

A Study on Generation Z College Students' Recognition and Acceptance of Traditional Chinese Medicine Wellness Culture from the Perspective of Healthy China

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Abstract: This study focuses on Generation Z college students in Fujian Province, investigating their cognition, recognition, and acceptance of Traditional Chinese Medicine TCM wellness culture through a combination of questionnaires and interviews. The results show that over 60% of students hold a positive attitude towards TCM wellness culture, but their overall familiarity is relatively low, with only a small minority being very knowledgeable. Core concepts such as Yin-Yang and Five Elements, and the homology of medicine and food, have relatively higher recognition. Key factors influencing students' acceptance include health management needs, recognition of scientific validity, and compatibility with personal constitution. Strengthening physical fitness and enhancing immunity are the primary purposes for use, while personal constitution or symptoms are the most important factors considered when choosing methods. Students pay more attention to the practical role of TCM in daily wellness and solving common health problems, preferring low-trauma conditioning methods. They also suggest promoting TCM wellness culture through practical experiences, thematic activities, and general education courses. This study provides empirical evidence for the inheritance, innovation, and targeted dissemination of TCM culture among youth.

Keywords: Traditional Chinese Medicine; Wellness Culture; Recognition; Acceptance.

1. Research Background and Significance

With the deepening development of China's new industrialization, informatization, urbanization, and agricultural modernization, the acceleration of population aging, and the vigorous growth of the health service industry, the public's demand for TCM wellness services is increasing. Unhealthy lifestyle habits such as staying up late, prolonged sitting, and irregular diets have led young people to face health problems like cervical spondylosis, eye fatigue, and persistent drowsiness, placing them in a sub-healthy state. As they become aware of the importance of health, TCM wellness culture has gradually entered their field of vision. With the advancement of modern technology, the current development of TCM culture is improving, solving previously unresolved issues. For example, AI image recognition technology can now assist doctors in analyzing tongue coating and facial complexion, and natural language processing technology can analyze consultation information. These technological developments have also increased contemporary young people's trust in TCM wellness culture.

In the current era, studying the recognition and acceptance of TCM wellness culture among Generation Z college students is significant for cultural inheritance, industrial innovation, and the construction of a Healthy China. It helps universities and medical institutions carry out targeted TCM science popularization, transform traditional wellness wisdom into healthy behavioral habits for young people, and solidify the youth foundation for a Healthy China.

2. Literature Review

Traditional Chinese Medicine (TCM) is one of the oldest and most comprehensive systems of medical knowledge and

practice, with roots stretching back over 2000 years [1]. It is built on principles such as balance, harmony, and the flow of vital energy (Qi), and employs a wide range of techniques, including herbal medicine, acupuncture, cupping therapy, and Qigong. TCM has been a foundational element of healthcare in many East Asian countries, including China, Taiwan, Hong Kong, and increasingly in other parts of the world [2]. However, as the world shifts toward the Sustainable Development Goals (SDGs), a set of 17 goals set by the United Nations to address global challenges by 2030 [3], TCM faces the challenge of aligning itself with these modern global objectives. The SDGs, adopted in 2015, provide a comprehensive framework for achieving social, environmental, and economic sustainability [4]. Despite these challenges, TCM holds considerable potential to advance at least five SDGs, specifically SDG 3 (Good Health and Well-being) [5], SDG 4 (Quality Education) [6], SDG 12 (Responsible Consumption and Production) [7], SDG 13 (Climate Action) [8], and SDG 15 (Life on Land) [9]. This potential stems from its focus on preventive healthcare, natural healing practices, and sustainable resource utilization [10].

3. Questionnaire Design and Data Collection

3.1. Questionnaire Design

This study takes college students in Fujian Province as the research object, focusing on the Generation Z group. Using a mixed research method combining quantification and qualitative analysis, it systematically investigates their cognitive structure, emotional attitudes, behavioral intentions, and influencing factors regarding TCM wellness culture. The aim is to construct a theoretical analysis framework of "cognition-recognition-acceptance-practice," providing

empirical evidence and strategic suggestions for the inheritance, innovation, and health communication of TCM

culture among youth. The main variables and their assignments are shown in Table 1.

