meanwhile, enhance their training and management to boost work efficiency and service quality. Install sufficient classified trash bins to guide visitors in proper waste sorting, thereby improving waste processing efficiency.
	Insufficient security personnel and low patrol frequency in the park, with potential security risks in some areas	Enhance the deployment of security personnel and install modern surveillance systems. Increase the frequency of security patrols, with a focus on monitoring areas with weaker public safety.

讨论

ROS 理论在体育公园中的适配性拓展

本研究首次将游憩机会谱理论应用于体育公园这一特定场景，突破了传统上以荒野游憩或一般性城市绿地为主导的应用范畴。结果表明，ROS 框架通过“自然环境——社会环境——管理环境”三维度的解构，能够有效解析体育公园在生态基底、运动功能与服务配套等方面的复合性特征。

体育公园分类管理的科学性与实践价值

通过聚类分析划分的滨河型、郊野型、城市型体育公园，与欧美“都市运动空间分级体系”存在显著差异。传统“一刀切”管理模式已难以适应需求分异，而基于ROS的差异化策略（如滨河型推行预约制、郊野型强化生态教育）可实现资源供给精准匹配。

研究局限与未来方向

本研究的样本范围目前主要覆盖云南主要城市群的体育公园，尚未充分纳入山地型、边境口岸型等具有特殊地理与人文背景的案例。后续研究可延伸至滇西生态屏障区等典型区域，进一步探索在生态敏感地区实现运动功能与生态保护相协调的可持续发展模式。作为本研究的核心创新，我们发现传统 ROS 的六分法及其通用指标在评价体育公园时存在明显局限。例如，标准ROS指标体系中未充分考虑体育设施的专业化程度（如球类场地是否符合赛事规格、健身路径是否满足全龄需求），也难以有效评估地方民族文化元素（如民族体育设施、节庆活动嵌入）对游憩体验的深刻影响。为此，本研究在保留 ROS 核心框架的基础上，新增了“设施专业化水平”、“民族文化表征度”与“智慧服务集成度”三类特色指标，初步形成了更贴合中国体育公园实际的本土化评价工具。

总结

本研究通过实证调研与理论分析，验证了游憩机会谱（ROS）理论在体育公园场景中的适用性。超过 85% 的使用者认为游憩环境质量对其体验具有显著影响，说明 ROS 所强调的“环境——体验”关联机制在体育公园中依然成立。研究进一步将云南体育公园划分为滨河型、郊野型与城市型三类，分别对应不同的功能定位与游憩特征，反映出体育公园在复合功能与使用者需求方面的异质性，也为差异化资源配置提供了科学依据。然而，调查也揭示出当前云南体育公园在自然生态维护、社会服务配套与运营管理效率等方面仍存在一系列问题，如水体维护不足、公共交通衔接不畅、文化特色缺失、设施分布不均及管理粗放等。

建议

基于上述研究发现，本文提出以下系统性建议：

在规划层面，应推动分类施策与融合发展。滨河型公园可加强水岸生态修复，引入智慧水上运动项目与民族文化主题景观；郊野型公园宜构建“生态 + 研学”模式，设计自然教育步道与低碳露营设施；城市型公园则应注重“体育+文化”融合，植入本土民族体育元素，优化高密度空间利用。

在运营层面，建议建立“分时预约——动态定价”系统以调控游客流量，并依据“15 分钟服务圈”原则优化休息、卫生与急救设施布局。同时，通过开发体育公园文化 IP、举办民族体育赛事与非遗工坊，增强场所的文化吸引力与社会凝聚力。

在技术与管理机制上，可搭建集成环境监测、游客行为分析与设施运维的“公园大脑”平台，推广光伏健身器材与雨水花园等绿色技术，并建立政府——社区——企业三方共治机制，引入专业运营团队与公众监督，提升管理效能与可持续性。

在政策保障方面，建议制定《云南省体育公园分级分类建设标准》，将体育公园管理纳入地方政府绩效考核体系，并推动高校成立专项研究中心，加强 ROS 理论培训与复合型管理人才培养，为体育公园的长期高质量发展提供制度与人才支撑。

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高校辅导员工作现状及协同优化路径研究
——基于 S 大学 J 学院的实证分析

THE CURRENT SITUATION AND COLLABORATIVE OPTIMIZATION PATH OF COLLEGE COUNSELORS' WORK—AN EMPIRICAL ANALYSIS BASED ON J SCHOOL OF S UNIVERSITY

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摘要

研究目的：分析中国 S 大学 J 学院辅导员九维工作现状与短板，聚焦学业指导、心理支持与科研能力等关键不足，破解改进方向不清问题，为构建院系协同优化策略提供依据。

研究设计/方法/途径：研究采用以问卷调查为主的量化研究并辅以基于量表结果的定性归纳。量化阶段基于《高等学校辅导员职业能力标准（暂行）》构建九维满意度量表，对 J 学院 464 份样本开展描述统计、信效度检验与 Pearson 相关分析；质性阶段结合低得分题项进行定性归纳，解释学业指导、心理支持与科研能力短板成因。

研究结果：满意度呈现“传统优势突出”特征：思想政治教育、党团班级建设与危机应对得分较高，学业指导、心理健康支持与理论实践研究相对滞后。机制分析显示，事务负担偏重、专业支持不足与培训激励薄弱是核心因素。基于此，提出“能力补短 + 协同联动”的优化路径，聚焦学业支持、心理预警与科研赋能。

创新性与价值：研究以 J 学院为单位开展微观实证，构建九模块评价框架，并结合描述统计与 Pearson 相关揭示模块联动机制，为理工科院系辅导员工作精准诊断、资源配置与协同优化提供实证依据。

关键词：辅导员工作 学生满意度 系统性育人

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Abstract

Purpose: This study examined the current status and main gaps in the nine dimensions of counselors' work at College J of University S in China, with a particular focus on academic guidance, psychological support, and research capacity. It aimed to clarify improvement priorities and to provide evidence for developing a college-level, coordinated optimization strategy.

Study Design/Methodology/Approach: A questionnaire-based quantitative approach was used, supplemented by qualitative interpretation derived from scale results. In the quantitative phase, a nine-dimensional satisfaction scale was created based on the Occupational Competency Standards for University Counselors (Trial), and data from 464 student respondents in College J were analyzed using descriptive statistics, reliability and validity tests, and Pearson correlation analysis. During the qualitative phase, low-scoring items were further analyzed to identify the causes of weaknesses in academic guidance, psychological support, and research competence.

Findings: The results revealed a pattern of "strong traditional strengths". Higher scores were observed in ideological and political education, Party/League and class development, and crisis response, while academic guidance, mental health support, and theoretical/practical research fell behind. Mechanism-based interpretation indicates that heavy administrative workloads, inadequate professional support, and weak training and incentive systems are the main contributing factors. The study suggests an improvement pathway featuring "capacity strengthening plus coordinated linkage", prioritizing academic support, psychological early-warning mechanisms, and research empowerment.

Originality/Value: By conducting a micro-level empirical study within a single college, establishing a nine-module evaluation framework, and using descriptive statistics and Pearson correlations, the study reveals linkage mechanisms across work modules. It provides evidence to support accurate diagnosis, resource allocation, and the coordinated optimization of counselors' work in engineering-oriented colleges.

Keywords: Counselor Work, Student Satisfaction, Systematic Education

引言

新时代背景下，中国高等教育正经历着由规模扩张向内涵提升、由精英教育向大众化教育转型的重要阶段。高校作为立德树人的主阵地，承担着培养担当民族复兴大任时代新人的历史使命。在这一过程中，高校辅导员作为一线思想政治教育和学生事务管理的中坚力量，其作用日益凸显。辅导员不仅是学生思想引路人，也是学业指导者、心理疏导者与职业发展的引导者，肩负着学生成长成才全过程的教育与管理责任。然而，随着高校教育环境的复杂化、学生个体差异的扩大化以及社会对高素质综合型人才的需求不断提高，传统辅导员工作模式与现实需求之间的矛盾日益突出。

新时代辅导员工作面临着多方面的挑战和问题。一方面，思想政治教育内容需与时俱进，回应青年学生多样化的价值观诉求；另一方面，学生心理健康问题日益复杂，心理疏导与危机干预成为辅导员不可回避的职责。此外，伴随着就业压力加剧，学生对职业发展指导的需求不断增强，这要求辅导员不仅要有政策宣讲能力，更要具备一定的行业认知与职业辅导技能。在多重角色并行、事务性工作负担沉重的背景下，辅导员个人的专业成长、角色认同与职业倦怠等问题也逐渐引起了学界关注。

研究目的

1. 考察中国 S 大学 J 学院辅导员工作的现状
2. 分析中国 S 大学 J 学院辅导员工作的存在不足和问题
3. 提出优化 S 大学 J 学院辅导员工作的建议

文献综述

对高校辅导员工作的职业定位、专业化发展、激励机制进行了系统的研究的文献有：辅导员职业定位与角色认知方面，Li (2022) 指出，新时代高校辅导员应在政治性、教育性与服务性三重角色之间实现有机融合，提升整体专业素养，以更好地服务于学生的全面发展。辅导员专业化发展路径方面，Zhang (2021) 认为，当前辅导员亟需通过系统培训、岗位实践和职业晋升机制，打通由事务性管理者向专业性育人者转型的路径。辅导员绩效考核与激励机制优化方面，Zhou (2023) 提出，科学合理的绩效评价体系是激发辅导员内在动力、提升工作效能的重要保障，应在考核指标中适度增加对学术研究、职业指导与心理疏导能力的要求。

辅导员工作的整体性和系统性特征也日益受到重视。辅导员工作不是各单项工作的简单叠加，而是涵盖思想政治教育、党团建设、学业指导、心理健康教育与咨询、网络思想引导、职业发展指导、危机应对管理、日常事务管理及理论与实践研究等多维模块的综合工程，各模块之间具有高度的关联性和协同性 (Wang, 2023)。在实际操作中，辅导员往往需要在学业支持中融入心理干预，在职业指导中兼顾思想引领，形成多领域融合、协同育人的整体效应。因此，对辅导员各项工作之间关系的系统性研究，也是提升整体育人效果的重要方向。

辅导员工作研究的文献理论基础有系统论和协同育人模型，为研究和优化高校辅导员工作提供了坚实的理论支撑和实践路径。

系统论由奥地利生物学家路德维希・冯・贝塔朗菲（Ludwig von Bertalanffy）于 20 世纪 40 年代提出，主张将研究对象作为一个系统来看待，强调整体性、关联性、动态性与环境适应性。系统论认为，一个系统由多个相互关联、相互作用的要素组成，整体功能不等于各部分功能之和。它主张研究“要素——结构——功能——环境”的互动关系，广泛应用于教育、管理、

社会学等领域。系统论视角有助于分析辅导员、学院、学生、教师、行政机构之间的互动关系，推动从局部事务转向整体系统的优化设计。

协同理论由美国学者赫尔曼·哈肯（Hermann Haken）在研究复杂系统时发展而成。引入教育领域后，协同育人模型强调多元主体协作、资源整合、目标统一、过程互动、成果共享。协同育人模型认为，学生培养不应只依赖某一单一主体（如辅导员或任课教师），而应是高校、教师、辅导员、家长、社会、企业等多元主体协同参与的过程。强调辅导员要主动与专业教师、思政工作者、家长、企业等建立合作机制，形成“全员、全过程、全方位”的育人共同体。

尽管现有研究在宏观层面对辅导员工作机制、能力要求与发展路径进行了较为深入的探讨，但多数研究样本基于综合性大学或跨院校范围调查，缺乏对特定院系特别是理工科院系辅导员工作现状的细致分析。理工科院系由于专业属性突出、学业要求高、学生个体专业兴趣与学术发展路径相对集中，导致其学生管理与教育工作呈现出明显不同于文科院系的特点(Guo, 2022)。例如，理工科学生在学业指导、科研规划、创新创业辅导等方面对辅导员的专业能力提出了更高要求，同时也更需要心理健康支持和学业压力调节机制。因此，如何针对理工科院系学生特点，科学评估辅导员工作现状，探寻符合专业属性的辅导路径，成为亟需关注的重要课题。

在此背景下，本文以 S 大学 J 学院为研究对象，采用定量问卷调查与描述性统计分析、相关性检验相结合的方法，围绕思想政治教育、党团和班级建设、学业指导、日常事务管理、心理健康教育与咨询、网络思想政治教育、危机事件应对、职业规划与就业指导、理论与实践研究九大核心模块，系统评估辅导员工作现状及学生满意度水平。旨在通过实证数据揭示当前辅导员工作成效及存在问题，探索各模块之间的内在联系，进一步提出针对性优化策略。

通过这一微观层面的院系研究，本文期望为完善高校辅导员工作体系、提升辅导员队伍专业化、学术化水平，提供有价值的实践参考和理论支持。更重要的是，希望能够为高等教育高质量发展、实现全员全过程全方位育人目标，贡献可行的经验和路径探索。

研究方法

1. 定量研究：问卷调查

本研究采用问卷调查作为主要的数据收集方式，依据前期文献综述和研究目的，主要参考了《高等学校辅导员职业能力标准（暂行）》(Ministry of Education of the People’s Republic of China, 2014)，该标准明确了高校辅导员在思想政治教育、党团班级建设、学业指导、心理健康教育与咨询等方面的核心职责与能力要求。为了确保问卷内容的科学性与有效性，研究者在查阅大量相关文献的基础，设计了涵盖思想政治教育、党团和班级建设、学业指导、心理健康教育与咨询、网络思想政治教育等九个方面的辅导员工作满意度量表。量表采用五点式评定，

衡量学生对辅导员各项工作的满意程度。在问卷正式施测前，研究者进行了小范围的预测试。通过预测试，我们对题项表述的清晰度、学生理解的准确性、作答流畅性等方面进行了详细反馈收集，并依据反馈意见对个别表达不够清晰、维度重合度较高的题项进行了修改与调整，并在正式收集问卷后，进行了信度和效度的检验。按年级和专业分层抽样，共回收有效问卷464份，涵盖不同年级、性别及专业背景的学生。本研究严格遵循科研伦理规范，在问卷发放时，研究团队已通过说明页向所有参与者明确告知研究目的、内容、数据用途及其匿名性原则，确保参与者在完全知情、自愿的基础上填写问卷，所有问卷均为匿名填写，研究过程中所收集的数据仅用于学术研究，未经允许不会用于其他用途。

2. 定性研究：基于量表指标的定性归纳分析

在问卷量化分析基础上，结合各维度得分结果和具体题项得分高低，本研究对辅导员各项工作的实际状况进行了定性归纳与分析。通过对低得分项（如学业指导、心理健康教育与咨询、理论与实践研究）进行重点解读，结合现有教育管理背景和辅导员实际工作环境，对问题成因进行了逻辑推演与合理推测，形成了辅导员工作现状的系统性认识。

3. 数据统计分析

通过SPSS 29.0进行统计分析，包括描述性分析（如百分比、平均值、标准差等)、信度效度检验、相关性分析等。

3.1 信度检验

Table 1 Consistency Analysis Results of the Total Sample

Dimension	Number of Items	Cronbach's Alpha of Subscale	Cronbach's Alpha
Ideological and Political Education	9	0.938	
Class and Party Group Building	8	0.929	
Academic Guidance	10	0.965	
Daily Affairs Management	10	0.965	
Mental Health Education and Counseling	9	0.961	0.965
Online Ideological and Political Education	7	0.939	
Crisis Event Response	11	0.949	
Career Planning and Employment Guidance	5	0.932	
Theoretical and Practical Research	6	0.944	

本研究的问卷信度使用 Cronbach's α 系数进行度量，使用 SPSS 软件进行分析，结果见表 1。一般认为 α 系数值高于 0.8 则说明信度好，α 系数值在 0.7-0.8 之间则说明信度较好。本问卷中党团和班级建设维度 Cronbach's 系数最低，为 0.929，大于 0.8。总体信度系数为 0.965，大于 0.8，由此可知本问卷的信度良好。

3.2 效度检验

Table 2 KMO and Bartlett's Test Analysis Results

KMO and Bartlett's Test		
KMO Measure of Sampling Adequacy		0.987
Bartlett's Test of Sphericity	Approx. Chi-Square	38588.844
	Degrees of Freedom (df)	2775
	Significance (Sig.)	0

本问卷采用 KMO 和 Bartlett 检验进行效度检测，结果见表 2。一般认为 KMO 值高于 0.8 则说明效度好，KMO 值介于 0.7-0.8 之间则说明效度较好。本问卷的 KMO 值为 0.987，大于 0.8，说明效度好，研究数据适合提取信息。

研究结果

1. 调查问卷对象的基本信息统计

Table 3 Statistical Characteristics of the Sample

Category	**Option**	**Frequency**	**Percentage**
Grade Level	Freshman	126	27.16%
	Sophomore	101	21.76%
	Junior	121	26.08%
	Senior	116	25.00%
Gender	Male	276	59.48%
	Female	188	40.52%
Major	Computer Science and Technology	124	26.72%
	Software Engineering	120	25.87%
	Network Engineering	104	22.41%
	Internet of Things Engineering	116	25.00%

Table 3 Statistical Characteristics of the Sample (Cont.)

Category	Option	Frequency	Percentage
Student Leadership Role	Yes	102	21.98%
	No	362	78.02%
Participated in Student Organizations or Clubs	Yes	274	59.05%
	No	190	40.95%
Frequently Communicates with Counselor	Yes	211	45.47%
	Occasionally	165	35.56%
	No	88	18.97%
Received Scholarships or Financial Aid	Yes	169	36.42%
	No	295	63.58%
Counselor's Years of Work Experience	1-3 Years	162	34.91%
	4-8 Years	198	42.67%
	Over 8 Years	104	22.41%

由表 3 可知，样本中大一、大二、大三、大四学生发所占比例分别为：27.16%、21.76%、26.08%、25.00%，男性比例为 59.48%，女性比例为 40.52%。在专业上，计算机科学与技术、软件工程、网络工程、物联网工程学生发所占比例分别为：26.72%、25.87%、22.41%、25.00%。学生干部人数所占比例仅占 21.98%。参加过学生组织或社团人数所占比例较大，比例为 59.05%，没参加过学生组织或社团的比例为 40.95%。经常与辅导员沟通交流的学生所占比例 45.47%，偶尔与辅导员沟通交流的学生所占比例 35.56%，基本不和辅导员沟通交流的学生所占比例 18.97%。获得奖学金或助学金学生所占比例 36.42%，没有获得学生所占比例 63.58%。样本中学生辅导员的工作年限 1-3 年比例占 34.91%，4-8 年占 42.67%，8 年以上仅占 22.41%。

2. 计算机科学与工程学院辅导员工作的现状及分析现状的不足和问题

本文通过采用平均值和标准差对问卷各维度的调查结果进行分析，表 4 是学生对计算机科学与工程学院辅导员工作的满意度的调查统计结果。

平均值表示被调查者对问卷中问题的满意程度，数据参考标准为 1）平均值：1.00-1.50 表示现状很差；2）平均值：1.51-2.50 表示现状差；3）平均值：2.51-3.50 表示现状一般；4）平均值：3.51-4.50 表示现状较好；5）平均值：4.51-5.00 表示现状很好。标准差用于衡量样本意见的一致性，数值越大说明被调查者的看法分歧较大，数值越小则表明观点较为统一。

Table 4 Descriptive Analysis of the Current Status of Students' Satisfaction with Counselors' Work

Survey Content			Mean	Standard Deviation (S.D.)	Evaluation Results
1. Ideological and Political Education			3.86	0.88	Good Situation
	The Highest Mean	The effectiveness of counselors' understanding of students' basic information, such as their family background and personal strengths, as well as their grasp of students' ideological characteristics, dynamics, and ideological and political status.	3.98	1.11	
	The Lowest Mean	The effectiveness of counselors actively engaging in reflective thinking and research, grasping the key points and general principles of ideological and political education, and enhancing its targeted and effective approach for students.	3.81	1.07	
2. Class and Party Group Building			3.84	0.87	Good Situation
	The Highest Mean	The effectiveness of counselors' work in selecting, training, and motivating student leaders.	3.88	1.08	
	The Lowest Mean	The effectiveness of counselors' work in the cultivation and education of students as active candidates for the Communist Party of China.	3.79	1.11	
3. Academic Guidance			3.49	1.09	Average Situation
	The Highest Mean	The effectiveness of counselors' organization and implementation of construction of study style and creation of a strong learning atmosphere.	3.56	1.18	
	The Lowest Mean	The effectiveness of counselors' guidance to students in academic matters such as preparing for postgraduate studies and studying abroad.	3.45	1.28	
4. Daily Affairs Management			3.50	1.12	Good Situation
	The Highest Mean	The effectiveness of counselors' work in grants, student loans, work-study programs, tuition reduction, and subsidies, and ensuring the proper implementation of support for students from economically disadvantaged families.	3.53	1.30	
	The Lowest Mean	The effectiveness of counselors' guidance in fostering dormitory culture, promoting harmonious relationships among students, and encouraging mutual help and support.	3.47	1.25	

Table 4 Descriptive Analysis of the Current Status of Students' Satisfaction with Counselors' Work (Cont.)

Survey Content			Mean	Standard Deviation (S.D.)	Evaluation Results
5. Mental Health Education and Counseling			3.50	1.11	Average Situation
	The Highest Mean	The effectiveness of counselors' assistance to the university's mental health education institutions in conducting psychological screenings.	3.55	1.24	
	The Lowest Mean	The effectiveness of counselors' organization and implementation of mental health education awareness campaigns.	3.47	1.25	
6. Online Ideological and Political Education			3.52	1.09	Good Situation
	The Highest Mean	The effectiveness of counselors' efforts in guiding public opinion on key, hot, and difficult issues of concern to students; enriching online publicity content, and effectively controlling the discourse power and leadership of online public opinion.	3.58	1.36	
	The Lowest Mean	The effectiveness of counselors' guidance in encouraging students to engage in self-education, self-management, and self-service online, as well as educating students on self-restraint and self-protection in the online environment.	3.49	1.25	
7. Crisis Event Response			3.82	0.88	Good Situation
	The Highest Mean	The effectiveness of counselors in thoroughly collecting and accurately analyzing event-related information and promptly communicating with relevant departments.	3.86	1.04	
	The Lowest Mean	The effectiveness of counselors in organizing basic safety education and establishing grassroots emergency response teams.	3.79	1.04	
8. Career Planning and Employment Guidance			3.53	1.10	Good Situation
	The Highest Mean	The effectiveness of counselors in fostering sound career values among students and guiding graduates to work at the grassroots level, in the western regions, and in other areas in need across the country.	3.55	1.25	
	The Lowest Mean	The effectiveness of counselors in providing efficient and high-quality career guidance and information services to students.	3.49	1.26	

Table 4 Descriptive Analysis of the Current Status of Students' Satisfaction with Counselors' Work (Cont.)

Survey Content		Mean	Standard Deviation (S.D.)	Evaluation Results
9. Theoretical and Practical Research		3.49	1.11	Average Situation
The Highest Mean	The effectiveness of counselors in leading or participating in university-level or higher ideological and political education projects or research and producing targeted and effective research outcomes.	3.54	1.26	
The Lowest Mean	The effectiveness of counselors in leading provincial or higher ideological and political education projects or research and producing influential and promotable research outcomes.	3.46	1.24	
Overall		**3.63**	**1.19**	**Good Situation**

本文根据文献从九个方面研究辅导员的工作，思想政治教育、党团和班级建设、学业指导、日常事务管理、心理健康教育与咨询、网络思想政治教育、危机事件应对、职业规划与就业指导、理论和实践研究，为全面了解辅导员的工作现状与学生对辅导员工作的满意度水平，对上述九个方面进行了调查。

在本次调查中，部分指标的标准差较高，表明学生对这些项目的评价存在显著分歧。具体包括：网络思想政治教育模块中："辅导员围绕学生关注的重点、热点和难点问题，进行有效舆论引导；丰富网上宣传内容，把握网络舆论的话语权和主导权的有效性"，该题项标准差为1.36；日常事务管理模块中："辅导员开展助、贷、勤、减、补工作，落实好家庭经济困难学生的资助工作的有效性"，标准差为 1.30；学业指导模块中："辅导员指导学生考研、出国留学等学习事务的有效性"，标准差为 1.28。

辅导员工作内容涉及面广，个体差异显著。由于辅导员个人能力、经验、态度及精力投入不同，其在舆论引导、学业支持及资助服务等方面的表现存在明显差距。例如，一些辅导员可能非常重视网络思想政治教育，积极引导学生参与网上思想讨论，而另一些辅导员则对此类工作重视不足，导致学生评价产生两极分化。

学生的个体需求和关注重点不同。对考研、出国有需求的学生对相关指导更为敏感和依赖，若获得的指导不足，容易给出较低评分；而未有此类需求的学生则可能选择中性评价或给予较高评价，从而拉大总体评分的分布范围。同样，对于资助政策熟悉或受助的学生更关注资助工作的执行效率，而未涉及该事务的学生则相对模糊或漠不关心，影响了评价一致性。

工作透明度与信息传达渠道差异。在网络舆论引导和资助工作的开展过程中，部分学生可能由于缺乏信息渠道或未能直接受益，进而对辅导员工作感知不足，导致评价存在偏差。

虽然以上题项的标准差明显偏高，说明存在少部分学生给出极高或极低的评分，但从样本量和总体均值分布来看，这些异常值并未显著影响数据的整体趋势和判断的可靠性。此外，描述性统计与相关性分析也进一步验证了各模块之间的高度关联性，辅导员工作的系统性与协同性明显，增强了结论的内在一致性与外部解释力。因此，尽管存在极端评分和个别维度分歧，研究结果整体上仍具备较强的稳健性与代表性。

根据调查数据，辅导员整体工作满意度呈现较好态势，各项指标的平均值普遍处于较好水平，但也存在个别方面满意度相对偏低的情况，反映了当前辅导员工作的优势与待改进空间。从整体来看，辅导员在思想政治教育方面的工作满意度最高，平均得分为 3.86，标准差为 0.88，评价结果为“现状好”。这说明大部分辅导员能够有效掌握学生思想特点，积极推进思想政治教育工作，整体表现令人满意。

但仍有三个方面的平均得分不高于 3.5 分，分别是：学业指导（平均值 3.49）、心理健康教育与咨询（平均值 3.50）、辅导员的理论和实践研究（平均值 3.49），学业指导得分最低，反映出辅导员在学生学业规划、学习方法指导和学术支持方面的作用发挥不足。存在专业指导知识储备有限、辅导形式单一、辅导时间精力不足等问题，影响了辅导员对学生学业发展的有效引导。心理健康教育与咨询得分略高于学业指导，但仍低于理想水平，说明辅导员在心理健康教育与危机干预方面存在能力欠缺。存在问题包括：缺乏专业心理辅导知识、心理危机识别与处理技能不强，以及心理健康教育资源不足，导致在实际工作中难以有效满足学生的心理支持需求。辅导员的理论和实践研究得分同样偏低，表明辅导员在科学总结工作经验、提升理论水平和进行学术研究方面存在薄弱环节。

辅导员日常工作繁忙、研究意识不强、缺乏系统培训与激励机制，可能是制约其理论与实践研究能力提升的重要原因。

3. 相关性分析

本研究将思想政治教育、党团和班级建设、学业指导、日常事务管理、心理健康教育与咨询、网络思想政治教育、危机事件应对、职业规划与就业指导、理论和实践研究依次编码为 H1、H2、H3、H4、H5、H6、H7、H8、H9，利用相关分析研究它们之间的相关关系，使用 Pearson 相关系数表示相关关系的强弱情况。具体如表 5 所示。

Table 5 Correlation Analysis Results for Each Dimension

	H1	H2	H3	H4	H5	H6	H7	H8	H9
H1	1								
H2	.933**	1							
H3	.709**	.695**	1						
H4	.667**	.651**	.960**	1					
H5	.665**	.664**	.953**	.959**	1				
H6	.624**	.618**	.937**	.949**	.948**	1			
H7	.749**	.779**	.560**	.543**	.551**	.577**	1		
H8	.555**	.556**	.835**	.856**	.842**	.890**	.672**	1	
H9	.548**	.555**	.838**	.859**	.846**	.898**	.659**	.942**	1

Remarks: ** At the 0.01 level (two-tailed), the correlation is significant

从表 5 可知，本研究将辅导员工作分为九个方面（H1 至 H9），相关性分析结果显示，各变量之间普遍存在显著的正相关关系（均在显著性水平上达到统计学意义，标注为“**”），表明各方面工作在实际开展中具有较强的联动性和互相影响的特点。

思想政治教育（H1）与其他各项高度相关，H1 与党团和班级建设（H2）的相关系数为 0.933，为最高相关性之一，说明思想政治教育与班级组织建设紧密联系。与学业指导（H3）、日常事务管理（H4）、心理健康教育与咨询（H5）等也有较高的相关性（均在 0.66 以上），表明思想教育贯穿辅导员工作的各个方面。学业指导（H3）与多项指标强相关，H3 与日常事务管理（H4）相关系数为 0.960，与心理健康教育与咨询（H5）相关系数为 0.953，与网络思想政治教育（H6）为 0.937，都非常高；说明学业指导与日常管理、心理辅导及网络教育活动之间具有极其密切的联系，学生的学业发展受到多方面因素的综合影响。心理健康教育与咨询（H5）是重要连接点，H5 与 H4、H6 的相关系数均高达 0.948-0.959，显示心理健康工作不仅关系到学生个体发展，还与日常管理和网络思想政治教育密切结合。职业规划与就业指导（H8）和理论实践研究（H9）的联系，H8 与 H9 之间的相关系数为 0.942，非常接近完全正相关，说明辅导员在进行职业规划与就业指导时，其理论学习和实践研究能力的提升同步推进，两者相辅相成。

整体来看，辅导员的各项工作内容之间呈现出高度正相关的态势，说明辅导员工作是一个综合性强、各模块相互交融的系统工程。特别是思想政治教育、党团班级建设、学业指导、心理健康教育与咨询、日常事务管理等核心内容，彼此之间的关联非常密切。优化辅导员工作路径时，应着眼于整体协同，强化各领域的有机融合，而不仅仅是孤立地提升某一单项能力。

讨论

通过对辅导员工作的满意度描述性分析与各项工作的相关性分析，可以更加深入理解当前 S 大学 J 学院辅导员工作现状的特点与内在联系。整体而言，辅导员工作的整体满意度水平较好，但不同模块之间仍呈现出一定的差异性和层次性，这种差异性对于后续辅导员队伍建设和工作模式优化具有重要启示意义。

1. 工作整体水平较好，局部存在短板

从描述性分析可以看出，辅导员整体工作满意度处于“现状较好”水平，尤其是在思想政治教育（均值 3.86）、党团和班级建设（均值 3.84）、危机事件应对（均值 3.82）等传统优势领域，辅导员能够较好地履行岗位职责，反映了学院在传统思想政治引导与组织管理方面的重视与成效。这些领域的标准差也相对较小，说明辅导员群体在这些方面的工作经验较为丰富、操作较为成熟，整体表现稳定。

然而，在学业指导（均值 3.49）、心理健康教育与咨询（均值 3.50）、理论和实践研究（均值 3.49）三个领域，满意度评价明显偏低，均未高于 3.5 分。这表明，随着高校辅导员工作内容的不断拓展与深化，部分新兴或专业性要求更高的工作领域，尚未得到充分重视或有效支持，成为辅导员工作体系中的薄弱环节。这种局部短板的存在，不仅影响了辅导员个人职业能力的发展，也在一定程度上制约了学生综合素质培养的整体效果。

2. 学业指导功能发挥不足，影响学生发展支持

学业指导方面得分最低，显示辅导员在学生学习规划、学习能力提升、考研及出国留学指导等环节中，发挥的作用远未达到预期。这一方面可能与辅导员本身的学科背景及专业指导能力有关，另一方面也可能由于辅导员日常行政事务负担较重，导致在精细化学业指导方面投入不足。值得注意的是，在具体维度中，“指导学生考研、出国留学等学习事务的有效性”得分最低（3.45），说明辅导员在面对高阶学习指导和学术职业路径规划时，面临较大挑战，难以有效满足学生个性化、专业化发展的需求。正如 Li (2024a) 提出，辅导员需要从学生发展的角度重构学业发展支持工作模式，强化多维联动和精准服务能力，以更好地契合学生多样化需求。

3. 心理健康教育和咨询支持力度不足，难以满足新需求

心理健康教育与咨询得分偏低，同样反映了辅导员在应对学生心理问题时存在较大压力与能力不足。随着大学生心理问题的多样化和复杂化，对心理健康教育的专业性、系统性提出了更高要求。调查结果显示，辅导员在心理健康宣传教育、心理问题识别及初步干预等环节，整体评价一般，标准差较大，进一步暴露出不同辅导员个体在心理健康工作领域能力参差不齐的现实。这一现象意味着，在突发心理危机事件或隐性心理问题学生管理中，辅导员的实际应对效果存在较大差异，潜藏一定的工作风险。这一现象亦受到其他研究印证，Tan (2024) 强调了提升辅导员心理咨询能力对缓解学生心理焦虑、加强早期干预的重要性，并建议构建结构化

培训体系。此外，Sun 和 Wei (2024) 也指出，应当通过策略整合和机制构建，使辅导员在心理教育中发挥“引导者”“守门人”“桥梁人”的作用，提升心理育人系统性效能。

4. 理论与实践研究能力不足，限制了辅导员职业发展

理论和实践研究得分亦处于较低水平，表明辅导员在科学总结工作经验、参与课题研究、发表学术成果等方面的意识和能力普遍较弱。辅导员更多地处于事务性管理角色，缺乏将工作经验上升为理论成果、反哺实践改进的科研路径。这种状况一方面使辅导员职业认同感和成就感受限，另一方面也阻碍了辅导员队伍的专业化、学术化建设进程，不利于高校思想政治教育工作的可持续发展。Li (2024b) 从师范类高校视角指出，辅导员的专业成长亟需将理论反思融入日常管理与教育工作之中，以提升职业认同与成长质量。该发现与本研究中“理论与实践研究得分偏低”的调查数据形成印证，提示应系统性加强辅导员的科研意识和学术能力建设。

本研究通过描述性分析与相关性分析，系统揭示了 S 大学 J 学院辅导员工作现状的整体特点。整体满意度水平较好，思想政治教育与班级建设处于核心地位，但在学业指导、心理健康教育与咨询及理论与实践研究方面仍存在明显短板。同时，各工作模块间存在高度正相关关系，反映出辅导员工作具有明显的系统性和整体性特征。思想政治教育、班级建设等传统领域与新兴领域密切关联，相互影响，形成综合育人的整体格局。以上发现为后续针对性优化辅导员工作路径、提升整体育人效果提供了坚实的基础。

总结

本研究围绕 S 大学 J 学院辅导员工作现状展开，采用描述性统计分析与 Pearson 相关性检验，系统探讨了辅导员在思想政治教育、党团和班级建设、学业指导等九个维度的工作成效及其相互关系。研究结果表明，辅导员整体工作满意度较高，传统领域优势明显，但学业指导、心理健康教育与咨询、理论与实践研究等方面仍存在改进空间。各工作模块之间普遍呈现显著正相关，反映出辅导员工作具有高度系统性与协同性。基于此，本研究提出了加强学业指导、完善心理健康支持、推动科研能力建设与促进工作体系协同的优化路径。研究不仅丰富了高校辅导员工作现状的实证研究，也为提升辅导员专业化水平与育人质量提供了理论支撑与实践启示。

建议

1. 加强学业指导能力建设，完善学习支持体系

学业指导作为辅导员工作的重要组成部分，在调查中满意度评价偏低，亟需加强。针对这一问题，建议从以下几个方面着力，首先，应提升辅导员的专业素养与学术指导能力。学院可定期组织学术研修、继续教育和专题培训，提升辅导员在学科前沿知识、学习方法指导、考研出国咨询等方面的能力，使辅导员具备一定的专业指导水平，能够为学生提供科学、系统

的学业支持。其次，优化辅导员的工作内容与时间安排，减少日常事务性工作占比，为辅导员投入学业指导工作创造充足时间保障。同时，鼓励辅导员与各专业学院、教师导师团队合作，联合开展学业帮扶计划，如学业沙龙、学习经验分享会、学术规划讲座等，搭建多元化的学业支持平台。最后，建立针对不同类型学生（如考研、留学、就业导向型学生）的精准学业指导档案，实现分类指导、因材施教，增强辅导员学业指导的针对性和实效性。

2. 强化心理健康教育专业培训，提升心理育人实效

随着大学生心理健康问题日益突出，辅导员作为学生心理支持的第一道防线，其专业能力亟需加强。首先，系统提升辅导员的心理健康教育专业技能。学院可与心理咨询中心合作，设置辅导员心理健康工作专项培训课程，内容涵盖心理问题识别与干预、危机干预流程、心理咨询基础技能等，提升辅导员的专业水平和实际操作能力。其次，完善心理健康教育协作机制。辅导员与专业心理咨询师之间应建立更加紧密的联动体系，辅导员负责初步识别与转介，心理咨询师负责深度干预与治疗，形成分工明确、合作有序的工作模式。此外，重视日常心理健康教育工作的常态化与多样化，鼓励辅导员通过心理健康讲座、心理素质拓展活动、心理主题班会等多种形式，增强学生心理健康意识，构建积极向上的校园心理氛围。

3. 推动理论与实践研究能力提升，促进辅导员专业发展

理论与实践研究能力是辅导员职业发展的重要支撑，当前辅导员在此方面普遍存在意识弱、能力低的问题。首先，加强辅导员科研意识培养。学院应通过设立辅导员专项课题申报、科研能力培训、经验分享交流等途径，引导辅导员认识到理论总结与研究对于工作优化和个人成长的重要意义，激发辅导员从事学术研究的内生动力。

其次，完善科研支持体系。学校可设立辅导员工作研究专项基金，提供经费资助，鼓励辅导员参与省级、国家级思想政治教育课题，提升科研积极性和参与度。同时，在考核体系中增加科研成果占比，将发表论文、参与课题作为辅导员职务晋升的重要依据之一，形成有效激励。再次，强化实践反思机制。鼓励辅导员在日常工作中善于记录案例，总结经验，提炼规律，形成案例分析、调研报告等初步研究成果，并逐步上升为系统性课题研究，促进理论与实践良性互动。

4. 构建整体协同的辅导员工作体系，打破工作孤岛

从相关性分析结果来看，辅导员各模块工作内容高度关联，优化辅导员工作必须从系统化、整体化角度出发。首先，建立跨模块协作机制。打破传统条块分割的工作方式，促进思想政治教育、学业指导、心理健康教育与咨询、就业指导等不同工作领域之间的协同配合。例如，在学风建设活动中，结合心理健康讲座和职业规划指导，实现多领域联动，提升整体育人效果。其次，优化辅导员团队内部合作。根据辅导员个人专长，合理分工，如设立心理健康辅导专员、学业指导专员、职业规划专员等岗位，形成优势互补、合作共赢的团队运作模式，

提升整体工作效率与专业水平。此外，推动信息化建设。利用信息技术手段，如学生发展数据库、心理健康预警系统、就业信息服务平台等，实现学生工作信息共享与数据互联互通，为辅导员跨模块协作提供数据支持和技术保障。

研究局限

本研究虽在设计和分析过程中力求严谨，但仍存在一定的局限性，需要在未来研究中加以补充和改进。本研究基于一所 S 大学下属 J 学院开展实证数据收集，作为案例研究是可行且必要的。一方面，辅导员工作具有显著的情境性与制度嵌入性，不同高校在组织结构、岗位分工、资源配置与学生结构方面差异明显，选择单一单位可以在相对稳定的制度与管理边界内进行细致测量与机制辨析，从而提升研究的内部一致性与解释清晰度。另一方面，本研究样本量较为充足，并完成信效度检验，能够较为可靠地反映该案例单位内学生对辅导员九维工作的评价结构与差异特征，具备开展实证分析的基础条件。

本研究以 S 大学 J 学院为调查对象，尽管涵盖了不同年级、专业和性别，但总体样本仍集中于理工科院系。研究结论主要适用于工科类院系背景下辅导员工作的现状分析与优化建议，对其他专业或院校的适用性仍需结合具体背景进一步验证。单位内部的管理风格、考核制度与资源供给具有路径依赖效应，可能放大或弱化某些维度得分及其相关模式，使研究结果具有一定“情境锁定”特征。因而，本研究结论更适用于相似背景单位的参考与启示，若用于跨地区、跨类型高校推广，仍需通过多校多院系对比与多案例复现进一步验证其稳健性与普适性。

未来研究方向

1. 进一步拓展研究范围。未来可在 S 大学其他学院及更多高校中进行横向比较研究，分析不同院校辅导员工作现状的共性与差异，提升研究的广泛性与代表性。

2. 深化辅导员专业发展机制研究。后续可聚焦辅导员职业认同、能力提升路径与激励机制建设，探讨系统化提升辅导员工作效能与职业满意度的有效策略，为高校辅导员队伍建设提供理论支持与实践参考。

独创或新颖之处

1. 本研究以学院为单位开展实证调研，将视角聚焦于 J 学院这一特定院系，而非以往较多采用的全校范围或宏观层面的研究。这种院系微观层面的分析，有助于更精准地揭示不同专业背景、学生特性对辅导员工作实际开展情况的具体影响，填补了现有文献中针对特定学院辅导员工作现状研究的空白，具有一定的创新价值。

2. 本研究根据文献梳理，将辅导员工作科学划分为九大模块，即思想政治教育、党团和班级建设、学业指导、日常事务管理、心理健康教育与咨询、网络思想政治教育、危机事件应对、职业规划与就业指导、理论和实践研究，系统地覆盖了辅导员工作的各主要领域。这种细化且全面的分类，不仅使调查内容更加结构化和系统化，也有助于深入挖掘不同工作模块之间的内在联系，为后续改进提供了清晰的方向指引，体现出研究框架设计上的新颖性。

3. 本研究在方法上采用了描述性统计与 Pearson 相关性分析相结合的策略，不仅揭示了辅导员在各项工作中的满意度水平，还深入分析了各工作模块之间的联动关系。这种双重分析视角，使得研究结论不仅限于对单项工作成效的评估，还能够从整体系统性角度理解辅导员工作的综合性与协同性，丰富了高校辅导员工作评价体系的研究方法。

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人工智能辅助翻译对学生译者翻译行为的影响研究

THE IMPACT OF AI-ASSISTED TRANSLATION ON STUDENT TRANSLATORS' BEHAVIOR

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摘要

研究目的：本研究探讨人工智能（AI）辅助翻译对学生译者翻译行为的影响，分析其在认知负荷分配、翻译过程范式及能力发展上的作用机制，为翻译教学优化提供参考。

研究设计/方法/途径：以认知翻译学与认知负荷理论为框架，通过对 42 名学生译者的问卷调查、10 名学生译者的半结构化访谈以及自主翻译与 AI 辅助翻译的行为对比分析，比较两类条件下认知负荷与翻译加工路径的差异。

研究结果：结果显示 AI 明显降低了翻译初始阶段的认知负荷：源语理解困难比例由自主翻译的 66.7% 降至 AI 辅助翻译的 40.5%，行文与语法问题由 69.0% 减少至 45.2%。然而，认知负荷呈现向验证环节的显著转移，译文正确性检验困难从 45.2% 上升至 52.4%。翻译过程由“生成模式”转向“验证模式”，学生译者在策略使用与工具能力上有所提升，但语言能力存在弱化风险。

创新性与价值：本研究揭示认知负荷再分配与翻译范式转型，丰富认知翻译学在 AI 场景中的应用，为教学改革与能力培养提供理论依据。未来研究可结合多模态认知测量与教学干预验证认知参与型任务效果。

关键词：人工智能辅助翻译 学生译者 翻译行为 认知负荷 翻译教学

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Abstract

Purpose: This study investigates the impact of Artificial Intelligence (AI)-assisted translation on student translators' translation behavior, with a focus on the mechanisms through which AI influences cognitive load distribution, translation process paradigms, and competence development. The aim is to provide findings that offer pedagogical insights for optimizing translation training in the AI era.

