RESEARCH ARTICLE

The Consumption Willingness of Medicinal Food in the Context of Traditional Chinese Medicine Cultural Identity: Taking Guangzhou City as an Example

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Abstract

With the innovative development of traditional Chinese medicine and the implementation of China's Great Health Strategy, the food and medicine industry has ushered in new development opportunities. However, the development of traditional Chinese medicine still faces challenges such as irrational resource allocation and the need to modernize governance. This study explores the influence of traditional Chinese medicine (TCM) cultural identity on the consumption intention of medicinal food, as well as the roles of perceived consumption value and perceived consumption risk in this process. Based on cultural identity theory, perceived risk theory, and consumption value theory, a research model was constructed. Data were collected through questionnaires distributed to residents of Guangzhou City and analyzed using reliability and validity tests, multicollinearity diagnostics, confirmatory factor analysis, and structural equation modeling. The results show that TCM cultural identity has a significant positive effect on medicinal food consumption intention, and perceived consumption value plays a partial mediating role between TCM cultural identity and medicinal food consumption intention. However, perceived consumption risk does not have a significant moderating effect on the relationship between TCM cultural identity and medicinal food consumption intention. This study provides theoretical guidance for the government, hospitals, and the TCM industry to promote the healthy development of the medicinal food sector and to guide consumers toward scientific consumption, thereby highlighting the study's economic and social significance.

Keywords: Cultural identity of traditional Chinese medicine, Medicinal dietary consumption willingness, Perceived consumption value, Perceived consumption risk, Consumer behaviour.

1 Research background

Chinese medicine culture is a representative of the traditional culture of the Chinese nation, reflecting the cultural and national identity of the Chinese nation. With the innovative development of Chinese traditional medicine and the implementation of

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Table 1. Overall study table.

Variable Measurement	Secondary dimensions				
Consumer sentiment	The likelihood of me consuming medicinal meals is high			I would like to recommend the medicinal food to my relatives and friends who need it	
Perceived consumer value	Functional value			Sentimental value	
Perceived consumer risk	Cognitive risk	Physical risk	Performance risk	Time risk	Financial risk
Chinese Medicine Cultural Identity	Mindset identity		Emotional identity	Behavioral identity	

China's great health strategy, the development of the food and medicine industry is showing a new trend. At the same time, the development of Chinese medicine is facing new challenges. There is still a considerable gap between the development of Chinese medicine in Guangdong Province, China, and the multi-level and diversified needs of the people, the structure of resource allocation is unreasonable, and the modernisation of the governance capacity of Chinese medicine needs to be strengthened.

A retrospective study published in scientific reports assessed changes in young people's physical fitness in the year since the start of the epidemic. The results showed that the COVID-19 pandemic and its response resulted in significant impairment of various aspects of young people's physical health. It can be seen that the current demand for Chinese medicine by the people shows a trend of steady growth, therefore, the comprehensive popularisation of dietary nutritional knowledge is based on the current good demand for Chinese medicine by the people, and how to better go about innovating medicinal diets and understanding the needs of the consumer is the focus of this study aims. The overall structure of the study variables is presented in Table 1.

2 Literature review and research hypothesis

2.1 Cultural Identity Theory and Chinese Medicine Cultural Identity

2.1.1 Cultural identity theory

Cultural identity not only affects the individual's sense of self-identity and group belonging, but also influences the maintenance of national and ethnic traditions and cultures, the maintenance of national ideologies, and the international political landscape.That is why cultural identity has become a hot research topic in recent years, not only because scholars are interested in it, but also because the issue of cultural identity is the most active and widely influential active factor affecting modern society [1].

2.1.2 Concepts and dimensions of Chinese medicine cultural identity

Chinese medicine culture is a representative of the traditional culture of the Chinese nation, reflecting the cultural and national identity of the Chinese nation and the similarity and relevance of Chinese medicine culture to the culture of the Chinese nation.Based on previous studies, the concept of TCM cultural identity can be understood as the positive psychological and corresponding behavioural tendencies that individuals perceive the cultural values and cultural value functions condensed in the TCM culture and display [2].