Table 1. Questionnaire Variables and Assignments

Variable Type	Variable Definition
Q1 Gender	1=Male, 2=Female
Q2 Grade	1=Freshman, 2=Sophomore, 3=Junior, 4=Senior, 5=Postgraduate and above
Q3 Major Category	1=Humanities and Social Sciences, 2=Economics and Management, 3=Science and Engineering, 4=Medicine and Health, 5=Agriculture
Q4 Place of Origin	1=City, 2=County Town, 3=Township, 4=Rural
Q5 Whether have been exposed to or studied systematic TCM knowledge	1=Yes, 2=No
Q9 Your degree of favorability towards TCM wellness culture	1=Very averse, 2=Generally averse, 3=Neutral, 4=Generally approve, 5=Very approve
Q25 Willingness to try or deeply learn TCM wellness methods	1=Very unwilling, 2=Somewhat unwilling, 3=Somewhat willing, 4=Very willing
Familiarity with TCM wellness culture	1=Completely unfamiliar, 2=Not very familiar, 3=Somewhat familiar, 4=Relatively familiar, 5=Very familiar
Understanding of Yin-Yang and Five Elements	
Understanding of Zang-Fu Organs and Meridians	
Understanding of TCM Holistic Concept	
Understanding of TCM Homology of Medicine and Food Concept	1=Very disapprove, 2=Generally disapprove, 3=Neutral, 4=Generally approve, 5=Very approve
College students' degree of favorability towards TCM wellness culture	
College students' recognition of the unique advantages of TCM wellness methods in disease prevention and health promotion	1=Yes, 2=No
Do you think "method complexity, difficult to master and adhere to" is an influencing factor for TCM wellness culture cognition?	
Do you think "an important component of excellent traditional Chinese culture, worthy of inheritance and promotion" is an influencing factor for TCM wellness culture cognition?	
Do you think "concern about side effects or adverse effects" is an influencing factor for TCM wellness culture cognition?	
Do you think "unpleasant taste" is an influencing factor for TCM wellness culture cognition?	
Do you think "TCM wellness methods are more natural, with fewer side effects" is an influencing factor for TCM wellness culture cognition?	
Do you think "scientificity and effectiveness of TCM wellness" is an influencing factor for TCM wellness culture cognition?	
Do you think "lack of atmosphere or peers around" is an influencing factor for TCM wellness culture cognition?	
Do you think "the help of learning TCM wellness knowledge for personal health management of college students" is an influencing factor for TCM wellness culture cognition?	
When choosing TCM wellness methods, do you value "obvious effect" the most?	
When choosing TCM wellness methods, do you value "high safety, few side effects" the most?	
When choosing TCM wellness methods, do you value "convenient and easy to practice, easy to adhere to" the most?	
When choosing TCM wellness methods, do you value "affordable cost" the most?	
When choosing TCM wellness methods, do you value "scientific basis or authoritative recommendation" the most?	
When choosing TCM wellness methods, do you value "family/friends' recommendation" the most?	
When choosing TCM wellness methods, do you value "conforms to personal constitution" the most?	
When choosing TCM wellness methods, do you value "method is interesting" the most?	

3.2. Questionnaire Distribution and Collection

This survey was conducted both online and offline, covering multiple (sampled) universities within Fujian Province. The online survey was designed and generated on the "Questionnaire Star" platform, with links and QR codes disseminated through official student organizations, departmental class groups, campus forums, and regional student online communities of the sampled universities. Offline surveys were conducted simultaneously on the campuses of selected universities, using a combination of "fixed-point random" and "(intercept)" methods. Trained investigators or (school coordinators) randomly selected eligible students in typical high-traffic areas on each campus (such as libraries, teaching buildings, cafeterias, sports fields, etc.) to distribute and collect questionnaires.

A total of 300 questionnaires were distributed (exceeding

the minimum required sample size), with 237 valid responses, resulting in a valid response rate of 79%.

4. Analysis of Generation Z College Students' Recognition of TCM Culture

4.1. Basic Information of Survey Respondents

Regarding the grade distribution of the survey population, from freshmen to postgraduate students and above, as shown in Table 2: Freshmen accounted for 26.16%, sophomores 32.07%, juniors 18.14%, seniors 19.41%, and postgraduate students and above 4.22%. The distribution of surveyed students' majors was: Humanities and Social Sciences 26.16%, Economics and Management 24.89%, Science and Engineering 21.94%, Medicine and Health 18.99%, Agriculture 6.75%. The distribution of surveyed students'

places of origin was: City 15.61%, County Town 32.49%, Township 25.32%, Rural 26.58%.