Study Design/Methodology/Approach: Grounded in cognitive translatology and cognitive load theory, the study employed a mixed-methods design, including a questionnaire survey of 42 student translators, semi-structured interviews with 10 student translators, and a comparative behavioral analysis of human-only translation and AI-assisted translation. Differences in cognitive load patterns and processing pathways under the two conditions were systematically examined.

Findings: The results indicate that AI significantly reduces cognitive load during the initial stages of translation. Difficulties in source-text comprehension decreased from 66.7% in human translation to 40.5% in AI-assisted translation, while issues related to wording and grammar declined from 69.0% to 45.2%. However, cognitive load shifted markedly toward the verification stage, with difficulties in evaluating translation accuracy increasing from 45.2% to 52.4%. The translation process transitioned from a "generative mode" to a "verification mode". Although students demonstrated improved strategy use and tool literacy, a potential risk of weakened linguistic competence was also shown.

Originality/Value: This study revealed how AI reshapes cognitive load allocation and transforms translation process paradigms, enriching the application of cognitive translation theories in AI-mediated contexts. Thus, the findings offer theoretical grounding for translation pedagogy reform and competence development. Future research may integrate multimodal cognitive measures and instructional interventions to further examine the effectiveness of cognitively engaging translation tasks.

Keywords: AI-assisted Translation, Student Translators, Translation Behavior, Cognitive Load, Translation Pedagogy

引言

人工智能（Artificial Intelligence, AI），尤其是生成式人工智能的迅速发展，正在以颠覆性力量重塑全球产业结构，语言服务与教育领域亦深受影响。作为语言教学的重要组成部分，翻译教育在这一技术浪潮中面临前所未有的机遇与挑战。AI 不仅为语言学习提供高效工具和创新路径，还推动教学模式、师生角色及能力培养的深度转型，促使教育主体主动适应并探索其应用边界。

近年来，AI 对语言学习的影响已成为学术研究的核心议题，涵盖学习行为、认知模式及听说读写译五项技能的发展路径。其中，翻译领域的变革尤为显著。ChatGPT 发布以来，大规模语言模型（Large Language Models, LLMs）在翻译领域的研究呈现指数级增长。生成式

AI 不仅改变了翻译技术形态,更深刻影响译后编辑流程、翻译任务负荷结构与人机协作模式。人工智能译后编辑（Arabic Index of Premature Ejaculation, AIPE）正逐步取代机器翻译译后编辑（Machine Translation Post-Editing, MTPE）成为行业主流 (Wang & Liu, 2025)。

AI 的广泛应用不仅重塑翻译活动的性质与流程，还推动译后编辑的常态化。这一变革不仅影响翻译实践与教学，也对现有研究范式提出了挑战 (Yu & Liu, 2024)。当前研究热点集中于 AI 与机器翻译技术革新及其跨学科融合，翻译教学模式亟需技术整合与师资建设，同时伦理规范体系仍待完善 (Chen, 2025)。研究多关注 AI 对翻译质量、翻译技术的提升以及对不同文本翻译质量的影响 (Meng, 2026; Wang, 2026)。虽已有学者对学生译者与教师译者翻译过程中的修改行为对比以及跨文化能力对学生翻译行为的影响进行了研究 (Jiang, 2017; Zhang, 2020)，然而，针对学生译者翻译行为的系统性研究仍显不足，尤其缺乏对 AI 辅助条件下翻译决策逻辑、策略选择及应对的深入探讨 (Sun et al., 2025)。学生译者在 AI 辅助翻译中的使用行为、策略呈现出何种模式；与自主翻译相比，AI 辅助翻译如何重塑学生译者的翻译过程与认知负荷分配；AI 介入对学生译者的语言能力、工具能力与策略能力产生何种影响均有待深入研究。

研究目的

本文以学生译者为研究对象，重点研究以下两方面内容，旨在为翻译教学模式优化与学生翻译能力培养提供理论支撑与实践参考。

1. 探讨学生译者 AI 辅助翻译的使用现状与策略，包括工具选择、提示语设计及译文验证方式，揭示其使用行为特征。

2. 比较自主翻译与 AI 辅助翻译在翻译过程与认知负荷上的差异，分析 AI 介入对学生译者认知模式与翻译能力发展的影响。

文献综述

本研究以认知翻译学和认知负荷理论为核心理论支撑。认知翻译学强调翻译是意义建构的认知活动，涉及源语识解、目的语表达和语篇整合等多层次加工过程 (Wen & Xiao, 2019)。认知负荷理论 (Sweller, 1988) 将学习或加工中的负荷分为内在负荷、外在负荷和相关负荷：内在负荷由任务复杂度和学习者知识水平决定，外在负荷源于信息呈现方式，相关负荷则用于图式建构和技能迁移。

为确保概念一致性，本文界定以下核心术语：

1. 生成模式：译者自下而上的理解——表达——整合路径，认知参与度高。

2. 验证模式：以 AI 生成译文为起点，译者自上而下进行核验与修订，认知投入集中于验证环节。

3. 认知负荷类型：包括内在负荷、外在负荷和相关负荷。

4. 认知参与：译者在任务中主动加工、策略选择和元认知监控的程度。

人工智能对翻译的各方面都产生了重大影响，目前的相关研究主要集中在AI对翻译技术、翻译伦理以及翻译教学与人才培养等3个方面。

首先是对翻译技术本身的影响。Wang 和 Li (2019, 2020) 对人工智能时代笔译员翻译技术应用以及翻译技术本身进行了调查研究。指出翻译技术呈现出专业化、智能化、云端化、平台化、生态化等发展趋势。认为掌握翻译技术已成为现代翻译行业从业人员的必备技能。对此，我们深感认同。特别是对于学生译者而言，学习掌握以 ChatGPT 为代表的人工智能辅助翻译技术，进行人工智能译后编辑尤为重要。目前对于 AIPE 模式下的翻译研究仍相对较少。Wang (2025) 研究结果发现，人工智能译后编辑可以同时实现提高译文质量、缩短工作时间，但同样也存在逻辑性篡改、一致性背离、语境关系混乱的问题。而针对学生译者人工智能辅助翻译技术的应用以及译后编辑研究仍是空白。

人工智能时代翻译伦理存在用户隐私、知识产权、影响译者职业发展等问题 (Li et al., 2022)。针对相关问题，有学者提出了强化翻译技术使用者个人伦理意识，构建基于价值——标准——规范的人工智能翻译技术伦理框架等建议 (Xiao & Han, 2024; Lu, 2024)。相关翻译伦理的研究有助于我们认清翻译技术使用中的风险与问题，更好地开展翻译工作以及翻译人才的培养。但现有研究的伦理框架多为规范建构，以学生译者翻译行为对象的具象研究仍不足，缺少转化为可操作的教学干预与评价标准。

人工智能对翻译教学与翻译人才培养的影响方面，多项研究指出高校亟需改革传统教学模式，构建技术赋能的课程体系。人工智能时代的翻译人才培养应转向“翻译 + 技术 + 专业”多元复合型人才，课程体系应融入计算机辅助翻译、语料库技术等模块，强化实践能力 (Ding & Liu, 2022; Mou, 2022)。以上研究主要聚焦课程结构，尚未涉及学生译者在人工智能辅助翻译技术介入下的行为变化，对学生译者在 AI 辅助翻译使用过程中的策略调整、核验方式与认知负荷变化缺乏实证支持。现有研究在指出教学方向的同时，尚未建立起对学生译者真实翻译行为的系统理解。

对AI辅助翻译与自主翻译效能的比较研究，为理解学生译者在具体翻译行为中如何与AI互动提供了参考。AI辅助翻译与自主翻译两者并非简单的替代关系，而是各具优势、互补共存 (Yao, 2020)。多项研究显示AI在词汇多样性、准确性方面更优，而学生译者在文化适配与风格保持方面表现突出 (Li & Li, 2025; Peng, 2025)。当前的这些研究总结了 AI 辅助翻译与自主翻译的优缺点，但缺少对翻译过程维度的对比分析，学生译者在翻译策略使用、结果验证、认知负荷分配等方面有何异同仍有进一步研究空间。鉴于此，本研究将聚焦于学生译者这一特定群体，深入探究人工智能对其翻译行为的影响机制。

研究方法

研究设计：本研究采用解释性顺序混合研究设计。第一阶段以问卷调查获取学生译者在AI辅助翻译中的使用模式、困难、策略与体验；第二阶段对问卷样本中的部分学生译者进行半结构化访谈，以解释量化趋势背后的原因；第三阶段通过行为对比分析，比较学生译者在自主翻译与 AI 辅助翻译条件下的认知负荷分配与翻译行为差异，通过量化数据、质性资料与行为证据三者的三角验证，系统揭示AI辅助翻译对学生译者的影响机制。

研究对象：泰国某高校商务中文系选修《商务汉语翻译》课程的大三学生。样本包括：问卷样本 42 人（有效样本率 100%）；访谈样本 10 人（从问卷样本中随机抽取）；行为对比样本同访谈样本 10 人。

研究工具：

1. 问卷：问卷依据认知翻译学和认知负荷理论构建，内容涵盖 AI 使用频率与场景、翻译任务类型及 AI 使用策略、自主翻译与 AI 辅助翻译中遇到的问题以及对 AI 辅助翻译的教学需求四个方面。问卷类型包括多项选择题、五点李克特量表与开放式问题。为确保信效度，研究在正式发放前进行了预测试（N = 8），根据反馈修改题项表述；正式样本中对量表部分进行信度分析，Cronbach's α = 0.84，属较高水平。

2. 访谈：对问卷样本中随机抽取的 10 名学生译者开展半结构化访谈。访谈内容围绕 AI 辅助翻译的使用策略与理由、翻译过程中的认知投入与困难点、验证阶段遇到的判断与修订问题以及 AI 辅助翻译对自身能力的影响等方面展开，以进一步了解 AI 辅助翻译对其翻译行为的影响。

3. 行为对比分析：基于访谈资料中学生译者对自主翻译与AI辅助翻译两种实践经历的详细自我报告展开。

数据收集：问卷数据通过线上问卷平台向被调查者发放问卷，共发放并回收 42 份，有效回收率 100%，问卷数据由平台自动汇总并导出数据文件。访谈数据在问卷样本中随机抽取 10 名学生译者进行半结构化访谈。每次访谈时长约 20-30 分钟，经授权录音并转写为文本。行为对比分析数据基于访谈内容获得学生译者对“自主翻译”与“AI辅助翻译”两类实际翻译任务的详细回顾，从中形成可比对的行为描述（如理解路径、策略使用、验证与修改行为）。该部分以访谈文本为主要数据来源。

数据分析：使用描述统计方法与主题分析法分析相关数据。

研究结果

1. AI 辅助翻译的使用情况

调查问卷与深度访谈研究发现随着 AI 的发展与普及，使用 AI 已成为所有学生译者的

共识。所有的学生译者均在课堂或课后翻译任务中使用 AI 进行辅助翻译。同时，AI 辅助翻译的使用频率也非常高。如表 1 所示：

Table 1 Frequency of AI-assisted Translation Use Among Student Translators

Frequency of AI-assisted Translation Use	Number of Students	Percentage
Always use	25	59.5%
Frequently use	14	33.3%
Occasionally use	3	7.2%

选择“经常使用”与“一直使用”的学生译者百分比达 92.8%。其原因来自翻译任务与学生译者自身两方面：首先，翻译任务有一定难度，学生译者无法理解翻译任务中的部分词语、句子或整体意思。再者，学生译者的学业任务较重，为能完成任务，不得不使用 AI 进行辅助翻译。加之 AI 辅助翻译方便、快捷的特点，使学生译者倾向于经常使用 AI。

面对如今 AI 工具的多样性，学生译者更倾向于使用 ChatGPT，之后依次为 Google Translate、Gemini、DeepSeek 等。具体选择使用情况如表 2 所示：

Table 2 Selection of AI-assisted Translation Tools by Student Translators

AI-assisted Translation Tool	Number of Students	Percentage
ChatGPT	42	100%
Gemini	21	50.0%
Google Translate	23	54.8%
Copilot	0	0.0%
DeepSeek	11	26.2%
Baidu Translate	8	19.0%

所有学生译者均选择使用 ChatGPT 进行辅助翻译。其原因在于该 AI 工具使用简单、方便、快速，回答结果准确、全面。值得注意的是在 AI 工具的选择上学生译者通常会同时使用多个 AI 工具，呈现出一主多辅的形态。

2. AI 对翻译过程与行为的影响

2.1 AI 辅助翻译的使用策略

针对翻译任务中词语、句子、段落及文章等不同的文本类型，学生译者使用 AI 进行辅助翻译最多的文本类型是句子，占比 85.7%；之后依次为词语（83.3%）、段落及文章

（69.0%）。其原因在于大部分翻译任务是以句子的文本形式呈现的，有时学生译者亦会将段落或文章拆分为句子进行翻译，进而使用 AI 进行句子翻译的需求较大。词语的 AI 辅助翻译需求相差不多，原因一方面在于翻译任务，另一方面是出于检查 AI 词语翻译是否准确、恰当的需求。

而针对不同的翻译任务类型，如广告文本、对话型文本、法律合同文本等，大部分学生译者的 AI 辅助翻译策略相同，即根据翻译任务类型的不同调整完善 AI 提示语以获得较为恰当、准确、满意的翻译结果。

绝大多数学生译者都会对 AI 辅助翻译结果进行正确性的核对检验。而且核对检验的对象以词语为主。学生译者会重点检验词语意义是否准确，语体以及难度是否符合语境等。而在核对检验方法上，不同的学生译者采用了不同的策略。部分进行自我检验，部分选择询问身边的师友，部分则通过设定 AI 提示语让 AI 进行自我检验或使用另一个 AI 进行结果的检验。

同样，当遇到 AI 所生成的翻译结果不符合预期时，不同学生译者采用的处理策略亦不相同。部分学生译者选择让 AI 自我检验并再次翻译，部分选择用词典检索词语语义或从教材中寻找相似或相关句子作参考，把自己的知识与 AI 的翻译结果相结合。

2.2 自主翻译与 AI 辅助翻译所遇问题对比分析

我们将翻译过程中所遇问题归纳为源语理解、汉字书写、词语与表达、行文与语法以及正确性检验 5 个方面。

学生译者自主翻译与 AI 辅助翻译所遇问题分别如表 3、表 4 所示，卡方检验值如表 5 所示：

Table 3 Problems Encountered by Student Translators During Independent Translation

Problems Encountered in Independent Translation	Number of Students	Percentage
1. Inability to comprehend the source text	28	66.7%
2. Forgetting character forms or producing misspellings	20	47.6%
3. Difficulty selecting appropriate target-language lexical items or expressions	25	59.5%
4. Problems with target-text syntactic arrangement or grammatical accuracy	29	69.0%
5. Uncertainty regarding the accuracy of the translation	19	45.2%

Table 4 Problems Encountered by Student Translators During AI-assisted Translation

Problems Encountered in AI-assisted Translation	Number of Students	Percentage
1. Inability to comprehend the source text	17	40.5%
2. Forgetting character forms or producing misspellings	10	23.8%
3. Difficulty selecting appropriate target-language lexical items or expressions	22	52.4%
4. Problems with target-text syntactic arrangement or grammatical accuracy	19	45.2%
5. Uncertainty regarding the accuracy of the translation	22	52.4%

Table 5 Chi-square Results for Translation Problems in Independent vs. AI-assisted Translation

Problem Type	Independent Translation (%)	AI-assisted Translation (%)	$\chi^2(1)$	p	φ
Source-text comprehension	28 (66.7%)	17 (40.5%)	4.79	.029	0.26
Character/word formation	20 (47.6%)	10 (23.8%)	4.20	.040	0.25
Lexical/expressional choice	25 (59.5%)	22 (52.4%)	0.19	.660	0.07
Syntax and grammar	29 (69.0%)	19 (45.2%)	3.94	.047	0.24
Accuracy verification	19 (45.2%)	22 (52.4%)	0.19	.662	0.07

对比分析结果显示，学生译者在自主翻译与 AI 辅助翻译过程中所遇问题比重呈现出显著差异。总体而言，自主翻译的问题发生率普遍高于 AI 辅助翻译，这表明 AI 工具在一定程度上缓解了学生译者的翻译困难。

具体来看，由于学生译者将源语文本理解过程交由 AI 来处理，使得源语理解问题的比例由 66.7% 下降至 40.5%，χ^2（1）= 4.79，p = .029 < .05，差异具有统计显著性，显示出 AI 在语义理解方面具有明显优势。同样，由于有 AI 辅助翻译结果作为参考，因此汉字书写问题由 47.6% 降至 23.8%，χ^2（1）= 4.20，p = .040 < .05，差异具有统计显著性，但并未完全消除；词语与表达方面改善幅度有限（由 59.5% 降至 52.4%），p = .660，差异无统计学意义。AI 辅助翻译在该方面存在的问题为译文词语的选择过于正式或高级，不适合语境，以及 AI 无法获得人类的情绪感受，在翻译对话时无法做到准确表达。翻译过程包含两个核心阶段：源语理解和目标语表达。翻译是意义建构或概念化，意义建构或概念化是识解的结果 (Wen & Xiao, 2019)。AI 能快速解析源语语义，降低学生译者的认知负荷，因此源语理解问题显著下降。但词汇选择不仅是语言转换，更涉及概念重构和语用适配。在目标语表达阶段，译者仍需根据语境、风格和交际目的选择最恰当的词语，这方面 AI 无法完全替代。学生译者须对多个候选表达进行评估，进行认知努力，因此该问题改善幅度有限。行文与语法问题由 69.0% 降至 45.2%，χ^2（1）= 3.94，p = .047 < .05，差异具有统计显著性，反映出 AI 在结构化输出方面的优势与作用。

然而，值得注意的是，正确性检验问题在 AI 辅助下不降反升，由 45.2% 上升至 52.4%。学生译者在自主翻译时对词语、表达和译文行文等进行了自我评估与选择，使得在正确性检验方面的认知负荷相对较低。反观 AI 辅助翻译，学生译者将大部分源语理解与目的语表达的认知判断交给了 AI 来完成，较少的认知参与度造成了学生译者对翻译结果的不确定性。学生译者需重新对比译文与源语文本，重新开展翻译的整个认知过程，进而所遇问题较多。综上，学生译者自主翻译时所遇问题集中在源语文本理解以及译文转化两个阶段，而使用 AI 辅助翻译时所遇问题则更多地出现在译文的检验方面。

除了译文正确性检验困难，学生译者在使用 AI 辅助翻译时还遇到了 AI 工具的技术性问题：若未能给 AI 提供完整、清晰的提示语，则无法获得理想的翻译结果；某些情况下，AI 会遗漏或自主增加一些内容，造成译文与源语文本不对应；每次的 AI 辅助翻译结果均有所差异，造成学生译者对译文的正确性产生困惑。

2.3 AI 对翻译过程的影响

AI 辅助翻译对以往翻译过程产生了显著影响，将自主翻译由局部到整体的生成模式转变为由整体到局部的验证模式。其过程对比如表 6 所示:

Table 6 Comparison of Independent Translation and AI-assisted Translation Processes

Independent Translation (Generation Mode)	AI-assisted Translation (Verification Mode)
1. Comprehending the Source Text Read the entire text to grasp its core meaning, context, and cultural background	**1. Generating an Initial Translation** Input the source text to obtain a preliminary AI-generated translation
2. Lexical Selection Choose target-language equivalents for key terms with attention to collocation, register, and accuracy	**2. Source-text Comparison** Compare the AI output with the source to deepen semantic understanding
3. Sentence and Paragraph Integration Adjust syntactic structures to ensure fluent sentences and coherent paragraph organization	**3. Sentence-level Validation** Examine grammar, meaning, and contextual appropriateness in each translated sentence
4. Producing a Complete Translation Integrate all components into a coherent target-language text	**4. Lexical Refinement** Optimize word choices and correct improper collocations or register mismatches
5. Review and Verification Reread the translation to check semantic accuracy, fluency, and cultural appropriateness	**5. Final Optimization** Consolidate revisions to ensure the translation is natural, precise, and context-appropriate

自主翻译过程通常遵循自下而上的认知路径：译者首先理解源语文本，随后逐步完成词语选择、句子组合与段落整合，最终形成完整译文并进行检查。这一过程体现了译者在认知加工中的高参与度，涉及语义识解、句法重组和语篇连贯性构建，属于典型的“局部到整体”生成模式。

相比之下，AI 辅助翻译呈现出自上而下的加工特征。译者以 AI 生成的完整译文为起点，在此基础上逐句对比源语文本，完成理解与验证，并针对词语语义、语体进行局部调整，最终确认译文质量。这种模式显著降低了译者在源语理解阶段的认知负荷，但在验证和调整环节仍需投入认知努力，尤其在词汇选择和语用适配方面。

3. AI 辅助翻译对学生译者认知行为的影响

关于 AI 辅助翻译的优缺点问题，学生译者的回答基本一致。其优点包括：快速、方便；可完成多种任务；节省词语检索时间；帮助行文与检查语法；翻译效率高等。缺点则为：部分翻译错误；用词不准确；语言不自然；无故添加内容；需多次检查以及需输入正确提示语等。

此外，不少受访者还提到了一个非常重要的缺点，即 AI 对学生译者自身的负面影响。其中包括：无法获取新知；减少了词汇记忆；忘记如何书写汉字；缺乏自主学习；缺乏独立思考、判断翻译是否正确的能力；过度依赖 AI，在无 AI 的情况下无法独自完成翻译任务以及无法深入学习、提升翻译能力等。

以上均反映出 AI 对学生译者认知方面的影响。这种影响反映在学生译者翻译能力以及认知负荷两个方面。

3.1 AI 对学生译者翻译能力的影响

翻译策略、翻译能力及其习得、译者认知努力等均是认知翻译学主要研究对象。翻译能力是一个多维度综合能力，翻译能力包括语言能力、外部知识能力、翻译知识能力、策略能力、工具能力、心理生理要素六个子能力 (Jing, 2023)。

当被问及 AI 是否对自己的翻译能力产生影响时，被访者均表示产生了影响。该影响主要表现在语言能力、策略能力以及工具能力方面。语言能力方面，AI 是否有助于提高语言能力取决于学生译者对其的使用方式。部分被访学生译者表示 AI 辅助翻译让自身的词语掌握能力下降，词语记忆不牢固。而部分则表示 AI 辅助翻译帮助生成了带有词语以及拼音的结果，这有助于习得相关词语。同时 AI 辅助翻译提供了一个翻译样式，学生译者可参考该样式用于其他翻译任务。学生译者在策略与工具使用方面的能力有所提高。学生译者会根据不同的翻译任务类型调整 AI 提示语；使用多个 AI 工具对翻译结果进行验证等。

3.2 AI 对学生译者认知负荷的影响

调查与访谈结果表明，学生译者在自主翻译过程中认知努力显著偏高，需要同时处理词汇选择、语法结构、语序安排以及频繁查阅词典等任务，其内在和外在认知负荷均处于较高水平。相比之下，AI 辅助翻译显著降低了源语理解、句法组织和词汇检索等环节的认知负荷。然而，这种减负效应并未完全消除认知压力，而是造成了认知负荷的转移：学生译者将更多的认知努力集中于译文的验证与修正环节。AI 在源语理解环节表现突出，能够快速解析语义，减少译者的识解负荷。然而，目标语表达仍需译者进行概念重构、语境判断和风格控制，这些高阶认

知活动无法完全由 AI 替代。“无法确认译文是否正确” 的比例由自主翻译时的 45.2% 上升至 AI 辅助翻译时的 52.4%，清晰反映了认知负荷在评估阶段的集中。总而言之，AI 在翻译初始阶段显著降低了学生译者的认知负荷，尤其在语义解析和结构化输出方面表现突出，但同时重塑了认知加工路径，使负荷从“生成”环节转移到“验证”环节。这种认知努力的再分配不仅改变了翻译过程的认知模式，也对学习深度和能力习得提出挑战。

综上研究显示，AI 辅助翻译已成为学生译者翻译学习的常态，使用频率极高，尤其以 ChatGPT 为首选工具，呈现“一主多辅”的使用模式。在翻译过程与行为方面，AI 显著改变了以往翻译的认知加工路径，将自主翻译的“局部到整体”生成模式转变为“整体到局部”的验证模式。在认知行为层面，AI 的介入带来了双重效应：一方面降低了源语理解和句法组织的认知负荷；另一方面，认知负荷出现转移，学生译者在译文正确性确认环节的负担加重，且长期依赖可能导致语言能力弱化、词汇记忆减少和批判性思维不足等问题。这些发现不仅揭示了 AI 在翻译学习中的优势与风险，也凸显了教学中亟需应对的挑战。如何在降低学生译者认知负荷的同时，帮助其在技术支持下实现认知参与和翻译能力的均衡提升成为翻译教学急需解决的问题。

讨论

本研究从认知负荷理论和认知翻译学框架出发，对比了学生译者在自主翻译与 AI 辅助翻译中的行为差异，其结果揭示了一种由“生成模式”向“验证模式”的认知加工转向。

1. 认知负荷的再分配：从初始环节向评估环节转移

本研究发现 AI 辅助翻译显著降低了“源语理解”与“行文语法”等困难，其效应与认知负荷理论一致。根据 Sweller (1988)，外在负荷源于信息呈现方式的复杂性。AI 能快速生成初步译文或语义解释，相当于简化了信息呈现形式，从而降低了学生译者在识解阶段的外在负荷。此外，这一发现与 Yu 和 Liu (2024) 关于“AI 重塑翻译流程，改变认知加工顺序”的论述相一致。

然而，“正确性检验困难”未显著改善，甚至呈上升趋势，说明外在负荷的减少并未降低总体认知负荷，而是导致负荷从生成阶段向验证阶段转移。Sweller (1988) 指出相关负荷与知识建构有关，当学习者将主要精力用于验证而非建构时，可能削弱学习深度。访谈数据显示学生译者在 AI 情境下需要更多的核查、判断与调整 AI 生成内容，这一现象与 Liu 和 Shao (2025) 所提出的“大模型时代认知参与度下降风险”一致。

因此，AI 的作用不是单纯“降低难度”，而是重新分配难度：降低低阶加工负荷、提高高阶验证负荷。

2. AI 对翻译行为模式的影响：从生成模式向验证模式转型

研究结果显示，自主翻译遵循自下而上的生成路径，而 AI 辅助翻译呈现自上而下的验

证路径。这与 Wen 和 Xiao (2019)“意义建构过程需经历识解——表达——整合”的认知模式一致。本研究表明，当AI负责生成输出后，学生译者并非放弃认知加工，而是将认知努力转向“比对——判断——修订”，这与 Wu 和 Yang (2026) 提出的“译者不再是单纯的文本生产者，而是逐步转型为‘质量管理者’与‘决策者’”的观点一致。

这一模式转型具有双重效应：（1）提高译后编辑效率：AI在词汇检索、句法组织方面提供初始结构，使学生译者可集中资源处理语用与风格问题。（2）削弱生成能力的参与度：若学生译者长期依赖AI生成译文初稿，其语言生成能力与语篇构建能力可能下降，这与 Wang (2024) 关于“AI引发学习者依赖性”的担忧一致。

3. AI对能力结构的影响：策略能力提升与语言能力弱化并存

本研究的访谈结果显示，学生译者在AI情境下策略能力（如提示语调整、多工具交叉验证等）得到显著提升。这与 Li 和 Li (2025) 关于“提示语能力（Prompt Literacy）成为大模型时代译者新核心能力”的观点一致。

但与此同时，学生译者反映的语言能力弱化也在本研究中得到印证。这与 Mou (2022) 关于“技术便利性会削弱学习者语言巩固机制”的论述相符。换言之，AI的介入带来了一种能力结构的“非对称增长”：策略与工具能力上升，语言能力存在弱化风险。这一结果凸显教学中需要平衡“技术赋能”与“认知参与”，避免让学生译者将高阶语言加工责任完全转移给AI。

总结

本研究基于问卷、访谈及行为对比分析，系统呈现了AI辅助翻译对学生译者翻译行为与认知加工的影响。结果显示，AI有效缓解了学生译者在源语理解、句法组织和词汇检索方面的认知负荷，使翻译初始阶段的加工难度显著降低。然而，这种减负并非减少总体认知需求，而是导致负荷向译文验证与质量控制环节集中，学生译者在判断译文语义准确性、语体适配性与细节一致性方面的压力增加，形成“认知负荷再分配”的典型特征。同时，翻译过程由以往的“生成模式”转向“验证模式”，学生译者在AI产出的基础上进行比对、调整和修订，其认知参与从生产性加工转向评估性加工。

本研究的创新性主要体现在三个方面：（1）从认知负荷视角揭示了AI辅助翻译中负荷转移的机制，提出“认知负荷再分配”这一解释框架；（2）归纳形成了学生译者的“验证式翻译路径模型”，弥补了目前对AI情境下翻译过程机制研究的不足；（3）指出能力结构呈现“双向变化”：AI使用提升了提示语设计、工具选择与审校策略等技术与策略能力，同时也可能造成语言能力巩固度下降、词汇记忆弱化及独立生成能力减弱，为翻译能力构成研究提供新的实证支持。

建议

基于上述发现，本研究提出以下教学建议：第一，应引导学生译者批判性使用 AI，通过“AI 译文诊断”、“多工具交叉验证” 等任务提高其语用判断能力和译文质量控制能力。第二，教师可从语言知识传授者转向“技术整合型引导者”，在教学中加入提示语优化训练、工具选择策略等内容，帮助学生译者提高 AI 素养。第三，设计认知参与型任务，如“部分 AI 辅助翻译”、“无 AI 挑战”等，以保持学生译者在源语理解与表达生成环节的主动加工能力，防止过度依赖。第四，应融入 AI 时代的伦理教育，包括学术诚信、译文原创性与数据安全意识，促使学生译者形成正确的技术观与职业规范。

研究局限与未来研究方向

本研究在揭示人工智能辅助翻译对学生译者翻译行为影响的同时仍存在一定局限。首先，样本规模较小且集中于单一院校，结果的普适性有待验证；其次，数据主要来源于问卷与访谈，缺乏其他认知负荷测量手段，可能影响认知加工差异的精确性；再次，所提出的 4 条教学建议偏向宏观，缺乏具体的教学场景落地案例与实证依据。未来研究可在更大样本和跨文化背景下开展比较，结合多模态认知测量深入分析 AI 介入对认知加工模式的影响。同时，建议开展实证研究，评估认知参与型任务在防止过度依赖、提高语言能力方面的效果，并进一步探讨 AI 辅助翻译在学术诚信、知识产权及职业伦理中的风险，构建适用于教育场景的技术使用规范。

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资质过剩感对律师任务绩效的影响研究——以情绪劳动为中介

THE IMPACT OF PERCEIVED OVERQUALIFICATION ON LAWYERS' TASK PERFORMANCE: THE MEDIATING ROLE OF EMOTIONAL LABOR

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摘要

研究目的：在法律服务市场高度专业化与竞争加剧并存的背景下，高学历律师从事低复杂度、重复性业务现象增多，岗位价值感受挫，资质过剩感日益突出。既有研究虽关注资质过剩感的情绪与行为后果，但其影响律师任务绩效的机制仍不明确，尤其缺乏对情绪劳动中介路径的系统检验。本研究基于认知评价理论，探讨资质过剩感对律师任务绩效的影响，并检验情绪劳动的中介作用。

研究设计/方法/途径：以陕西省执业律师为样本，获得 473 份有效问卷（约占全省 1.9 万名执业律师的 2.5%）。采用 SPSS 进行多元回归分析，并使用 AMOS 进行结构方程模型与中介效应检验。

研究结果：结果显示：资质过剩感对律师任务绩效具有显著负向影响。情绪劳动在两者之间发挥中介作用，其中表层行为呈正向中介效应，而深层行为呈负向中介效应。

创新性与价值：本研究在律师职业情境下检验资质过剩感的绩效后果，并从情绪劳动“双路径”视角细化其作用机制，拓展相关理论解释。实践上，建议律所通过案件分级、岗位轮换与职业发展支持优化人岗匹配、缓解资质过剩感，并加强情绪管理培训，以提升任务绩效与职业满意度。

关键词：资质过剩感 情绪劳动 任务绩效 认知评价理论 律师

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Abstract

Purpose: In an increasingly specialized and highly competitive legal services market, more highly educated lawyers are performing low-complexity and repetitive work, undermining their sense of job value and intensifying perceived overqualification. Although previous research has examined the emotional and behavioral consequences of perceived overqualification, the extent to which it affects lawyers' task performance remains unclear, particularly given the lack of systematic tests of the mediating role of emotional labor. Grounded in Cognitive Evaluation Theory, this study investigates the effect of perceived overqualification on lawyers' task performance and examines the mediating role of emotional labor.

Study Design/Methodology/Approach: A survey of practicing lawyers in Shaanxi Province, yielding 473 valid questionnaires (approximately 2.5% of the province's roughly 19,000 practicing lawyers). Multiple regression analyses were conducted using SPSS, and Structural Equation Modeling (SEM) and mediation tests were performed using AMOS.

Findings: Perceived overqualification has a significant negative effect on lawyers' task performance. Emotional labor mediates this relationship: surface acting has a positive mediating effect, whereas deep acting has a negative mediating effect.

Originality/Value: This study examined the performance consequences of perceived overqualification among lawyers and refined the underlying mechanism through a dual-path perspective on emotional labor, thereby extending existing theoretical explanations. Practically, the findings indicated that law firms should improve person-job fit and relieve perceived overqualification through measures such as case grading, job rotation, and career development support, while strengthening emotion management training to enhance task performance and job satisfaction.