2.1.3 Influence of Consumption Intention of Chinese Medicine Cultural Identity Teams

Conroy et al. [3] explored how Chinese consumers and medical professionals perceive and utilize functional foods, particularly in the context of traditional Chinese medicine (TCM). Their findings indicate that TCM functional foods are commonly understood as occupying a hybrid role between nutrition and medicine, contributing to preventive health and overall wellbeing. The study also reveals differences in how consumers and doctors evaluate the efficacy and appropriate use of such products, highlighting the complexity of decision-making in this domain. These

insights suggest that consumers' acceptance and use of TCM functional foods are shaped more by health beliefs and perceived functionality than by purely symbolic or identity-driven factors.

H1: Chinese medicine cultural identity has a positive effect on the willingness to consume medicinal diets.

2.2 Perceived risk theory

2.2.1 The concept of perceived risk

"Risk perception" is a psychological concept, also known as cognitive risk and perceived risk, which is the individual's awareness and perception of the existence of external objective risks, in addition to emphasizing the impact of the individual's perception through intuitive judgement and the experience gained through subjective perception.Risk in the field of consumer behaviour is a concept based on loss, which arises when an individual's decision or behaviour produces social or economic consequences that cannot be estimated with certainty [4]. At the same time, consumers hesitate when deciding whether to purchase a particular good or service [5].

2.2.2 Dimensions of Perceived Risk

Lim [6] argued that consumers' perceived risk manifests itself in four ways: loss of time, risk of bodily harm, loss of self, and loss of money. Jacoby et al. [7] identified five risk dimensions of perceived risk in a 1972 study: psychological risk, financial risk, performance risk, physical risk, and social risk.

According to consumer value theory, consumers' perceived value of a product positively promotes their willingness to consume. Furthermore, Kacen and Lee [8] demonstrated that cultural factors significantly moderate consumers' impulsive buying behavior. In actual consumption scenarios, many consumer behaviors are often irrational and driven by emotional outbursts or expressions. In such irrational consumption contexts, cultural identity can further strengthen consumers' perceived value of a product. Specifically, when consumers strongly identify with a country's culture and lifestyle, it enhances their value recognition and product recognition associated with that cultural lifestyle, thereby increasing consumption intention.

H2: Perceived consumption value has a positive mediating effect in the activity of TCM cultural identity on the willingness to consume medicinal food.

H2-1: TCM cultural identity has a positive effect on perceived consumer value

H2-2: Perceived consumption value has a positive effect on willingness to consume medicinal diets

2.3 Consumer value theory

2.3.1 The concept of consumer value

Consumer value theory was developed by Sheth et al. [9] after extended research in sociology, psychology, economics and consumer behaviour. Consumer values proposed in this theory include functional, social, emotional, cognitive and conditional values.

2.3.2 The Moderating Role of Consumer Risk Concerns

Generally, perceived consumption risk as a moderating variable plays a negative moderating role, but it may happen differently under the influence of culture. Individuals may not activate cultural identity protection mechanisms for unfamiliar risks; only when perceived risks trigger cultural conflicts do such mechanisms emerge [10]. Chinese medicine cultural identity can be understood as the individual has a strong liking for Chinese medicine culture and believes that Chinese medicine culture is high, so they will follow Chinese medicine culture and consume products related to this culture, and when the consumer's cultural identity of Chinese medicine is threatened, such as when a perceived consumption risk arises for medicinal diets, a conflict between Western and Eastern medicine cultures may arise, and out of the protective mechanism of Chinese medicine culture, the individual's willingness to consume The willingness of individuals to consume such related products as medicinal diets is increased due to the protection mechanism of Chinese medicine culture.

H3: Perceived consumption risk positively moderates the effect of Chinese medicine cultural identity on medicinal dietary consumption intention.