Table 2. Basic Information of Survey Respondents

	Category	Number of People	Proportion (%)
Grade	Freshman	62	26.16
	Sophomore	76	32.01
	Junior	43	18.14
	Senior	46	19.41
	Postgraduate and above	10	4.22
Major Category	Humanities and Social Sciences	62	26.16
	Economics and Management	59	24.89
	Science and Engineering	52	21.94
	Medicine and Health	48	18.99
	Agriculture	16	6.75
Place of Origin	City	37	15.61
	County Town	77	32.49
	Township	60	25.32
	Rural	63	26.58

4.2. Current Status of Cognitive Level

For the survey respondents, regarding familiarity with

Table 3. Basic Situation of Cognitive Level of TCM Wellness Culture

Question	Level of Understanding	Number of People	Proportion (%)
Familiarity with TCM Wellness Culture	Completely unfamiliar	77	32.49
	Not very familiar	79	33.33
	Somewhat familiar	55	23.21
	Relatively familiar	22	9.28
	Very familiar	4	1.69
Understanding of Yin-Yang and Five Elements	Completely unfamiliar	23	9.70
	Not very familiar	11	4.64
	Somewhat familiar	51	21.52
	Relatively familiar	51	21.52
	Very familiar	101	42.62
Understanding of Zang-Fu Organs and Meridians	Completely unfamiliar	10	4.22
	Not very familiar	24	10.13
	Somewhat familiar	56	23.63
	Relatively familiar	106	44.73
	Very familiar	41	17.30
Understanding of TCM Holistic Concept	Completely unfamiliar	10	5.06
	Not very familiar	24	12.24
	Somewhat familiar	56	11.39
	Relatively familiar	106	51.05
	Very familiar	41	20.25
Understanding of TCM Homology of Medicine and Food Concept	Completely unfamiliar	16	6.75
	Not very familiar	24	10.13
	Somewhat familiar	19	8.02
	Relatively familiar	117	49.37
	Very familiar	61	25.74

As shown in Figure 2, within the college student population, the degree of recognition regarding the unique advantages of TCM wellness methods in preventing diseases and promoting health is still not sufficiently high, indicating that communication efforts need to be strengthened.

5. Analysis of Factors Influencing Generation Z College Students' Recognition and Acceptance of TCM Wellness Culture

5.1. Decision Tree Analysis of College Students' Attitudes and Recognition towards TCM Wellness Culture

Figure 3 presents the resulting two-layer decision tree. The

TCM wellness culture, as shown in Table 3, 32.49% were completely unfamiliar, 33.33% were not very familiar, 23.21% were somewhat familiar, 9.28% were relatively familiar, and 1.69% were very familiar. Regarding understanding of specific concepts: for Yin-Yang and Five Elements, 9.70% were completely unfamiliar, 4.64% not very familiar, 21.52% somewhat familiar, 21.52% relatively familiar, and 42.62% very familiar. For Zang-Fu Organs and Meridians, the figures were 4.22%, 10.13%, 23.63%, 44.73%, and 17.30% respectively. For the TCM Holistic Concept: 5.06%, 12.24%, 11.39%, 51.05%, and 20.25%. For the TCM Homology of Medicine and Food Concept: 6.75%, 10.13%, 8.02%, 49.37%, and 25.74%.

4.3. Current Status of Recognition

A pie chart clearly illustrates the relationship between the proportion of each category and the total. As shown in Figure 1, 22.70% of the students hold a generally approving attitude towards TCM wellness culture, 19.80% hold a very disapproving attitude, and 22.30% hold a very approving attitude. The results indicate that the majority of students recognize TCM wellness culture.

root node contains 237 samples: 47 held a very averse attitude, 38 were generally averse, 45 were neutral, 54 were generally approving, and 53 were very approving. College students in sophomore, senior, and postgraduate years held a generally approving attitude, with a sample size of 37 and a confidence level of 0.280. College students in freshman and junior years held a very averse attitude, with a sample size of 28 and a confidence level of 0.267.

From the entire decision tree, it is evident that, overall, college students hold a generally approving attitude towards TCM wellness culture. This indicates that the majority of college students recognize and support TCM wellness culture.