Keywords: Perceived Overqualification, Emotional Labor, Task Performance, Cognitive Appraisal Theory, Lawyers

引言

随着法律行业的不断发展，中国律师职业呈现出高度专业化与激烈竞争并存的特点。近年来，执业律师人数快速增长，据司法部数据显示，截至 2025 年 9 月，中国执业律师总数已超过 83 万人（The State Council Information Office of the People's Republic of China, 2025）。然而，法律服务市场的发展相对滞后，行业“过度竞争”趋势明显，大量初级律师长期从事基础性、重复性法律事务，造成高学历人才“高能低用”的现象日益普遍。

在组织行为学领域，这种岗位与能力之间的不匹配通常被界定为“资质过剩感”(Perceived Overqualification, POQ)。资质过剩感指个体感知其教育背景、技能经验等超过当前岗位实际需求的主观心理状态 (Cheng et al., 2021; Zhao et al., 2019)。已有研究表明，资质过剩感可能引发员工的无力感与职业脱离感，影响其心理健康与行为表现 (Yang & Li, 2021)。在律师这一高度

专业化与高情绪劳动并重的职业中，这种影响尤为显著。律师在面对客户沟通、庭审辩护、团队协作等复杂场景时，需要频繁调节自身情绪状态，而资质过剩感可能干扰其情绪劳动策略的选择，从而对其任务绩效产生深远影响 (Hu et al., 2023)。

认知评价理论 (Cognitive Appraisal Theory, Lazarus & Folkman, 1984) 指出，个体对其所处情境的认知评估是其情绪体验和行为反应的关键机制。资质过剩感作为一种主观不匹配体验，可能被评估为威胁个体胜任感与自主性的压力源，进而激发不同类型的情绪劳动反应，如表层行为（Surface Acting）与深层行为（Deep Acting），并通过这些路径影响个体的绩效水平 (Qu et al., 2025)。因此，认知评价理论为深入揭示资质过剩感的作用机制提供了有力的理论基础。

尽管已有研究初步关注资质过剩感对组织成员行为的影响，但对于律师这一特殊职业群体的系统性实证研究仍较为缺乏，尤其是其通过情绪劳动影响任务绩效的中介路径尚未得到充分揭示。因此，本文试图以律师为研究对象，探讨资质过剩感如何通过情绪劳动策略影响其任务绩效，进一步构建“认知——情绪——行为”的理论路径模型，以期丰富组织行为领域关于资质过剩感的研究视角，并为法律服务行业的人才管理实践提供理论支持与现实参考。

研究目的

本研究旨在探讨资质过剩感对律师任务绩效的影响机制，并分析情绪劳动的中介作用。具体目标如下：

1. 探讨资质过剩感对律师任务绩效的直接影响。
2. 分析情绪劳动在资质过剩感与任务绩效之间的中介作用，比较其不同维度的作用路径。
3. 运用认知评价理论解释资质过剩感如何影响律师的情绪劳动方式及其工作表现。

文献综述

本章旨在为本研究提供理论基础与文献支持，围绕“认知评价理论”构建理论分析框架，梳理与本研究相关的核心变量：资质过剩感、情绪劳动与任务绩效的定义与作用机制，并结合前人研究提出本研究的主要假设。

理论基础

认知评价理论（Cognitive Appraisal Theory）由 Lazarus 和 Folkman (1984) 提出，强调个体在面对外部环境刺激时，会对情境进行主观评价，并基于这种认知产生相应情绪反应与行为反应。该理论认为，个体在主观评价事件的相关性、利害关系及应对资源的过程中，形成对当前情境的情绪应对机制，进而影响其动机状态与行为表现。

在组织行为研究中，认知评价理论被广泛用于解释个体在面对工作压力、资源匮乏或角色冲突等组织情境时的心理调节路径。其两个核心机制包括：“评价”（Appraisal）与“应对”

（Coping）。前者指个体对外部情境是否构成威胁或挑战的认知判断；后者则体现为个体根据该判断采取的情绪调节与行为反应。

结合本研究语境，律师在面对自身资质高于工作任务要求的情境中，往往会主观评价此类岗位为“价值不足”或“无法发挥所长”，进而削弱其胜任感与自主性体验，产生负面情绪反应。为维持职场情绪稳定性，个体将通过不同形式的情绪劳动进行应对，表现为对情绪的外显调节（表层行为）或内在调整（深层行为），最终影响其工作状态与绩效表现。

变量界定

资质过剩感（Perceived Overqualification）是指个体主观认为其教育背景、工作经验或技能水平超出其当前岗位要求的一种心理感受 (Maynard et al., 2006)。已有研究表明，资质过剩感可能导致员工产生不满、无意义感和倦怠感 (Erdogan & Bauer, 2009)，进而影响其工作动机与行为表现 (Luksyte et al., 2011)。

情绪劳动（Emotional Labor）是员工为达到组织情绪表达规范而进行的情绪调节过程 (Hochschild, 1983)，通常表现为表层行为和深层行为两种方式。前者侧重于外在伪装，后者强调内在调节 (Grandey, 2000)。情绪劳动作为一种应对策略，会对员工的精力状态与工作表现产生深远影响。

任务绩效（Task Performance）指个体在工作职责范围内完成核心任务的能力与结果，是衡量员工工作成效的重要指标 (Borman & Motowidlo, 1993)。研究表明，任务绩效不仅受到能力和知识影响，还与员工的动机状态、情绪体验密切相关 (Williams & Anderson, 1991)。

结合认知评价理论，资质过剩感作为一种负向情境认知，会被员工视为工作资源与心理需求不匹配的表现，破坏其自主性与胜任感 (Deci & Ryan, 2000)。这一过程可能引发情绪劳动作为应对策略，并通过情绪调节机制进一步作用于员工的任务绩效。因此，资质过剩感、情绪劳动与任务绩效之间存在潜在的因果关系链条。

研究假设

已有研究指出，员工在主观感受到其资历或能力未被充分利用时，容易产生失落感和疏离感，降低工作动机，进而导致绩效水平下降 (Zhang et al., 2019; Yang & Li, 2021)。这一现象在高度专业化的法律服务行业中表现尤为突出。从认知评价理论视角看，资质过剩感所带来的负向评价容易引发低效能感与低投入行为。因此，提出以下假设：

H1：资质过剩感对律师任务绩效具有显著负向影响

进一步地，认知评价理论认为，当个体评估工作环境无法满足其心理需求时，将引发相应的情绪调节反应。资质过剩员工通常会采用不同的情绪劳动策略作为应对机制，以缓解认知评价带来的负面情绪影响 (Cheng et al., 2021; Zhao et al., 2019)。因此：

H2：资质过剩感对律师情绪劳动具有显著影响

H2a：资质过剩感对表层行为具有显著正向影响

H2b：资质过剩感对深层行为具有显著负向影响

情绪劳动的不同策略对工作绩效存在差异化影响。研究表明，表层行为由于长期压抑情绪，易引发情绪耗竭并降低绩效，而深层行为则有助于情绪一致性与积极工作投入 (Wang et al., 2021; Xu et al., 2020)。因此：

H3：情绪劳动对律师任务绩效具有显著影响

H3a：表层行为对律师任务绩效具有显著负向影响

H3b：深层行为对律师任务绩效具有显著正向影响

资质过剩感通过引发情绪劳动行为，从而间接影响任务绩效，这种传导路径符合认知评价理论中“认知——情绪——行为”的逻辑链条 (Hu et al., 2023; Qu et al., 2025)。因此：

H4：情绪劳动在资质过剩感与任务绩效之间起中介作用

H4a：表层行为在资质过剩感与任务绩效之间起中介作用

H4b：深层行为在资质过剩感与任务绩效之间起中介作用

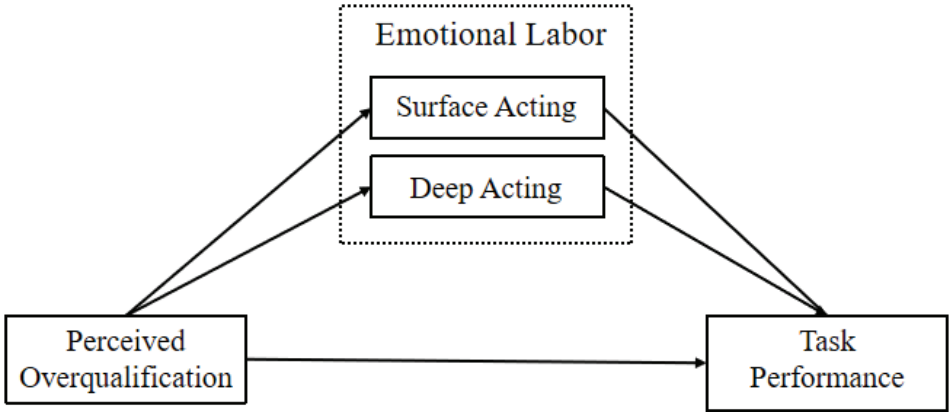


Figure 1 The Hypothesized Model

研究方法

1. 研究设计

本研究采用定量研究方法，以结构化问卷为主要数据收集工具，通过问卷调查方式获取律师群体的第一手数据。研究目标是验证资质过剩感是否通过情绪劳动影响律师的任务绩效，从而构建并检验一条以“认知——情绪——行为”为逻辑链条的中介模型。整体研究设计遵循实证研究路径，采用横断面调查方式进行数据收集，并通过统计分析方法对提出的假设模型进行验证。

2. 样本与数据收集

研究对象为中国陕西省的执业律师，调查涵盖不同类型与规模的律师事务所。数据收

集采用非概率抽样中的便利抽样法，通过线上问卷平台（如问卷星）发布电子问卷，并借助律师协会、律所内部通讯群及专业社交平台进行发放，以保证样本的多样性和覆盖面。该方法在社会科学研究中较为常见，但可能存在样本代表性不足的局限性。为降低潜在偏差，本研究尽可能覆盖不同地区、不同规模及不同执业年限的律师群体，从而增强结果的可靠性与推广性。

在数据收集过程中，调查前设置封面说明，明确调查目的与保密承诺，确保被试的自愿参与和真实作答。本研究共计发放问卷 550 份，收回有效问卷 473 份，数据量具备较强的代表性，满足后续统计分析要求。

3. 变量测量

本研究涉及三个核心变量：资质过剩感、情绪劳动和任务绩效。各变量测量均采用已有成熟量表，并结合律师行业的语境特点进行语言本土化调整。所有题项均采用 Likert 五点量表（1 = 非常不同意，5 = 非常同意）进行评分。

其中，资质过剩感测量采用 Maynard et al. (2006) 开发的 Perceived Overqualification 量表；情绪劳动测量采用 Grandey (2000) 提出的双维度量表，包括表层行为与深层行为两个维度；任务绩效测量则采用 Williams 和 Anderson (1991) 开发的任务绩效自评量表。上述量表已在多个组织行为研究中广泛使用，具有良好的信效度和跨文化适用性。

研究结果

本研究采用结构方程模型（SEM）对陕西省律师群体的调查数据进行实证分析，围绕资质过剩感、情绪劳动与任务绩效三类核心变量展开，具体包括描述性统计、信效度检验、结构路径分析及中介效应检验，具体结果如下：

1. 描述性统计与信效度检验

样本共计 473 份，有效数据涵盖性别、年龄、律所职务等维度，具有较好的代表性。信度分析显示，各变量的 Cronbach’s α 系数均大于 0.80，表明量表具有较好的内部一致性。结构效度方面，KMO 值为 0.945，Bartlett 球形检验显著（$p < 0.001$），支持进行因子分析，说明测量工具具备良好的结构效度。

Table 1 Reliability and Validity Test Results (n = 473)

Variable Name	Mean (M)	Standard Deviation (S.D.)	Cronbach's α	KMO Value	Bartlett's Test of Sphericity (*p*-value)
Perceived Overqualification	2.26	0.97	0.924		
Surface Acting	2.16	1.04	0.899		
Deep Acting	3.36	1.10	0.812		
Task Performance	3.62	1.03	0.922	0.945	<0.001

Remarks: $p < 0.001$

2. 结构模型路径分析

结构模型分析结果显示，资质过剩感对任务绩效具有显著负向影响（$\beta = -0.172, p < 0.001$），并对表层行为产生显著正向影响（$\beta = 0.516, p < 0.001$），对深层行为则呈显著负向影响 ($\beta = -0.249, p < 0.001$）。此外，表层行为对任务绩效的影响为负（$\beta = -0.539, p < 0.001$），而深层行为对绩效则具有正向作用（$\beta = 0.188, p < 0.001$），结构路径关系均达到显著水平。

Table 2 Results of Structural Path Analysis

Path Relationship	Standardized Path Coefficient (β)	Significance Level (p)	Significance Marker
Perceived Overqualification → Surface Acting	0.516	<0.001	***
Perceived Overqualification → Deep Acting	-0.249	<0.001	***
Perceived Overqualification → Task Performance	-0.172	<0.001	***
Surface Acting → Task Performance	-0.539	<0.001	***
Deep Acting → Task Performance	0.188	<0.001	***

Remarks: $p < 0.001$

3. 中介效应检验

通过 Bootstrap 法（重抽样 5000 次）进一步验证中介效应，结果显示：表层行为和深层行为均在资质过剩感与任务绩效之间起到显著中介作用，间接效应的 95% 置信区间均不包含 0，支持研究假设 H4a 与 H4b 的成立。其中，表层行为的中介效应占比为 55.93%，深层行为占比为 9.46%，说明表层行为为更主要的中介路径。

Table 3 Results of Mediation Effect Analysis

Path	Direct Effect	Indirect Effect	Total Effect	95% Confidence Interval (Indirect Effect)	Includes Zero?	Mediation Type
Perceived Overqualification → Surface Acting → Task Performance	-0.172	-0.278	-0.497	[-0.363, -0.202]	No significant mediating effect was found.	Significant Mediation
Perceived Overqualification → Deep Acting → Task Performance	-0.172	-0.047	-0.497	[-0.086, -0.022]	No significant mediating effect was found.	Significant Mediation

Remarks: A confidence interval that does not include zero indicates a significant indirect effect.

4. 小结

实证分析表明：资质过剩感不仅直接削弱律师的任务绩效，还通过情绪劳动的双重机制发挥间接作用。表层行为的负面中介效应显著且占比较高，深层行为则起到一定的正向缓解作用。研究验证了“认知——情绪——行为”逻辑路径的适用性，对组织如何调节资质错配与绩效关系提供了理论支撑与实践启示。

讨论

本研究基于认知评价理论，构建了“资质过剩感——情绪劳动——任务绩效”的中介模型，对律师群体中资质认知、情绪调节行为与绩效结果之间的关系进行实证分析。研究结果支持提出的各项假设，验证了资质过剩感对任务绩效的直接与间接作用机制。以下将围绕研究模型对主要发现进行深入探讨。

1. 资质过剩感对任务绩效的直接作用

研究发现，资质过剩感与任务绩效之间存在显著负向关系。这一结果与已有研究结论一致，表明当个体认为其能力或经历超过岗位需求时，容易产生“资源浪费”的主观感受，从而削弱工作动机与组织归属感，降低其对任务的专注度与完成度。从认知评价理论角度看，资质过剩是一种不利的初级认知评价，个体在这一评价基础上倾向于产生负面情绪体验，影响其后续的行为表现。在律师这一高专业投入的职业群体中，岗位与能力之间的不匹配更易引发失落感与认同危机，进而对绩效产生实质性影响。

2. 情绪劳动的中介作用

在资质过剩感影响绩效的机制中，情绪劳动发挥了重要的中介作用。研究表明，资质过剩感分别通过影响个体在表层行为与深层行为两个维度的倾向，间接作用于任务绩效。

具体而言，资质过剩感与表层行为之间呈正相关，即当个体对岗位价值产生怀疑时，常通过“面具式”的外在表达维持工作形象。然而，这种情绪掩饰会在日常工作中积累情绪疲劳，难以支撑持续的工作投入，对绩效产生负面影响。与此同时，资质过剩感与深层行为呈负相关，表明高资质者面对“低匹配”岗位时，较少主动调整情绪以实现内在一致，深层调节动力不足，这也限制了积极情绪状态在任务执行中的正面作用。

整合来看，情绪劳动作为个体在面对负向认知评价后的应对机制，其调节方式（表层或深层）在资质过剩背景下呈现出一定的“偏向性”与“非适应性”。这种应对策略的偏移，是资质过剩感作用于绩效表现的一个关键路径。值得注意的是，表层行为的中介效应显著强于深层行为。这可能是因为律师在高压执业环境下更倾向于依赖表层情绪伪装来维持专业形象，但这种方式带来的情绪耗竭往往更加剧烈，从而放大了对绩效的负面作用。

3. 理论模型的整体启示

本研究所构建的中介模型清晰呈现了从认知评价到行为结果的心理机制路径，验证了“认知——情绪——行为”的理论逻辑。资质过剩感作为一种认知偏差，不仅在情绪水平上引发调节反应，还在行为层面体现为工作绩效的波动。这一发现不仅拓展了资质过剩感研究的理论外延，也深化了对情绪劳动在绩效形成过程中的理解。通过对律师群体的实证分析，本研究进一步验证了认知评价理论在高认知、高压力职业群体中的适用性，为未来情绪劳动机制研究提供了更具针对性的实证基础。

总结

本研究以认知评价理论为基础，聚焦律师群体中的资质过剩感、情绪劳动与任务绩效三者之间的关系，构建并验证了“认知——情绪——行为”的中介路径模型。通过对 473 份有效样本的结构方程建模分析，主要得出以下结论：

1. 资质过剩感对任务绩效具有显著负向影响，印证了岗位——能力错配所引发的认知落差会降低个体的工作投入与表现；

2. 情绪劳动在资质过剩感与任务绩效之间发挥显著中介作用。具体而言，资质过剩感会促使个体更倾向于采用表层行为这一低适应性的情绪调节方式，并抑制深层行为的积极发生，进而间接影响任务绩效表现；

3. 研究所构建的结构方程模型拟合良好，验证了认知评价理论在律师职业情境中的适用性，突出了情绪劳动在认知评价——行为反应机制中的桥梁作用。

综上，本研究不仅从实证角度深化了对资质过剩感的理解，也为探索员工情绪调节策略在组织行为中的作用机制提供了理论支持和分析路径。

研究局限与未来研究方向

本研究仍存在一定局限。首先，样本仅来自中国陕西省的执业律师，地域与职业的局限性可能影响结果的普遍性，未来研究可在不同地区和更大范围的样本中进一步验证结论。其次，数据收集采用横断面调查设计，难以充分揭示因果关系，后续研究可结合纵向数据或实验方法以增强因果推断的力度。此外，本文聚焦于律师群体，但资质过剩感与情绪劳动的作用机制同样可能存在于其他高认知职业（如医生、咨询顾问、教师等），未来研究可进一步拓展至更多职业情境中，以提高研究结论的外部效度。

建议

结合研究结论，本文提出以下几点管理实践建议，以期为法律行业及其他专业服务型组织提供人力资源管理的参考依据：

1. 加强岗位设计与人才匹配

组织在招聘与岗位配置过程中，应注重员工资质与岗位要求之间的匹配度，尽量避免因过度学历、经验或能力造成的岗位资源浪费与员工心理落差。可通过建立多元化的晋升通道、实施岗位轮换等方式提升岗位挑战度，增强员工对工作的价值认同。

2. 强化情绪劳动管理培训

情绪劳动的调节策略直接影响员工的工作状态与绩效表现。组织应开展情绪劳动意识培训，鼓励员工采用深层行为策略进行情绪调节，避免长期依赖表层行为造成情绪枯竭。通过培训提升员工的情绪调节能力，有助于塑造积极的工作氛围与服务质量。

3. 建立职业支持机制

对于存在资质过剩感的员工，管理者应给予更多职业发展支持，例如提供个性化的职业规划辅导、内在激励机制与心理疏导服务，帮助员工重建岗位价值感，缓解心理落差，从源头上减少负向情绪与行为反应。

4. 推进组织文化建设

构建开放、包容、尊重多元能力的组织文化，有助于员工在不同阶段获得平衡发展的机会。通过建立正向反馈机制与内部归属感建设，提升员工的组织认同，从而增强其情绪投入与绩效表现。

5. 政策层面的制度支持

从宏观层面看，政府及行业协会应进一步完善律师职业发展政策。例如，可通过建立律师职业能力分级制度、推动专业化法律服务细分市场发展，以及出台针对青年律师的职业扶持政策，为不同发展阶段的律师提供多元化的成长路径。同时，应加强对律师事务所人力资源管理的行业指导，倡导合理分工与职业发展支持机制，以缓解资质过剩感问题，提升整体行业的人才利用效率和服务质量。

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THE INTERPLAY OF TRUST: MEDIATING AND MODERATING EFFECTS IN THE COMMUNICATION-LOYALTY RELATIONSHIP IN PRIVATE HOSPITALS IN VIENTIANE

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Abstract

Purpose: This study investigated the relational mechanisms linking communication effectiveness to patient loyalty within the private healthcare sector of Vientiane, Lao PDR. Rooted in the Social Exchange Theory (SET), the research specifically examined trust's mediating and moderating role in translating service communication into behavioral commitment.

Study Design/Methodology/Approach: A quantitative research design involved a self-administered online questionnaire to gather data from 512 patients who had recently used private hospital services in Vientiane. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to evaluate the measurement and structural models.

Findings: The results offered strong empirical evidence of the direct effect of communication effectiveness on patient loyalty ($\beta = 0.252$, $p < 0.001$). Furthermore, the study identified trust as a critical mechanism: communication effectiveness significantly drives trust ($\beta = 0.778$, $p < 0.001$), which in turn boosts loyalty ($\beta = 0.550$, $p < 0.001$). Mediation analysis confirms that trust functions as a crucial partial mediator ($\beta = 0.428$, $p < 0.001$). However, the hypothesized moderating effect of trust was not significant ($\beta = -0.002$, $p = 0.478$), indicating that trust serves as a fundamental prerequisite rather than a conditional buffer in this high-risk context.

Originality/Value: This research advances SET by conceptualizing trust's dual role in a transitional Southeast Asian economy. It challenges Western-centric models by showing that, in the Lao PDR's developing healthcare market, trust acts as a "hygiene factor" essential for the relationship to exist, but does not amplify service inputs.

Keywords: Patient Loyalty, Communication Effectiveness, Trust, Mediation, Lao PDR

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Introduction

The global healthcare sector is undergoing a profound shift, transitioning from volume-based care to patient-centric models driven by quality of service, transparency, and consumer experience (Kehyayan et al., 2025; Ratasuk & Naing, 2025). This transition is characterized by rapid adoption of technology, including digital health records and telemedicine, and intensified competition among providers (Raunaq et al., 2025). Private hospitals, in particular, face pressure to deliver not only cutting-edge medical services but also superior non-clinical experiences to justify higher costs and retain clientele (Ratasuk et al., 2025). As disposable incomes rise across emerging economies, patients increasingly view healthcare as a high-contact service exchange, demanding personalized attention and seamless communication, which are now critical determinants of institutional viability and market share (Haleem et al., 2021).

The trend of privatizing and commercializing healthcare is rapidly accelerating across Southeast Asia, often driven by the growth of the middle class and the strain on public systems (Alayed et al., 2024). The Lao People's Democratic Republic (Lao PDR), specifically its capital Vientiane, serves as a compelling and critical microcosm of this development (Ministry of Health, Lao PDR, 2023b). While overall access to quality care remains a national challenge, the urban private hospital sector in Vientiane is highly competitive, characterized by investment (including foreign capital), increased patient choice, and the ongoing risk of patients bypassing local facilities for treatment in neighboring countries such as Thailand (Liu et al., 2025). For Vientiane's private hospitals to succeed and contribute to national health goals, they must differentiate themselves through relational qualities that build enduring connections with their patient base (Ministry of Health, Lao PDR, 2023a).

The core challenge for private hospitals in Vientiane lies in converting initial patient visits into long-term commitment. In a market where perceived quality can be highly subjective and switching costs (aside from medical history) are relatively low, achieving sustained patient loyalty is the key to minimizing patient outflow and securing consistent revenue streams (Rohita & Nurkholik, 2025). This necessity highlights a gap between recognized best practices (like effective service delivery) and the actual, measurable emotional and behavioral commitment demonstrated by patients in this unique cultural and regulatory environment (Lauwers et al., 2024).

While Social Exchange Theory (SET)-based models linking communication, trust, and loyalty are standard in global service literature, their application in transitional markets like Lao PDR requires critical re-evaluation (Kidron & Vinarski-Peretz, 2025). Existing frameworks often assume a baseline of institutional trust common in developed economies. However, in Vientiane, patients face high information asymmetry and significant "medical uncertainty," often prompting them to seek care in neighboring Thailand. Crucially, no previous study in the Vientiane private hospital context has rigorously investigated the dual role of trust as both a mediator (explaining how communication leads to loyalty) and a moderator (explaining when and for whom the communication-loyalty link is strongest) (Irgui & Qmichchou, 2024; Sheehan et al., 2021). Therefore, this study addresses a critical theoretical tension: does trust merely

mediate the relationship between communication and loyalty, or does a pre-existing reservoir of trust act as a buffer (moderator) that amplifies communication efforts? This moderated-mediation gap in the literature prevents hospitals in this developing market from receiving nuanced strategic intervention.

The outcome variable of this study is patient loyalty, defined as a patient's commitment to repeatedly use a specific hospital and advocate for it through positive word of mouth (Handayani et al., 2021). For private hospitals, patient loyalty is not merely a measure of satisfaction, but a crucial metric of profitability and long-term sustainability (Nguyen et al., 2021). Loyal patients require less marketing investment and serve as organic referral sources, particularly in markets that rely heavily on reputation (Ratasuk & Naing, 2025; Tabish, 2024).

This research focuses on communication effectiveness as the primary driver of patient loyalty. Clear, empathetic, and consistent communication, spanning from the initial consultation to discharge instructions, reduces patient uncertainty and enhances the overall care experience. However, this relationship is fundamentally dependent on trust, which is hypothesized to play a pivotal, multifaceted role in this service context, serving as the relational mechanism that solidifies the link between service input and behavioral outcome.

The relationships within this model are grounded in Social Exchange Theory (SET). SET posits that social interactions are based on a cost-benefit analysis where individuals seek to maximize rewards and minimize costs (Ratasuk, 2024a; Ratasuk & Gajesanand, 2022a). In healthcare, effective communication acts as a reward, fostering a sense of shared understanding and reciprocity (Naing & Ratasuk, 2025). This repeated positive exchange leads to the development of trust, a generalized expectation that the provider will act reliably and benevolently, which solidifies the long-term, loyal relationship (Jeerakamol et al., 2024).

Objectives

The main goals of this study are threefold: 1) To examine the direct influence of communication effectiveness on patient loyalty; 2) To establish the mediating effect of patient trust on this relationship; and 3) To determine the moderating effect of trust on the relationship between communication effectiveness and loyalty within private hospitals in Vientiane.

Theoretically, this research contributes to validating a complex moderated-mediation structure within the SET framework, advancing understanding of relational mechanisms in high-risk service environments. Academically, it provides rare empirical data from the burgeoning but under-researched private healthcare sector of Lao PDR, offering a necessary comparative perspective on the predominantly Western and large-economy Asian literature. The findings will offer direct, actionable insights for Vientiane hospital managers and policymakers. Specifically, the study will help managers allocate resources optimally by identifying whether trust should be fostered primarily as a prerequisite (moderator) or as an outcome (mediator) of communication excellence. This will enable the development of targeted, trust-centric

communication protocols to build and sustain patient loyalty, as well as mitigate patient outflow to neighboring countries.

Literature Review

Theoretical Foundation: Social Exchange Theory (SET) and Conceptual Model

The proposed conceptual model is grounded in the Social Exchange Theory (SET), which provides the necessary framework for explaining the formation of long-term relational assets, such as patient loyalty, in a voluntary service exchange (Zhang & Liu, 2022). SET, primarily attributed to Homans and Blau, posits that human interactions are rooted in a subjective cost-benefit analysis where individuals voluntarily engage in relationships to maximize rewards and minimize costs, leading to long-term interdependence based on the norm of reciprocity (Stafford & Kuiper, 2021). In the private healthcare context, this exchange begins when the patient receives a service benefit (a reward), creating a perceived obligation to reciprocate, which is manifest as long-term loyalty (Ratasuk & Naing, 2025). This theory explains why service inputs, such as communication, build relational assets, like trust, which subsequently secure commitment (Ratasuk & Gajesanand, 2022b). This logical progression underpins the entire research model, starting with the primary relational input: Communication effectiveness.

Communication Effectiveness and Patient Loyalty

Communication effectiveness is defined as the exchange process in which information, encompassing clarity, empathy, completeness, and timeliness, is successfully transmitted and understood between healthcare providers and patients (Jenstad et al., 2024; Sharkiya, 2023). It is distinct from broader service quality constructs as it specifically isolates the information exchange process from clinical outcomes or tangible facilities, focusing instead on the interpersonal transfer of meaning. In the high-stakes environment of healthcare, effective communication is paramount because it directly addresses the high information asymmetry and anxiety inherent in medical interactions, functioning as the foundational mechanism for rapport building and quality perception (Kwame & Petrucka, 2021). Ratasuk and Naing (2025) found a significant association between communication effectiveness and patients' revisit intentions in private hospitals in Yangon. It is the operational input that distinguishes merely technical competence from holistic, high-value service delivery (Wünderlich et al., 2025). Past relational marketing literature consistently positions communication as a key exogenous variable that significantly impacts emotional and behavioral outcomes (García-Carrión et al., 2023). Patient loyalty, the ultimate dependent variable, is conceptualized as a deeply held commitment to consistently rebuy or repatronize a preferred hospital and is differentiated from simple revisit intention by including attitudinal advocacy and resistance to switching (Liu et al., 2021). For private hospitals in Vientiane, loyalty is a critical strategic asset, providing stable revenue streams and acting as persuasive advocates in a competitive market. Consistent with the reciprocal rewards mechanism of SET and the established service literature, improvements in communication quality offered by healthcare personnel are anticipated to be reciprocated by patients through behavioral commitment.

Hypothesis 1 (H1): Communication effectiveness positively affects patient loyalty.

The Dual Role of Trust: Mediation and Moderation

While communication effectiveness is the crucial input, its impact on loyalty is rarely direct; instead, it often works through trust (Chen et al., 2022; Kähkönen et al., 2021). Trust is defined as the patient's willingness to be vulnerable to the provider's actions, based on the confident expectation that the provider is reliable and benevolent, thereby acting as a powerful risk-reducing mechanism (Ratasuk & Naing, 2025). Unlike satisfaction, which is a retrospective evaluation of a specific transaction, trust is a prospective belief regarding the provider's future conduct, making it uniquely critical in managing the inherent risks of medical care. Based on SET, positive communication serves as an initial social reward, leading to the expectation of future rewards and, consequently, the development of trust. In turn, high patient trust reduces psychological costs and promotes the long-term relationship necessary for sustained loyalty (Liu et al., 2021; MacKay et al., 2024). For example, Ratasuk and Naing (2025) also found that trust mediates between communication effectiveness and patients' revisit intentions in private hospitals in Yangon. Thus, trust fulfills a primary mediating role in the CE-PL relationship.

Hypothesis 2 (H2): Communication effectiveness positively affects trust.

Hypothesis 3 (H3): Trust positively affects patient loyalty.

Hypothesis 4 (H4): Trust mediates the relationship between communication effectiveness and patient loyalty.

Beyond its role as a pathway (mediator), this research proposes that trust plays a secondary, yet critical, moderating role. In the specific context of healthcare, characterized by high risk, vulnerability, and uncertainty, trust functions not only as a mechanism but as a boundary condition. The moderation argument is grounded in the premise that the impact of service attributes is not uniform; rather, it is contingent on the existing relational climate (Attar et al., 2023; Lee, 2021). Specifically, a patient with high initial trust is more forgiving of minor communication failures, and the positive effect of good communication is exponentially more substantial when the patient already trusts the institution (Simon et al., 2021; Zhao et al., 2024). This buffering or amplifying effect suggests that trust intensifies the impact of communication on loyalty, differentiating this model from standard mediation approaches. The moderating effect of trust suggests that the magnitude of communication's influence on loyalty is conditional on the level of existing trust, leading to a more sophisticated moderated-mediation model.

Hypothesis 5 (H5): Trust positively moderates the relationship between communication effectiveness and patient loyalty.

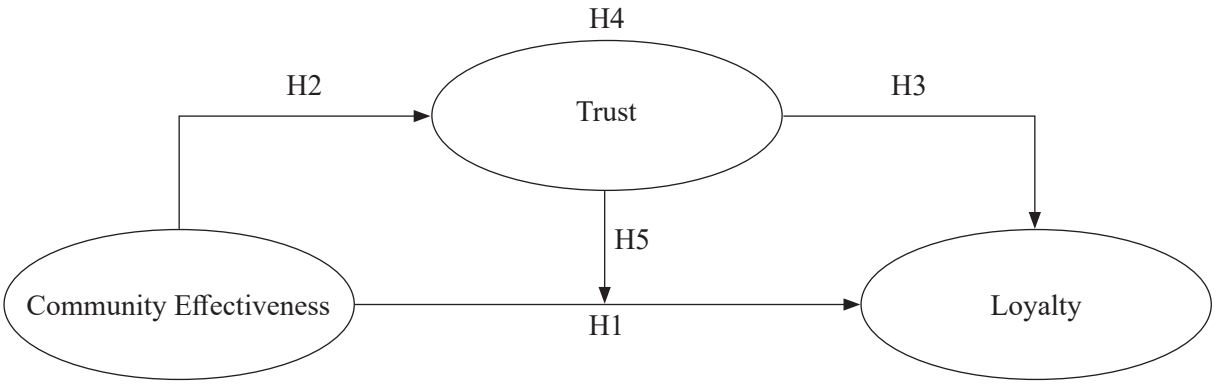


Figure 1 Conceptual Framework

Control Variables

To ensure the robustness and validity of the proposed structural relationships, demographic control variables, namely, age, gender, income, and education, are included in the model. These variables represent baseline patient characteristics that are known in existing healthcare research to influence health literacy, service utilization patterns, and expectations of care, thereby potentially confounding the primary results. Controlling for these demographics ensures that any observed structural effects of communication effectiveness and trust on patient loyalty are genuinely relational, rather than merely reflecting pre-existing demographic tendencies to select or stay with a private provider. This inclusion enhances the internal validity and ensures the integrity of the proposed moderated-mediation model in the specific Vientiane market context.

Methodology

This study adopts a quantitative, cross-sectional research design to investigate the hypothesized relationships. Given the complexity of the proposed model, which includes mediation and moderation effects, and the primary objective of maximizing predictive power R^2 rather than solely assessing theoretical fit, Partial Least Squares Structural Equation Modeling (PLS-SEM) was selected as the analytical technique. PLS-SEM is a variance-based method best suited for prediction, complex modeling, and research involving non-normal data distributions, distinguishing it from Covariance-Based SEM (CB-SEM), which is primarily confirmatory in nature. The approach enables the simultaneous testing of all structural and measurement relationships, providing robust insights into the drivers of patient loyalty within the specified context.

Population and Sampling

The target population consists of adult patients who have recently used services at private hospitals in Vientiane, Lao PDR. Due to the unknown size of the specific patient base across all private hospitals and privacy regulations preventing direct access to hospital patient registries, a non-probability, purposive sampling approach will be employed, utilizing a digital snowball technique. This focuses on respondents with direct experience in the Vientiane private healthcare sector. Drawing on established guidelines for

PLS-SEM, particularly given the model's complexity (the maximum number of arrows pointing to a latent variable), a minimum sample size of 400 complete responses will be targeted to ensure adequate statistical power (Cochran, 1977) for bootstrapping procedures and the estimation of moderated-mediation effects (Hair Jr et al., 2020; Ratasuk, 2022).

Data Collection

Primary data will be collected through a self-administered online questionnaire distributed via appropriate digital channels. Specifically, the survey link will be shared within Vientiane-focused health and wellness community groups on Facebook and distributed via QR codes placed in cooperating independent pharmacy chains. This distribution will occur over 4 to 6 weeks. To ensure data quality and relevance, two screening questions will be placed at the beginning of the survey to confirm that participants are over 18 years of age and have received treatment or consultation from a private hospital in Vientiane within the last six months. The online platform will be configured to automatically reject incomplete submissions, ensuring that the final dataset contains no missing values.

Questionnaire Design

The questionnaire is organized into four distinct sections. First, screening questions confirm eligibility, including age and a recent private hospital visit in Vientiane. Second, demographics and control variables, including age, gender, monthly income, and highest education level, are included in the model to control for potential confounding factors affecting patient loyalty. For the structural analysis, these categorical demographic variables will be dummy-coded to allow for their integration into the PLS-SEM model. Third is behavioral data on the specific hospital and the frequency of visits. Last, the main construct items measure the core variables, including communication effectiveness (Ratasuk & Naing, 2025), trust (Lyu & Ratasuk, 2024), and patient loyalty (Ratasuk, 2022a), using previously validated scales. Responses for these items will be captured using a five-point or seven-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data Analysis

Data will be analyzed using WarpPLS 8.0 software. The analysis follows a two-step procedure, which includes 1) assessment of the measurement model, including the reliability and validity of the reflective constructs assessed using internal consistency reliability, examined using composite reliability or CR, which should not be lower than 0.70, and convergent validity examined using outer loadings and Average Variance Extracted (AVE). Discriminant validity was assessed primarily using the Heterotrait-Monotrait Ratio (HTMT) criterion (Kock, 2017; Ratasuk & Charoensukmongkol, 2019). 2) Assessment of the structural model, the hypotheses were tested using a bootstrapping procedure to determine the significance of the path coefficients. Key structural model criteria are assessed by the coefficient of determination (R^2) for the endogenous variables. Collinearity was assessed using the Variance Inflation Factor (VIF) to ensure VIF < 5.0, confirming the absence of multicollinearity issues (Kim, 2019; Ratasuk, 2022b). Mediation, moderation, and robustness checks: The specific mediation (H4) will be tested using

confidence intervals for the indirect effect, and the moderation (H5) will be assessed using the interaction term. We explicitly acknowledge a potential sampling limitation regarding the demographic profile; given the digital nature of the data collection, we anticipate a skew toward younger and more highly educated respondents. To address potential bias, a check for Common Method Bias (CMB), such as Harman's single-factor test or the marker-variable technique, will also be performed, given the reliance on self-reported survey data (Kock, 2015; Ratasuk, 2024b).

Ethical Considerations

The study strictly adheres to ethical guidelines. Participants will be assured of complete anonymity and confidentiality of their responses, with data aggregated to prevent individual identification. Participation is entirely voluntary, and participants may withdraw from the survey at any time without penalty or consequence. All collected data will be securely stored and used exclusively for academic research purposes.

Results

The study collected data from n = 512 patients who had recently visited private hospitals in Vientiane. The sample showed a slight skew towards female respondents (54.5%) and was overwhelmingly composed of the younger working-age demographic, with over half of the participants (52.5%) falling within the 26-35 age bracket. Crucially, the sample reflects the target market for private healthcare, with 84.9% of respondents holding at least a Bachelor's degree. Similarly, the monthly income distribution indicates a financially capable base, with the majority (48.4%) earning between 2,000,000 and 4,999,999 LAK, indicating that the sampled population possesses the financial means and educational background typically associated with seeking and evaluating competitive private medical services. This demographic profile represents the middle- and upper-middle-class urban consumers driving private healthcare growth in Vientiane.

Table 1 Characteristics of the Sample and Descriptive Statistics

Characteristics	Categories	Descriptive Statistics	
		Frequency	Percentage (%)
Gender	Male	228	45.5
	Female	284	54.5

Table 1 Characteristics of the Sample and Descriptive Statistics (Cont.)

Characteristics	Categories	Descriptive Statistics	
		Frequency	Percentage (%)
Age	18-25	79	15.4
	26-35	269	52.5
	36-45	99	19.3
	46-55	45	8.8
	56-65	13	2.5
	Above 65	7	1.5
Education	Primary school or less	5	1.0
	Secondary school	4	0.8
	High school/Vocational certificate	68	13.3
	Bachelor's degree	326	63.7
	Master's degree	107	20.9
	Doctoral degree	2	0.3
Income (Monthly)	Less than 2,000,000	78	15.2
	2,000,000 - 4,999,999	248	48.4
	10,000,000 - 19,999,999	98	19.2
	Above 20,000,000	88	17.2

The measurement model demonstrated robust psychometric properties across all constructs, as shown in Table 2. Convergent validity was confirmed by high Factor Loadings (FL > 0.70) and Average Variance Extracted (AVE) values ranging from 0.761 to 0.838 (all > 0.50). Reliability was excellent, with Composite Reliability (CR) values ranging from 0.941 to 0.963 and Cronbach's Alpha (CA) values ranging from 0.922 to 0.952 (all > 0.70).

Table 2 Convergent Validity, Reliability, Multicollinearity, and Common Method Bias (CMB)

Question Items	FL	CR	CA	AVE	VIF
Loyalty 1. I will consistently recommend this hospital to others.	0.924	0.963	0.952	0.838	2.953
Loyalty 2. I would recommend this hospital to anyone seeking my advice on medical care.	0.918				
Loyalty 3. I will actively encourage my friends and relatives to seek care at this hospital.	0.899				

Table 2 Convergent Validity, Reliability, Multicollinearity, and Common Method Bias (CMB) (Cont.)

Question Items	FL	CR	CA	AVE	VIF
Loyalty 4. This hospital will be my first choice when I need medical care.	0.934				
Loyalty 5. I am likely to continue using this hospital's services for my future healthcare needs.	0.901				
CommuEft 1. The hospital provided clear instructions and information for my care upon my discharge.	0.883	0.941	0.922	0.761	2.645
CommuEft 2. The hospital followed up with me after my visit to check on my health.	0.858				
CommuEft 3. I feel that the hospital genuinely cares about my recovery and well-being, even after I have been discharged.	0.882				
CommuEft 4. The hospital's post-discharge communication was helpful and timely.	0.870				
CommuEft 5. I was satisfied with the information and support I received after leaving the hospital.	0.869				
Trust 1. Trust in the treatment process according to the law	0.913	0.955	0.940	0.808	3.597
Trust 2. Trust in the medicines given	0.918				
Trust 3. trust in doctors and nurses	0.914				
Trust 4. trust in commitment to nutritional intake and medicines	0.872				
Trust 5. The full trust of hospital service standards	0.876				

Discriminant validity was also established, as all Heterotrait-Monotrait (HTMT) ratios, presented in Table 3, were significantly below the conservative threshold of 0.85, confirming that the constructs are empirically distinct.