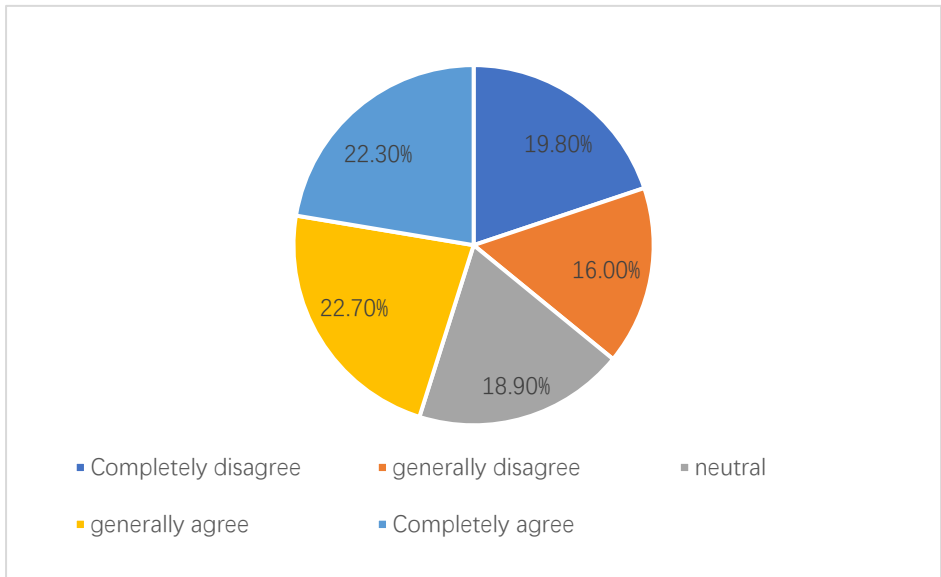


Figure 1. Pie Chart of College Students' Degree of Favorability Towards TCM Wellness Culture

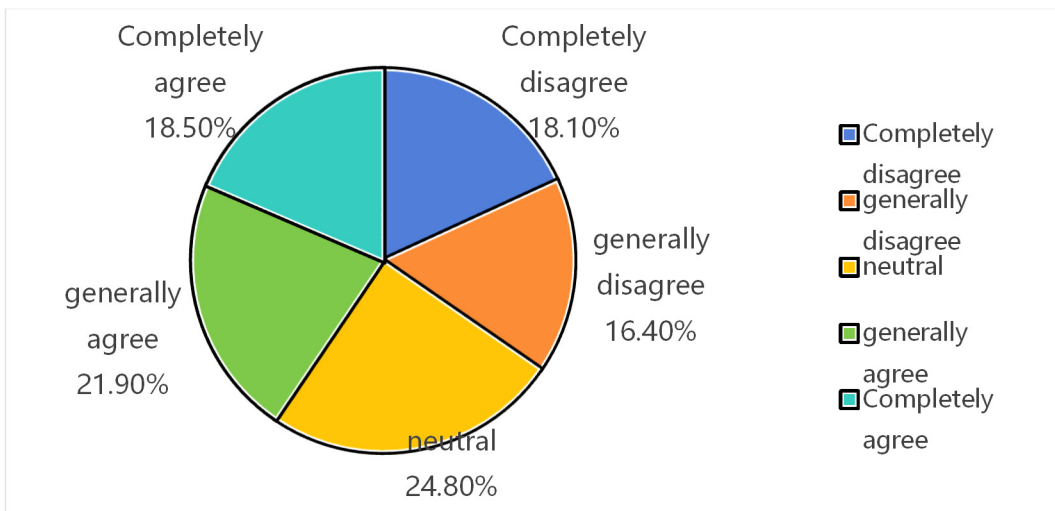


Figure 2. Pie Chart of College Students' Recognition of the Unique Advantages of TCM Wellness Methods in Disease Prevention and Health Promotion

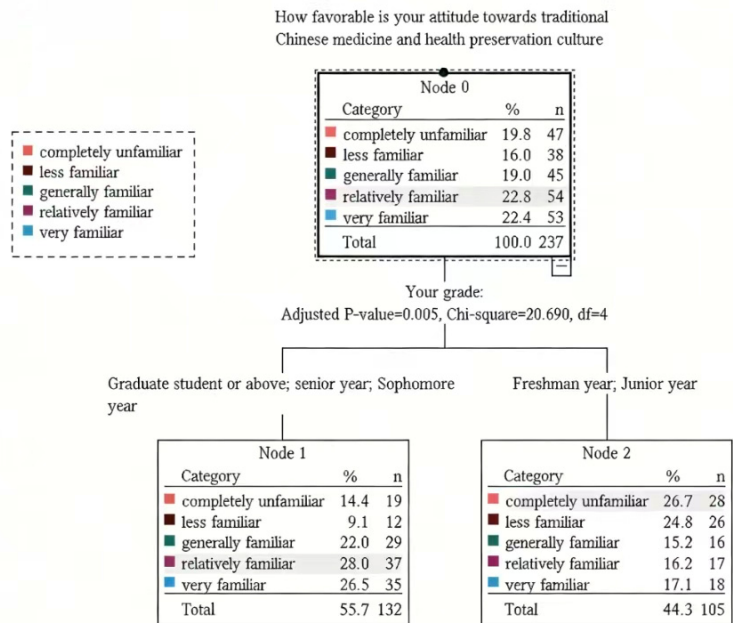


Figure 3. Decision Tree Analysis of College Students' Favorability Towards TCM Wellness Culture

5.2. Regression Analysis of Factors Influencing College Students' Understanding of Traditional Chinese Medicine Health Preservation Culture

5.2.1. Basic Summary

Table 4. Basic Summary Table of Binary Logistic Regression Analysis

name	option	frequency	percentage %
Has been exposed to or studied systematic traditional Chinese medicine (TCM) knowledge	yes	193	81.43
	no	44	18.57

First, college students were categorized into two groups based on their exposure to systematic Traditional Chinese Medicine (TCM) knowledge: "yes" and "no." As shown in Table 4, 81.43% of students had studied or been exposed to systematic TCM knowledge. Using this data, we conducted a simulation test with the following independent variables: "whether they had studied or been exposed to systematic TCM knowledge," and the following dependent variables: "complex methods that are difficult to master and adhere to," "an important component of China's excellent traditional culture that deserves inheritance and promotion," "concerns about side effects or adverse reactions," "unpleasant taste that makes it hard to accept," "TCM health preservation methods are more natural with fewer side effects," "confidence in the scientific validity and effectiveness of TCM health preservation," "lack of surrounding TCM culture or peers,"

Table 7. Logistic Regression Analysis Results of Factors Influencing College Students' Cognitive Status of Traditional Chinese Medicine Health Preservation Culture

	B	standard error difference	conspicuousness	Exp(B)	95% confidence interval	
					lower limit	superior limit
The method is complex and difficult to master and adhere to.	-0.709	0.426	0.096	0.492	0.214	1.134
An important part of the excellent traditional Chinese culture, it is worthy of inheritance and development	0.838	0.676	0.216	2.311	0.614	8.700
Concerns about side effects or adverse reactions	-0.994	0.521	0.056	0.370	0.133	1.028
The taste is not acceptable.	-1.054	0.488	0.031	0.348	0.134	0.907
Traditional Chinese Medicine (TCM) health preservation methods are more natural with fewer side effects	0.515	0.784	0.512	1.673	0.360	7.782
Scientificity and Effectiveness of Traditional Chinese Medicine in Health Preservation	1.836	0.813	0.024	6.273	1.275	30.872
Lack of a supportive environment or companionship	-0.815	0.419	0.050	0.443	0.195	1.005
The Health Management of College Students with Learning Traditional Chinese Medicine Health Preservation Knowledge	1.853	0.664	0.005	6.381	1.737	23.44
constant	2.884	0.921	0.002	17.88		

5.2.4. Model Result Analysis

Using the group that has not been exposed to or studied systematic Traditional Chinese Medicine (TCM) knowledge as the reference, the model's output results indicate that the regression coefficient for the perceived benefit of learning TCM health preservation knowledge in college students' self-health management is 1.853, with a significance level of less than 0.05. The null hypothesis is rejected, demonstrating that the perceived benefit of learning TCM health preservation knowledge in college students' self-health management exhibits a significant positive correlation with the group that has been exposed to or studied systematic TCM knowledge. The exponent (B) is 6.381, indicating that for every unit increase in perceived benefit, the effect size is 6.381 times. This suggests that among the group that has been exposed to or studied systematic TCM knowledge, students who more

and "the benefits of learning TCM health preservation knowledge for personal health management."

5.2.2. Model Testing

As shown in Table 5, all model coefficients are statistically significant ($p < 0.05$), which rejects the null hypothesis and confirms the overall significance of this model.

Table 5. Omnibus Test for Model Coefficients

	chi-square	free degree	conspicuousness
step	54.650	20	<0.001
block	54.650	20	<0.001
model	54.650	20	<0.001

As shown in Table 6, the model's significance exceeds 0.05, confirming the null hypothesis and indicating that the observed data fit well with the regression model.

Table 6. Hosmer-Lemeshow Test Table

chi-square	free degree	conspicuousness
5.822	8	0.667

5.2.3. Model Establishment

Eight explanatory variables were identified, including the degree of favorable perception toward traditional Chinese medicine (TCM) health preservation culture and the recognition of its scientific validity and efficacy, designated as ξ_i ($i = 1, 2, \dots, 8$). The output results are presented in Table 7.

strongly support the idea that learning TCM health preservation knowledge benefits their self-health management will engage more deeply in studying TCM knowledge.

5.3. Factor Analysis of Influencing Factors on College Students' Recognition of Traditional Chinese Medicine Health Preservation Culture

Through random grouping, exploratory factor analysis was conducted on one set of questionnaire data using SPSS 27.0 software. Professional knowledge was applied to extract appropriate factors, name them, and establish their relationships with items, thereby identifying the factors. First, KMO and Bartlett's test were performed on the 10-item scale

in the questionnaire. The observed values for Bartlett's spherical test in Table 8 were 1328.303 and KMO value 0.924, both exceeding 0.7, indicating that the original variables were suitable for factor analysis. In this study, the number of common factors was determined using the eigenvalue criterion, scatter plot, and cumulative variance contribution rate. Table 8 shows that the first common factor among the five extracted factors has a cumulative variance contribution rate of 48.140%, while the cumulative variance contribution rate of the first five factors is 87.974%, meeting the 85% explanation standard. Therefore, the analysis achieves the goal of dimensional reduction.