Table 3 HTMT Ratio (Discriminant Validity)

Construct	Loyalty	CommEf	Trust
Loyalty			
CommEf	0.747***		
Trust	0.838***	0.817***	

Remarks: * = $p \leq 0.05$, ** = $p \leq 0.01$, *** = $p \leq 0.001$, Loyalty (Patient Loyalty), CommEf (Communication Effectiveness), and Trust (Patient Trust)

Lastly, because the Normality Test results, shown in Table 4, indicated non-normal distributions across the latent variables, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) for structural model analysis, a technique robust to such distributions.

Table 4 Normality Test

Model Type	Loyalty	CommEf	Trust
Normal-JB	No	No	Yes
Normal-RJB	Yes	Yes	No

Remarks: Loyalty (Patient Loyalty), CommEf (Communication Effectiveness), and Trust (Patient Trust)

The overall model demonstrated rigorous statistical analysis and high predictive utility. The model demonstrated substantial predictive power (average $R^2 = 0.455$; adjusted $R^2 = 0.449$), with an R^2 change of 0.025 supporting the interaction term's incremental impact. Model quality was further validated by the Average Full Collinearity VIF of 2.115 (well below 5.0), eliminating multicollinearity concerns. Crucially, the Tenenhaus Goodness-of-Fit (GoF) statistic of 0.582 confirmed a strong global fit. Robustness checks, including Statistical Power, Simpson's Paradox, and Nonlinear Bivariate Relationships, all supported the findings, verifying the adequacy of the sample size and the appropriateness of the hypothesized linear structure.

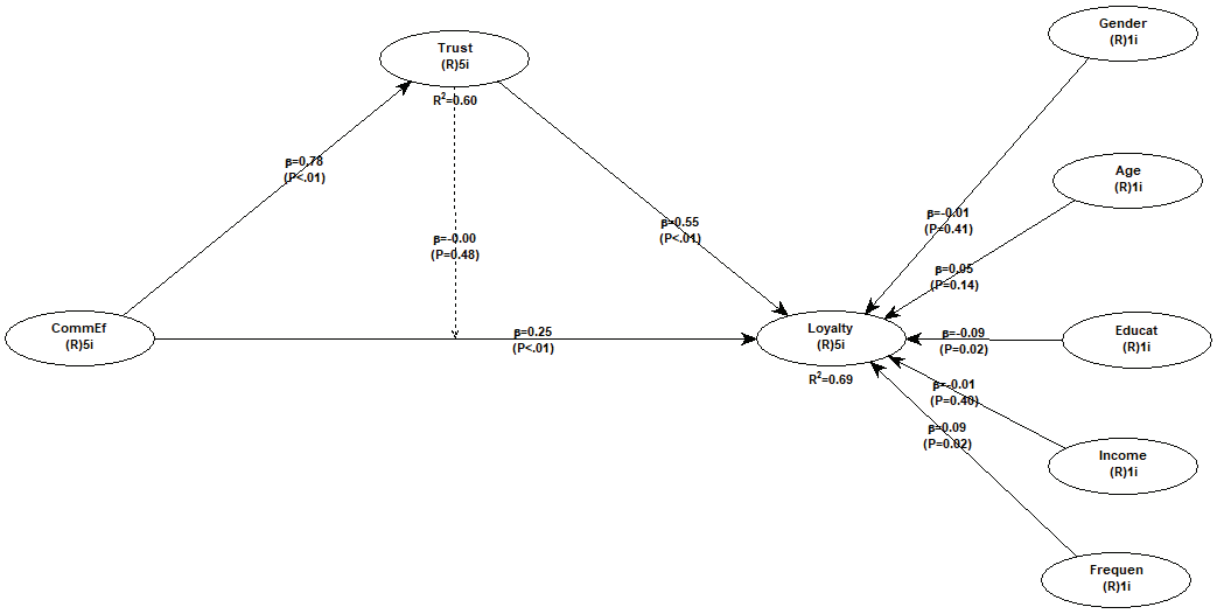


Figure 2 PLS-SEM Results

Figure 2 shows direct impacts as follows. H1 is supported: The direct path from communication effectiveness to patient loyalty is significant ($\beta = 0.252$, $p < 0.001$). H2 and H3 are also supported: Communication Effectiveness (CE) is a powerful driver of trust ($\beta = 0.778$, $p < 0.001$), and trust, in turn, is the strongest factor influencing patient loyalty ($\beta = 0.550$, $p < 0.001$). H5 not supported: The moderation hypothesis was rejected, as the interaction term (Trust x CE) was statistically insignificant ($\beta = -0.002$, $p = 0.478$), indicating that the strength of the communication-loyalty link is not conditional on the level

of existing trust. The mediating role of trust (H4) was confirmed through the bootstrapping analysis of the indirect effect (CE > T > PL). The standardized indirect effect was highly significant (β = 0.428, p < 0.001, SE = 0.043, ES = 0.307), indicating that the confidence interval excludes zero. This significant indirect path, in conjunction with the significant direct effect, leads to the conclusion that trust acts as a critical partial mediator, strongly supporting H4.

The results showed that age, gender, and income do not significantly influence patient loyalty. However, patients with higher levels of education exhibited a significant negative relationship with loyalty (β = -0.088), suggesting that higher expectations are associated with lower loyalty. Conversely, patients who report a higher frequency of visits exhibit significantly greater loyalty (β = 0.092), suggesting that repeat patronage reinforces commitment.

Discussion

The structural model results provide robust empirical validation for the relational mechanisms governing patient loyalty in the competitive private healthcare market of Vientiane, Lao PDR. The findings confirm that while communication effectiveness is vital, trust functions as the indispensable intermediary. The analysis revealed a highly significant and strong relationship between communication effectiveness and trust (β = 0.778, p < 0.001), followed by a significant and robust link between trust and patient loyalty (β = 0.550, p < 0.001). These findings unequivocally support H2 and H3, confirming the core tenets of Social Exchange Theory (SET) in this high-risk service context. In the context of Vientiane's private healthcare, where information asymmetry is high and medical outcomes are uncertain, transparent, empathetic communication acts as the primary social reward exchanged between provider and patient. This reward reduces the patient's perceived costs of vulnerability, thereby fostering a generalized sense of trust. This trust then serves as the patient's confident expectation of future benevolence and reliability, directly translating into long-term loyalty and commitment. The significant coefficient for CE > T suggests that in transitional markets like Lao PDR, competence in relational aspects (communication) is paramount for building foundational relational equity.

Our findings indicate that the direct influence of communication effectiveness on patient loyalty is significant (H1 supported) (β = 0.252, p < 0.001), but the indirect effect through trust is even more substantial, confirming partial mediation (H4 supported) (β = 0.428, p < 0.001). This suggests that while communication offers an immediate, tangible reward (satisfaction), the majority of its power to generate loyalty is channeled through the patient's calculated sense of future obligation and confidence (trust). In the context of retaining local patients in Vientiane, trust is not merely an outcome of good communication; it is the primary mechanism that converts transactional satisfaction into long-term commitment. This may be because, without established trust, the fear of misdiagnosis or poor care quality remains too high to sustain patronage when superior regional alternatives, such as those in Bangkok, are readily available. The unique competitive landscape best explains this finding: without established trust, the fear of misdiagnosis

or poor care quality remains too high to sustain patronage when superior regional alternatives, such as those in Bangkok, are readily available.

The structural model did not support the moderation hypothesis (H5) (β = -0.002, p = 0.478). This unexpected, non-significant result offers a critical theoretical insight specific to the Vientiane context. Unlike in saturated western markets where high trust can "buffer" service failures or amplify successes, in the high-risk environment of Lao PDR, trust appears to function as a "hygiene factor" or a fundamental prerequisite. In this transitional market, trust is likely binary: without it, the transaction does not occur (patients leave for Thailand); with it, the relationship proceeds, but higher levels do not exponentially increase the impact of communication. This finding suggests that in environments with high medical uncertainty, trust is the "floor" required to enter the market, rather than a "ceiling" that enhances differentiation. This contrasts with studies in highly saturated western markets, where trust often serves a buffering or enhancing role.

The analysis of control variables yielded salient insights. Frequency of visits was a significant positive predictor of loyalty (β = 0.092, p = 0.018), suggesting that established routines and accumulated positive experiences reinforce commitment. More critically, education exhibited a significant negative relationship with loyalty (β = -0.088, p = 0.022). In Vientiane, highly educated patients tend to exhibit lower intrinsic loyalty to local private hospitals. This result suggests that higher health literacy enhances the patient's comparison level for alternatives, making them more aware of and willing to access foreign medical tourism options, thereby placing greater competitive pressure on local institutions.

Theoretical and Academic Contributions

This research makes several distinct contributions to the literature on relational services. Theoretically, it validates the applicability of the Social Exchange Theory (SET) framework in the specific context of private healthcare in an emerging Southeast Asian economy, affirming that the principles of reciprocal rewards (communication) and relational assets (trust) hold predictive power globally. Academically, this study fills a crucial gap in moderated mediation by empirically testing the dual role of trust. By rejecting the moderation hypothesis and confirming intense partial mediation, we provide nuanced evidence that trust primarily serves as a channeling mechanism in high-risk service settings rather than an enhancing catalyst. Furthermore, this study presents novel empirical data from the Lao PDR, a region that is underrepresented in global healthcare loyalty studies, offering a vital comparative lens for future cross-cultural research on service quality and commitment.

Practical Implications

The findings offer direct, actionable guidance for private hospital management in Vientiane. First, management must treat communication not as a soft skill, but as a risk-reduction tool. Training should prioritize trust-building protocols, such as explicitly explaining diagnoses and treatment plans to reduce information asymmetry, which is the primary driver of patient anxiety in this market. Second, strategic resources must be directed toward preventing patient outflow to Thailand. Given the negative influence

of education on loyalty, hospitals must develop targeted strategies for the "flight risk" demographic, highly educated patients. This includes emphasizing physician credentials, international accreditations, and transparent pricing to compete with cross-border alternatives. Third, because trust functions as a prerequisite (hygiene factor) rather than an amplifier, marketing efforts should focus on reliability and safety records to establish the baseline trust patients need to even consider the hospital as an option.

Limitations and Recommendations for Future Studies

This study is subject to limitations typical of cross-sectional designs, particularly the inability to definitively establish causality over time. Furthermore, reliance on self-reported data introduces the possibility of Common Method Bias (CMB), despite diagnostic checks. Future research should address these limitations by adopting a longitudinal design to track the evolution of trust and loyalty over multiple hospital visits. Researchers could also introduce objective measures of service quality alongside perceived communication. Finally, given the strong role of the comparison level for alternatives, future studies in Vientiane should explicitly integrate perceived quality and cost of treatment in neighboring countries, such as Thailand, as antecedents of loyalty to better understand local patient decision-making.

Conclusions

This research confirms that the long-term success of private hospitals in Vientiane hinges on mastering the mediated relationship between communication and loyalty. The robust evidence from the structural model establishes trust as the dominant relational asset; it is the bridge, not the buffer, that channels the power of effective communication into enduring patient commitment. By understanding trust as a hygiene factor, essential for market entry but not an amplifier of returns, Vientiane's private hospitals can better allocate resources to secure their patient base against regional competition.

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心理安全在授权型领导与员工创新行为之间的中介作用

THE MEDIATING ROLE OF PSYCHOLOGICAL SAFETY IN THE RELATIONSHIP BETWEEN EMPOWERING LEADERSHIP AND EMPLOYEE INNOVATIVE BEHAVIOR

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摘要

研究目的：本研究旨在探究信息化行业中授权型领导如何通过心理安全的中介作用影响员工创新行为。

研究设计/方法/途径：本文采用文献分析法和问卷调查定量数据分析的方式，通过对 235 名信息化行业从业人员发放的问卷，使用 SPSS 软件作为数据分析的工具，使用多元回归方法对数据进行科学的处理，对采集数据做描述性统计，信度分析，效度分析，共同方法偏差（CMB）检验，并分析直接效应和中介效应，有效支撑了本文的研究主题。

研究结果：授权型领导能够通过营造安全、开放的工作环境，间接促进员工的创新行为。中介效应模型的 R^2 为 0.4827，F 值为 35.46。心理安全的间接效应值为 0.2984（95% CI = [0.2030, 0.4024]）。结果验证了假设：心理安全在授权型领导与员工创新行为之间起中介作用。

创新性与价值：本研究明确了心理安全在授权型领导与员工创新行为之间起中介作用。本文的调研行业为信息化行业，对于高速发展的信息化行业在实际工作中起到了重要的指导意义，对于员工心理安全的建设工作是组织必须要面对的事实。

关键词：授权型领导 心理安全 员工创新行为

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Abstract

Purpose: This study systematically analyzed and explained how empowering leadership significantly enhances employees' innovative behavior by fostering psychological safety.

Study Design/Methodology/Approach: This study combines literature analysis and quantitative analysis of questionnaire data. SPSS is used as the data analysis tool, and multiple regression analysis is applied to analyze scientific data, including descriptive statistics, reliability, and validity analyses, and the Common Method Bias (CMB) test, and tests of direct and mediating effects to support the research theme.

Findings: Empowering leadership can indirectly facilitate employees' innovative behavior by fostering a safe, open working environment. The R^2 of the mediating effect model was 0.4827 with an F-value of 35.46. The indirect effect value of psychological safety was 0.2984 (95% CI = [0.2030, 0.4024]). The results verified the hypothesis that psychological safety acts as a mediating role between empowering leadership and employees' innovative behaviors.

Originality/Value: This study confirmed the mediating role of psychological safety in the relationship between empowering leadership and employees' innovative behavior. The research focused on the information technology industry, providing important practical guidance for this rapidly developing sector. Fostering employees' psychological safety is an unavoidable task for organizations.

Keywords: Empowering Leadership, Psychological Safety, Employees' Innovative Behavior

引言

在数字经济加速渗透的时代背景下，信息化行业作为技术创新与业态变革的核心载体，其竞争优势高度依赖员工的持续创新能力。随着组织管理模式的迭代，授权型领导凭借对员工自主权的尊重与赋能特性，逐渐成为激发知识型员工创新潜力的关键领导范式，通过权力下放、信任建立等行为为员工创造积极工作环境，进而促进创新行为产生。谷歌公司通过赋予技术员工高度决策自主权与容错空间形成持续创新的组织文化，印证了授权型领导在信息化行业的适配性。然而现有研究仍存在明显缺口：1）多数研究聚焦通用行业情境，针对信息化行业高知识密度、高风险容忍需求的特异性研究相对匮乏，难以精准揭示该行业中授权型领导对创新行为的影响机制。已有研究虽证实授权型领导对创新的正向作用，但多基于传统行业样本，未充分考虑信息化行业技术迭代快、创新风险高的特性对领导效果的重塑作用。2）尽管心理安全被证实是连接领导风格与创新行为的重要纽带 (Edmondson & Lei, 2014)，但关于其在信息化行业授权型领导与员工创新行为之间的中介路径检验仍不够充分，尤其缺乏基于中国组织情境的实证支撑。现有中介机制研究多集中于通用场景，未深入探讨信息化行业员工对心理安全的独特诉求如何影响传导效果。3）现有研究对授权型领导作用边界的探讨多集中于个体或团队

层面，忽视了行业特性对“领导——心理安全——创新”链条的调节效应，导致研究结论的行业适配性不足 (Zhou & Song, 2020)。Newman et al. (2014) 的研究虽构建了心理安全的多层次影响框架，难以直接指导信息化行业的管理实践。基于上述研究缺口，本研究的核心问题明确为：在中国信息化行业中，心理安全是否在授权型领导与员工创新行为之间发挥中介作用，本研究旨在通过实证分析系统验证心理安全的中介效应，揭示授权型领导影响信息化行业员工创新行为的内在逻辑。理论层面，可填补信息化行业领导风格与创新行为关系研究的空白，丰富心理安全中介机制的行业特异性证据。实践层面，能为信息化企业优化领导模式、构建心理安全环境提供针对性指导，助力组织在技术竞争中构建持续创新优势。

研究目的

本研究的核心目的是探究信息化行业中授权型领导影响员工创新行为的内在机制，验证心理安全在二者间的中介作用。

以信息化行业为实证背景，精准揭示该行业高知识密度、高创新需求特性下，授权型领导通过心理安全促进员工创新的传导路径，丰富领导风格与创新行为关系的行业特异性研究。

文献综述

核心变量定义

授权型领导是一种以赋能员工为核心的管理模式，核心在于通过赋予员工适度的自主决策权、工作责任与资源支持，鼓励员工独立思考、自主决策并主动解决问题，进而激发员工的创新潜力与工作积极性 (Chu & Liao, 2025)。其区别于传统指令型领导的关键特征的是，强调通过信任建立、权力下放与支持性管理行为，构建开放包容的组织氛围，为员工自主行动与创新尝试提供空间。在知识密集型行业中，这种领导风格更能适配高素养员工对自主权与价值认可的需求，成为激发组织创新活力的重要驱动因素。

心理安全的研究起源于对组织变革的探索性工作，为该概念奠定了组织管理领域的理论基础。在此基础上将其明确定义为“团队对承担人际风险后果的共享信念”，推动了实证研究的深入发展。从分析维度来看，心理安全呈现个体、团队、组织三个递进层次且相互强化：个体层面聚焦员工表达真实想法的安全感，团队层面强调成员间的互信氛围，组织层面体现为容错创新的文化特征 (Newman et al., 2014)。研究聚焦员工创新行为，采用个体层面的心理安全定义，员工在组织环境中“能够真实展现自我，而不必担忧对个人形象、职业发展或组织地位产生不利影响”的主观感知 (Qing et al., 2012)，具体表现为敢于提出突破常规的新问题、自由表达真实想法、坦然承认工作失误的行为特征 (Cui et al., 2021)。这种安全感知是员工应对创新风险的积极心理状态，也是连接领导行为与创新产出的关键心理纽带 (Edmondson & Lei, 2014)。

在组织管理研究中，创新（Innovation)、创意（Creative Idea）与创造力（Creativity）常被关联讨论但内涵各有侧重 (Anderson et al., 2014)。其中，员工创新行为作为个体层面的核心构念，是指个体在工作中产生新颖且具有实用价值的想法、流程或解决方案，并将其转化为实际成果的完整过程，涵盖问题确认、创新构想生成、寻求支持与实际应用等关键环节 (Sun et al., 2018)。与侧重“想法生成”的创造力不同，员工创新行为更强调从创意到实践的转化，是组织创新能力的核心微观基础 (Groyecka, 2018)。在信息化行业中，员工创新行为不仅体现为技术研发与产品迭代中的突破，也包括工作流程优化、服务模式创新等多元形式，其发生频率与质量直接决定了组织在技术竞争中的核心优势。

变量间关系与作用机制

授权型领导与心理安全的关系

授权型领导对员工心理安全感知具有显著的正向影响，这一关系已得到多项实证研究的支持。从权力分配视角来看，授权型领导通过赋予员工工作自主权与决策参与权，打破了传统层级制的束缚，使员工感受到组织的信任与尊重，进而增强心理稳定性与组织支持认知 (Chen & Zhou, 2020)。这种基于信任的互动关系，让员工坚信领导决策的公正性与组织对自身权益的保障，为心理安全的形成奠定了基础。在创新容错层面，授权型领导秉持“试错是创新必经之路”的管理理念，将创新过程中的失误视为学习机会而非惩罚依据 (Li et al., 2019)。这种包容的管理导向有效缓解了员工对创新失败的恐惧，降低了其表达异见、尝试新方法时的心理压力，进一步强化了心理安全感知 (Zhou & Song, 2020)。此外，授权型领导通过建立开放的沟通机制、重视员工意见贡献等行为，让员工感受到自身价值被认可，进一步巩固了心理安全的形成 (Edmondson & Lei, 2014)。

心理安全与员工创新行为的关系

心理安全是驱动员工创新行为的关键心理因素，其对创新行为的促进作用主要通过三个路径实现：其一，高心理安全感知让员工敢于突破常规，自由表达创新构想，无需担忧负面评价或不当处罚，从而提升创新建议的提出频率 (Mo et al., 2015)；其二，心理安全能够强化员工的团队协作与知识共享意愿，促进跨领域想法的碰撞与整合，为创新行为提供资源与思路支持；其三，心理安全通过缓解员工的心理压力，让员工能够将更多认知资源投入到创造性思考中，提升创新构想的质量与落地效率 (Sun & Lü, 2016)。在信息化行业中，技术迭代快、创新风险高的行业特征，使得心理安全对创新行为的支撑作用更为关键。高心理安全感知的技术人员更愿意尝试新技术、探索新路径，在面对研发瓶颈时也能保持积极的创新意愿，从而推动个人与组织层面的创新产出 (Yang & Zhou, 2021)。

心理安全的中介机制

心理安全在授权型领导与员工创新行为之间扮演着核心中介角色，构建了“授权型领导→

心理安全→员工创新行为”的传导路径。这一中介过程可分为两个递进阶段：第一阶段，授权型领导通过权力下放、信任建立、容错包容等管理行为，为员工营造安全包容的工作环境，直接提升员工的心理安全感知；第二阶段，高心理安全感知的员工通过增强创新意愿、提升协作水平、优化认知资源分配，进而表现出更多高质量的创新行为 (Mo et al., 2015)。

现有研究虽已关注到这一中介关系，但未能充分考虑信息化行业高知识密度、高创新需求的特性对中介效应强度与边界条件的影响。例如，信息化行业员工对自主决策的需求更强、创新失败的风险更高，授权型领导对心理安全的提升效应是否更显著，心理安全对创新行为的促进作用是否存在行业特异性表现，这些问题仍需进一步实证检验。

从社会认知理论来看，个体行为的形成是个人认知与外部环境交互作用的结果。授权型领导作为重要的外部环境因素，通过权力下放、信任建立等行为优化工作环境，直接影响员工对环境安全性的认知判断（即心理安全感知）；而心理安全作为积极的个体认知，进一步引导员工做出敢于创新、勇于尝试的行为选择 (Mo et al., 2015)。这一“环境→认知→行为”的传导路径，清晰揭示了授权型领导通过心理安全影响创新行为的外在逻辑。

自我决定理论则从内在动机视角提供了补充解释。该理论认为，自主需求、胜任需求与关系需求的满足是激发个体内在动机的关键。授权型领导通过赋予自主决策权满足员工的自主需求，通过提供资源支持与信任认可满足胜任需求，通过建立开放互动的上下级关系满足关系需求；这些基本心理需求的满足直接提升了员工的心理安全感知，进而激发其创新的内在动机，促使员工主动投入创新实践 (Sun & Lü, 2016)。两种理论相互补充，共同为研究假设提供了坚实的理论支撑。

研究缺口

综合现有研究成果当前领域仍存在以下关键研究缺口：一，变量关系的行业特异性研究不足。现有研究多聚焦传统行业或通用组织情境，针对信息化行业高知识密度、高创新风险、高自主需求的特性，探讨授权型领导、心理安全与创新行为关系的研究较为匮乏，难以精准指导该行业的管理实践；二，中介机制的深度解析不够。部分研究虽证实了心理安全的中介作用，但未结合信息化行业特征，深入剖析中介过程的行业特异性表现，如心理安全在该行业中是否通过独特路径影响创新行为。基于此，本研究以信息化行业为实证背景，系统验证心理安全的中介作用，旨在填补行业特异性研究的空白，为理论体系完善与管理实践优化提供支撑。

研究假设与理论模型

授权型领导与心理安全的关系

授权型领导通过给予员工更大程度的自主决策空间、建立相互信任的关系以及提供必要的支持资源，为组织成员打造了安全且具有包容性的工作氛围，这种管理方式能够明显提升员工的心理安全感受 (Mo et al., 2015)。心理安全感具体表现为员工在组织环境中发表观点、提出

创新构想或者出现工作失误时，不会担心受到负面评价或不当处罚的心理状态，这种心理状态会直接影响员工的工作表现和参与创新活动的意愿。采用开放沟通策略和提供情感支持的授权型领导，可以有效缓解员工的顾虑心理，促使他们更积极主动地尝试创新方法和挑战现有工作模式。这种管理行为既展示了领导者对员工专业能力的认可，同时也创造了让员工感到被尊重和重视的组织氛围。基于社会认知理论，个体行为的形成受个人认知和外部环境的交互影响，授权型领导通过给予员工更大程度的自主决策空间、建立相互信任的关系以及提供必要的支持资源，为组织成员打造了安全且具有包容性的工作氛围，这种外部环境的优化能够直接影响员工的认知判断 (Mo et al., 2015)。从自我决定理论来看，授权型领导满足了员工的自主需求和关系需求，员工在获得自主决策权时，会真切地体会到自由的滋味，而领导者与员工之间建立的信任关系则满足了其关系需求，这种基本心理需求的满足会进一步强化员工的心理安全感知。

在具体管理实践中，授权型领导通过在团队讨论中鼓励成员充分表达意见并虚心接纳不同观点，使员工感受到自身意见的价值，从而强化其心理安全感。同时，领导者对员工能力的信任态度和对个人职业发展的关注，能够有效降低员工在尝试创新方法或提出新构想时的心理障碍。研究表明，授权型领导风格与员工心理安全感之间存在明显的正向关联，在面对高压工作环境和复杂任务挑战时，授权型领导通过持续稳定的支持性行为，为员工构建了可靠的心理保障机制。

据此提出假设：H1：授权型领导正向影响心理安全

心理安全与员工创新行为的关系

心理安全感作为驱动员工创新行为的关键心理因素，对组织创新能力的提升具有重要作用 (Mo et al., 2015)。具备较高心理安全感的员工在职场中表现出更强的表达意愿，更勇于尝试创新方法，并且更倾向于突破传统工作模式的限制。这种安全感知使员工能够将注意力集中在创新活动本身，而不必过度担忧可能的失败后果或他人的负面评价。心理安全感为员工的创新实践提供了必要的心理支持，从而有效提高了创新行为的发生概率和实施频率。从具体作用机制来看，心理安全感对创新行为的促进作用主要体现在以下几个维度：1）心理安全感水平较高的员工表现出更强的观点表达意愿和创新建议提出倾向；2）心理安全感能够有效提升员工的团队协作意识和知识共享意愿；3）心理安全感通过强化员工的内在驱动力间接促进了创新行为的发生。根据社会认知理论，心理安全感作为员工对自身所处环境的一种积极认知，会影响其行为选择和努力程度。具备较高心理安全感的员工在职场中表现出更强的表达意愿，更勇于尝试创新方法，并且更倾向于突破传统工作模式的限制，这种安全感知使员工能够将注意力集中在创新活动本身，而不必过度担忧可能的失败后果或他人的负面评价 (Mo et al., 2015)。从自我决定理论视角，心理安全的工作环境能够满足员工的自主需求和胜任需求，当员工处于安全支持的工作环境中时，他们会更主动地投入时间和精力进行创新探索，并积极尝试新的工作方法和技术手段，这种内在动力促使员工在日常工作中持续寻找改进和优化的可能性。

在信息技术领域，心理安全感较强的技术人员表现出更强烈的学习新技术并将其应用于实际工作的意愿，这种持续的探索和实践过程，不仅提升了个人的创新水平，也为组织的整体创新能力建设做出了积极贡献。此外，心理安全感还通过缓解员工的心理压力间接促进了创新行为的产生，使员工能够将更多认知资源投入到创新任务中 (Sun & Lü, 2016)。

据此提出假设：H2：心理安全正向影响员工创新行为

心理安全的中介作用

心理安全感作为至关重要的中介变量，于授权型领导和员工创新行为之间搭建起了一座关键的桥梁 (Mo et al., 2015)。授权型领导借助提高员工的心理安全感程度，间接地促进了创新行为的出现，这一中介过程涵盖两个彼此关联的作用阶段：1）体现为阶段，授权型领导凭借信任给予、资源扶持以及权力下放等具体的管理举措，大幅增强了员工内心的心理安全体验；2）则表现为阶段，拥有较高心理安全感的员工呈现出更为卓越的创新表现。基于社会认知理论的交互决定论，授权型领导作为外部环境因素，通过影响员工的心理安全这一个体认知因素，进而作用于员工的创新行为。授权型领导凭借信任给予、资源扶持以及权力下放等具体的管理举措，大幅增强了员工内心的心理安全体验，这一过程是外部环境对个体认知的塑造 (Mo et al., 2015)。从自我决定理论来看，授权型领导通过满足员工的自主、胜任和关系需求，提升了员工的心理安全感，而心理安全感作为一种积极的心理状态，进一步激发了员工的内在动机，促使其表现出更多的创新行为。授权型领导着力营造开放包容的组织氛围，领导者对员工创新行为予以公开的肯定与积极的反馈，让团队成员切实体会到自身贡献的价值所在，这种正向的激励机制不仅加固了个体的心理安全感，还激发了整个团队的创新活力。

授权型领导构建的透明化沟通体系，为员工开辟了畅通无阻的意见表达通道，极大地减轻了员工提出创新构想时的心理负担，推动了创新参与的广泛化。拥有较高心理安全感的员工在解决问题的主动性以及方案的创新性都会显著提高，这些行为直接转化为组织的创新成果 (Sun & Lü, 2016)。众多实证研究结果均一致证实了心理安全感所起到的中介效应，尤其是在授权型领导对员工创新行为产生影响的过程中，心理安全感发挥着无可替代的传导功效。

据此提出假设：H3：心理安全对授权型领导和员工创新行为之间的关系起中介作用

基于上述研究假设，构建授权型领导、心理安全与员工创新行为的理论模型，具体如下：

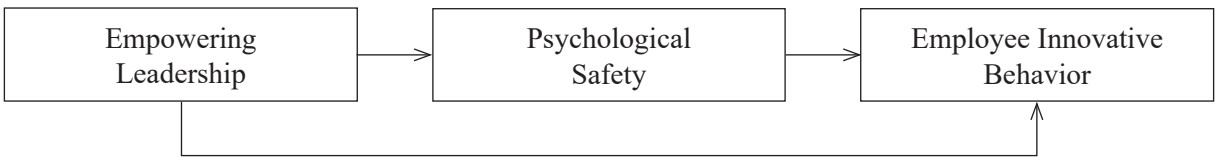


Figure 1 Hypothetical Model Diagram

研究方法

本研究问卷整体分为两个核心部分：第一部分为人口统计学信息，涵盖受访者性别、年龄、学历、工作年限等基本信息，用于后续人口统计学差异分析；第二部分为核心变量测量题项，针对授权型领导、心理安全、员工创新行为三个关键变量设计相应测量条目，采用 Likert 五级量表计分，其中“1”表示“非常不同意”，“2”表示“比较不同意”，“3”表示“一般”，“4”表示“比较同意”，“5”表示“非常同意”(Chen et al., 2016)。问卷总题量控制在 40 题以内，填写时长预计 5-10 分钟，以降低受访者填写疲劳度，保证数据质量。

研究样本聚焦信息化行业从业人员，选取北京、武汉、成都三地民营信息化企业的员工作为调研对象。选取该样本群体的原因主要有两点：一是信息化行业具有高知识密度、高创新需求、技术迭代快的特征，与研究主题高度契合；二是三地作为信息化产业集聚地，企业类型丰富、员工结构多元，能够保证样本的代表性。调研对象涵盖基层员工、技术骨干、中层管理者等不同层级，确保样本在职位、工作年限等维度的分布均衡。

变量测量

授权型领导

采用 Arnold et al. (2000) 开发的授权型领导量表，该量表经过多次实证检验，具有良好的信效度。量表共包含 5 个题项，核心测量维度包括决策参与、信任赋予、自主工作支持等。具体题项为：“我的主管经常让我参与制定策略”“如果决策可能对我产生影响，我的主管会征求我的意见”“我的主管充分相信我能够出色地完成任务”“我的主管允许我按照自己的方式工作”“我的主管尽量简化规章制度以提升我的工作效率”。

心理安全

采用 Wu 和 Chen (2011) 基于中国文化情境修订的心理安全量表，共 5 个题项，聚焦个体层面的安全感知。具体题项为：“我在工作中表达的看法都是自己的真实感受”“当我有不同意见时，不会受到故意刁难”“我在工作中表达真实想法是受欢迎的”“我在工作中可以大胆自由地表达自己的想法”“我并不担心在工作中表达真实想法会对自己不利”。

员工创新行为

采用 Ng 和 Lucianetti (2016) 开发的员工创新行为量表，共 5 个题项，涵盖创新构想生成、实践转化等完整过程。具体题项为：“我善于提出新的改进方法”“我善于寻找新的工作方法、技术或工具”“我善于为问题提出原创的解决方案”“我善于将创新想法转化为有用的应用”“我善于系统地将创新理念引入工作环境”。

数据收集与样本预测试

数据收集方法与过程

数据收集主要通过问卷星小程序在线开展，数据收集时间为 2024 年 9 月 - 10 月。为保证

数据质量，采用“企业内部推送 + 行业社群转发”的方式发放问卷，在问卷开头明确调研目的、匿名承诺及数据用途，降低受访者顾虑。同时设置填写逻辑校验和作答时间阈值（最短填写时间不低于 3 分钟），避免随机作答。

样本预测试

正式调研前，于 2024 年 9 月开展预调研，向 5 家信息化企业（涵盖大中型国有企业和民营企业）的组长及以上具有管理职能的员工发放问卷，共回收有效问卷 156 份。使用 SPSS 29.0 对预调研数据进行检验：KMO 取样适切性量数为 0.927，巴特利特球形度检验显著性小于 0.001，表明数据适合进行因子分析；验证性因子分析结果显示，所有测量题项的因子载荷均高于 0.5，且题项间聚合度良好；各变量的 Cronbach’s α 系数均高于 0.7，其中整体问卷的 Cronbach’s α 系数达到 0.927，表明量表具有良好的信效度。针对预调研中发现的个别题项表述模糊、过于学术化等问题，进行了修订优化，确保题项通俗易懂、贴合实际工作情境，为正式调研奠定基础。

Table 1 KMO and Bartlett’s Test

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.927
Bartlett’s Test of Sphericity	Chi-Square Approx.	4535.859
	df	595
	Sig.	<.001

正式调研样本情况

正式调研共回收问卷 286 份，经过严格筛选（剔除填写时间过短、答案一致或存在明显逻辑矛盾的问卷），最终获得有效样本 235 份，有效回收率为 82.2%。样本基本特征如下：性别方面，男性 130 人（55.32%），女性 105 人（44.68%）；年龄方面，26-35 岁 74 人（31.49%），36-45 岁 94 人（40.00%），为主要群体；学历方面，本科及以上学历 209 人（88.94%），整体受教育水平较高；工作年限方面，21 年以上 65 人（27.66%），11-15 年 47 人（20.00%），分布相对均衡，符合信息化行业员工结构特征。

研究结果

描述性统计分析

正式调研回收问卷 286 份，经筛选剔除无效问卷后获有效样本 235 份，有效回收率 82.2%。样本特征：性别分布均衡，男性 130 人（55.32%）、女性 105 人（44.68%）；年龄以 36-45 岁（40.00%）、26-35 岁（31.49%）为核心群体；学历以本科及以上为主（88.94%），整体受教育水

平较高；工作年限分布均衡，契合信息化行业员工结构特征。核心变量的描述性统计结果显示：授权型领导均值为 3.897（S.D. = 0.836），心理安全均值为 3.806（S.D. = 0.787），员工创新行为均值为 3.949（S.D. = 0.775），各变量得分均处于中等偏上水平，为后续假设检验奠定了良好基础。

共同方法偏差（CMB）检验

由于本研究自变量、中介变量与因变量均通过员工自评问卷收集，可能存在共同方法偏差。采用 Harman 单因子检验法进行验证：将所有 15 个测量题项（授权型领导 5 题 + 心理安全 5 题 + 员工创新行为 5 题）进行未旋转的探索性因子分析（EFA）。结果显示，共提取出 3 个特征值大于 1 的公因子，第一公因子解释方差占比为 35.2%（<40% 的临界标准），表明本研究不存在严重的共同方法偏差，数据可靠性良好。

信度分析

本研究通过 Cronbach’s α 系数、校正项总计相关性（CITC）、因子载荷、组合信度（CR）及平均方差抽取量（AVE）检验授权型领导（EL）、心理安全（PS）、员工创新行为（IB）的量表信度与效度，验证测量工具的可靠性，为后续实证分析奠定基础，各变量检验结果均达标准，具体如下：

授权型领导（EL）：Cronbach’s α 系数 0.848，CITC 值 0.586-0.724，CR 值 0.896，因子载荷 0.729-0.841，量表内部一致性良好，题项贡献度、对潜变量解释力均达标；

心理安全（PS）：Cronbach’s α 系数 0.878，CITC 值 0.603-0.812，CR 值 0.912，因子载荷 0.734-0.894，量表信度良好，内部一致性高，题项对潜变量解释力较强；

员工创新行为（IB）：Cronbach’s α 系数 0.946，CITC 值 0.832-0.866，CR 值 0.959，因子载荷 0.893-0.916，量表具备极高的内部一致性与信度，题项相关性及对潜变量解释力均表现优异。此外，各变量 AVE 值均高于 0.5 临界值，聚合效度良好，能有效解释潜在变量的方差结构。

Table 2 Reliability Analysis

Variable Name	Item Code	Reliability Analysis			Factor Loading	Composite Reliability (CR)
		Corrected Item-TotEL Correlation (CITC)	Cronbach's α if Item Deleted	Cronbach's α Coefficient		
Empowering Leadership	EL1	0.586	0.837	0.848	0.729	0.896
	EL2	0.713	0.801		0.826	
	EL3	0.724	0.807		0.841	
	EL4	0.658	0.817		0.795	
	EL5	0.647	0.822		0.785	
Psychological Safety	PS1	0.603	0.876	0.878	0.734	0.912
	PS2	0.670	0.863		0.790	
	PS3	0.743	0.845		0.841	
	PS4	0.812	0.826		0.894	
	PS5	0.732	0.847		0.839	
Employees' Innovative Behavior	IB1	0.832	0.936	0.946	0.893	0.959
	IB2	0.866	0.931		0.916	
	IB3	0.858	0.932		0.911	
	IB4	0.859	0.932		0.912	
	IB5	0.844	0.934		0.901	

效度分析

本研究通过因子载荷与平均方差提取值（AVE）检验测量模型的结构效度，以验证授权型领导（EL）、心理安全（PS）、员工创新行为（IB）量表在研究情境中的有效性与适用性，结果显示：各变量所有题项因子载荷均高于 0.7，其中员工创新行为题项因子载荷均超 0.9，且三者 AVE 值分别为 0.640、0.689、0.823，均远高于 0.5 临界值，充分说明各量表对对应潜变量具有良好乃至极强的解释力，聚合效度良好，量表适用有效。

Table 3 Validity Analysis

Variable Name	Item Code	Factor Loading	Average Variance Extracted (AVE)
Empowering Leadership	EL1	0.729	0.640
	EL2	0.826	
	EL3	0.841	
	EL4	0.795	
	EL5	0.785	
Psychological Safety	PS1	0.734	0.689
	PS2	0.790	
	PS3	0.841	
	PS4	0.894	
	PS5	0.839	
Employees' Innovative Behavior	IB1	0.893	0.823
	IB2	0.916	
	IB3	0.911	
	IB4	0.912	
	IB5	0.901	

区分效度（HTMT 检验）

采用 HTMT 比率检验变量间区分效度，标准为 HTMT 值 <0.85 即表明区分效度良好，结果如下表所示：

Table 4 HTMT Test Results of Discriminant Validity

Variable Name	Empowering Leadership (EL)	Psychological Safety (PS)	Employee Innovative Behavior (IB)
Empowering Leadership	-	0.843	0.796
Psychological Safety	0.843	-	0.812
Employee Innovative Behavior	0.796	0.812	-

直接效应

本研究直接效应分析通过逐步引入变量，探究授权型领导对员工创新行为的影响机制及路径，同时检验心理安全的直接作用，结果显示模型回归系数与解释力 R^2 显著提升，核心变量对员工创新行为呈实质性正向影响。授权型领导对心理安全的回归分析中，$R^2 = 0.330$、调整后 $R^2 = 0.315$、$F = 22.556$，授权型领导回归系数 0.558（$p < 0.001$），呈显著正向影响，验证其正向作用于心理安全，即领导赋予员工自主权与信任，能提升员工心理安全感，减少其创新顾虑。心理安全对员工创新行为的回归分析中，$R^2 = 0.468$、调整后 $R^2 = 0.456$、$F = 40.287$，心理安全回归系数 0.659（$p < 0.001$），呈显著正向影响，验证其正向作用于员工创新行为，即心理安全感可降低员工风险恐惧，推动其创新实践。

Table 5 Direct Effect Analysis

Direct Effect Test						
Variable	**Employees' Innovative Behavior**		**Psychological Safety**		**Employees' Innovative Behavior**	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Gender	-0.061	-0.04	0.018	0.043	-0.061	-0.073
Age	0.094	0.029	0.207	0.130	0.094	-0.042
Education Background	-0.061	0.011	-0.109	-0.025	-0.061	0.011
Work Tenure	0.107	0.090	-0.062	-0.082	0.107	0.148
Empowering Leadership		0.472*		0.558*		
Psychological Safety						0.659*
Employees' Innovative Behavior						
R^2	0.049	0.259	0.038	0.330	0.049	0.468
Adjusted R^2	0.033	0.243	0.021	0.315	0.033	0.456
△R	0.049	0.210	0.038	0.292	0.049	0.419
F-value	2.993	16.014	2.254	22.556	2.993	40.287

Remarks: $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

中介效应

本研究采用 SPSS PROCESS 宏的 Model 4，以授权型领导（AL）为自变量、员工创新行为（IB）为因变量、心理安全（PS）为中介变量，并控制性别（xb）、年龄（nl）、学历（xl）、工作年限（nx）等人口统计学变量，通过 Bootstrap 法（重复抽样 5000 次）检验心理安全的中介

效应。结果显示，在控制 covariates 后，授权型领导对心理安全的正向预测作用显著（$\beta = 0.5249$，$p < 0.001$，95% CI = [0.4214, 0.6284]），模型解释力 $R^2 = 0.3300$（$F = 22.5564$，$p < 0.001$），表明授权型领导能有效提升员工的心理安全感知；将授权型领导与心理安全同时纳入对员工创新行为的回归模型时，心理安全对员工创新行为的正向影响显著（$\beta = 0.5686$，$p < 0.001$，95% CI = [0.4557, 0.6814]），授权型领导仍对员工创新行为具有显著直接正向影响（$\beta = 0.1390$，$p = 0.0115$，95% CI = [0.0315, 0.2465]），模型整体解释力 $R^2 = 0.4827$（$F = 35.4603$，$p < 0.001$）；中介效应检验结果显示，心理安全的间接效应值为 0.2984，95% Bootstrap 置信区间 [0.2030, 0.4024] 不包含 0，表明心理安全在授权型领导与员工创新行为之间发挥显著部分中介作用，即授权型领导既可以直接促进员工创新行为，也能通过提升员工心理安全感知间接推动员工创新行为的产生。

Table 5 Mediating Effect Test Results

Direct Effect of X on Y					
Effect	**se**	**t**	***p***	**LLCI**	**ULCI**
0.1390	.05450	2.5485	0.0115	.0315	.2465
Indirect Effect(s) of X on Y:					
	Effect	**BootSE**	**BootLLCI**	**BootUICI**	
PS	.2984	.05130	.2030	.4024	

Remarks: Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

讨论

填补行业特异性研究缺口，丰富情境化理论证据。以信息化行业为实证背景，证实授权型领导通过心理安全影响员工创新行为的全模型解释力（$R^2 = 0.483$），揭示了高知识密集型行业中授权行为与心理安全的强适配性。这一发现填补了信息化行业领导风格与创新行为关系研究的空白，为心理安全中介机制的行业特异性提供了关键实证支撑，也拓展了领导行为情境化理论的应用边界。

整合双理论视角，深化中介机制的内在逻辑解析。整合两大理论视角：从社会认知理论来看，授权型领导通过权力下放、容错包容优化外部环境，降低员工风险感知，形成“环境→认知（心理安全)→行为（创新)”的传导路径；从自我决定理论来看，授权型领导通过赋予自主决策权满足员工自主需求、建立信任关系满足关系需求、提供资源支持满足胜任需求，共同强化心理安全感知，进而激发创新内在动机，细化了“授权——心理安全——创新”的内在传

导逻辑，回应了现有研究对中介路径模糊性的质疑，为领导行为影响创新的机理研究提供了更精准的理论框架。

精准量化中介效应，强化理论关系的实证支撑。通过 Bootstrap 检验精准测算出心理安全的间接效应值为 0.2984（95% CI = [0.2030, 0.4024]），且授权型领导对员工创新行为仍存在显著直接效应（β = 0.1390，p = 0.0115）。这一量化结果不仅为心理安全在授权型领导与员工创新行为之间的中介关系提供了更具说服力的实证证据，也为后续跨行业、跨文化研究提供了可对比的效应基准，进一步完善了领导行为与创新行为关系的理论体系。

总结

以信息化行业为实证背景，聚焦授权型领导、心理安全与员工创新行为的关系，通过文献分析与实证检验，系统揭示了“授权型领导→心理安全→员工创新行为”的中介传导机制，核心研究成果与创新贡献如下。

理论层面的创新点主要体现在三方面。一，精准捕捉行业特异性，证实信息化行业中授权型领导通过心理安全对员工创新行为的解释力（R^2 = 0.661），体现了领导风格与高知识密集型行业特征的适配性，弥补了行业特异性研究的不足。二，基于自我决定理论深化中介机制解析，明确授权型领导通过满足信息化行业员工的自主需求、关系需求与胜任需求，强化心理安全感知，进而激发创新行为，细化了“环境——认知——行为”路径的内在逻辑。三，通过严谨的 Bootstrap 检验，精准量化了心理安全的中介效应（间接效应值 0.2984，95% CI = [0.2030, 0.4024]），为该中介关系提供了更具说服力的实证支撑，丰富了领导行为与创新行为关系的理论体系。

实践层面，针对信息化行业高知识、高创新需求的特质，提出三点可操作建议。一是优化授权管理模式，领导者应赋予员工决策参与权与创新自主权，建立“试错即学习”的容错文化，减少创新过程中的心理顾虑；二是构建心理安全支撑体系，通过开放沟通机制、创新成果认可制度、跨部门协作平台等，强化员工“表达无风险、创新受支持”的感知；三是精准匹配行业需求，针对信息化行业技术迭代快的特点，将授权行为与员工技能提升、职业发展绑定，使授权不仅是“放权”，更是 “赋能”，推动心理安全向创新行为的高效转化。

未来研究可从以下方向展开优化：一是扩大样本范围，突破行业和地域限制，纳入多行业、多地域、不同性质企业的样本，通过跨行业对比分析检验研究结论的普适性与行业差异性；二是采用纵向研究设计，通过多波次数据收集，动态考察变量间的因果关系及长期演化规律；三是优化数据收集方法，结合员工自评、领导评价、同事评价等多源数据，减少共同方法偏差带来的影响。

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THE MEDIATING ROLE OF SUBJECTIVE WELL-BEING BETWEEN HOUSING CONDITIONS AND JOB PERFORMANCE AMONG URBAN RENTERS IN CHINA

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Abstract

Purpose: This study addresses a significant yet underexplored issue in China's urbanization context: how housing conditions relate to job performance among urban rental residents, who comprise approximately 25% of the urban population and often experience inferior living conditions compared with homeowners. Despite extensive research on housing and well-being, limited evidence exists on work-related outcomes among renters, the psychological mechanisms linking housing to job performance, and the measurement tools tailored to rental housing conditions. By focusing on the mediating role of Subjective Well-Being (SWB), this study aims to clarify the psychosocial pathway through which housing may influence work outcomes.

Study Design/Methodology/Approach: A cross-sectional survey of 400 employed urban renters across mainland China was conducted using multi-stage stratified sampling. Housing conditions were assessed with a newly developed multidimensional scale (affordability, quality, neighborhood, accessibility). SWB was measured using the Satisfaction with Life Scale and the Chinese revised PANAS, and job performance was assessed with adapted the Individual Work Performance Questionnaire subscales. Structural Equation Modeling with bootstrapping was employed for analysis.

Findings: Housing conditions showed a strong positive association with SWB ($\beta = .809$, $p < .001$), and SWB significantly predicted job performance ($\beta = .499$, $p = .004$). No significant direct path from housing conditions to job performance was found. Mediation analysis revealed that, in the tested model, SWB fully mediated this relationship (indirect $\beta = .415$, $p = .005$), accounting for the total effect of housing on performance. The model explained 65.5% of the variance in SWB and 34.2% in job performance.

Originality/Value: This study offers three contributions. Theoretically, it validates SWB as a full statistical mediator in the housing–job performance nexus among Chinese renters. Methodologically, it develops a context-sensitive multidimensional housing conditions scale for China's rental context.

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Empirically, it provides the first evidence of the psychological pathway linking housing to work outcomes in China's large rental population. Findings suggest that improving rental housing quality may relate to enhanced well-being and self-reported job performance, although broader economic implications require further research.

Keywords: Housing Conditions, Job Performance, Subjective Well-being, Rental Housing, China

Introduction

Housing represents a fundamental human need and the most significant expenditure for most households in China (Zhang et al., 2018). Beyond providing shelter, it symbolizes wealth and social status, influencing individuals' self-perception and societal valuation (Zumbro, 2014). At a macro level, housing conditions are pivotal indicators of urban livability and a central focus of public policy (Wei & Wei, 2020). A robust body of international research has consistently corroborated the profound direct and indirect impacts of housing on critical life outcomes, including SWB and Job Performance (JP) (Dettmers et al., 2020; Hu et al., 2022; Murat et al., 2023). These relationships are often explained through theories such as the Conservation of Resources (Hobfoll, 2001), which posits that stressful environments deplete personal resources, and the Bottom-Up Spillover theory, which suggests satisfaction in life domains like housing influences overall well-being.

Despite its scale, empirical research specifically examining the work-related outcomes of China's rental housing population remains scarce and fragmented. The Seventh National Population Census (2020) revealed that approximately 25% of China's urban population resides in rental housing (Li, 2023). This segment often experiences poorer housing conditions compared to homeowners, within a market that remains underdeveloped and faces persistent challenges affecting residents' quality of life (Jin & Meng, 2021).

More specifically, three critical gaps in the literature warrant attention. First, while extensive research has documented the health and well-being consequences of housing (Riva et al., 2022; Tang et al., 2022), limited evidence exists on how housing conditions influence work-related outcomes, particularly job performance, among renters. Second, although psychological mechanisms such as subjective well-being have been proposed to link living environments to behavioral outcomes, few studies have empirically tested the mediating role of SWB in the Chinese rental context. Third, existing housing measurement tools often fail to capture the multidimensional nature of rental housing conditions-including affordability, quality, neighborhood, and accessibility—That are particularly salient for China's urban renters.

Given the government's increasing emphasis on citizen well-being and housing as a basic necessity, critical questions emerge: What are the specific mechanisms through which the housing conditions experienced by this substantial demographic affect their psychological state? How do these psychological states, in turn, translate into their capacity to perform in the workplace, which is crucial for both individual economic security and national productivity?

This study addresses these gaps by investigating the interaction mechanisms among housing conditions, SWB, and job performance specifically for China's urban rental housing residents. The scope is confined to the urban working population living in rental housing within mainland China, estimated at approximately 50.7 million households (Office of the Leading Group for the Seventh National Population Census, 2022), excluding Hong Kong, Macao, Taiwan, and rural areas.

Objectives

The primary objectives of this study are designed to systematically unpack the relationship between the physical environment of housing and the economic outcome of job performance through psychological lenses, thereby addressing the three identified gaps: the lack of evidence on work-related outcomes, the untested psychological mechanism, and the absence of a context-sensitive measurement tool.

1. To examine the direct effects of housing conditions (conceptualized as affordability, quality, neighborhood, and accessibility) on SWB and job performance of urban rental residents in China. This establishes the foundational links in the proposed model.

2. To investigate the mediating roles of SWB in the relationship between housing conditions and job performance. This objective aims to discern whether housing impacts work primarily through cognitive evaluation, affective state, and overall SWB.

Literature Review

Subjective Well-Being (SWB)

Subjective Well-Being (SWB), commonly referred to as happiness, represents an individual's holistic evaluation of their own life quality. This construct has evolved from philosophical roots to become a central, empirically measurable focus in psychology, economics, and sociology. The modern operational definition was crystallized by Diener (1985), who conceptualized SWB as a person's overall assessment of their life according to their own criteria, encompassing both cognitive judgments and affective reactions.

Diener's tripartite model posits that SWB comprises three interrelated yet distinct components: frequent positive affect, infrequent negative affect, and cognitive life satisfaction. This model has gained dominant scholarly acceptance. Life satisfaction represents the conscious, global cognitive appraisal of one's life as a whole. Emotional (or affective) well-being refers to the balance, frequency, and intensity of positive and negative emotions experienced in daily life. For the purpose of this study, SWB is adopted as the overarching psychological construct, with life satisfaction and emotional well-being serving as its two primary dimensions.

Influencing Factors of SWB are multifaceted, with meta-analyses suggesting environmental factors account for 60-70% of the variance (Diener et al., 2018). Key social-environmental influences relevant to a housing context include: Residential environmental factors (such as access to green spaces, neighborhood

safety, pollution levels, and commute duration) have demonstrated significant associations with SWB (Zhu et al., 2019; White et al., 2013); Changing house also can influence the subjective well-being of individuals, with the more they change house, the lower their subjective well-being and even the increased risk of death afterwards (Oishi & Schimmack, 2010).

Outcomes of SWB extend beyond mere feeling states to predict significant life results. Crucially for this research, higher SWB is robustly associated with superior job performance. Individuals with higher SWB tend to demonstrate greater productivity, creativity, organizational citizenship behaviors (e.g., helping colleagues), resilience, and lower burnout and absenteeism. While the direction of causality can be complex, evidence supports that SWB acts as a resource that fosters effective functioning in the work domain.

Housing Conditions (HC)

The conceptualization of housing conditions has evolved from a narrow focus on physical structure to a holistic, multidimensional construct. For this study, we synthesize contemporary scholarship and contextualize it within China's urban rental market to define housing conditions along four interlinked dimensions:

1. Affordability: This is a primary concern globally and particularly acute in China's high-cost cities. It encompasses not just the absolute rent-to-income ratio, but also the subjective financial burden, the availability of housing subsidies, and the stability of rental costs (Borgoni et al., 2021; Vybostok & Stefkovicova, 2023).

2. Housing Quality: This foundational dimension includes the structural integrity of the dwelling, the quality of internal facilities (plumbing, heating, appliances), indoor environmental quality (air, light, noise), space adequacy, and overall safety and livability (Battisti et al., 2021).

3. Neighborhood and Community Conditions: This dimension captures both the physical and social fabric surrounding the home. It includes the quality of public spaces, maintenance, security, noise levels, the quality of property management, and critically, the sense of community and social interaction among residents (Murat et al., 2023).

4. Accessibility to Basic Needs: This refers to the proximity and convenience of accessing essential services and amenities, including public transportation, healthcare facilities, educational institutions (a paramount concern in China's "school district housing" system), supermarkets, and cultural/recreational venues (Wang & Zhang, 2021; Borgoni et al., 2021).

Empirical evidence consistently links deficiencies in these dimensions to adverse outcomes. Poor housing quality is associated with physical health problems (respiratory issues, injuries) and mental health strains like depression and anxiety (Riva et al., 2022; Tang et al., 2022). These health outcomes, in turn, are well-established determinants of work capacity and performance (Lu et al., 2022). Furthermore, housing conditions have been directly linked to subjective well-being metrics, including both life satisfaction and emotional states (Zhou et al., 2022).

Housing conditions are multidimensional. This study synthesizes literature to define them through four key dimensions: 1) Affordability: relating to cost burdens and support mechanisms; 2) Housing Quality: encompassing structural safety, indoor environment, and livability; 3) Neighborhood and Community Conditions: including both physical infrastructure and social environment; and 4) Accessibility to Basic Needs: proximity to essential services like healthcare, education, and transportation (Borgoni et al., 2021; Wang & Zhang, 2021). Poor conditions across these dimensions are associated with adverse physical and mental health outcomes, which in turn can impair functioning, including work performance (Riva et al., 2022; Tang et al., 2022).

Job Performance (JP)

Job performance study originated in scientific management (Taylor, 1911). Primary conceptualizations include: 1) Outcomes Perspective: defines performance as the tangible results employees achieve within a timeframe, reflecting organizational expectations for outputs and achievements (Campbell & Wiernik, 2015). 2) Behavioral Perspective: Employee actions linked to productivity, fostering capabilities, innovation, engagement, and citizenship behaviors (Hakim & Fernandes, 2017). 3) Competency Perspective: emphasizes the underlying employee attributes—expertise, experience, resilience—that drive performance differences in achieving goals (Ng & Feldman, 2009).

Woodroffe (1992) expanded on the connotation of job performance as a combination of behaviors, competencies, and outcomes, with behaviors and outcomes connected through employee competencies (Pulakos et al., 2000). An integrated view, combining behaviors, competencies, and outcomes, is adopted in this study. Factors influencing job performance include competencies (knowledge, skills), personality traits (conscientiousness, emotional intelligence, proactivity), attitudes/emotions (organizational justice, satisfaction, commitment, motivation), physical and mental health status, and family and social support (Pandey, 2018).

Empirical Review and Hypotheses Development

Research demonstrates multiple dimensions of housing conditions impact residents' well-being. Internal factors (size, quality, facilities) and external factors (neighborhood design, community facilities, accessibility) significantly affect health and subjective well-being (Riva et al., 2022; Tang et al., 2022; Yu et al., 2022). Location, commuting, and affordability also contribute (Park & Seo, 2020; Sun et al., 2021). Consequently, we hypothesize:

H1: Housing conditions positively affect subjective well-being among Chinese rental housing residents.

Meta-analytic evidence establishes robust links between subjective well-being and job performance (Salgado & Moscoso, 2022). Therefore, we propose:

H2: Subjective well-being positively influences job performance among Chinese rental housing residents.

Although indirect, empirical evidence suggests pathways linking housing conditions and job performance (commute demands, insecurity, recovery states) (Dettmers et al., 2020). Therefore, the third hypothesis is proposed:

H3: Housing conditions positively affect job performance among Chinese rental housing residents.

Housing conditions influence key mediators of job performance (health, recovery, SWB) (Riva et al., 2022; Sun et al., 2021; Tang et al., 2022). We therefore hypothesize mediating roles:

H4: Subjective well-being mediates the relationship between housing conditions and job performance.

Synthesizing the above literature, this study addresses the identified gaps by proposing and testing an integrated model that links housing conditions to job performance through the mediating mechanism of subjective well-being. The model is grounded in Conservation of Resources theory and Bottom-Up Spillover theory, and employs a multidimensional measurement of housing conditions tailored to the Chinese rental context.

Based on the literature review and hypotheses, the research framework of this paper can be constructed as follows:

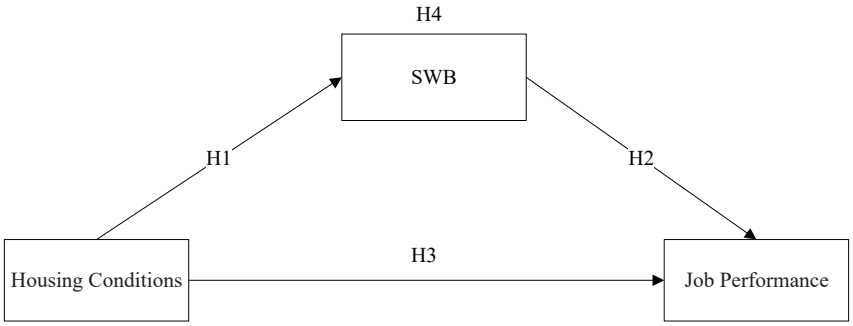


Figure 1 Research Framework

Methodology

Population and Sampling

The target population was defined as working-age urban residents living in rental housing in mainland China who were actively attached to the labor market. This included individuals who were currently employed (formally, flexibly, or self-employed) as well as those who were temporarily out of work but had recent work experience (within the past three months) and were actively seeking new employment. This broader definition was adopted to capture the dynamic nature of the rental population, which includes many young professionals and migrant workers who frequently transition between jobs. All respondents included in the final sample had recent work experience and were able to report on their job performance based on their most recent employment.

Using Yamane's formula for a finite population (N = 50.7 million, e = 0.05), a minimum sample size

of 400 was determined. Due to the absence of a complete sampling frame for China's rental population, a multi-stage targeted convenience sampling approach was employed. First, mainland China was stratified into four economic regions (Eastern, Central, Western, Northeastern) based on National Bureau of Statistics criteria. Second, a target sample of 400 was proportionally allocated across the first three regions (Eastern: n = 180, Central: n = 117, Western: n = 122), with the Northeastern region used for pretesting (n = 31). Third, within each region, participants were recruited through rental-focused online social media groups (WeChat/QQ) using the Questionnaire Star platform.

It is important to acknowledge that this recruitment approach may introduce sampling bias, as participants recruited through online rental groups tend to be younger, more educated, and more digitally active. The demographic profile indeed reflects this skew (82.1% aged 18-35; 92.3% with college degree or higher). However, this profile is broadly representative of China's urban rental population in major cities, where renters are disproportionately composed of young professionals, recent graduates, and migrant workers with relatively higher educational attainment (National Bureau of Statistics of China, 2022). While the sample is not fully representative of all rental residents (e.g., older or less-educated renters), it captures a significant and policy-relevant segment of the rental market. Readers should interpret the findings with this sampling limitation in mind, as discussed in the Limitations section.

Instruments

Data were collected using a structured questionnaire with 7-point Likert scales (1 = Strongly Disagree, 7 = Strongly Agree).

Housing Conditions (HC): A multidimensional scale was developed specifically for this study to capture the unique housing experiences of urban renters in China. The scale development process followed a five-stage procedure.

Stage 1: Literature review and dimension identification. Based on a comprehensive review of housing studies (Borgoni et al., 2021; Wang & Zhang, 2021; Murat et al., 2023), four core dimensions of rental housing conditions were identified: Affordability, housing quality, neighborhood and community conditions, and accessibility to basic needs.

Stage 2: Item generation and content validity assessment (IOC). An initial pool of 20 items was generated based on the literature and semi-structured interviews with five urban renters. To assess content validity, a panel of five experts-two professors in urban studies, two associate professors in organizational behavior, and one senior researcher in public health-was invited to evaluate each item. Experts rated each item on a three-point scale: +1 (clearly measuring the intended construct), 0 (uncertain), or -1 (clearly not measuring the intended construct). The Item-Objective Congruence (IOC) index was calculated for each item by summing the ratings and dividing by the number of experts. Items with an IOC score ≥ 0.60 were retained, while those below 0.60 were revised or removed based on expert feedback (Rovinelli & Hambleton, 1977). This process resulted in the rewording of three items and the removal of one item from the neighborhood dimension.

Stage 3: Exploratory Factor Analysis (EFA). Prior to pilot testing, an EFA was conducted on a separate sample of 150 urban rental residents to examine the preliminary factor structure. The Kaiser-Meyer-Olkin (KMO) measure was 0.929, and Bartlett's test of sphericity was significant ($p < .001$), indicating suitability for factor analysis. Principal axis factoring with promax rotation revealed a clear four-factor structure consistent with the hypothesized dimensions, explaining 54.18% of the total variance. Four items with low factor loadings (< 0.50) or substantial cross-loadings were removed, resulting in a 15-item scale with clean factor structures (loadings ranging from 0.55 to 0.98). The four factors were interpreted as affordability, housing quality, neighborhood conditions, and accessibility.

Stage 4: Pilot testing and item refinement. The revised 15-item scale was pilot tested with 31 rental residents from Northeastern China (a region not included in the main survey). All items demonstrated acceptable item-total correlations and internal consistency, and no further items were removed.

Stage 5: Final scale structure. The final 15-item scale measures four dimensions: Affordability (2 items), Housing Quality (3 items), Neighborhood Conditions (6 items), and Accessibility (4 items). All items were rated on a 7-point Likert scale.

Supporting evidence of validity: As reported in the Results section, Confirmatory Factor Analysis (CFA) confirmed the four-factor structure of the HC scale, with all fit indices meeting recommended thresholds ($\chi^2/df = 1.704$, CFI = .978, RMSEA = .042). Composite Reliability (CR) values ranged from .76 to .92, and Average Variance Extracted (AVE) values ranged from .61 to .80, demonstrating adequate convergent validity. Discriminant validity was also established, as the square root of AVE for each dimension exceeded its correlations with other dimensions.

Subjective Well-Being (SWB): SWB was measured as a second-order construct comprising cognitive and affective components. The cognitive component was assessed using the 5-item Satisfaction with Life Scale (Diener et al., 1985); one item was later removed based on CFA results, yielding a 4-item scale. The affective component was measured using the Chinese revised version of the Positive and Negative Affect Schedule (PANAS) (Qiu et al., 2008), from which an emotional balance score was calculated using 9 pairs of positive and negative affect items. Both scales were also subjected to the same IOC review process described above, resulting in minor wording adjustments to enhance contextual relevance for Chinese rental residents, but no items were removed.

Job Performance (JP): Relevant subscales from the Individual Work Performance Questionnaire (Koopmans et al., 2012) were adapted to a 7-point scale, focusing on task and contextual performance (5 items). The adapted scale underwent IOC review, with minor wording modifications to ensure clarity and relevance for the rental population, but no items were removed.

Results

Sample Characteristics

The final sample comprised 400 respondents. The majority were female (70.75%), aged 18-35 (82.1%), unmarried (70.5%), and held a college degree or higher (92.3%). Most were formally employed

(78.6%).

Measurement Model and Validity

Confirmatory Factor Analysis (CFA) confirmed the validity of the there-factor measurement model (HC, SWB, JP). All fit indices met recommended thresholds (e.g., CFI > 0.90, RMSEA < 0.08) as shown in Table 1.

Table 1 CFA Model Fit Indices (n = 400)

Model Fit Indices	Threshold Range	SWB	Housing Conditions	Job Performance	Research Model
Chi-square/df	below 5.00	2.670	1.704	3.310	1.808
GFI	above 0.90	0.961	0.943	0.984	.920
AGFI	above 0.90	0.932	0.925	0.953	.902
CFI	above 0.90	0.983	0.978	0.990	.962
TLI	above 0.90	0.976	0.974	0.980	.958
RMSEA	below 0.08	0.065	0.042	0.076	.045

Sources: Cheung et al., (2024)

In addition to the IOC-based content validity, the internal consistency of the scales was further supported by Cronbach's α and Composite Reliability (CR), as shown in Table 2. Internal consistency and convergent validity were evaluated using: Standardized factor loadings (threshold ≥ 0.5; ideally ≥ 0.7) (Cheung et al., 2024), Composite Reliability (CR > 0.7) (Cheung et al., 2024), Average Variance Extracted (AVE > 0.5) (Fornell & Larcker, 1981). All constructs met or exceeded criteria (Table 2).

Table 2 Reliability and Convergent Validity (n = 400)

Constructs	Item	Significance Estimates				FL	Cronbach's α	CR	AVE
		β	S.E.	t-value	*P*				
HC	affordability	1.000				.537	.899	.759	.623
	quality	1.078	.161	6.691	***	.661			
	neighborhood	1.191	.181	6.672	***	.802			
	accessibility	.917	.142	6.448	***	.645			
affordability	aff1	1.000				.786	.796	.797	.664
	aff2	1.150	.126	8.967	***	.843			
quality	qua_6	1.000				.913	.922	.923	.800
	qua_7	1.002	.036	27.996	***	.916			
	qua_8	.948	.039	24.189	***	.852			

Table 2 Reliability and convergent validity (n = 400) (Cont.)

Constructs	Item	Significance Estimates				FL	Cronbach's α	CR	AVE
		β	S.E.	t-value	*P*				
neighborhood	nei_2	1.000				.770	.904	.905	.613
	nei_6	.960	.058	16.622	***	.792			
	nei_7	.967	.059	16.460	***	.801			
	nei_9	.904	.054	16.892	***	.806			
	nei_10	.964	.062	15.523	***	.751			
	nei_13	.896	.056	16.009	***	.776			
accessibility	acc_1	1.000				.788	.865	.865	.617
	acc_2	1.086	.062	17.408	***	.843			
	acc_3	.996	.064	15.615	***	.774			
	acc_4	.936	.063	14.908	***	.732			
SWB	Cognitive	1.000				.886	.907	.750	.605
	Affective	.579	.064	8.976	***	.652			
cognitive	lf_1	1.000				.855	.924	.926	.759
	lf_2	.991	.042	23.353	***	.882			
	lf_3	1.111	.044	25.365	***	.928			
	lf_4	1.065	.052	20.354	***	.815			
affective	EB3	1.000				.762	.897	.898	.639
	EB4	1.169	.069	16.943	***	.827			
	EB5	1.009	.059	17.224	***	.839			
	EB6	.930	.062	14.908	***	.737			
	EB8	1.075	.064	16.914	***	.825			
JP	job_4	1.000				.713	.892	.897	.637
	job_7	1.146	.073	15.463	***	.829			
	job_9	1.215	.075	16.161	***	.870			
	job_10	1.305	.075	16.548	***	.869			
	job_13	1.144	.087	13.176	***	.693			

Remarks: *β* = Unstandardized Estimate; FL = Factor Loading; SMC = Squared Multiple Correlations; ***$P < 0.001$

Discriminant validity was examined using the Fornell-Larcker criterion (Fornell & Larcker, 1981), which requires that the square root of the AVE for each construct exceed its correlations with other constructs. As shown in Table 3, the square root of AVE for HC (0.789) was slightly lower than its correlation with SWB (0.809), indicating a potential overlap between these two constructs. This finding

is not entirely unexpected given the strong theoretical link between housing conditions and subjective well-being, and it is consistent with the high path coefficient (β = .809) observed in the structural model. Nevertheless, the remaining comparisons (SWB–JP and HC–JP) met the criterion, and all other validity and fit indices were satisfactory. Thus, while the distinctiveness of HC and SWB may be limited, the overall measurement model remains acceptable for the purpose of this study.

Table 3 Discriminant Validity Analysis (Fornell-Larcker Criterion)

Constructs	AVE	HC	SWB	JP
HC	.623	**.789**		
SWB	.605	.809	**.778**	
JP	.637	.467	.550	**.798**

Remarks: Diagonal values (bold) are the square root of the Average Variance Extracted (AVE); off-diagonal values are inter-construct correlations.

Structural Model Evaluation

Prior to model estimation, the normality of the observed variables was assessed by examining skewness and kurtosis. All items exhibited skewness values within ±2 and kurtosis values within ±7, which are considered acceptable for Maximum Likelihood (ML) estimation under moderate non-normality (Curran et al., 1996). Nevertheless, given the ordinal nature of the 7-point Likert scale, a Bollen–Stine bootstrap (5,000 iterations) was applied to obtain bias-corrected standard errors and confidence intervals, as recommended for non-normal data (Bollen & Stine, 1992).

The research model of this study demonstrated a good fit to the empirical data. The ratio of chi-square to degrees of freedom (χ^2/df) was 1.808, falling well below the conservative threshold of 3.0. The Comparative Fit Index (CFI) was 0.962, and the Root Mean Square Error of Approximation (RMSEA) was 0.045, with both indices surpassing their respective benchmarks of 0.90 and 0.08. These collective indices indicate that the hypothesized model provides an adequate representation of the observed covariance structure among the variables. The final structural model is depicted in Figure 2.

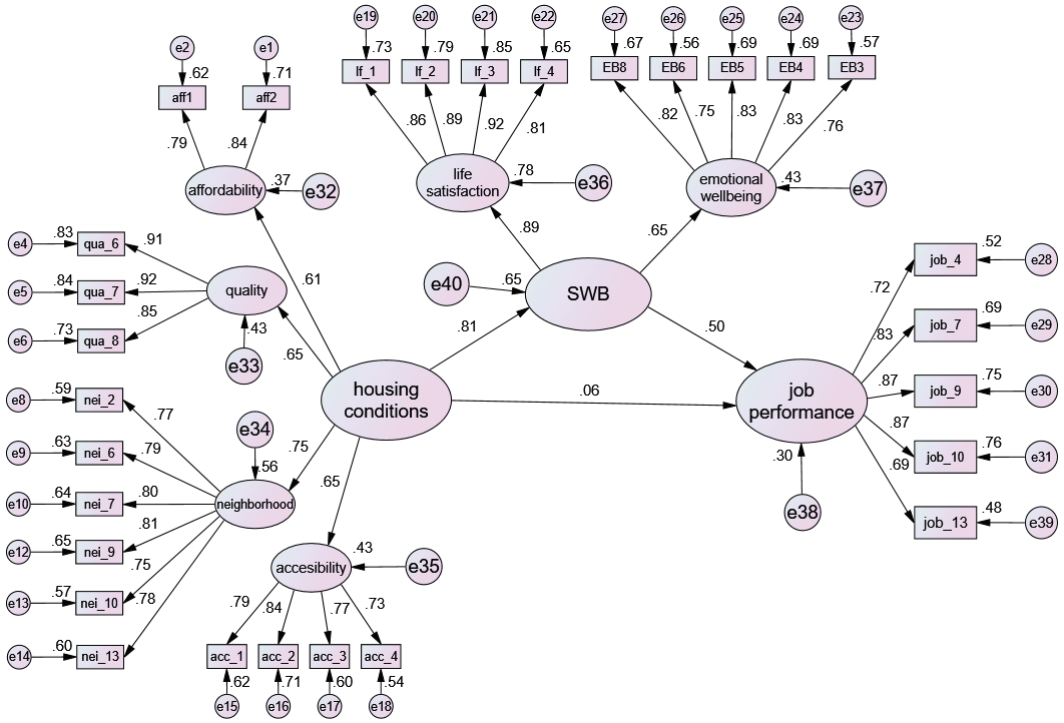


Figure 2 The Structural Equation Model of Research Framework

Hypothesis Testing

The standardized path coefficients derived from the Structural Equation Modeling were examined to test the direct relationships posited in Hypotheses 1 through 3. The results are summarized in Table 4.

Table 4 Direct Path Effects (n = 400)

Hypothesis	Relation Path			*β*	S.E.	C.R.	*P*	Std. Estimate	Result
H1	HC	→	SWB	.971	.122	7.964	***	.809	Supported
H2	SWB	→	JP	.428	.148	2.890	.004	.499	Supported
H3	HC	→	JP	.065	.158	.412	.680	.063	Not Supported

Remarks: β = unstandardized estimate; ***$p < 0.001$

As presented in Table 4, Hypothesis 1 (H1), which proposed a positive effect of Housing Conditions (HC) on Subjective Well-Being (SWB), was strongly supported. The path coefficient was statistically significant ($\beta = .809$, $p < .001$), indicating that improvements in housing conditions are associated with substantially higher levels of resident well-being. Hypothesis 2 (H2) was also supported, confirming a significant positive relationship between subjective well-being and job performance (JP) ($\beta = .499$, $p = .004$). This suggests that residents reporting greater overall well-being tend to demonstrate better performance in their occupational roles.

Conversely, Hypothesis 3 (H3), positing a direct positive link from housing conditions to job performance, was not supported. The direct path coefficient was negligible and non-significant ($\beta = .063$, $p = .680$). This finding implies that, within this model, housing conditions do not exert a straightforward, unmediated influence on job performance.

Given the non-significant direct effect (H3) alongside the significant effects leading to and from SWB (H1 and H2), a mediation analysis was conducted to test Hypothesis 4 (H4). Using a bootstrapping procedure with 5,000 resamples to generate bias-corrected confidence intervals, the indirect effect of housing conditions on job performance through subjective well-being was examined. The results are detailed in Table 5.

Table 5 Mediation Test Results (Bootstrapping, 5,000 samples)

Relationship	Point Estimate	Product of Coefficient		Bootstrapping (5,000 times)				
				Percentile 95%CI		BC 95%CI		
		S.E.	Z	Lower	Upper	Lower	Upper	*P*
Direct effect:								
HC→JP	.065	.298	.218	-.567	.412	-.525	.426	.801
Indirect effect:								
HC→SWB→JP	.415	.290	1.431	.120	1.036	.112	.983	.005
Total effect:								
Total effect	**.481**	**.089**	**5.404**	**.319**	**.669**	**.323**	**.676**	***

Remarks: ***$P < 0.001$; BC = Bias-corrected; CI = Confidence interval

The analysis revealed a statistically significant indirect effect ($\beta = .415$, 95% BC CI [.112, .983], $p = .005$). Crucially, the direct effect of housing conditions on job performance remained non-significant ($\beta = .065$, 95% BC CI [-.525, .426], $p = .801$), while the total effect was significant ($\beta = .481$, $p < .001$). This pattern of results—A significant total effect, a non-significant direct effect, and a significant indirect effect—Provides clear evidence for complete mediation (Preacher & Hayes, 2008). Therefore, Hypothesis 4 is fully supported.

The structural model explained a substantial proportion of variance in both endogenous variables. Specifically, housing conditions accounted for 65.5% of the variance in subjective well-being ($R^2 = 0.655$, 95% BC CI [0.490, 0.837]), and together with the indirect effect, the model explained 30.4% of the variance in job performance ($R^2 = 0.304$, 95% BC CI [0.175, 0.442]). a large effect size according to Cohen's (1988) guidelines for multiple regression ($R^2 \geq 0.26$ considered large).

The findings indicate that the influence of housing conditions on the job performance of urban rental residents is not direct but is entirely channeled through the psychological mechanism of subjective well-being. In other words, housing conditions primarily affect how residents feel and evaluate their lives (SWB), and this enhanced psychological state, in turn, leads to improved performance at work.

Summary of Findings

The results of the Structural Equation Modeling and mediation analysis offer clear empirical insights into the proposed relationships:

1. Housing conditions have a strong, positive direct impact on the subjective well-being of renters.
2. Subjective well-being has a significant positive direct impact on job performance.
3. No significant direct link exists between housing conditions and job performance when Subjective Well-Being is accounted for in the model.
4. Subjective well-being fully mediates the relationship between housing conditions and job performance, serving as the essential psychological pathway through which the quality of the living environment translates into occupational outcomes.

Discussion

This study investigated the mechanism through which housing conditions influence the job performance of urban rental residents in China, with a specific focus on the mediating role of Subjective Well-Being (SWB). The findings delineate a clear psychosocial pathway from the external material environment to internal psychological states and subsequently to external work behaviors, providing empirical evidence for understanding the broad socio-economic correlates of this fundamental living condition.

The Central Finding: Complete Mediation by Subjective Well-Being

The core finding of this research is that, in the tested model, the relationship between Housing Conditions (HC) and Job Performance (JP) is fully mediated by Subjective Well-Being (SWB). This indicates a statistical pattern consistent with full mediation, wherein the direct effect of HC on JP becomes non-significant after accounting for SWB. This model of complete mediation carries substantial theoretical weight. It indicates that, for urban renters, housing conditions do not enhance performance through direct, mechanistic means such as shortening commutes to increase work time. Instead, their influence operates through the more fundamental and complex pathway of shaping overall psychological well-being.