It can be seen from Table 8 the factor loading of different common factors on different variable indicators. The first factor has a significant load in food therapy/medicinal diet, appoint massage, Tai Chi, traditional Chinese medicine conditioning, emotional conditioning, and seasonal health preservation, reflecting the degree and cognitive level of college students' understanding of various specific methods

of traditional Chinese medicine health preservation, and is defined as the knowledge understanding factor of traditional Chinese medicine health preservation. The second one has a large payload in the willingness to recommend, reflecting the willingness of college students to recommend traditional Chinese medicine for health preservation and to others, and is defined as the willingness to recommend traditional Chinese medicine factor. The third factor, which has a large payload of less natural side effects, reflects college students' recognition of the core value of traditional Chinese medicine health preservation and is defined as the natural factor of traditional Chinese medicine. The fourth factor has a large load on the cultural identity of traditional Chinese medicine, reflecting the degree of acceptance and cultural identity of traditional Chinese medicine culture among college students, and is defined as the cultural identity factor of traditional Chinese medicine. The fifth factor has a significant load on scientific confidence in traditional Chinese medicine and is defined as the scientific confidence factor.

Table 8. Results of Factor Analysis

Item	Factor Loadings					Communality (Common Factor Variance)
	Factor1	Factor2	Factor3	Factor4	Factor5	
Understanding of dietary therapy and medicinal cuisine as health preservation methods	0.897	-0.048	-0.105	-0.027	0.011	0.817
Understanding of Acupoint Massage/Moxibustion as a Traditional Chinese Medicine Health Preservation Method	0.860	0.115	0.029	-0.015	0.040	0.742
Understanding of the Medical and Health Preservation Methods of Tai Chi/Baduanjin	0.898	-0.032	-0.054	-0.083	0.000	0.815
Understanding of Traditional Chinese Medicine (TCM) health preservation methods (e.g., paste prescriptions, herbal tea substitutes)	0.904	-0.066	0.038	-0.058	-0.001	0.826
Understanding of medical and health preservation methods for emotional regulation (such as meditation and breath control)	0.895	-0.020	0.025	-0.047	0.011	0.803
Understanding of medical and health preservation methods adapted to solar terms	0.888	-0.043	-0.048	-0.018	0.012	0.793
Recommend traditional Chinese medicine (TCM) health preservation methods to friends or family members	-0.040	-0.048	0.992	0.063	0.066	0.692
Recognition of the view that traditional Chinese medicine health preservation methods are more natural and have fewer side effects	-0.036	0.991	-0.048	0.041	0.086	0.756
Recognition of the scientific validity and efficacy of Traditional Chinese Medicine (TCM) health preservation	0.030	0.086	0.066	0.015	0.993	0.525
Develop a sense of cultural identity and belonging to traditional Chinese medicine health preservation culture	-0.091	0.041	0.063	0.992	0.015	0.418
Eigenvalues (before rotation)	4.809	1.241	1.101	0.935	0.719	
Variance explained % (before rotation)	48.087	12.411	11.011	9.348	7.192	
Cumulative variance explained % (before rotation)	48.087	60.497	71.508	80.856	88.047	
Eigenvalues (before rotation)	4.770	1.016	1.013	1.005	1.001	
Variance explained % (before rotation)	47.702	10.157	10.130	10.048	10.010	
Cumulative variance explained % (before rotation)	47.702	57.859	67.989	78.037	88.047	
KMO value	0.924					

6. Empirical Conclusion and Recommendations

6.1. Empirical Findings

Factoranalysis identified five common factors

(47.702%,10.157%,10.130%,10.048%, and 10.010%) from ten core indicators influencing Generation Z's acceptance of TCM health preservation culture. These factors-understanding of TCM methods, willingness to recommend TCM, value of TCM, cultural identity with TCM, and confidence in TCM's scientific validity-accounted for 88.047%

of total variance. The results demonstrate that all five factors significantly influence Generation Z's acceptance behavior, with the understanding factor being the most dominant.

The study identified traditional Chinese medicine (TCM) health preservation methods, with TCM regulation (e.g., paste prescriptions, herbal tea substitutes) as the primary influencing factor, achieving the highest loading value of 0.904. Generation Z college students' understanding of TCM health preservation primarily depends on exposure to specific practices. Their familiarity with practical approaches like dietary therapy, acupoint massage, Tai Chi, emotional regulation, and seasonal health preservation directly impacts their willingness to embrace the holistic culture. The survey revealed that only 9.28% of students were "somewhat familiar" with TCM health preservation culture, 1.69% "very familiar," while 32.49% "completely unfamiliar" and 33.33% "not very familiar." Most students' knowledge of specific health preservation methods remains superficial, constituting a key bottleneck in their cultural acceptance.

The core indicator of the recommendation intention factor for Traditional Chinese Medicine (TCM) health preservation is the behavior of recommending to friends or family, with a loading of 0.992. The cultural acceptance among college students exhibits distinct social transmission characteristics. The intensity of their willingness to recommend to others after self-identification directly reflects their depth of recognition of TCM health preservation culture. Data indicate that although some students have a certain level of awareness about TCM health preservation, their willingness to actively disseminate it is insufficient, with only a minority actively recommending it to those around them. This is closely related to the behavioral characteristics of young groups emphasizing social identification.

Among the health preservation value factors of Traditional Chinese Medicine (TCM), the recognition of 'minimal natural side effects' serves as the core influencing indicator, with a loading factor of 0.991. Generation Z college students, who grew up in an era of heightened health awareness, exhibit particular concern for the safety of health preservation methods and demonstrate a clear preference for natural, low-invasive, and minimally adverse treatment approaches. In the survey, over half of the students acknowledged the core advantage of TCM as 'natural and gentle,' a perception that directly influences their attitude toward TCM health preservation culture and becomes a critical consideration in their decision to attempt related methods.

The cultural identity factor of Traditional Chinese Medicine (TCM) health preservation culture, with cultural identity and sense of belonging as core indicators, has a loading of 0.992. The emotional resonance and cultural belonging perception of Generation Z college students toward TCM health preservation culture serve as the key psychological foundation for their transition from "understanding" to "practice." However, some students currently perceive TCM culture merely as a "practical tool," lacking comprehension of its core concepts such as "holistic philosophy" and "syndrome differentiation and treatment." This weak sense of cultural belonging makes it difficult to translate identification into sustained practical behavior.

The core indicator of the confidence factor for the scientific nature of Traditional Chinese Medicine (TCM) health preservation is confidence in its scientific validity and efficacy, with a loading of 0.993. Among young populations dominated by rational thinking, the recognition of the

scientific attributes of TCM health preservation serves as a critical prerequisite for establishing trust and engaging in practice. Logistic regression analysis revealed that students who have confidence in the scientific validity and efficacy of TCM health preservation are 6.273 times more likely to systematically acquire relevant knowledge compared to those lacking such confidence, fully demonstrating the pivotal role of scientific cognition in driving acceptance behaviors.

Furthermore, decision tree analysis revealed that grade level significantly influences college students' favorable attitudes toward traditional Chinese medicine (TCM) health preservation culture. Freshmen and juniors demonstrated relatively higher levels of aversion, with 26.728% expressing strong disapproval. In contrast, sophomores, seniors, and graduate students showed stronger acceptance, with 28.0% exhibiting moderate agreement (confidence level: 0.280). Neural network modeling indicated that among the purposes of TCM health preservation, 'strengthening physical health and enhancing immunity' held the highest importance (0.195), serving as the primary driver of learning motivation. Among the valued factors, 'personal constitution or symptoms' ranked first (0.217), reflecting college students' strong demand for personalized health management. Logistic regression analysis further revealed that 'the perceived benefits of TCM in health management' significantly positively influenced students' systematic learning of related knowledge, with an exponent (B) of 6.381—students who endorsed this view were 6.381 times more likely to pursue in-depth TCM studies compared to those who did not.

6.2. Recommendations and Countermeasures

6.2.1. Social Aspects

Fostering a diverse communication ecosystem, innovating cultural presentation formats, and consolidating health communication platforms. In the current digital environment, the quality of Traditional Chinese Medicine (TCM) health preservation information varies significantly, with partial interpretations and false advertisements misleading young audiences. It is imperative to establish an authoritative, engaging, and youth-oriented communication framework. Firstly, collaborate with TCM research institutions, tertiary hospitals, and mainstream media to create a "TCM Health Preservation Science Popularization Matrix." Utilize formats such as short videos, live streams, and science comics to explain practical content like dietary therapy recipes, acupoint massage techniques, and seasonal health preservation principles. Reinforce the core perceptions of "natural safety" and "scientific efficacy" to address students' "cognitive ambiguity." Secondly, promote the deep integration of TCM health preservation with trendy cultures by supporting innovative formats such as "herbal milk tea," "herbal wellness markets," and "health preservation cultural and creative products." Integrate traditional health preservation wisdom into daily life scenarios to reduce acceptance barriers for young people and stimulate their exploratory interest. Thirdly, establish cross-regional exhibition and exchange platforms. Organize TCM public welfare clinics, community health preservation practices, and intangible cultural heritage health preservation skill demonstrations. Enable college students to experience the practical value of TCM through firsthand engagement. Simultaneously, regulate online communication order, combat false health preservation information, and provide a clear and healthy information environment for young audiences.