This result offers robust support for the applicability of the Conservation of Resources (COR) Theory (Hobfoll, 2001) in this context. Favorable housing conditions-characterized by safety, comfort, and accessible communities-can be viewed as critical external resources. They may help reduce chronic daily stressors (e.g., financial strain, neighborhood disputes, exhausting commutes), which is in turn associated with the preservation of psychological resources. Conversely, poor housing conditions may perpetually deplete these resources. Individuals reporting greater psychological resource reserves tend to report enhanced concentration, creativity, interpersonal cooperation, and resilience. Consequently, the role of housing is essentially that of a resource enrichment and protection mechanism, whose efficacy is realized through the conduit of psychological resources.

Analysis of the Non-Significant Direct Path (H3)

An intriguing finding of this study is the non-significant direct effect of housing conditions on job performance (β = .063, p = .680), despite the significant total effect mediated through subjective well-being. This result warrants further analytical consideration.

From a theoretical standpoint, the absence of a direct effect is consistent with the Conservation of Resources (COR) theory and the Bottom-Up Spillover theory that underpin this study. According to COR theory, external environmental conditions-such as housing-function as resource caravans that influence outcomes primarily through their impact on individuals' psychological resource reservoirs (Hobfoll, 2001). Housing conditions do not directly translate into workplace behaviors; rather, they shape the affective and cognitive states that, in turn, enable or constrain performance. In other words, housing operates as a distal, contextual factor whose influence on work outcomes is fully channeled through proximal psychological mechanisms.

Methodologically, the non-significant direct path may also reflect the multidimensional nature of both housing conditions and job performance. Housing conditions-encompassing affordability, quality, neighborhood, and accessibility-may affect different facets of job performance (e.g., task performance vs. contextual performance) through different pathways, some of which may cancel out or remain unobserved when performance is measured as a unidimensional construct. The fact that the indirect effect through SWB fully captures the housing–performance relationship suggests that the psychological pathway is the dominant, if not exclusive, mechanism linking these two domains.

Furthermore, the characteristics of the sample-predominantly young, educated urban renters-may also contribute to this pattern. For this demographic, housing conditions may be less likely to directly constrain work performance (e.g., through physical limitations like lack of space for remote work) and more likely to operate through psychological well-being, given their relatively higher adaptive capacity and access to resources, consistent with prior research on housing and well-being among younger populations (Zhou et al., 2022). Future research could examine whether a direct effect emerges among more vulnerable subgroups, such as low-income migrant workers or multi-family households, where poor housing may more directly impede work functioning (e.g., through lack of sleep, health issues, or inability to work from home).

In sum, the non-significant direct path does not imply that housing conditions are irrelevant to job performance; rather, it underscores that their influence is indirect and psychologically mediated, reinforcing the theoretical premise that housing matters for work outcomes primarily through its impact on how people feel and evaluate their lives.

Housing Conditions, Subjective Well-Being, and Its Dual Components

The results strongly confirm that housing conditions are a significant positive predictor of SWB. This validates the core assumption of "housing as a living environment" and elevates its impact to the level of overall psychological assessment. It is noteworthy that SWB was operationalized as a construct

integrating both the cognitive dimension (life satisfaction) and the affective dimension (emotional balance), following Diener's (1985) tripartite model of subjective well-being. Housing conditions likely influence these two components through distinct pathways: improvements in community environment and spatial quality may directly elevate global life evaluations, while the enhanced sense of security, belonging, and reduction in daily hassles may more directly manifest in fluctuating daily emotional experiences. The joint elevation of these two dimensions constitutes a more robust and comprehensive state of psychological well-being, providing a solid foundation for subsequent impacts on work behavior.

Subjective Well-Being as a Potent Antecedent of Job Performance

The finding that SWB significantly predicts JP aligns with a substantial body of evidence from positive psychology and contemporary organizational behavior, including meta-analytic evidence (Salgado & Moscoso, 2022). Employees with high SWB typically exhibit higher levels of both task performance and contextual performance. By confirming this relationship within the specific demographic of rental residents, this study underscores the cross-domain, universal influence of personal holistic well-being on workplace functioning. A positive balance of affective experiences fosters constructive work attitudes and prosocial behaviors, while satisfaction with life may correlate with greater work engagement and organizational commitment. Therefore, enhancing employee well-being is not merely a welfare objective but also a potential strategy for human capital investment.

Implications within the Chinese Context

The conclusions of this study hold particular relevance against the backdrop of China's rapid urbanization and evolving rental market. The urban renting population in China primarily consists of young professionals, new entrants to the workforce, and migrant populations, as documented in the Seventh National Population Census (Office of the Leading Group for the Seventh National Population Census, 2022; Li, 2023). These groups are often more sensitive to housing conditions and are at a critical stage of career development. This research offers preliminary evidence that improving housing quality for this sizable segment is associated with enhanced individual-level well-being, which in turn relates to higher self-reported job performance. At the individual and organizational levels, these findings suggest that housing conditions may be a relevant consideration for employers seeking to support employee well-being and effectiveness. For policymakers, the results point to potential individual-level benefits of housing interventions, though broader claims about labor market productivity or macroeconomic outcomes would require further research using aggregate-level data and more comprehensive indicators.

Theoretical Contributions and Practical Implications

The theoretical contributions of this study are threefold. First, it explicitly extends housing research from traditional economics and public health domains into the intersection of organizational management and psychology, constructing and validating a complete "environment-psychology-behavior" chain model. Second, by confirming the complete mediation role of SWB, it deepens the understanding of the specific mechanism through which housing conditions exert their influence, moving beyond simple correlational

relationships. Finally, it tests and supports Western theories like COR (Hobfoll, 2001) within the unique context of China's rental market and socio-cultural environment, thereby enhancing their cross-cultural explanatory power.

The practical implications should be interpreted within the scope of this study. At the organizational level, employers may consider housing-related benefits-such as rental assistance or flexible work arrangements-as part of employee well-being initiatives, given the observed association between housing conditions and self-reported job performance through SWB. For policymakers, the findings suggest that rental housing quality may have individual-level implications for resident well-being and self-reported work performance. Within the limits of this study, this provides a rationale for considering housing conditions in urban planning and housing policy, particularly for the young and educated rental population that constitutes a significant portion of the urban workforce, consistent with calls in the literature for more nuanced approaches to rental housing policy in China (Jin & Meng, 2021). However, the translation of these individual-level associations into broader urban economic outcomes—Such as talent competitiveness or city-level productivity—Remains an open question that would benefit from future research using macro-level indicators and longitudinal designs.

Limitations and Avenues for Future Research

This study has several limitations that point to directions for future inquiry. First, the cross-sectional design constrains the strength of causal inference. Although the theoretical model posits a flow from HC to SWB to JP, reverse or bidirectional relationships are also plausible, as cross-sectional mediation findings are inherently model-dependent (Preacher & Hayes, 2008). Future research could employ longitudinal panel designs, tracking changes in residents' well-being and performance before and after a change in residence, to provide stronger causal evidence. Second, the sampling method introduces a potential selection bias. Participants were recruited through rental-focused online social media groups (WeChat/QQ), which may over-represent younger, more educated, and digitally active renters. As reflected in the demographic profile, the sample is predominantly aged 18-35 (82.1%) and holds a college degree or higher (92.3%). While this profile aligns with a significant segment of China's urban rental population-particularly in first-tier cities where young professionals constitute a large share of renters-it limits the generalizability of the findings to older, less-educated, or digitally excluded rental subgroups. It is plausible that the relationships among housing conditions, SWB, and job performance may differ for these underrepresented groups. For instance, low-income migrant workers may experience more severe housing deprivation, potentially amplifying the impact of housing on well-being and work outcomes. Future research should employ more diverse recruitment strategies, such as community-based sampling or offline outreach, to capture a broader spectrum of the rental population. Additionally, stratified sampling based on age, education, and income levels could help ensure greater representativeness and allow for subgroup comparisons. Finally, the reliance on self-reported measures is a limitation. Future work could incorporate objective performance data (e.g., supervisor ratings, sales metrics), more nuanced objective

assessments of housing quality, and methods like experience sampling to further validate the model's robustness using multi-method, multi-source data.

Conclusions

This study provides robust empirical evidence for a psychosocial pathway linking housing conditions to job performance among urban rental residents in China. The findings confirm that housing conditions exert a significant positive influence on residents' subjective well-being, which in turn enhances their job performance. Crucially, the analysis reveals that, within the current model, subjective well-being functions as a full statistical mediator in this relationship. This suggests that, based on the variables included in this study, the association between housing conditions and work outcomes operates entirely through psychological mechanisms, with no significant direct link remaining after accounting for SWB. However, as with all cross-sectional mediation findings, this pattern is model-dependent and may vary with the inclusion of additional variables or alternative model specifications.

These results underscore the significant role of housing beyond mere shelter, positioning it as a critical form of "psychosocial infrastructure" that directly contributes to human capital by fostering psychological resources. The study advances the theoretical understanding of environment-behavior linkages by integrating the Conservation of Resources theory (Hobfoll, 2001) within the specific context of China's urban rental market. It affirms that improving housing quality is associated with enhanced subjective well-being, which in turn relates to higher self-reported job performance among rental residents. Within the limits of the study's scope, these findings suggest that housing quality may serve as a lever for supporting individual-level workforce outcomes, with potential implications for organizational human resource practices and urban housing policy.

Recommendations

Based on the conclusions, the following actionable recommendations are proposed for stakeholders:

For Policymakers and Urban Planners:

1. Integrate qualitative standards for rental housing—Focusing on safety, thermal comfort, noise insulation, and community facilities—Into housing regulations and urban development plans.

2. Develop targeted rental subsidy programs or tax incentives to alleviate affordability stress, a key dimension of housing conditions identified in this study.

3. Foster the development of "well-being-oriented" rental communities by ensuring access to green spaces, recreational facilities, and efficient public transportation, thereby enhancing neighborhood livability.

For Employers and Organizational Leaders:

1. Acknowledge housing stability and quality as components of employee well-being. Consider offering housing-related benefits, such as rental assistance or location-adjusted salaries, particularly in high-cost urban areas.

2. Implement and promote flexible work policies (e.g., remote work options) to help employees mitigate the negative well-being and performance effects associated with long and stressful commutes.

3. Strengthen workplace mental health and well-being support systems (e.g., Employee Assistance Programs) to help employees build resilience against external stressors, including those stemming from suboptimal living conditions.

For Future Research:

Future studies should employ longitudinal designs to better establish causality and explore the model's applicability among diverse renter subgroups (e.g., low-income migrants). Incorporating objective performance metrics and multi-source data would further enhance the validity of findings.

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旅游感知质量、汉语服务满意度与中国籍汉语专业学生旅客行为意图之关系——以泰国大城府为例

THE RELATIONSHIP BETWEEN PERCEIVED TOURISM QUALITY, CHINESE-LANGUAGE SERVICE SATISFACTION, AND BEHAVIORAL INTENTIONS OF CHINESE STUDENTS MAJORING IN CHINESE: A CASE STUDY OF AYUTTHAYA PROVINCE, THAILAND

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摘要

研究目的：大城府作为泰国重要的文化与历史旅游目的地，长期以来深受中国游客的青睐。然而，回顾现有文献可发现，泰国学术界针对旅游景点中汉语服务水平、游客感知质量、服务满意度及中国旅客行为意图之间关系的系统性实证研究仍相对不足，尤其缺乏以具体旅游目的地为研究情境的分析。本研究以泰国大城府为研究情境，聚焦曾到访当地之中国籍游客，探讨旅游景点感知质量对汉语服务满意度及旅客行为意图之影响关系，并进一步检验汉语服务满意度在感知质量与旅客行为意图之间所扮演的中介作用，以补足泰国旅游汉语服务相关实证研究之不足。

研究设计/方法/途径：本研究采用立意抽样法进行在线问卷调查，研究对象为 198 名曾到访泰国大城府之中国籍游客，主要包括中国籍汉语相关专业学生及国际中文学院学生。数据分析方面，采用 SPSS 26.0 进行描述性统计与 95% 信赖区间（95% CI）分析，并运用 Mplus 软件进行验证性因子分析，以检验研究构念之信效度与模型适配度。

研究结果：研究结果显示，感知质量对游客旅客行为意图具有显着正向影响，且对汉语服务满意度亦产生显着正向作用。同时，汉语服务满意度对游客旅客行为意图具有显着正向影响。

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中介效应部分，汉语服务满意度在感知质量与旅客行为意图之间存在部分中介作用，显示感知质量可透过提升游客对汉语服务的满意程度，进一步强化其旅客行为意图。

创新性与价值：本研究以泰国大城府为研究情境，验证感知质量透过汉语服务满意度影响中国游客旅客行为意图之作用机制，补足非英语旅游目的地中汉语服务在游客行为研究上的理论与实证缺口，并为泰国旅游实务提供具体管理启示。

关键词：中国游客 感知质量 汉语服务满意度 旅客行为 大城府

Abstract

Purpose: Ayutthaya is one of Thailand's most important cultural and historical tourism destinations and has long been popular among Chinese tourists. However, a review of the existing literature indicates that systematic empirical research in Thailand examining the relationships among Chinese-language service levels at tourist attractions, perceived quality, service satisfaction, and behavioral intentions of Chinese tourists remains limited, particularly studies grounded in a specific destination context. Accordingly, this study adopted Ayutthaya, Thailand as the research setting and focused on Chinese tourists who have visited the destination with the aim to examine the effects of tourist-perceived quality on Chinese language service satisfaction at tourist attractions and tourists' behavioral intentions, as well as to further test the mediating role of Chinese language service satisfaction between perceived quality and behavioral intentions, thereby addressing the research gap in the field of Chinese-language tourism services in Thailand.

Study Design/Methodology/Approach: This study employed a purposive sampling approach and collected data through an online questionnaire survey. The sample consisted of 198 Chinese tourists who had previously visited Ayutthaya, Thailand, primarily including students majoring in Chinese from China and those enrolled in International Chinese Language Institutes. Data analysis was conducted using SPSS 26.0 for descriptive statistics and 95% Confidence Interval (95% CI) analysis. In addition, Confirmatory Factor Analysis (CFA) was performed using Mplus to assess the reliability, validity, and model fit of the research constructs.

Findings: The results indicate that perceived tourism quality has a significant positive effect on tourists' behavioral intentions and also exerts a significant positive influence on Chinese language service satisfaction at tourist attractions. Furthermore, Chinese language service satisfaction has a significant positive effect on tourists' behavioral intentions. Mediation analysis revealed that Chinese language service satisfaction partially mediates the relationship between perceived quality and behavioral intentions, suggesting that perceived quality can enhance tourists' behavioral intentions by improving their satisfaction with Chinese-language services.

Originality/Value: By conducting an analysis in Ayutthaya, Thailand, this study empirically verified the mechanism through which perceived tourism quality influences the behavioral intentions of Chinese majors from China via Chinese language service satisfaction at tourist attractions. The findings contribute to filling the theoretical and empirical gap in research on Chinese-language services in non-English-speaking tourism destinations and provide practical managerial implications for tourism practitioners in Thailand.

Keywords: Chinese Tourists, Perceived Quality, Chinese Language Service Satisfaction, Behavioral Intentions, Ayutthaya

引言

在泰国学术界，关于泰国主要旅游景点汉语服务满意度的相关研究仍较为有限。目前，已有的研究主要集中于曼谷的金佛寺（Wat Traimit）和大城府 (Xu, 2018), 以及曼谷和清迈 (Wei et al., 2024)。Huang (2018) 指出，金佛寺的汉语服务平均评分仅为 1.38，属于“不满意”水平。因此，有必要进一步深入探讨泰国旅游景点中的汉语服务满意度问题。在泰国积极吸引中国游客的大背景下，景区所提供的汉语服务可能显着影响中国游客对泰国知名景点的访问意愿与整体旅游体验。因此，本文认为有必要聚焦于泰国景点的汉语服务，系统探讨其对旅客行为意图与满意度的影响，从而为泰国旅游业在语言服务与跨文化传播方面提供理论支持与实践参考。

且根据泰国旅游局官网，大城府历史公园是重要的文化与历史遗址。14 至 18 世纪间，大城府作为泰国首都长达 417 年。学者指出，在泰国众多历史文化景点中，大城府是最受中国游客欢迎的目的地之一 (Huang, 2018), 该研究特别强调，大城府旅游方面应提升汉语服务水平，如增加中文导游讲解和汉语标识牌的数量，以提升中国游客的体验。综上所述, 本研究认为，大城府以其深厚的历史底蕴、文化价值和建筑美学吸引大量中国游客，大城府历史公园（Ayutthaya Historical Park Office）是该地区旅游经济的重要组成部分。因此，本研究以大城府历史公园旅客为对象，特别是针对该地区的中国游客的体验感，用以分析游客行为，旨在探讨中国籍游客的感知质量和汉语服务满意度的关系。

近年来，虽然国际上已有不少关于旅游质量、旅游价值、旅游满意度与旅客行为之间关系的研究 (Tran & Le, 2020; Won & Kim, 2020)，但针对泰国旅游景点，尤其是大城府的旅客行为意图相关研究仍较为缺乏。Hu et al. (2020) 针对广州市 11 个森林公园的调查研究发现，景区满意度受到多项因素影响，其中感知质量涉及景区内部环境、景点特征、游览路线、标识系统及停车设施等多个方面，这与本研究关注的感知质量主题高度契合；Han (2015) 指出，目前针对中国籍游客在旅游地感知价值、满意度与旅客行为之间关系的研究较少，且尚未有学者深入分析泰国大城景点的感知质量、汉语服务满意度与中国籍旅客行为意图之间的作用机制。Chou

(2025)、Luo 和 Chou (2025) 皆指出全球华语教育的快速扩张，强调汉语相关专业的重要性，然而本研究发现在中国学术界中，以中国籍汉语相关专业学生作为旅游景点研究对象具有明显的研究稀缺性。现有与泰国旅游相关的文献大多聚焦于一般中国游客或背包客, 而针对汉语专业学生的旅游行为、旅游感知质量以及其对中文服务满意度之反应的研究相对缺乏。因此，本研究旨在填补这一领域的空白，系统探讨泰国大城景点的感知质量、汉语服务满意度及其对中国籍旅客行为意图的影响，为相关理论研究和景区管理提供参考。

研究目的

首先，本研究旨在探讨泰国大城府历史公园内中国游客的汉语服务满意度与其旅客行为之间的关系。通过分析游客对感知质量如何影响他们对汉语服务满意度，进一步探讨汉语满意度是否影响中国游客的来大城的旅客行为意图；其次，本研究结果能为泰国旅游行业在汉语服务方面提供改进建议，以提升中国籍游客体验、改善大城旅游形象并促进泰国旅游经济的发展，同时能补足学术关于中国籍游客感知质量对大城汉语服务满意度和旅客行为研究的空白。

文献综述

理论基础

情感事件理论（Affective Events Theory, AET）主要探讨员工在工作中所经历的情感事件，并研究这些情感事件如何影响员工的态度与行为，从而引发员工的具体行为 (Weiss & Cropanzano, 1996)。本研究利用该理论构建了游客的感知质量和汉语服务满意度, 和汉语服务满意度对旅客行为意图的关系。

变量定义

旅客行为意图（Tourism Behavioral Intentions）：本研究依据 Fishbein 和 Ajzen (1975) 的观点，将旅客行为意图界定为个体针对特定行为所表现出的意图强度，即其从事该行为的可能性倾向。

感知质量（Perceived Quality）：本研究依据 Hu et al. (2020) 的定义，将感知质量界定为游客在其特定旅游目的与需求的基础上，对景区所提供的各项服务与环境要素进行综合性评价的主观判断。

汉语服务满意度（Chinese Language Service Satisfaction）：依据 Zeng et al. (2014) 的定义，本研究将汉语服务满意度界为游客在旅游过程中，其汉语使用需求得到满足后所产生的愉悦感受与满意程度。

假设推导

学者们认为满意的用户更可能表现出对服务的忠诚，从而减少投诉数量 (Ibrahim & Borhan,

2020)。此外，研究指出顾客感知到三大关键因素——餐厅环境、食物和服务会影响到旅客行为(Ji et al., 2016)。且 Perugini et al. (2001) 指出城市旅游感知价值会影响旅客行为；因此，本研究推测，较高的感知质量会提高游客的感知汉语服务满意度，进而提高其旅客行为，Sun et al. (2020) 也指出感知价值正向影响旅客行为；基于上述文献，本研究提出研究假设 1：

H1：旅游感知质量对旅客行为意图产生显着正向影响。

Chaturvedi (2009) 证实旅游感知价值正向影响游客满意度；Sun et al. (2020) 也得出感知价值正向影响满意度；Han (2015) 以无锡灵山景区为研究区域，在问卷调研获取游客行为数据的基础上，得出感知价值会正向影响满意度和旅客行为的结论；因此，本研究推测，较高的感知价值会提高游客的感知汉语服务满意度。因感知质量和感知汉语服务满意度相关研究尚缺，故本研究基于感知价值之观点来推论，本研究提出假设 2：

H2：旅游感知质量对感知汉语服务满意度产生显着正向影响。

Ryu et al. (2012) 指出，顾客满意度对旅客行为产生正向影响，是预测旅客行为的重要指标。Tran 和 Le (2020) 通过对 220 名顾客进行调查结果表明，服务质量通过顾客满意度对旅客行为产生显的间接正向影响，即为顾客满意度越高，旅客行为越强。Won 和 Kim (2020) 也指出消费者态度越积极，购买意图越强。基于上述文献，本研究推论出感知汉语服务满意度对旅客行为意图产生显着正向影响，并提出研究假设 3：

H3：感知汉语服务满意度对旅客行为意图产生显着正向影响。

此外，Chaturvedi (2009) 指出旅游感知价值越高，其满意度越高，进而提高进而旅客行为意图; Mo et al. (2022) 发现，服务满意度与旅客行为意图之间存在显着的正向关系。此外，Sun et al. (2020) 验证了游客感知价值与旅客行为之间的关系，得出感知价值正向影响满意度。

Han (2015) 在其关于旅游中感知价值、满意度与旅客行为关系的研究，指出较高的满意度会导致游客产生更强的旅客行为；Zhao et al. (2025) 和 Wang et al. (2025) 研究皆指出感知价值越高则满意度越高，进而影响到旅客行为，因此，当游客感受到较高的感知质量时，更有可能在接触汉语服务时获得正向体验，从而提升其汉语服务满意度；综上所述，本研究认为，感知价值对汉语服务满意度产生正向影响，进而提高旅客行为意图。基于上述文献，本研究提出研究假设 4：

H4：感知汉语服务满意度在旅游感知质量与旅客行为意图关系间起到中介作用。

根据文献综述，本研究的变量模型图如下。变量模型图如图 1 所示。

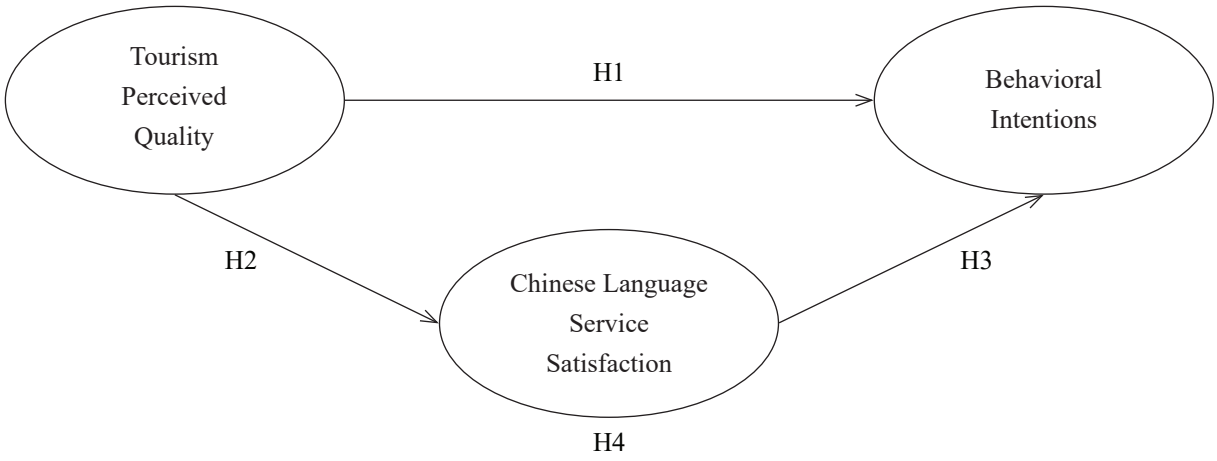


Figure 1 Conceptual Model Diagram

研究方法

样本选取及数据

本研究采用问卷调查法，于 2024 年对曾经去过大城府历史公园旅游的中国游客进行调查。采用立意抽样法，发送给曾经来泰国大城的中国籍游客（主要为中国籍汉语相关专业和国际中文学院学生） 进行填答, 共计 230 名中国籍汉语和教育相关专业学生填答，去除掉无效问卷 32 份，共回收有效问卷为 198 份。根据 Tinsley 和 Tinsley (1987) 的研究建议，问题数与有效答案数之比为 1:10 是最严格的标准。本研究的调查问卷共包含 17 个问题。因此，需要收集 170 份有效问卷。本研究回收了198 份有效问卷，符合学者要求的标准 (Tinsley & Tinsley, 1987)。

本研究共回收有效样本 197 份。在年龄分布方面，18-24 岁受访者共有 142 人，占 72.08%; 25-30 岁有 29 人，占 14.72%；31-40 岁为 10 人，占 5.08%；41-50 岁为 9 人，占 4.57%；51 岁及以上为 7 人，占 3.55%。在性别方面，男性受访者共有 60 人，占 30.46%；女性共有 137 人，占 69.54%。对于“在大城景点提供中文服务或标示是否会提高旅游满意度”之看法，回答“是”的受访者共有 196 人，占 99.49%；回答“否”的受访者 1 人。

测量工具

本研究变量的量表基于他人问卷，且根据本研究的背景，进行主词修改，如下：

1. 旅游感知质量量表，感知质量问卷参考 Hu et al. (2020) 提出的 11 个感知质量影响指标，与专家讨论，本研究对其进行了主词修改，并编制成 11 个感知价值题目。量表包括“您认为大城府的大城府历史公园环境安静且适合观光吗？”、“您认为大城府的大城府历史公园景观独特且值得一看吗？”与“您认为大城府的大城府历史公园卫生设施和休息设施清洁且方便吗？”等问题。

2. 汉语服务满意度量表，本研究参考 Mo et al. (2022) 的量表，并根据大城府历史公园的具体情况建立了汉语服务满意度三题题目。汉语服务满意度问卷题目包含：“在大城府历史公园

的经历, 汉语服务让我觉得很满意”、“在大城府历史公园时使用汉语服务，我很享受”与“在大城府历史公园旅游时使用汉语服务时心情很好”等问题。

3. 旅客行为意图量表，本研究引用 Mo et al. (2022) 与 Evanschitzky et al. (2006) 的量表，旅客行为问卷包含三题：“我会给其他人分享这次大城旅游体验”、“我会向他人推荐大城的特色美食”与“我想在未来再次前往大城旅游”。

本研究量表均采用了 5 点 Likert 量表，根据满意度水平从“完全满意”到“完全不满意”，分值范围从 5 分“完全满意”到 1 分“完全不满意”。

研究结果

数据可靠性和有效性分析

本研究采用 Mplus 针对 17 个题目进行验证性因子分析。结果汇总如表 1 与表 2：

Table 1 Descriptive Statistics, Reliability, and Correlations among Variables

Variable	Mean	SD	1	2	3
Chinese Language Service Satisfaction	4.672	0.641	0.885		
Behavioral Intentions	4.591	0.740	0.643**	0.953	
Tourism Perceived Quality	4.606	0.587	0.705**	0.653**	0.955

Remarks: *$p < 0.05$, ** $p < 0.01$

表 1 得知, 斜对角线为 AVE 平方根值，均大于相关系数值，本研究对各主要构念的平均数进行描述性统计分析，结果显示汉语服务满意度的平均值为 4.672，旅客行为意图的平均值为 4.591，而旅游感知质量的平均值为 4.606。整体平均数皆落在 4.50 以上，属于相对高的评价。

Table 2 Model Fit Indices

Indices	χ2	df	*p*	χ^2/df	TLI	CFI
Recommended Criteria	-	-	> 0.05	< 3	> 0.8	> 0.8
Results of This Study	775.334	116	0	6.684	0.846	0.869

上表 2，本研究采用 Mplus 针对模型拟合指标进行分析，本研究的模型拟合指标总体符合标准 (Schumacker & Lomax, 2004), 且 CFI > 0.8 (Zhang & Zheng, 2012)，TLI > 0.8 (Ullman, 2001)。

Table 3 Average Variance Extracted (AVE) and Composite Reliability (CR)

Variable	AVE	CR
Chinese Language Service Satisfaction	0.783	0.975
Behavioral Intentions	0.909	0.968
Tourism Perceived Quality	0.912	0.969

表 3，本研究 3 个变量的 AVE 值全部均超过 0.5，且 CR 值均超过 0.7，代表本研究具有良好的聚合效度。

根据共线性诊断结果显示，本研究各变量的 VIF 值介于 1.974-2.297 之间，低于常用的判断标准 5 的临界值；容忍度（Tolerance）介于 0.435-0.507， 说明本研究模型不存在显着的多重共线性问题，可进一步进行回归分析。

回归分析结果

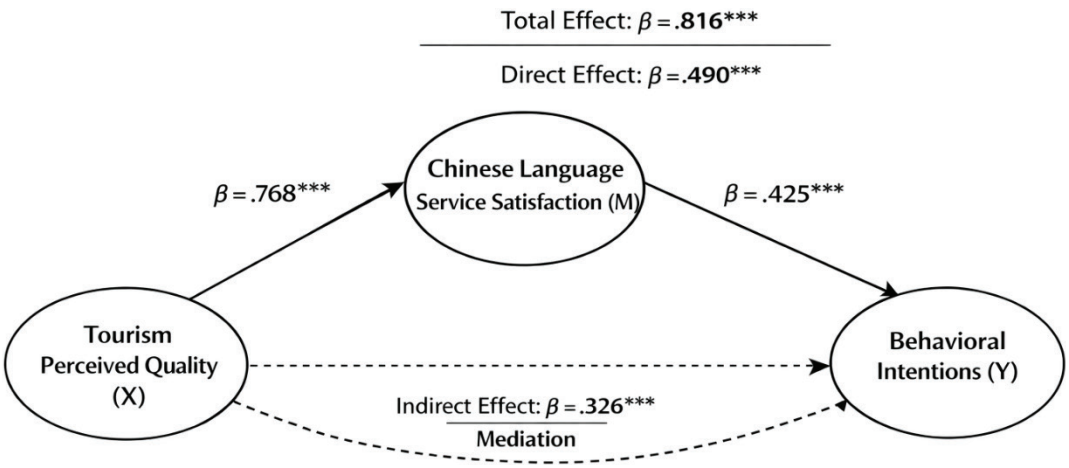
本研究分析采用 SPSS 26.0 进行 95% CI 分析；表 4 为回归分析结果。

Table 4 Regression and Mediation Analysis Results

Path	Effect	95% CI		SE	z /t	*p*
		Lower	Upper			
Tourism Perceived Quality (X) → Chinese Language Service Satisfaction (M) → Behavioral Intentions (Y)	0.326	0.129	0.406	0.070	4.661	0
Tourism Perceived Quality → Chinese Language Service Satisfaction	0.768	0.658	0.878	0.056	13.749	0
Chinese Language Service Satisfaction → Behavioral Intentions	0.425	0.261	0.589	0.083	5.119	0
Tourism Perceived Quality → Behavioral Intentions (Direct Effect)	0.490	0.311	0.668	0.091	5.403	0
Tourism Perceived Quality → Behavioral Intentions (Total Effect)	0.816	0.681	0.951	0.068	11.913	0

Remarks: CI = Confidence interval; SE = Standard error. All effects are significant at $p < .001$

由上表 4 得知，路径 X→M = 0.768（$p < 0.001$），路径 M→Y = 0.425（$p < 0.001$），总效应 = 0.816（$p < 0.001$），直接效应 = 0.490（$p < 0.001$）为显着，说明为部分中介, 因此假设 1 到假设 4 成立。研究结果数值呈现于图 2。



Remarks: *** $p < 0.01$

Figure 2 Result of Conceptual Model Diagram

而假设的结果列于表 5。

Table 5 Summary of Hypothesis Testing Results

Hypothesis	Description	Result
H1	Tourism perceived quality has a significant positive effect on tourists' behavioral intentions.	Supported
H2	Tourism perceived quality has a significant positive effect on Chinese language service satisfaction.	Supported
H3	Chinese language service satisfaction has a significant positive effect on tourists' behavioral intentions.	Supported
H4	Chinese language service satisfaction mediates the relationship between tourism perceived quality and tourists' behavioral intentions.	Supported

讨论

本研究之四项假设均获得实证支持，显示研究模型具有良好的解释力。其中，研究结果证实感知质量对游客旅客行为意图具有显着正向影响，且感知质量亦显着正向影响汉语服务满意度。此一发现与 Han (2015) 的研究结论一致，该研究指出旅游情境中的感知质量可透过提升游客满意度，进一步促进其再访意愿与推荐行为。此外，Ni (2024) 以云南丽江古城为研究对象，发现游客地方认同感越强，其真实性感知对体验质量的影响效果越明显。基于此，本研究认为，当游客在旅游过程中（如泰国大城府）获得高质量的整体体验时，可能进一步强化其对目的地的文化认同或情感认同。

同时，本研究结果亦与 Bai 和 Guo (2010) 的研究发现相符，强调高质量旅游服务不仅能够提升游客的整体体验感受，还能增强游客对目的地的情感连结与文化归属感，进而促使游客产生自发推荐与再次访问的行为意图。上述结果共同支持了感知质量在旅游行为研究中的核心地位。本研究验证了汉语服务满意度在感知质量与旅客行为意图之间所扮演的部分中介角色，显示感知质量不仅可直接影响游客行为意图，亦可透过提升游客对汉语服务的满意程度，间接强化其行为意图。此一发现填补了以大城府为研究情境、探讨汉语服务机制的实证研究缺口，并回应了非英语旅游目的地中语言服务对游客行为影响之学术关注。

此外，本研究发现高达 99% 的中国籍游客（以汉语相关专业学生为主）表示其旅游过程中需要汉语服务，突显语言服务在大城府旅游体验中具有关键地位。尽管该族群普遍具备一定的语言适应能力或跨文化沟通能力，汉语服务的满足程度仍然成为其行为意图的重要决定因素。研究结果显示，游客感知质量越高，其对汉语服务的满意程度亦越高，进而提升其未来重游大城或积极推荐大城的可能性。本研究认为相较于单一语言服务的优化，整体旅游品质的提升可能对游客后续行为产生更为根本且广泛的影响。

总结

本研究以泰国大城府为研究情境，实证检验感知质量、汉语服务满意度与旅客行为意图之间的关系，研究结果显示感知质量对旅客行为意图具有显著正向影响，且汉语服务满意度在其中发挥部分中介作用，成功填补了大城府相关旅游研究的实证空白，并为泰国旅游业在中国市场形象的提升提供了有力支持。

从管理意涵来看，基于感知质量对行为意图所产生的正向影响，本研究认为，大城府独特的文化景观、便利的购物环境、餐饮与交通服务（如汽车租赁），以及清洁且完善的卫生与休憩设施，皆有助于提升中国游客的访问意愿。基于 Hu et al. (2020) 的研究建议，大城府相关旅游管理单位应持续优化管理实践，以全面提升中国游客的旅游体验。

本研究建议大城府旅游发展应着重于基础设施与设施管理的改善，例如提升停车便利性与维护品质（以自驾游客为主），加强环境管理措施，并提高整体旅游环境的吸引力与舒适度。同时，辅以具针对性的语言与文化服务，如中文导游服务及完善的中文告示系统等。透过持续提升上述层面的感知质量，大城府有望进一步强化中国籍游客（尤其是汉语相关专业学生）的行为意图，进而发展为更具吸引力的国际旅游目的地。

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汉语“于”与泰语“เมื่อ”、“ณ”、“ใน”的对比研究

A COMPARATIVE STUDY OF THE CHINESE PREPOSITION “于” (YÚ) AND THE THAI PREPOSITIONS “เมื่อ”, “ณ”, AND “ใน”

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摘要

本研究以汉语介词“于”与泰语介词“เมื่อ”[mɯa:[41]]、“ณ”[na[45]]、“ใน”[nai[33]]的对比分析。介词在汉泰语表达时间与空间关系中具有核心地位，但在跨语言习得中往往是学习者的难点，且现有针对“于”与上述三个泰语介词的专项对比研究尚不充分。本研究基于北京大学语料库（CCL）与泰国国家语料库（TNC）的真实语料，选取并分析约 500 例汉语“于”用例及约 300 例泰语“เมื่อ”[mɯa:[41]]、“ณ”[na[45]]、“ใน”[nai[33]]的用例，运用描述法与比较法，从构词、语义及句法功能三个维度探析其异同点。通过对比发现泰语“ณ”[na[45]]是与汉语“于”对应度最高的词汇。

关键词： 汉语“于”泰语“เมื่อ”[mɯa:[41]]、“ณ”[na[45]]、“ใน”[nai[33]] 构词对比 语义功能 句法结构

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Abstract

In this study, a contrastive analysis of the Chinese preposition “于” and the Thai prepositions “เมื่อ” [mɯa:^{41}], “ณ” [na^{45}] and “ใน” [nai^{33}] was conducted. Prepositions play a central role in expressing temporal and spatial relations in Chinese and Thai; however, they often constitute a major difficulty for learners in cross-linguistic acquisition. Moreover, targeted contrastive studies comparing “于” with these three Thai prepositions remain limited. Based on authentic data from the Peking University Chinese Corpus (CCL) and the Thai National Corpus (TNC), approximately 500 instances of the Chinese preposition “于” and 300 instances of the Thai prepositions “เมื่อ” [mɯa:^{41}], “ณ” [na^{45}], and “ใน” [nai^{33}] were selected and analyzed. Using descriptive and comparative methods, the study examined similarities and differences across three dimensions: word formation, semantics, and syntactic functions. The findings indicate that the Thai preposition “ณ” [na^{45}] exhibits the highest degree of correspondence with the Chinese preposition “于”.