6.2.2. From the School's Perspective

Strengthen educational guidance and leverage the educational function of campus culture. Schools serve as critical settings for the formation of cultural cognition among Generation Z college students, necessitating targeted initiatives. Firstly, offer specialized general education courses on Traditional Chinese Medicine (TCM) health preservation, covering foundational theories such as Yin-Yang and Five Elements, visceral meridians, and the concept of food as medicine. These courses should integrate practical modules including constitution identification, health preservation plan design, and management of common sub-health conditions, complemented by case analysis and group discussions to meet students' needs for personalized health management. Surveys indicate strong demand among college students for "specialized general education courses," which are considered a key approach to promoting TCM culture. Secondly, enrich campus cultural activities by organizing lectures on TCM health preservation, hands-on acupressure workshops, Tai Chi/Baduanjin promotion competitions, and seasonal health preservation recipe contests. Establish off-campus practice bases and arrange visits to TCM hospitals and intangible cultural heritage workshops, enabling students to deepen their understanding through immersive experiences. Thirdly, utilize campus communities to build communication platforms by forming health preservation interest clubs, encouraging students to share health preservation experiences and collaborate on practical activities, thereby enhancing cultural acceptance through peer influence. Simultaneously, strengthen collaboration with TCM colleges by introducing professional instructors for joint teaching, thereby enhancing the scientific rigor and authority of the curriculum and addressing the shortage of TCM health preservation educational resources in universities.

6.2.3. Personal Aspects

Establish scientific cognition and actively practice the concept of health preservation to achieve the transformation from "cognition" to "action". Generation Z college students should adopt a rational attitude towards traditional Chinese medicine (TCM) health preservation culture and integrate it into their daily study and life. First, actively broaden channels for knowledge acquisition by systematically learning the basics of TCM health preservation through authoritative popular science books, official medical institution WeChat accounts, and professional online courses, distinguishing scientific health preservation from feudal superstition, and avoiding blindly following "internet celebrity health preservation methods". Second, choose health preservation methods based on personal constitution and health needs, integrating TCM health preservation into daily routines: such as regulating sub-health through barbary wolfberry chrysanthemum tea and sour jujube seed tea, relieving study stress with appoint massage, and adjusting emotions through meditation and breathing exercises, experiencing its value in practice. Third, enhance cultural identity and awareness of dissemination, recommending high-quality TCM health preservation methods to family and friends after benefiting from them, becoming young carriers of cultural inheritance; while rationally viewing the role boundaries of TCM and clarifying its core advantage of "preventive regulation".

6.2.4. Family Aspects

Enhance guidance and demonstration to foster a family atmosphere for cultural inheritance and build a bridge for inter-generational cultural transmission. The family serves as

a crucial link in the inter-generational transmission of Traditional Chinese Medicine (TCM) health preservation culture, exerting a subtle influence on the cognitive formation of college students. Firstly, parents should set an example by actively learning and practicing scientific TCM health preservation methods, such as daily dietary adjustments, seasonal health preservation practices, and family acupoint massage, thereby integrating TCM health preservation into family life scenarios. Secondly, strengthen communication with children by establishing an equal and respectful communication model. Share TCM health preservation knowledge and experiences through family health case studies, avoiding rigid didactic approaches. For cognitive confusions in children, jointly consult authoritative materials and professional physicians to help them establish scientific understanding. Thirdly, support children's participation in TCM health preservation-related courses and practical activities, providing necessary support such as purchasing popular science books and health preservation tools. Encourage children to apply the health preservation knowledge learned in school to family life. Simultaneously, create a harmonious and fulfilling family atmosphere, enabling children to enhance their sense of belonging to traditional culture through emotional nourishment, thereby laying a psychological foundation for the acceptance and recognition of TCM health preservation culture.

7. Conclusion

Based on the perspective of Generation Z college students, this study conducted an empirical analysis of the collected data through distributing questionnaires and employing factor analysis methods using SPSS statistical software, aiming to explore the current development status of traditional Chinese medicine health preservation culture.

The research results indicate that current college students hold an affirmative and supportive attitude towards traditional Chinese medicine (TCM) health preservation culture. Among them, college students have a prominent demand for knowledge about TCM health preservation culture, which serves as a core breakthrough point for promoting TCM health preservation culture.

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