Keywords: Chinese “于” , Thai “เมื่อ” [mɯa:^{41}], “ณ” [na^{45}], and “ใน” [nai^{33}], Contrastive Word Formation, Semantic Functions, Syntactic Structures

引言

汉语“于”此词早就出现于商代的甲骨文，它的演变历史悠久古汉语为“於”。汉语“于”的用法和形态有多次的发展变化，目前“于”多见是作介词使用，常见于书面语，用来表示动作的时间、地点处所，有“在”、“从”、“自”、“到”、“对”、“向”等意思。“于”固定位置出现在动词或形容词后面。泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 本身是介词，多见于书面语，使用在文档当中、正式场合、礼仪、宣布信息等。尤其是“ณ” [na^{45}] 仅用于书面语，并不用于口语。“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 也是介词，通常用于时间或者处所、地点之前。此外汉语“于”与泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 还能作语素，“于”一般构成介词和连词，但是泰语 “เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 基本上构成名词较多。虽然从资料上看，汉语“于”与泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 十分相似，意思和用法也相对应，但这种对应并非“一对一”，而是“一对多”或“多对一”的复杂映射。

鉴于目前学术界对汉语“于”与泰语这三个特定介词的对比研究尚不充分，本研究旨在补充该领域的科研成果，还为学术理论价值与教学、翻译应用价值，提供了理论支撑与实践参考。

研究目的

本研究旨在对汉语“于”与泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 进行对比研究。

1. 通过对比分析汉语“于”与泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 的构词方式、语义功能和句法结构。

2. 探讨汉语“于”作为补语成分的特殊性与泰语介词习惯性前置的结构性冲突，揭示两者在词义虚化倾向上的深层差异。

3. 总结汉语“于”与泰语“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 在使用上的规律，并为翻译或教学提供参考。

文献综述

Lu (1980) 认为“于”是介词，用法如：1）用于动词后（V+于）：（1）表示处所、来源；（2）表示时间;（3）表示方向、目标；（4）表示对象、对、向；（5）表示方面、原因、目的；（6）表示被动;（7）表示比较；2）用于动词之前（于+V）：（1）表示时间；（2）表示对象；（3）表示范围。

Yu (1992) 分析了“于”的三个问题；1）构词成分“于”与介词“于”；2）含介词“于”的“于”字句；3）“于”字句的小类，具体用法包括：（1）表示处所的“于”字句；（2）表示时间的“于”字句；（3）表示对象、相关事物的“于”字句；（4）表示比较的“于”字句；（5）表示范围的“于”字句；（6）表示被动的“于”字句；（7）表示方面、原因的“于”字句。

Guo (1997) 认为“于”的用法比较频繁，通过考证甲骨文中认为“于”是从动词出发，介词“于” 来源于“去到”的意思，是用于介绍行为、处所、对象和时间。后来到西周金时可用于介绍动作的各种对象，能搭配更多的动词，语义也更复杂。

Li (2003) 认为“于”是介词，分为：（1）“于”和时间名词组成介宾短语，表示时间，相当于“在”，用法如用于动词之前与用于动词之后；（2）表示来源或处所。有“在、从、自”的意思，用于动词后；（3）指出动作的对象及有关的人或事物。有“对、向”的意思。用法如用于动词之前与用于动词之后；（4）表示方向、目的或目标，多用于动词后；（5）表示方面或原因，多用于动词后；（6）用在动词后，表示被动。动词多为单音节动词；（7）引进被比较的对象。

Zhang (2003) 探讨介词“于”和词缀“于”的关系及其原因，认为“于”本身有介词和词缀的特点。从他的区分发现介词“于”发展变化为词缀“于”，它的发展变化的原因有：（1）双音化的大趋势;（2）“于”在历史上的组合特点。

Li (2005) 认为“于”是书面语，具体用法有：（1）有“在”的意思，表示时间，用于动词之前或之后;（2）有“在”的意思，表示处所，用于动词前或者动词后;（3）表示人或事物通过动作进入某境况，“于.....”只用于动词后;（4）有“对”的意思，指出与行为、动作有关的对象，

多用于动词后面；（5）有“给”的意思，表示方向目标，“于.....”用于动词后面；（6）有“自、从”的意思，表示动作行为的起点或由来，“于.....”用于动词后面；（7）有“比”的意思，表示比较，“于.....”用于形容词或动词后；（8）有“被”的意思，表示被动，“于.....”用于动词后；（9）表示原因，“于.....”只用于单音节动词或形容词之后。

Wu (2005) 分析现代汉语“于”的用法和意义：（1）引介动作行为发生的处所，相当于“在”；（2）引介事物的源头或来源，相当于“从”、“自”；（3）引介动作行为的发生时间，相当于“在”、“对”、“为”；（4）引介动作行为的对象，相当于“对”、“对于”；（5）引介动作行为发生的主动者，相当于“受”、“由”、“被”；（6）引介被比对象，相当于“比”、“与”；（7）引介对象的范围、结果、程度，相当于“到”；（8）引介动作行为的目标、方向，“于”后面多为动词性的词语；（9）“于”构成插说语，相当于“对于.....来说”；（10）作为词缀构成双音节词。

Luo (2007) 通过前者的考证依据认为“于”是动词，有“到”、“往”的意思，后来它由动词虚化而来成为介词。根据他的推测认为当初“于”可以表示“往”，又可以表示“来”最初是动词的用法。

Ren (2008) 认为“于”引出时间、处所方向等成分，相当于泰语的“เมื่อ”[mɯa:^{41}]、“ใน”[nai^{33}]，“于”在古代汉语中经常使用，现代汉语中大部分出现在成语或者书面语中，引出时间成分时，有泰语“เมื่อ”[mɯa:^{41}] 的意思，一般放在动词之前。

Hu (2009) 比较分析“于”字句的比较句和“比”字句的结构和功能，发现“比”字句的句法结构比“于”字句更强，语义语用也更灵活多样，不论在口语还是书面语中，它的使用率较高，而且使用范围也更广泛。

Li (2010) 认为“于”是介词：（1）引进处所、范围时间，相当于“在”；（2）引进对象，相当于“向”、“对”、“给”；（3）引进来源、起点，相当于“从”、“自”；（4）引进方面、原因、目的；（5）引进行为的主动者；（6）引进方向、目标；（7）引进比较的对象。

Huang (2011) 涉及了泰语时间介词“เมื่อ”[mɯa:^{41}] 与“ใน”[nai^{33}] 与汉语相对应的词做对比语法意义、语法结构、语法功能、词性等，然后分析泰国学生学习汉语时间介词“在”、“从”及发生错误的原因。

关于泰语介词的研究，Sinlaprasan (1918) 指出介词用于名词、代词前面，他将介词分为 6 类：连接宾语的介词，表示所属的介词，表示说明性质的介词，表示时间的介词，表示地点的介词，表示数量、范围的介词。

Wijin (1977) 提出介词有时出现在名词之前，或者能出现在动词与名词之间，就是说能出现在状语的位置。

Royal Institute Dictionary (2003) 认为“เมื่อ”[mɯa:41] 有两个词性：1）介词，相当于汉语的“当.....的时候”、“在.....时候”。2）连词，用 以连接两个句子，相当于汉语“届时”、“在那时”、“当.....的时候”。

从以上已有的研究成果来看，大多数仅涉及到汉语“于”或与“于”相关的时间介词单方面的研究，而尚未出现对汉语“于”与泰语“เมื่อ”[mɯa:41]、“ณ”[na45]、“ใน”[nai33] 的专门研究。因此本研究主要将汉语“于”与泰语“เมื่อ”[mɯa:41]、“ณ”[na45]、“ใน”[nai33] 进行对比分析找出二者的异同点。

研究方法

本研究以汉语介词“于”与泰语“เมื่อ”[mɯa:41]、“ณ”[na45]、“ใน”[nai33] 为研究对象，依托功能语法理论与结构式分析框架，旨在探讨汉泰介词在语义表达功能及句法分布上的异同。研究利用北京大学语料库（CCL）筛选出的 500 条“于”字例句，以及从泰国国家语料库（TNC）及网络资源中收集的 300 条泰语对应词语料，采用对比分析法与文献研究法，对“介词 + NP”结构在两种语言中的句法位置差异、构词方式及语义功能进行了系统描写。在吸纳前人研究成果的基础上，本研究重点剖析了汉泰介词在不同语境下的深层演变规律与分布特征。

研究结果

1. 构词分析

1.1 “于”的构词分析

“于”有两种构词能力，第一种是“于”作为语素用以构成其他词，第二种是“于”本身是成词语素，单独为一个词来使用。

1.1.1 “于”为语素

“于”是语素，用于构成不同的词，这些词具体为：“于是”、“终于”、“由于”、“对于”、“关于”、“属于”、“等于”、“至于”、“大于”、“小于”。

1.1.2 “于”为词

“于”作为词，用在时间、处所、人、物等成分之前构成介宾词组，可以充当状语，也可以充当补语。

1）“于 + 时间成分”，如：

汽车展会于早上 9 点开始。

2）“于 + 指人成分”，如：

他们组队时间长、配合默契，全队平均年龄高于我们，经验丰富、身体强壮。

3）“于 + 指物成分”，如：

在中国居民家庭的消费总支出中，约有 30% 用于食品。

1.2 “เมื่อ” [mɯa:41]、“ณ” [na45]、“ใน” [nai33] 的构词分析

1.2.1 “เมื่อ” [mɯa:41]

“เมื่อ” [mɯa:41] 多数是作为词出现，也可以作为语素构成别的词。下面分别说明。

1.2.1.1 “เมื่อ” [mɯa:41] 作为语素

“เมื่อ” [mɯa:41] 作为语素出现构成不同的词，这些词具体为：“เมื่อไร” [mɯa:41rai21]（什么时候）、“เมื่อวานนี้” [mɯa:41wa:n33ni:45]（昨天）、“เมื่อเช้า” [mɯa:41tɕhau45]（今天早上）、“เมื่อคืน” [mɯa:41khɯ:n33]（昨天晚上）、“เมื่อวานซืน” [mɯa:41wa:n33sɯ:n33]（大前天）、“เมื่อก่อน” [mɯa:41kɔ:n21]（以前）、“ในเมื่อ” [nai33mɯa:41]（即然）、“เมื่อกี้” [mɯa:41ki:45]（刚才）、“เมื่ออาทิตย์ก่อน” [mɯa:41ʔa:33tit45kɔ:n21]（上个星期）、“ก็ต่อเมื่อ” [kɔ:41tɔ:21mɯa:41]（只要）。

1.2.1.2 “เมื่อ” [mɯa:41] 作为词

根据出现环境可分为 4 种：“เมื่อ” [mɯa:41] 用于名词性成分之前构成介宾词组、“เมื่อ” [mɯa:41] 用于两个句子中间、“เมื่อ” [mɯa:41] 与 “ก็” [kɔ:41]（也）搭配使用、“เมื่อ” [mɯa:41] 与 “จึง” [tɕɯŋ33]（才）搭配使用。

1）“เมื่อ” [mɯa:41] 用于名词性成分之前构成介宾词组，如：

<u>เมื่อ</u> อุทกภัย ทำ คน หาย ออก จาก บ้าน

[mɯa:41 ʔu21tuk45ka21phai33 tham33 khon33 ha:j14 ʔɔ:k21 tɕa:k21 ba:n41]

（当 洪水 把 人 消失 出 从 家）

当洪水将人从家冲走（之时）。

2）“เมื่อ” [mɯa:41] 用于两个句子中间，连接两个句子，表示时间关系，如：

พ่อ จะ กลับ บ้าน <u>เมื่อ</u> เลิก งาน

[phɔ:41 tɕa21 klap21 ba:n41 mɯa:41 lə:k41ŋa:n33]

（爸爸 将要 回 家 当 下班）

当下班的时候，爸爸就回家。

3）“เมื่อ” [mɯa:41] 与 “ก็” [kɔ:41]（也）搭配使用，构成 “เมื่อ [mɯa:41].....ก็ [kɔ:41].....” 形式，相当于汉语的 “当.....也 / 就.....”，表示时间关系，如：

<u>เมื่อ</u> เรียนจบ แล้ว <u>ก็</u> จะ หา งาน ทำ

[mɯa:41 ria:n33tɕop21 lɛ:w45 kɔ:41 tɕa21 ha:14 ŋa:n33 tham33]

（当 毕业 了 就 要 找 工作 做）

当毕业后就要找工作。

4）“เมื่อ”[mɯa:41] 与“จึง”[tɕɯŋ33]（才）搭配使用，构成“เมื่อ [mɯa:41].....จึง [tɕɯŋ33].....”形式，相当于汉语的“在/当.....才.....”，表示时间关系，如：

เมื่อ อาบน้ำ แล้ว จึง ทำ การบ้าน

[mɯa:41 ʔɑ:p21nam45 lɛ:w45 tɕɯŋ33 tham33 ka:n33ba:n41]

（当 洗澡 了 才 做 作业）

当澡洗完了以后，才做作业。

1.2.2 “ณ”[na45]

“ณ”[na45] 一般单独使用，不作为语素构成其他词语，相当于汉语的“于、在”。“ณ”[na45] 可分为两类：1）引出时间成分；2）引出处所成分。

1.2.2.1 “ณ”[na45] 引出处所

这种用法的“ณ”[na45] 是介词，放在处所成分之前，构成介宾词组，如：

งาน ศิลปวัฒนธรรม ไทย ครั้ง ที่ 7 ณ

[ŋa:n33 sin14la45pa21wat45ta21na45tham33 thai33 khraŋ45 thi:41 tɕet21 na45]

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มหาวิทยาลัย ศรีนครินทรวิโรฒ สงขลา

ma33ha:14wit45ta21ya:33lai33 sri:14na45kha21rin33tha21ra45wi45ro:t41 soŋ14kha:14]

大学 诗纳卡宁威洛 宋卡）

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1.2.2.2 “ณ”[na45] 引出时间

这种用法的“ณ”[na45] 是介词，放在时间成分之前，构成介宾词组。其中的时间成分可以是过去、现在或者将来的时间，如：

ประกาศ ณ วันที่ 16 มีนาคม พ.ศ.

[pra21ka:t21 na45 wan33thi:41 sip21hok21 mi:33na:33kom33 phɔ:33sɔ:14

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sɔ:ŋ14phan33ha:41rɔ:j45ha:41sip21tɕet21 we:33la:33 sip21hok21 na:33li45ka:33]

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1.2.3 “ใน”[nai33]

“ใน”[nai33] 大多数是作为词出现的，也可以与其他语素一起构成别的词。

1.2.3.1 “ใน”[nai33] 作为语素

“ใน”[nai33] 作为语素出现，用于构成不同的词，这些词具体为：

“ภายใน”[pha:j^{33}nai^{33}]（以内）、“ในหลวง”[nai^{33}hlua:ŋ^{14}]（国王）、“ในไส้”[nai^{33}sai^{41}]（亲生骨肉）、“ในที่สุด”[nai^{33}thi:^{45}su:t^{21}]（终于）、“ข้างใน”[kha:ŋ^{45}nai^{33}]（里面）、“กางเกงใน”[ka:ŋ^{33}ke:ŋ^{33}nai^{33}]（内裤）、“ยางใน”[ja:ŋ^{33}nai^{33}]（里带）、“เครื่องใน”[khɯa:ŋ^{41}nai^{33}]（下水）、“เหล็กใน”[lek^{21}nai^{33}]（尾针）、“หลับใน”[hlap^{21}nai^{33}]（打瞌睡）、“นั่งทางใน”[naŋ^{41}ta:ŋ^{33}nai^{33}]（打坐算命）。

1.2.3.2 “ใน”[nai^{33}] 作为词

“ใน”[nai^{33}] 是词，根据出现环境可将其分为：1）“ใน”[nai^{33}] 用在时间成分之前，2）“ใน”[nai^{33}] 用在处所成分之前，3）“ใน”[nai^{33}] 用在时间、处所之外的其他成分之前。

1）“ใน”[nai^{33}] 用在时间成分之前，如：

วัดพระศรีรัตนศาสดาราม ก่อ สร้าง ขึ้น

[wat^{45}phra^{45}sri:^{14}rat^{45}ta^{21}na^{45}sa:t^{21}sa^{21}da:^{33}ra:m^{33} kɔ:^{21}sa:ŋ^{41}khɯn^{41}

（ 玉佛寺 建立

ใน ปี 2325

na:i^{33} pi:^{33} sɔ:ŋ^{14}phan^{33}sa:m^{14}rɔ:j^{45}ji:^{41}sip^{21}ha:^{41}]

于 年 2325 ）

玉佛寺建立于 1782 年。

2） “ใน”[nai^{33}] 用在处所成分之前，如：

พวกเขา เข้า ไป ใน ห้องเรียน

[phua:k^{41}khau^{14} khau^{41} pai^{33} na:i^{33} hɔ:ŋ^{41}ria:n^{33}]

（ 他们 进 去 里 教室）

他们进教室里去了。

3） “ใน”[nai^{33}] 用在时间、处所之外的其他成分之前，如：

อาเซียน เป็น ความร่วมมือ ใน

[ʔa:^{33}sia:n^{41} pen^{33} kha:m^{33}rɯa:m^{41}mɯ:^{33} nai^{33}

（东南亚国家联盟 是 合作 在

ด้าน อื่น ที่ มิ ใช่ ด้าน

da:n^{45} ʔɯ:n^{21} thi:^{41} mi^{45}tɕhai^{41} da:n^{45}

方面 其他 的 不是 方面

การเมือง และ ด้าน เศรษฐกิจ

ka:n^{33}mɯa:ŋ^{33} lɛ^{45} da:n^{41} se:t^{21}tha^{21}kit^{21}]

政治 与 方面 经济）

东南亚国家联盟是在其他方面合作，而不是政治与经济方面。

“ใน” [nai^{33}] 用在时间、处所之外的其他成分之前，构成介宾词组。

4） “ใน” [nai^{33}] 相当于汉语的“在.....方面 / 上 / 中”，如：

ดิน ที่ มี ปัญหา ใน ทาง เกษตร ของ

[din^{33} thi:^{45} mi:^{33} pan^{33}ha:^{14} nai^{33} ta:ng^{33} ka^{33}se:t^{21} khɔ:ŋ^{14}

（土壤 的 有 问题 在 方面 农业 的

ภาค อีสาน

pha:k^{41} ʔi:^{33}sa:n^{14}]

部 东北）

在东北部农业方面有关于土壤的问题。

1.3 “于”与“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 的构词比较

汉语的“于”既可独立使用，也可作为语素参与构词，常见结构有“X 于”与“于 X”，其中以“X 于”更为常用，构成的词有介词、动词、连词、副词等词性，具有较强的构词灵活性。泰语中“เมื่อ” [mɯa:^{41}]、“ณ” [na^{45}]、“ใน” [nai^{33}] 主要作为功能词使用，但也具备构词能力，可构成名词、动词、代词、连词、副词等。尤其“เมื่อ” [mɯa:^{41}] 在构成名词方面更为活跃，常以“เมื่อ [mɯa:^{41}] + X”结构出现，兼具连词功能；“ณ” [na^{45}] 作为介词，多用于引出时间或处所；“ใน” [nai^{33}] 无论作为前缀还是后缀，多用于构成名词，语义侧重时间、空间与所属关系。

综上可见，“于”与“ณ” [na^{45}] 更具功能词特征，结构稳定，构词较少；而“เมื่อ” [mɯa:^{41}] 构词活跃，语法功能更为多元。中泰两种语言在构词方式与语素组合上既有共通，也展现出各自的系统特征。

2. 语义功能分析

2.1 “于”作为介词的语义功能分析

“于”为介词时，其所引出的成分可有不同的语义类型，下面分别说明。

1）表示时间，如：鲁迅先生生于 1881 年，卒于 1936 年。

2）表示处所、地点，如：全国人民代表大会于北京召开。

3）表示比较，如：这时只会下雨，如果云中和下面空气都低于 0 ℃，小水滴就凝结成冰晶、雪花下落地面。

4）表示对象，如：科学技术的应用，促使社会进步，造福于人民。

5）表示方向、目标，如：姚明 22 日的辉煌 24 日归于沉寂。

6）表示范围，如：于攻读专业书籍之外，我也不时阅读一些文艺作品。

7）表示源点，如：今天我们所学的平面几何学知识，都来源于这本书。

8）表示原因，如：在 100 多年中，全世界有 2300 万人死于汽车交通事故。

9）表示被动，如：2002 年中青队曾败于叙青队，今晚的胜利使中青队报了一箭之仇。

2.2 “เมื่อ” [mɯa:41]、“ณ” [na45]、“ใน” [nai33] 作为介词的语义功能分析

“เมื่อ” [mɯa:41]、“ณ” [na45]、“ใน” [nai33] 是泰语中常见的三个介词，语义相似，以下主要分析这三个词的语义。

2.2.1 “เมื่อ” mɯa:41

“เมื่อ” [mɯa:41] 作为词，有两种用法，因此意义也随之不同。

1）“เมื่อ” [mɯa:41] 相当于汉语“于”的意思，是一个介词，如：

เกิด คลื่นสึนามิ ใน ทะเล อันดามัน เมื่อ พ.ศ.

[kɔ:t21 klɯ:n41sɯ21na:33mi33 nai33 tha45le:33 ʔan33da:33man33 mɯa:41 phɔ:33sɔ:33

（发生 海啸 在 海边 安达曼 于 佛历年

2547

sɔ:ŋ14phan33ha:41rɔ:j45si:21sip21tɕet21]

2547）

于 2004 年在安达曼海发生了海啸。

2）“เมื่อ” [mɯa:41] 相当于汉语“当.....”的意思，是一个连词，如：

（1） เขา เดินทาง ถึง ประเทศไทย เมื่อ เวลา 11

[khau14 dɔ:n33tha:ŋ33 thɯŋ14 pra21the:t41thai33 mɯa:41 we:33la:33 sip21ʔet21

（ 他 出行 到达 泰国 当 时间 11

นาฬิกา ตาม เวลา ใน ประเทศไทย

na:33li45ka:33 tha:m33 we:33la:33 nai33 pra21the:t41thai33]

点 按照 时间 在 泰国）

当泰国时间 11 点时，他已经到达泰国了。

（2） เมื่อ เวลา ผ่านไป เขา ก็ จำ ฉัน ไม่ได้

[mɯa:41 we:33la:33 pha:n21pai33 khau14 kɔ:41 tɕam33 tɕhan14 mai41dai41]

（ 当 时间 过去 他 就 记 我 不能）

当时间过去，他就记不得我了。

（3） เมื่อ เขา ติดต่อ มา แล้ว ฉัน จึง สบายใจ

[mɯa:41 khau14 tit21tɔ:21 ma:33 lɛ:w45 tɕhan14 tɕɯŋ33 sa21ba:j33tɕai33]

（ 当 她 联系 来 了 我 才 放心）

当她回来跟我联系之后，我才放下了心。

从例（23）中“เมื่อ”[mɯa:41] 相当于“于”的意思。在例（24）中“เมื่อ”[mɯa:41] 相当于汉语“当.....”的意思。例（25）中“เมื่อ”[mɯa:41] 与“ก็”[kɔ:41]（也）搭配使用，相当于“当.....也 / 就.....”的意思。例（26）中“เมื่อ”[mɯa:41] 与“จึง”[tɕɯŋ33]（才）搭配使用，相当于“当.....才.....”的意思。

2.2.2 “ณ”[na45]

“ณ”[na45] 作为介词，相当于汉语“于”的意思，如：

งาน บ้าน และ คอนโด 2014 จัดขึ้น ณ

[ŋa:n33 ba:n41 lɛ:45 khɔ:n33do:33 sɔ:ŋ14phan33sip21si:21 tɕat21kɯn41 na45

（展览 家 与 公寓 2014 举办 于

ศูนย์การค้า พาราไดซ์ พาร์ค ชั้น G

su:n14ka:n33kha:45 pha:33ra:33dai45pha:k45 tɕhan45 tɕi:33]

商场 Paradise Park 层 G）

2014 公寓建筑展览会举办于 Paradise Park G 层。

2.2.3 “ใน”[nai33]

“ใน”[nai33] 作为介词，意义可分为三种：

1）“ใน”[nai33] 相当于汉语“于”的意思，例如：

วัดพระปฐมเจดีย์ ก่อสร้างขึ้น ใน

[wat45phra45pa21thom14tɕe:33di:33 kɔ:21sa:ŋ41khɯn41 na:i33

（ 佛统塔 建立 于

ปี 2390

[pi:33 sɔ:ŋ14phan33sa:m14rɔ:j45kau41sip21]

年 2390）

佛统塔建立于 1847 年。

2）“ใน”[nai33] 相当于汉语 “在.....中/里” 的意思，如：

โต๊ะ ใน ห้องเรียน มี สิบห้า ตัว

[to45 nai33 hɔ:ŋ41ria:n33 mi:33 sip21ha:45 tua:33]

（桌子 里 教室 有 十五 张）

教室里有十五张桌子。

3）“ใน”[nai33] 相当于汉语 “在.....上” 的意思，如：

หล่อน ขยัน ใน ด้าน การเรียน และ เอาจริงเอาจัง

[hlɔ:n21 kha21jan14 nai33 da:n41 ka:n33ria:n33 lɛ:45 ʔau33tɕiŋ33 ʔau33tɕaŋ33

（她 努力 在 方面 学习 和 认真

ใน ด้าน การทำงาน

nai^{33} da:n^{41} ka:n^{33}tham^{33}ŋa:n^{33}]

在 方面 工作）

她在学习上很努力，在工作上很认真。

2.3 “于”与“เมื่อ”[mɯa:^{41}]、“ณ”[na^{45}]、“ใน”[nai^{33}]的语义功能比较

汉语“于”为介词，用法广泛，能引出时间、处所、比较、对象、方向、范围、源点、原因和被动等语义成分。泰语中“เมื่อ”[mɯa:^{41}] 兼具介词与连词功能，但作为介词仅用于引出过去时间，语义范围相对有限;“ณ”[na^{45}] 主要引出时间与处所;“ใน”[nai^{33}] 则用于引出时间、处所及对象。综上可见,“于” 在语义表达上更为多样，覆盖多个语义功能;而“เมื่อ”[mɯa:^{41}]、“ณ”[na^{45}]、“ใน”[nai^{33}] 语义功能较为集中，使用范围相对明确。其中“เมื่อ”[mɯa:^{41}] 聚焦于过去时间,“ณ”[na^{45}] 用于时空定位,“ใน”[nai^{33}] 涵盖时间、空间及受事对象，三者各有侧重。由此可见,“于”与“ณ”[na^{45}] 在语义功能重合度最高，但“于”的语义类型更为丰富。

3. 句法功能

3.1 “于” 的句法功能

“于”是介词，用于名词性成分之前构成介宾词组，主要充当补语和状语。

3.1.1 “于＋NP”充当状语

1）引出时间成分，充当状语的，如：

他于 1919 年 4 月回到中国。

2）引出处所成分，充当状语的，例如：

第一届管理国际会议 1994 年于北京举行。

3.1.2 “于＋NP”充当补语

“于＋NP”充当补语引出处所、引出时间、引出比较、引出对象、引出范围、引出方向、引出原因、引出源点、引出被动。

1）引出处所、地点成分，充当补语的，如：

现为泰国华尔街大厦有限公司董事长的李光隆 1936 年出生于广东省潮阳县。

2）引出时间成分，充当补语的，如：

据了解，体细胞克隆奶山羊雄性“呈呈”出生于 2002 年 9 月 28 日。

3.2 “เมื่อ”[mɯa:^{41}]、“ณ”[na^{45}]、“ใน”[nai^{33}]的句法功能

3.2.1 “เมื่อ”[mɯa:^{41}] 的句法功能

“เมื่อ”[mɯa:^{41}] 有两种词性：介词和连词，下面分别说明。

1）介词 “เมื่อ”[mɯa:41] 的后面带名词性成分，构成介宾词组，在句中充当状语，如：

เมื่อ 10 โมง เขา เพิ่ง กิน ข้าวเช้า

[mɯa:41 sip21 mo:ŋ33 khau14 phɔ:ŋ41 kin33 khau41tɕhau45]

（当 10 点 她 刚 吃 早饭）

当 10 点的时候她刚吃早饭。

2）“เมื่อ [mɯa:41] + NP”还可以充当补语，如：

2499 อันธพาล ครอง เมือง ออกฉาย

[sɔ:ŋ14si:21kau41kau41 ʔan33tha21pha:n33 krɔ:ŋ33 mɯa:ŋ33 ʔɔ:k21tɕhai14

（ 2499 强盗 占领 城市 上映

เมื่อ วันที่ 11 เมษายน

mɯa:41 wan33thi:41 sip21ʔet21 me:33sa:14jon33

于 日期 11 4月

พ.ศ. 2540

phɔ:33sɔ:14 sɔ:ŋ14phan33ha:45rɔ:j45si:21sip21]

佛历年 2540）

《2499 曼谷被强盗占领》（泰国电影）于 1997 年 4 月 11 日上映。

3）连词 “เมื่อ”[mɯa:41] 用连接小句，表示时间关系，如：

ผู้หญิง สองคน นี้ มา แจ้งความ เมื่อ เวลา

[phu:45jing14 sɔ:ŋ14khon33 ni:45 ma:33 tɕɛ:ŋ41khwa:m33 mɯa:41 we:33la:33

（ 女人 两个 这 来 报警 当 时间

23.30 นาฬิกา ของ เมื่อคืนนี้

ha:41thum41khrɯŋ41 khrɔ:ŋ14 mɯa:41khɯn33ni:45]

23:30 点 的 昨晚）

昨晚 23:30 点，这两个女人来报警。

3.2.2 “ณ”[na45] 的句法功能

“ณ”[na45] 是介词，引出时间，处所成分，构成介宾词组，在句子中充当状语或补语。

1）“ณ [na45] + NP”充当状语，如：

ณ กรุงโตเกียว มี จัดงาน เทศกาล ไทย

[na45 kruŋ33to:33kia:w33 mi:33 tɕat21ŋa:n33 te:t41sa21ka:n33 thai33

（于 东京 有 举办 节日 泰国

ครั้งที่ 25

khraŋ^{45}thi:^{21} ji:^{41}sip^{21}ha:^{41}]

第 25

于东京举办第 25 届泰国节日。

2）“ณ [na^{45}] + NP”充当补语，如：

ประกาศ มา ณ วันที่ 16 กันยายน

[pra^{21}ka:t^{21} ma:^{33} na^{45} wan^{33}thi:^{41} sip^{33}hok^{33} kan^{33}ja:^{33}yon^{33}

（ 宣布 来 于 日期 16 9月

พุทธศักราช 2500

phut^{45}tha^{45}sak^{21}ka^{21}ra:t^{14} sɔ:ŋ^{14}phan^{33}ha:^{45}rɔ:j^{45}]

佛历年 2500）

宣布于1957 年9月16日。

3.2.3 “ใน”[nai^{33}] 的句法功能

“ใน”[nai^{33}] 是介词，引出时间、处所、对象成分，构成介词词组，充当句子的状语或补语。

1）“ใน [nai^{33}] + NP”充当状语，如：

ใน วันพฤหัสบดี ที่ผ่านมา เกิด เหตุ ระเบิด

[nai^{33} wan^{33}pha^{45}rɯ^{45}hat^{21}sa^{21}bɔ:^{33}di:^{33} thi:^{41}pha:n^{21}ma:^{33} kɔ:t^{21} he:t^{21} ra^{45}bɔ:t^{21}

（于 星期四 以来 发生 事故 爆炸

ใน ประเทศอิรัก

nai^{33} pra^{21}the:t^{41}ʔi^{21}rak^{45}]

在 伊拉克）

上周四在伊拉克发生了爆炸。

2）“ใน [nai^{33}] + NP”充当补语，如：

สวนสัตว์ ดุสิต ก่อสร้างขึ้น ใน

[sua:n^{14}sat^{21} du^{21}sit^{21} kɔ:^{21}sa:ŋ^{41}khɯn^{41} na:i^{33}

（动物园 Dusit 建立 于

ปี 2438

pi:^{33} sɔ:ŋ^{14}phan^{33}si:^{21}rɔ:j^{45}sa:m^{14}sip^{21}pɛ:t^{21}]

年 2438）

Dusit 动物园建立于 1895 年。

3.3 “于”与“เมื่อ”[mɯa:41]、“ณ”[na45]、“ใน”[nai33]的句法功能比较

在句法功能方面，汉语“于”通常作为介词使用；泰语中“เมื่อ”[mɯa:41] 既可作介词，也可作连词，而“ณ”[na45] 和“ใน”[nai33] 仅为介词。四者均可与名词性成分搭配，构成“介词＋NP”结构，语法功能上可用作状语或补语。不过，不同表达在句法上的使用倾向略有差异：“เมื่อ [mɯa:41] + NP”更常用作时间状语；“于 + NP”、“ณ [na45] + NP”及“ใน [nai33] + NP”多用于作补语；其中“于”和“ณ”[na45] 在使用功能上最为接近，均常用于引出时间或处所成分，承担补语角色。综上可见，这几种表达形式虽在结构上相似，但其句法分布呈现出一定的功能差异，体现出中泰语言在功能词使用上的细微区别。

结论

通过构词、语义、和句法三方面对汉语“于”与泰语“เมื่อ”[mɯa:41]、“ณ”[na45]、“ใน”[nai33] 进行了系统对比，可显示这些差异反映出汉泰语言在语法结构与词类演变方面的不同特点。

在构词维度，汉语“于”与泰语三个对应词均展现出“词”与“语素”的双重属性。汉语“于”构词灵活性极强，可构成介词、连词等多种词性，而泰语“เมื่อ”[mɯa:41] 在构成时间名词方面更为活跃；相比之下，泰语“ณ”[na45] 主要作为纯粹的功能词使用，这与“于”作为成词语素独立使用的功能高度契合。

在语义功能方面，两者在语义功能和使用场景上具有高度相似性。汉语“于”的语义覆盖极广，涵盖时间、处所、比较、被动等九大范畴，验证了 Lu (1980) 和 Li (2005) 对其用法广泛性的论述。泰语词汇则语义分工明确：“เมื่อ”[mɯa:41] 聚焦于过去时间，“ณ”[na45] 专注于时空定位，而“在”则涵盖空间及受事对象；相较于 Ren (2008) 的研究，本研究通过实证分析进一步细化了“ณ”[na45] 在正式书面语中引出精确时空的不可替代性。

在句法结构上，两者均能构成“介词 + NP”结构充当状语或补语。尽管 Wijin (1977) 指出泰语介词可出现在状语位置，但本研究揭示了汉语“于”作为补语成分的特殊性与泰语介词习惯性前置的结构性冲突。

综上所述，本研究在支持 Guo (1997) 关于“于”演变考证的基础上，通过引入“ณ”[na45] 这一变量，填补了 Huang (2011) 等前人研究中对特定书面语介词对比的空白。研究证实，泰语“ณ”[na45] 是与汉语“于”功能重合度最高、语法表现最一致的词汇，这一发现为解决跨语言习得中的复杂映射难题提供了明确的理论支撑与实践参考。

建议

本研究系统填补了汉泰语介词专项对比的空白，深化了对两国语言在时空表达机制上的理解。通过构建可操作的语法对照框架，本研究不仅为解决学习者在介词习得中的困惑提供了理论依据，也为语言教学与翻译实践提供了极具应用价值的参考指南。

尽管本研究在结构功能层面进行了详尽的实证分析，但仍存在进一步挖掘的空间。目前的研究重心主要集中在语言的“表层机制”上，未来的研究可从以下深层语言机制角度进行拓展，以提升论证的深度与广度。此外，后续研究应进一步扩展语料库的类型与容量，涵盖更多样化的语用场景，从而构建起更加立体、深层的汉泰介词对比体系。

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INTEGRATION OF ARTIFICIAL INTELLIGENCE IN PRIMARY SCHOOL MUSIC EDUCATION IN CHINA: A REVIEW BASED ON THE AI-TPACK-AK FRAMEWORK

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Abstract

The integration of Artificial Intelligence (AI) into primary school music education represents a significant transformation with important pedagogical implications. This study reviews and synthesizes global research on the historical development of AI, its current applications in music education, and teachers' perceptions and attitudes toward AI within the Technological Pedagogical Content Knowledge–Arts Knowledge (TPACK-AK) framework. Using a comprehensive literature analysis approach, the study examines the current status of AI adoption in primary school music education and identifies the key factors influencing teachers' perceptions and instructional adaptations. The findings indicate that AI-based tools can enhance personalized learning, provide real-time feedback, and support students' musical creativity and engagement. However, several challenges remain, including algorithmic cultural bias, teachers' technological anxiety, and disparities in digital infrastructure between urban and rural schools. Analysis based on the AI-TPACK-AK framework suggests that effective AI integration requires teachers to balance technological competence, pedagogical innovation, artistic sensitivity, and disciplinary knowledge. To address these challenges, the study proposes three strategies: developing culturally responsive adaptive algorithms, establishing collaborative teacher-AI lesson planning mechanisms, and promoting digital equity initiatives to reduce resource disparities. A limitation of this study is that most of the existing evidence is derived from developed countries; therefore, further research is needed to examine the applicability of these findings within the contexts of developing economies. This study provides theoretical insights and practical implications for the sustainable and equitable integration of AI in primary school music education.

Keywords: Artificial Intelligence, Music Education, TPACK, Arts Knowledge, Primary School

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Introduction

Artificial Intelligence has evolved from a theoretical concept in the 1950s to a widespread educational tool, fundamentally reshaping teaching methods across various disciplines. In music education, AI integration encompasses composition assistance, performance analysis, adaptive learning systems, and immersive simulation technologies. The global educational AI market is projected to reach $404 billion by 2025, reflecting its accelerating adoption (Williamson, 2022). China actively promotes educational technology through initiatives such as the "Education Informatization 2.0 Action Plan" (Ministry of Education of the People's Republic of China, 2018), making it a crucial context for examining this transformation.

Primary music education in the AI era faces unique challenges. Traditional teaching methods emphasize the acquisition of technical skills through direct instruction and performance-based assessment, while AI introduces new paradigms for creative exploration and personalized learning. This technological shift has raised fundamental questions about the emotional dimensions of music, cultural authenticity, and the preservation of teaching values (Porayska-Pomsta et al., 2022). Understanding how teachers respond to these tensions requires a robust theoretical framework that acknowledges the domains of expertise involved in technology integration.

The TPACK (Technological Pedagogical Content Knowledge) framework, first introduced by Mishra and Koehler (2006), provides a foundation for analyzing teachers' capabilities at the intersection of technology, pedagogy, and subject content. Recent academic research has extended this model to include Artistic Knowledge (AK), recognizing the unique aesthetic, creative, and cultural dimensions of music education (Merchán Sánchez-Jara et al., 2024). This AI-TPACK-AK framework offers a comprehensive perspective for examining how primary school music teachers conceptualize, adapt, and implement AI technologies while preserving music's fundamental artistic qualities.

Despite the rapid growth of research on Artificial Intelligence in education, existing reviews show three main limitations: (1) They focus disproportionately on higher education or general education, with limited attention to primary school music education's unique needs; (2) Most studies apply the original TPACK framework without integrating AK, failing to address music education's aesthetic and cultural particularities; (3) Few reviews link international theoretical discussions with China's specific policy context and urban-rural disparities, resulting in a lack of contextually relevant practical guidance. This review addresses these gaps by synthesizing international literature through the AI-TPACK-AK framework and situating China as a representative policy and practice case.

Purpose

This study aims to explore the current state of AI technology in primary school music education, teachers' perceptions and attitudes, and the influencing factors behind them. Based on the AI-TPACK-AK framework, the study also proposes optimization strategies to help teachers better integrate AI tools, enhancing teaching effectiveness while addressing challenges such as cultural bias, technological anxiety, and urban-rural resource disparities.

Methods

This study adopted a systematic literature review approach. Literature was retrieved from three core databases—Web of Science, SCOPUS, and CNKI (China National Knowledge Infrastructure)—using combinations of Boolean operators (AND/OR) with search keywords including "Artificial Intelligence," "primary school music education," "TPACK," and "Artistic Knowledge," To reflect the latest developments in the fields of AI and education, only studies published between 2018 and 2025 were included, with inclusion criteria limited to empirical research, systematic reviews, or policy documents. The study selection process involved removing duplicate records (n = 42) from 287 initial entries, followed by title/abstract screening (n = 156 excluded for irrelevance) and full-text assessment (n = 100 excluded for failing to meet the inclusion criteria), resulting in 31 studies ultimately included for synthesis.

1. The Historical Development and Current Situation of Artificial Intelligence

The development of AI reflects a cycle of alternating enthusiasm and disillusionment, namely the so-called "AI winter" (Frana & Klein, 2021). The foundational work emerged in the 1940s-1950s, with the neural model of McCulloch and Pitts (1943) and the perceptron of Rosenblatt (1958). The Dartmouth Conference in 1956 formally established AI as a discipline, but the early optimism was tempered by Minsky and Papert (1969) demonstrating the limitations of perceptrons in solving non-linear problems. The following decades witnessed the rise of expert systems, such as MYCIN for medical diagnosis (Shortliffe, 1976), and then a reduction in funding triggered the first "AI winter". The revival in the 1980s-1990s was characterized by breakthroughs such as backpropagation, support vector machines, and Long Short-Term Memory networks (LSTM) (Hochreiter & Schmidhuber, 1997), although commercial failures led to the second winter (Toosi et al., 2021).

The 21st century has witnessed the deep learning revolution, thanks to the improvement of computing power and the support of big data. Major developments include Hinton's Deep Belief Network, the victory of AlexNet in the 2012 ImageNet competition, and the transformer architecture, which has made models like GPT-3 and BERT possible. Current frontiers include multimodal systems (such as GPT-4V), generative tools (such as Stable Diffusion 3.0, Sora), and embodied AI for robotics (Driess et al., 2023). Modern AI systems demonstrate unprecedented capabilities and have a profound impact on education: AI algorithms analyze student performance, providing customized content and adaptive paths. Platforms like DreamBox and Century Tech have proven their effectiveness in the field of mathematics, and similar applications have also emerged in the music field through tools like Smart Music and Yousician. In addition, AI-driven analysis provides real-time assessment of pitch accuracy, rhythm, and dynamics, supporting targeted skill development.

Despite rapid progress, significant challenges persist. Training data imbalance leads to cultural marginalization—over 86% of training data in music-generating AI systems comes from the "Global North," severely underestimating non-Western musical traditions (Mehta et al., 2024). Regulatory frameworks struggle to keep up with technological changes, as seen in the EU AI Act's risk-classification system, which is insufficient to address multimodal models' emerging capabilities.

2. Music Education in China: Policies and Practices

2.1 Policy Evolution

Since 1949, China's aesthetic education policies have undergone significant evolution. The early Soviet-influenced approach emphasized technical training rather than cultural contextualization. The Compulsory Education Law of China in 1986 established the legal status of music, while the Decision on Deepening Educational Reform in 1999 elevated aesthetic education to a strategic priority. The Guiding Opinions on Strengthening Aesthetic Education in Schools in 2015 was a landmark shift. This document stipulated the minimum teaching hours and expanded art forms to include dance, drama, and multimedia art (General Office of the State Council of the People's Republic of China, 2015). The Art Curriculum Standards for Compulsory Education in 2022 redirected the goals towards four core competencies: aesthetic perception, artistic expression, cultural understanding, and creative practice (Ministry of Education of the People's Republic of China, 2022). In 2025, China's Ministry of Education proposed integrating traditional aesthetic education methods with intelligent technical means into school educational activities. The Ministry of Education is also committed to promoting the digital development of aesthetic education by utilizing various resources (Ministry of Education of the People's Republic of China, 2025).

2.2 Implementation Status

The urban-rural gap remains a major challenge in the field of music education during policy implementation. Data from the Ministry of Education of the People's Republic of China (2022) shows that approximately 15% of professional music teachers are allocated to rural areas, forcing some rural schools to rely on substitute teachers or recorded broadcast resources. A questionnaire survey and interviews with 28 rural primary schools in Northeast China found that local music education faces real dilemmas such as insufficient teaching staff, backward teaching facilities, easy cancellation of courses, and the conversion of teaching content into recorded broadcast resources (Leung & Sun, 2013). In contrast, urban schools have more professional teaching staff, MIDI (Musical Instrument Digital Interface) laboratories, and rich extracurricular music programs. This structural advantage provides students with a more complete music experience. Technological inequality is also a key factor exacerbating the urban-rural gap. Relevant research points out that although many urban classrooms are equipped with interactive whiteboards and multimedia devices, teachers in rural schools often cannot use these devices effectively or simply lack audio playback tools (Yu, 2025).

The teaching tradition has also become a major obstacle to reform. In rural music classrooms in China, the "demonstration-imitation" approach still prevails, emphasizing skill training while neglecting the cultivation of musical expressiveness and cultural emotions. Rural teachers lack support and training in the integration of ICT (Information and Communication Technology) and the use of digital resources. An international study pointed out that "virtual choirs" using remote audio/video tools can effectively connect urban and rural student groups, enhancing the sense of collaboration and music learning opportunities

(Eren & Öztuğ, 2020). In summary, the gaps in hardware, teaching staff, and educational concepts between urban and rural areas have made rural music education face significant challenges in terms of quality, sustainability, and cultural expression. In contrast, urban schools are already in a relatively leading position in terms of resources and teaching methods.

2.3 Technology Integration

Digital technology provides new possibilities for alleviating the uneven distribution of music education resources between urban and rural areas by enabling the sharing of high-quality teaching resources. However, disparities in access to digital technologies still exist. For example, the internet penetration rate in China reached 85.3% in urban areas compared with 65.6% in rural areas, reflecting a persistent digital divide that may influence the adoption of digital learning tools in schools (China Internet Network Information Center [CNNIC], 2025). Similarly, the Global Education Monitoring Report highlights that emerging educational technologies such as Artificial Intelligence and virtual reality are increasingly being integrated into classrooms, while inequalities in technological access remain significant across regions (United Nations Educational, Scientific and Cultural Organization, 2023). In addition, Sun (2024) found that after adopting a VR-based music learning system, students showed significant improvements in immersion, learning motivation, and conceptual understanding.

However, while actively spreading the achievements of digital teaching, risks should not be ignored. Neumann and Neumann (2017) warned that a screen-intensive learning environment may weaken children's tactile contact with physical musical instruments in music learning, posing a potential obstacle to the development of motor skills. At the same time, the "AI and the Future of Teaching Report" released by the U.S. Department of Education also emphasized that unregulated AI platforms pose a risk of student privacy leakage. In 2023, some teachers were investigated for uploading student data in violation of regulations (U.S. Department of Education, 2023). These studies fully demonstrate that when promoting AI digital technology, the protection of student information and ethical norms urgently need to be strengthened simultaneously.

3. AI in International Art Education: A Comparative Perspective

Against the backdrop of multiple countries promoting the integration of technology into art education, practices in different countries indicate that technological means have significant advantages in enhancing artistic skills, while also having limitations in cultural interpretation. For example, the e-David robot developed by the University of Konstanz in Germany analyzes the painting process through computer vision and provides students with feedback on brushstrokes and colors, thereby improving technical accuracy. However, this system relies on fixed algorithms when dealing with abstract expressions and lacks an understanding of subjective intentions (Deussen et al., 2012). In France, research by Avci et al. (2024) shows that the digital game ARTè: Lumière has improved students' knowledge acquisition and learning interest in art history teaching. But when it comes to in-depth interpretations of cultural symbols and historical contexts, students still prefer the guidance of human teachers. In Japan,

the LLaVA-Docent multimodal system developed by Lee et al. (2024) is used in calligraphy teaching and significantly improves the accuracy of stroke structures. However, it has also raised concerns among teachers about the weakening of the traditional aesthetic dimension, especially in traditional expressions that emphasize "verve" and "vivid charm." In cross-cultural art generation applications, Wang et al. (2023) pointed out that although using the CycleGAN model for style transfer can generate images with a Ukiyo-e style, without historical control, it is easy to mix the Edo and Meiji styles, leading to misinterpretations of history. Similarly, in the teaching of Ram Thai traditional dance in Thailand, although the AI system can improve students' mastery of dance sequences, the teaching process often shows the phenomenon of "mechanical repetition," unable to reflect the religious spirit and cultural atmosphere in the sacred gestures. In summary, the application of technology in art education can improve the effect at the technical execution level, but its conveyance of culture, emotion, and historical context still depends on the guidance of teachers and human intervention to achieve a more balanced and in-depth art learning experience.

4. TPACK-AK Framework: Theoretical Foundations and Extensions

4.1 The Original TPACK (Technological, Pedagogical, and Content Knowledge) Model

The TPACK framework by Mishra and Koehler (2006) conceptualizes teacher knowledge into three intersecting domains: Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK). This model emphasizes that effective technology integration requires understanding how tools transform teaching methods in specific disciplines, rather than merely digitizing traditional practices. Empirical validation indicates that the effectiveness of TPACK depends on contextual adaptation, especially in resource-constrained environments. However, measurement challenges persist as self-assessment often overestimates actual capabilities. This model emphasizes that effective technology integration requires understanding how tools transform teaching methods in specific disciplines, rather than merely digitizing traditional practices. Empirical validation indicates that the effectiveness of TPACK depends on contextual adaptation, especially in resource-constrained environments (Schmid et al., 2021). Teachers tend to overestimate their capabilities in self-assessment. There are significant differences between objective measurements, lesson plan analysis, and self-assessment. Although pre-service teachers generally have high self-assessment scores, the degree of technology integration in the lesson plans they design may not be consistent with their self-assessment.

4.2 Integration of Artistic Knowledge (AK) with TPACK

The TPACK-AK extension meets the unique needs of art education by adding artistic knowledge. It addresses the shortcomings of traditional TPACK in the sociocultural dimension by introducing "AK" (Artistic Knowledge). This extension responds to the criticism that TPACK does not pay sufficient attention to the sociocultural dimension and acknowledges that artistic thinking is the foundation of cognitive development and culturally responsive teaching. Artistic Knowledge is defined as "the interaction between material art skills and the ability to decode cultural meanings through multimodal representations" (Burnard & Colucci-Gray, 2021). Globally, institutional barriers still exist: A UNESCO

(2023) survey points out that the standardized testing system and resource allocation policies marginalize art integration in 68% of national curricula, leading to the so-called "aesthetic segregation," which has a particularly greater impact on marginalized students.

In the continuous development of the TPACK framework, scholars have begun to focus on its adaptability and limitations in the field of art education, especially the integration of "Artistic Knowledge (AK)". Burnard and Colucci-Gray (2021) pointed out that while the traditional TPACK model emphasizes the intersection of technology, teaching, and subject knowledge, it ignores the importance of multimodal representation and cultural meaning decoding in art education. They advocate introducing the AK dimension to make TPACK better reflect the complexity and cultural nature of artistic thinking, emphasizing that the mastery of technology in art education should be equally important as the critical understanding of the social and political impacts of digital tools, thus expanding the theoretical boundaries and practical applicability of TPACK in art education.

AI technology is redefining the boundaries of AK (Artistic Knowledge). Generative AI models represented by DALL-E and Stable Diffusion have become new media that cannot be ignored in artistic creation and teaching. Dehouche and Dehouche (2023) pointed out that these text-image models can not only effectively support students' visual experiments and exploration of artistic styles, but also force educators to re-examine the definitions of creativity and artistic copyright. In addition, Epstein et al. (2023) emphasized in their review of generative AI that such AI tools have significant aesthetic and cultural embedding capabilities, and pointed out that the education system needs to introduce an interdisciplinary teaching framework to promote the integration of algorithmic literacy and art criticism in order to meet the challenges of technological change. At the same time, blockchain technology has triggered a new model of competence certification in art education.

The AI-TPACK-AK model conceptualizes Artificial Intelligence as an enabling layer that interacts dynamically with Technological Knowledge (TK), Pedagogical Knowledge (PK), Content Knowledge (CK), and Artistic Knowledge (AK). In primary school music education, AI enhances diagnostic feedback (TK), supports adaptive pedagogy (PK), strengthens music content understanding (CK), and expands creative and cultural expression (AK). Teachers play a central mediating role in balancing these components to preserve artistic integrity.

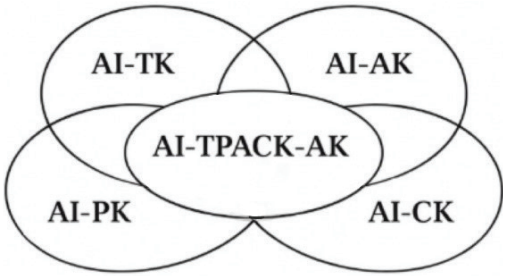


Figure 1 Theoretical Model Diagram

4.3 Synthesis of AI Applications in Primary School Music Education and TPACK-AK Alignment

Table 1 AI Applications in Music Education and Alignment with AI-TPACK-AK Framework

AI Application Category	Representative Tools	Learning Outcomes	Success Factors	Potential Risks	AI-TPACK-AK Alignment
Skills Practice	SmartMusic, Yousician	Improved pitch accuracy	Real-time feedback	Over-reliance on automation	TK (tool operation), CK (music skills), PK (adaptive teaching)
Performance Assessment	AI-driven rhythm analysis tools	Targeted skill improvement	Objective evaluation criteria	Neglect of expressive qualities	TK (data analysis), CK (assessment standards), AK (artistic expression awareness)
Creative Composition Assistance	AIVA, Soundful	Enhanced creative thinking	Cultural music database	Cultural bias in algorithms	TK (generative tool use), CK (music theory), AK (creative expression, cultural authenticity)
VR-based Immersive Learning	VR music performance simulators	Increased immersion	Stable network	Cost barriers	TK (VR technology), PK (immersive teaching design), AK (aesthetic perception)
Teacher-Assistant Tools	AI lesson planners, resource recommenders	Improved teaching efficiency	User-friendly design	Over-reliance on AI	TK (tool integration), PK (lesson planning), CK (curriculum knowledge), AK (artistic value preservation)

Sources: Developed by the author

5. Teachers' Cognition, Attitude and Adaptation

5.1 Cognitive Dimension

Teachers' understanding of AI mainly stays at the "tool" level, rather than an in-depth understanding of the technical logic. For example, although music-generating tools like AIVA provide new ways of teaching, research shows that most teachers cannot explain the machine-learning principles

behind them. Globally, the surface understanding of AI is significantly higher than the understanding of its underlying mechanisms: a study indicates that while about 70% to 80% of teachers can list practical AI applications (such as AIVA), less than 35% of teachers understand their algorithmic principles (Nazaretsky et al., 2022). This cognitive disconnect exacerbates the implementation anxiety of senior teachers, as they worry about losing control of the technology. In South Korea, teachers who have received AI training are on average about 30% more confident in using AI tools than those who have not (Ravi et al., 2023). Although teachers are aware of the potential of AI in personalized diagnosis, they still emphasize the dominance of teaching, and more than 70% of teachers oppose completely entrusting curriculum design to AI. In addition, constructivism-oriented teachers are more inclined to accept AI tools and regard them as a way to support student-centered teaching (Holmes & Tuomi, 2022).

In the field of art education, there is a tension among teachers between practicality and emotional authenticity. Research shows that approximately 60% of music teachers recognize the value of AI in style exploration and creative assistance, but they remain skeptical about the emotional depth of AI-generated works (Culliton, 2024). Cultural background also significantly influences its application orientation: for example, Italian teachers tend to view AI as an experimental medium, while Chinese teachers are more concerned about its practical utility in skill training. In terms of content integration, most teachers find it difficult to effectively align AI resources with established curriculum goals, and only about 40% can adapt platform suggestions to local teaching needs (Zhang, 2023). In music preservation and interdisciplinary integration projects, such as "AI + Traditional Music Preservation," the new knowledge integration challenges faced by curriculum designers further highlight the integration obstacles.

5.2 Attitude Formation

Teachers generally hold a cautiously optimistic attitude towards the integration of Artificial Intelligence (AI) into courses, but there are also significant concerns. For example, Zhang (2022) found in an empirical study of music education in China that about 64% of teachers believe that AI can improve teaching efficiency, but a considerable proportion of teachers are concerned about data privacy and system reliability. At the same time, age and teaching experience have a moderating effect on teachers' attitudes: novice teachers are more inclined to try AI teaching tools, while senior teachers show a reserved attitude due to concerns about the weakening of teaching autonomy and authority (Yu et al., 2023). Teachers' views on AI automatic feedback also present an "efficiency-dependence" dilemma: although most teachers affirm the immediacy and time-saving nature of AI feedback, they also worry that excessive dependence may lead to the rigidity of teaching strategies and a lack of human judgment (Zhang et al., 2024).

In the field of art teaching, the creative ability of AI has triggered teachers' dual judgment on "technical assistance" and "emotional expression". Some research indicates that music teachers generally recognize the potential of AI in stimulating creativity when using it for assisted creation, but they still have reservations about whether AI works can truly express emotions (Zhang & Wan, 2020). In addition, cultural background also affects teachers' attention to AI ethical issues to a certain extent. For example,

some research points out that teachers in Europe and Asia have different concerns regarding copyright, intellectual property rights, and cultural inheritance (Yu et al., 2023).

At the level of curriculum content integration, teachers generally welcome the supportive role of AI in theoretical teaching. For example, tools used to assist in rhythm, harmony, or melody analysis can enhance students' mastery of basic knowledge. However, some research also warns that the introduction of such technologies may lead to learning remaining at a surface level of understanding, and the development of students' critical and creative thinking may not necessarily improve synchronously (Zhang et al., 2024). Globally, AI-led content recommendation may also bring the risk of cultural homogenization, weakening the diverse expressions of local musical traditions (Yu et al., 2023).

5.3 Adaptation Path

When primary school music teachers adapt to AI technology, they face the tension between tool selectivity and teaching autonomy. Research has found that teachers have a "critical selectivity" towards AI-assisted tools. They are more willing to use functions that are highly consistent with teaching objectives and will actively avoid complex or opaque modules. For example, in the practice of the AIVA system, the dependence of some teachers on it may compress the space for teaching autonomy. Especially in areas with unstable offline conditions, the adaptation scores of teachers to AI tools are significantly lower (García-Martínez et al., 2020). The teaching structure also needs to be reshaped: from the traditional "demonstration-practice" to the "diagnosis-intervention" cycle, in order to achieve more targeted teaching improvement.

In art teaching, the boundaries of "collaboration" have become the focus of attention. Research shows that when AI tools are used to generate initial creative materials, teachers are more likely to accept this "semi-open" collaborative approach if students incorporate original elements based on these materials. Such collaboration emphasizes transparent attribution and role differentiation, forming an "AI-human collaboration" model. In addition, combining AI-generated content with local music culture can also help enhance learning effects and avoid cultural homogenization. All these practices indicate that the rational application of AI in primary school music education needs to be premised on teachers' autonomy, cultural context, and the adjustment of teaching structure.

6. Discussion: Towards Balanced Integration

The integration of AI-TPACK-AK into primary school music education continues to reveal the tension between its transformative potential and systemic challenges. Successful implementation will depend on the following interrelated dimensions:

Infrastructure equity and teacher development form the fundamental support. The technological gap seriously hinders accessibility-the AI adaptation efficiency of rural schools is 40% lower (García-Martínez et al., 2020), and only 37% of rural schools in China have sufficient bandwidth for music applications (UNESCO, 2023). This requires the fair distribution of resources through lightweight intelligent solutions, such as mobile projection systems, and policy interventions. At the same time, the

systematic cultivation of teachers' AI-TPACK-AK capabilities is crucial, including the integration of pre-service training, cooperation with artists, differentiated professional development compared with traditional training, and an ethical framework to address privacy and algorithmic bias.

Ethical governance and curriculum innovation determine the implementation quality. Algorithmic transparency, cultural inclusivity, and copyright reform constitute the core ethical pillars. It is necessary to address the dominance of Western art in training data and improve policies for AI-generated content. At the same time, local ethical guidelines (such as those in Shanghai) should be expanded into national art-specific regulations. Curriculum design must maintain cultural authenticity through algorithm localization, balance the participation of digital tools and physical instruments, and ensure students' creative autonomy to preserve the essence of art. In these dimensions, a sustainable ecosystem for technology-enabled music education has been jointly established.

6.1 Implications for Practice

To promote the effective integration of AI into Chinese primary school music education, the following actionable recommendations are proposed for teachers, schools, and policymakers:

1) Phased Teacher Development Roadmap: Design a three-stage training program based on AI-TPACK-AK: (a) Initiation stage-train teachers to use user-friendly AI tools; (b) Pilot implementation stage-guide teachers to design AI-assisted lessons that balance technical practice and artistic expression; (c) Scaling-up stage-support teachers to develop AI tools adapted to local musical traditions.

2) Urban-Rural Resource Sharing Mechanism: Establish a "cloud music classroom" platform connecting urban and rural schools, providing: (a) Pre-recorded AI-assisted lessons by urban professional teachers; (b) Virtual choir collaboration tools to enhance interaction between urban and rural students; (c) Low-cost hardware support for rural schools through government funding.

3) Balanced Teaching Model Design: Combine AI tools with traditional teaching methods: (a) Use AI for technical training and human teachers for emotional expression guidance; (b) Allocate 60-70% of class time to physical instrument practice and 30-40% to AI-assisted creative or immersive activities; (c) Incorporate local musical culture into AI applications.

4) Ethical Guidelines for Primary School Music Education: Develop age-appropriate ethical norms: (a) Teach students to distinguish between AI-generated and human-created music; (b) Emphasize copyright attribution when using AI-generated content; (c) Limit screen time to avoid affecting motor skill development.

5) Policy Implementation Monitoring: Establish a dynamic evaluation system to track: (a) The penetration rate of AI tools in rural primary schools; (b) Teachers' AI-TPACK-AK competence improvement; (c) Students' artistic expression and cultural identity development.

Conclusions

Core Findings

AI tools offer significant potential for primary school music education, including personalized learning support, real-time performance feedback, and expanded creative expression, but their effectiveness is constrained by urban-rural infrastructure gaps, algorithmic cultural bias, and teachers' technological anxiety.

The AI-TPACK-AK framework is a valid analytical tool for understanding teachers' technology integration capabilities, with Artistic Knowledge (AK) playing a critical role in preserving music's aesthetic and cultural essence amid technological change.

China's policy context provides strong impetus for AI-in-education development, but the implementation gap between urban and rural areas, as well as traditional teaching models, hinder equitable access to technological benefits.

Teachers' attitudes toward AI are cautiously optimistic, with cognitive depth, teaching experience, and cultural background influencing their adaptation paths, highlighting the need for targeted professional development.

Recommendations

Integrating Artificial Intelligence into the AI-TPACK-AK framework is effective because it aligns technical functions with teaching intentions and artistic values. The main advantages include personalized learning, timely feedback, and more creative opportunities, while the main limitations involve cultural bias, over-reliance on automation, and the potential erosion of teachers' professional autonomy.

Specifically, this study argues that effective AI integration in primary school music education requires:

1. Longitudinal Adaptation Research: Tracking the development of teachers at various stages of their careers.
2. Culturally Responsive AI Design: Co-creating tools with diverse music communities.
3. Blended Learning Model: Optimizing the integration of AI and traditional music teaching.
4. Policy Implementation Analysis: Evaluating the effectiveness of regulation in different scenarios.
5. Student Experience Research: Focusing on learners' perspectives on AI-enhanced music education.

With the rapid development of AI, continuous teacher development, critical policy engagement, and student-centered teaching innovation remain crucial for realizing the potential of technology while preserving the irreplaceable human essence of music. The principles and practices outlined in this article provide a foundation for this ongoing work in the context of global education.

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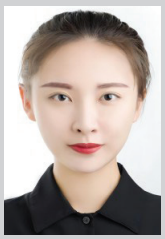
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Field of Expertise: Music

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提交的稿件必须符合如下要求：
The submitted manuscript must adhere to the following instructions:

- 文章篇幅约为 10-15 页，单面 A4 纸打印，页边距（上、下、左、右）均 1 寸（2.54 厘米）。文章应尽量简明扼要，文章篇幅应涵盖必要内容。
  The manuscript must be 10-15 pages in length, printed on one side of A4 paper, with 1-inch (2.54 cm) margins on all sides (top, bottom, left, and right). The manuscript should be as concise and precise as possible.
- 全部内容设置为单栏，首行缩进 1 厘米（0.39 寸）
  All content must be printed in a single column, with the first line indented by 1 cm (0.39 inches).
- 行间距 1.5 倍
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文章各组成部分格式要求	Format Requirements for Each Component of the Manuscript	中文字号 Chinese Font Size	英文字号 English Font Size	标注	Labeling
文章标题（中-英文）	Title (Chinese-English)	16（居中）	13（居中）	加粗	bold
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摘要标题（中-英文）	Abstract Title (Chinese-English)	11（左右对齐）	11（左右对齐）	加粗	bold
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文章各组成部分 格式要求	Format Requirements for Each Component of the Manuscript	中文字号 Chinese Font Size	英文字号 English Font Size	标注	Labeling
关键词标题（中-英文）	Keywords Title (Chinese-English)	11（左右对齐）	11（左右对齐）	加粗	bold
关键词（中-英文）	Keywords (Chinese-English)	11（左右对齐）	11（左右对齐）	正常	regular
内容标题（中文）	Topics (Without numbering, Chinese)	11（左对齐）	-	加粗	bold
内容（中文）	Contents (Chinese)	11（左右对齐）	-	正常	regular
参考文献（英文）	References (English)	-	11（左右对齐）	正常	regular
表格标题（中文）	Table Title (On top of the table, Chinese)	10（左对齐）	-	加粗	bold
表格内容（中文）	Table Content (On top of the table, Chinese)	9（左对齐）	-	正常	regular
图档标题（中文）	Figure Title; Chart Title (Under the figure or chart, Chinese)	11（居中）	-	加粗	bold
图档内容（中文）	Figure Content; Chart Content (Under the figure or chart, Chinese)	11（居中）	-	正常	regular

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1) 文章标题（中-英文）
   Manuscript title (in both Chinese and English)
2) 所有作者姓名，隶属单位，国家（中-英文）
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3) 通讯作者电子邮箱，仅识别主要作者或文章协调人的电子邮箱
   Corresponding Author E-mail, provide only the E-mail of main author or the article coordinator
4) 摘要（中-英文），300 字左右的中文摘要应包含文章的目的、方法、结果、和贡献，结论，英文摘要必须与中文摘要内容一致。
   The abstract (in both Chinese and English) should be approximately 300 words and include the purpose, methodology, findings, and conclusions of the manuscript. The English abstract must align with the Chinese abstract.
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The contents of an academic manuscript comprise the following sections: Introduction, Content, Conclusion, and Recommendations (if any).

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The data for each author must include the following: full name, highest education, affiliation, field of expertise, and a photograph, all of which must be written in English.

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Figures, charts, tables, and other illustrations must be numbered and include proper references to their sources. They should be clear, distinctive, and not infringe upon the copyrights of others.

表格、图型和图表的展示示例

The Examples of Presentation of Tables, Figures, and Charts

表 1 表格名称

“表 1” 宋体 11 号，加粗，左对齐

“表格名称” 宋体 11 号，不加粗

表格标题（宋体 10 号，加粗，居中）	**序号**	**百分比**
内容（宋体 9 号，不加粗，左对齐）	1	33
内容（宋体 9 号，不加粗，左对齐）	2	67
合计	**3**	**100**

来源:（如果有）（宋体，9 号，加粗，左对齐）

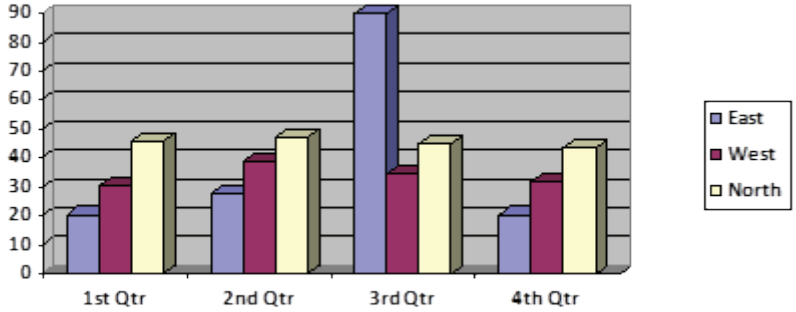


图 1 图表名称

来源:（如有）

“图 1” 宋体，11 号，加粗，居中
“图表名称” 宋体，11 号
“来源或备注” 宋体，9 号，加粗，左对齐
“来源信息” 宋体，9 号，左对齐

内容引用及参考文献

字体 Times New Roman 11 号

1. 内容引文 Quotations in the Contents

格式	句前引用	句末引用
一位作者	Coghlan (1993)	(Coghlan, 1993)
二位作者	Mohsen and Mohammad (2011)	(Mohsen & Mohammad, 2011)
三位作者，或更多	Burkart et al. (1997)	(Burkart et al., 1997)
组织或机构	Ministry of Education (2020)	(Ministry of Education, 2020)
使用缩写的组织	First quotation: National Institute of Development Administration (NIDA, 2018) Next quotation: NIDA (2018)	First quotation: (National Institute of Development Administration [NIDA], 2018) Next quotation: (NIDA, 2018)
来自文档的引用（指定页码）	Shaw (2017, p. 172) or Shaw (2017, pp. 172-180)	(Shaw, 2017, p. 172) or (Shaw, 2017, pp. 172-180)
采访引述	J. M. Sun (Personal communication, August 18, 2021)	(Sun, J. M., Personal communication, August 18, 2021)

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所有被引用的文件必须在手稿末尾的参考文献中列出。列表必须根据参考来源和作者的姓氏按字母顺序排列。参考格式应遵循 APA（第 7 版）的格式。

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2.1 基于作者数量的参考文献格式 Format of Reference Based on Number of Authors

作者	文末参考文献
一位作者	Surname,/ First alphabet of name being a capital letter. 作者的姓,/名字的第一字母.
二位作者	Surname,/First alphabet of name being a capital letter.,/&/Surname of second author,/First alphabet of name being a capital letter. 作者的姓,/名字的第一字母.,/&/第二作者的姓,/名字的第一字母.
3-20 位作者	Surname,/First alphabet of name being a capital letter.,/Surname,/First alphabet of name being a capital letter.,/ Surname,/First alphabet of name being a capital letter.,/(Number 1-19 authors),/&/Surname,/First alphabet of name being a capital letter. (Number 20 author) 作者的姓,/名字的第一字母.,/作者的姓,/名字的第一字母.,/ 作者的姓,/名字的第一字母.,/(第一至第19 位作者),/&/ 作者的姓,/名字的第一字母.(第二十位作者)
21位或更多作者	Surname,/First alphabet of name being a capital letter.,/(Number 1-19 authors),/./././ Surname,/First alphabet of name being a capital letter. (The last author) 作者的姓,/名字的第一字母.,/作者的姓,/名字的第一字母.,/(第一至第19位作者), /./././作者的姓,/名字的第一字母.(最后一位作者)

2.2 依据文章所引用的文献类别来说明 Format of Reference Based on Document

1.2.1 期刊 Journals

1) 期刊（印刷版）Journal (Printed)

Surname,/First alphabet of name being a capital letter./(A.D. year)./Article title./*Journal title*,/*Volume*(No.),/ ////// first page-last page of article in the journal.
作者的姓,/名字的第一字母./(出版年份)./标题./*期刊名称*,/*卷*(期),/首页-尾页.

Gao, Y., Shi, J., Niu, Q., & Wang, L. (2013). Work-family conflict and job satisfaction: Emotional intelligence as a moderator. *Stress and Health*, *29*(3), 222-228.

2) 期刊（电子版）Journal (Electronic)

Surname,/First alphabet of name being a capital letter./(A.D. year)./Article title./*Journal title*,/ *Volume*(No.),/ //////first page-last page of article in the journal./http://doi.org/xxxx or URL
作者的姓,/名字的第一字母./(出版年份)./标题./*期刊名称*,/*卷*(期),/首页-尾页./http://doi.org/xxxx 或 URL

Waehayee, N. (2014). Relationship between strategic performance based budgeting system and law on the budgetary procedures. *Jurisprudence Journal Naresuan University, 7*(2), 152-178. http://doi.org/10.14456/nulj.2014.9

Cai, A. T., & Wu, W. Q. (2021). The mediator effect of Chinese university teachers' volunteerism on teaching quality. *Chinese Journal of Social Science and Management, 5*(2), 100-110. https://so01.tcithaijo.org/index.php/CJSSM/article/view/245296

2.2.2 书籍 Books

1) 书籍 （印刷版）Book (Printed)

Surname,/First alphabet of name being a capital letter./(A.D. year)./*Book title*/(Edition)./Publisher. * In case of no publication date, put n.d. * In case of first edition, do not specify the edition. * In case of no specification of publisher, put n.p. 作者的姓,/名字的第一字母./(出版年份)./*书名*/(版本)./出版社. * 在没有出版年份的情况下，请放入 n.d. * 若是初次出版，不用加出版次 * 在没出版社的情况下，请放入 n.p.

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Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.

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Surname,/First alphabet of name being a capital letter./(A.D. year)./*Book title*/(Edition)./URL * In case of no publication date, put n.d. * In case of first edition, do not specify the edition. * In case of no specification of publisher, put n.p. 作者的姓,/名字的第一字母./(出版年份)./*书名*/(版本)./出版社./URL * 在没有出版年份的情况下，请放入 n.d. * 若是初次出版，不用加出版次 * 在没出版社的情况下，请放入 n.p.

Department of Primary Industries and Mines. (2017). *Benchmarking industrial logistics performance index supply chain performance index logistics scorecard.* https://dol.dip.go.th/files/article/attachments/dol/3e30ca4fc9f964feeb57fce3fc602c04.pdf

3) 书籍章节 Chapter in a Book

Surname,/First alphabet of name being a capital letter./(A.D. year)./Title of chapter or article./In/First alphabet of ///////editor's name being a capital letter/Surname/(Ed. or Eds.),/*Book title*/(pp./page numbers)./Publisher. 作者的姓,/名字的第一字母./(出版年份)./书籍题目./In/主编名字的第一个字母大写/姓氏/(Ed. or Eds.),/ ///////*书名*/(pp./页数)./ 出版社.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates.

2.2.3 已出版博士/学位论文 Thesis

1) 论文（印刷版）Thesis (Printed)

Surname,/First alphabet of name being a capital letter./(A.D. year)./*Title of thesis*/[Master's thesis or Doctoral ///////dissertation]./Name of educational institution. 作者的姓,/名字的第一字母./(出版年份)./*论文题目*/[Doctoral dissertation 或 Master's thesis]./学校名称.

Seangsri, W. (2009). *An analysis and development of school network administration model in Northeastern rural area* [Doctoral dissertation]. Chulalongkorn University.

2) 论文（电子版）Thesis (Electronic)

第一种格式 First Format

Surname,/First alphabet of name being a capital letter./(A.D. year)./*Title of thesis*/[Doctoral dissertation or Master's ///////thesis]./Name of website./URL 作者的姓,/名字的第一字母./(出版年份)./*论文题目*/[Doctoral dissertation 或 Master's thesis]./网站名称./URL

Lin, Q. (2020). *The influence of music teachers' competence on job performance-moderator role of interactive behavior* [Doctoral dissertation]. Panyapiwat Institute of Management Library. http://elibrary.pim.ac.th/Record/833578

第二种格式 Second Format

Surname,/First alphabet of name being a capital letter./(A.D. year)./*Title of thesis*/(UMI number or other ///////numbers)/[Doctoral dissertation or Master's thesis,/Name of university]./Name of database. 作者的姓,/名字的第一字母./(出版年份)./*论文题目*/(UMI 编号或其他顺序编号)/[Doctoral dissertation 或 ///////Master's thesis,/学校名称]./数据库名称.

Lope, M. D. (2014). *Perceptions of global mindedness in the international baccalaureate middle years programme: The relationship to student academic performance and teacher characteristics* (Order No. 3682837) [Doctoral dissertation, University of Maryland]. ProQuest Dissertations and Theses Global.

2.2.4 研究报告 Research Report

Surname,/First alphabet of name being a capital letter./(A.D. year)./*Title*/(Report No. if given)./Publisher./ /////// http://doi.org/xxxx or URL 作者的姓,/名字的第一字母./(出版年份)./*报告名称*/(Report No. 如有).出版./http://doi.org/xxxx 或 URL

National Cancer Institute. (2019). *Taking time: Support for people with cancer* (NIH Publication No. 18-2059). U.S. Department of Health and Human Services, National Institutes of Health. https://www.cancer.gov/publications/patient-education/takingtime.pdf

2.2.5 社交网络 Electronic Media

Surname,/First alphabet of name being a capital letter./(A.D. year,/month/date)./*Article title*./Name of website./URL * In case of no publication date, put n.d. * In case of only A.D. year appears, put only A.D. year * In case of the author's name and the website name being the same, cut the website name 作者的姓,/名字的第一字母./(年,/月/日)./*文章题目*./网站名称./URL * 在没有出版年份的情况下，请放入 n.d. * 若只显示年份，直接写年份即可 * 在作者与网站同样名称的情况下，仅写作者名称即可

Minister of Tourism and Sport. (2020, January 9). *Bangkok flea markets: Adventurous shopping experience.* Tourism Thailand. https://www.tourismthailand.org/Articles/bangkok-flea-markets-adventurous-shopping-experience

Millburn, J. F. (2021). *How to start a successful blog in 2021*. Theminimalists. https://www.the minimalists.com/blog/

2.2.6 学术会议上发表的文章/文件（论文集）Articles/documents presented in academic conference (Proceedings)

Surname,/First alphabet of name being a capital letter./(A.D. year)./Title of article./In/First alphabet of the editor's ///////name being a capital letter./Surname/(Ed. or Eds.),/*Name of conference topic*./*Name of conference*/ ///////(pp./page numbers)./Name of database. https://doi.org/xxxx or URL 作者的姓,/名字的第一字母./(出版年份)./书籍题目./In/主编名字的第一个字母大写/姓氏/(Ed. 或 Eds.),/ ///////会议主题./*会议名称*/(pp./页数)./数据库名称.https://doi.org/xxxx 或 URL

Phinitchai, S., Nawaratana, N., & Tanthanuch, J. (2021). Distributional-based analysis for health care insurance claim data. In *Globalization revisited: Building organization resilience with digital transformation. The 4th PIM International Conference* (pp. 715-725). Panyapiwat Institute of Management. https://conference.pim.ac.th/zh/wp-content/ uploads/2021/03/I-Social-Sciences-and-Humanities-Part-1.pdf

2.2.7 会议文件 Documents for the Conference

Surname,/First alphabet of name being a capital letter./(A.D. year,/month/date)./Topic of conference./In/First ///////alphabet of the Chair Person's name being a capital letter./Surname (Chair),/*Name of conference*/[Symposium]./ ///////Name of conference organizer,/Place of conference. 作者的姓,/名字的第一字母./(年,/月/日)./会议事项./In/主席名字的第一个字母大写/姓氏./(Chair),/*会议主题*/ ///////[Symposium]./会议名称,/地点.

Wasi, N., Poonpolkul, P., & Thephasdin na Ayudhya, C. (2021, September 30). Policy design for coping with aging society. In N. Wasi (Chair), *Future world money: Developing Thai digital currency* [Symposium]. BOT Symposium 2021: Building a Resilient Thailand. Bank of Thailand. https://www.pier.or.th/conference/2021/symposium/

2.2.8 访谈文件 Interview Documents

Surname,/First alphabet of name being a capital letter./(A.D. year,/month/date of the interview)./Interviewed by/ ///////First alphabet of the interviewer's name being a capital letter./Surname/[Tape recording]./Position of interviewee ///////(If any),/Place of interview. 受访者的姓,/名字的第一字母./(采访年,/月/日)./Interviewed by采访者名字的第一字母./姓氏/[Tape recording]./ ///////受访者的职位 (如有),/采访地点.

Chearavanont, S. (2021, September 30). Interviewed by N. Wanakijpaiboon [Tape recording]. Executive Chairman of Charoen Pokphand Group, Bangkok.

2.2.9 报纸 Newspapers

1) 报纸（印刷版）Newspaper (Printed)

Surname,/First alphabet of the author's name being a capital letter./(A.D. year,/month/date)./Topic or article title./ ///////*Name of newspaper*,/first page-last page. 作者的姓,/名字的第一字母./(年,/月/日)./文章题目./*报纸名称*,/首页-尾页.

Sriwattanachai, R. (2014, October 24). The prefabricated generation of seasoning sauce market. *POST TODAY*, B3-B4.

2) 报纸（电子版）Newspaper (Electronic)

Surname,/First alphabet of the author's name being a capital letter./(A.D. year,/month/date)./Topic or article title./ ///////*Name of newspaper*./URL 作者的姓,/名字的第一字母./(年,/月/日)./文章题目./*报纸名称*,/URL

Bangkok post and reuters. (2021, October 8). UK eases travel rules for countries including Thailand. *Bangkok Post*. https://www.bangkokpost.com/thailand/general/2194651/uk-eases-travel-rules-for-countries-including-thailand

提交投稿 Submission of Manuscript

作者可通过 https://so01.tci-thaijo.org/index.php/CJSSM/index 网站进行投稿。

Authors can submit articles via the website https://so01.tci-thaijo.org/index.php/CJSSM/index "Online submission" system.

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