2.4 Modelling

Based on the above analysis, the following model is constructed as in Figure 1 :

2.5 Summary of the chapter

From the perspective of perceived risk theory, medicinal food may have certain risk perception in the mind of consumers: from the perspective of consumption value theory, medicinal food has unique consumption value; from the perspective of cultural identity theory, medicinal food, as an important carrier of Chinese medicine culture, has profound cultural heritage and national characteristics; from the perspective of Chinese medicine cultural identity,

Table 2. Collinearity Diagnostics.

Item number	Term (in a mathematical formula)	VIF value	Tolerance
U1	Medical benefits of medicinal diets	3.047	0.328
U2	Medicinal meals can be colourful and flavourful	2.838	0.352
U3	Eating medicinal food makes me feel like I have a healthy lifestyle	4.420	0.226
U4	Eating medicinal food makes me more proud of our Chinese medicine culture	4.625	0.216
U5	I am worried that I don't know the contraindications of medicinal diets and choose the wrong one for me.	9.890	0.101
U6	I'm worried that I won't be able to identify my body type correctly and choose the wrong medicinal diet that doesn't suit my body type.	11.057	0.090
U7	I'm worried about the medicinal diet itself having side effects on the body	4.053	0.247
U8	I'm worried that the authenticity and quality of the herbal ingredients can't be guaranteed	3.061	0.327
U9	I'm worried that the ratios of medicinal diets don't conform to the principles of Chinese medicine compounding	2.666	0.375
U10	I'm concerned that the medicinal food is not convenient enough to consume	4.787	0.209
U11	I'm worried that the cooking process of medicinal food is tedious and complicated	6.933	0.144
U12	I'm concerned that the pricing of medicinal food is unreasonable	3.664	0.273
U13	Chinese medicine culture represents the harmony between man and nature, and health needs to follow the law of the four seasons, as the saying goes, "Nourish Yang in spring and summer, and Yin in autumn and winter".	14.579	0.069
U14	Getting theyin and yang properties of foods or medicines right can regulate the body's equilibrium	11.364	0.088
U15	Chinese medicine culture is an important part of traditional outstanding culture	4.756	0.210
U16	I am interested in Chinese medicine-themed animation works, documentaries, popular science programs, film and television works short videos, etc.	5.086	0.197
U17	I am interested in visiting Chinese medicine cultural experience venues, museums or educational bases, etc.	6.060	0.165
U18	I am interested in reading books related to Chinese medicine culture	4.530	0.221
U19	If I get sick, I'll consider going to a Chinese doctor.	5.219	0.192
U20	When I have learnt something about Chinese medicine, I will take the initiative to talk about and promote Chinese medicine to my family and friends.	5.316	0.188
U21	I am usually concerned about and understand knowledge related to Chinese medicine	13.820	0.072
U22	I usually use what I know about Chinese medicine to maintain my health	10.412	0.096

Note: Red underlining indicates VIF >10 or null.

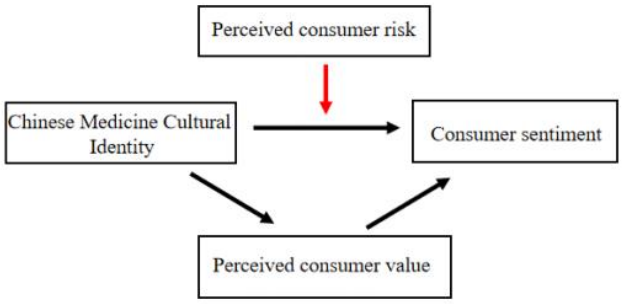


Figure 1. Research Model.

through the dissemination of medicinal food From the perspective of Chinese medicine cultural identity, through the dissemination and promotion of medicinal food, more people can understand and accept Chinese medicine culture.

3 Design and implementation of investigation programmes

3.1 Overall study design

The questionnaire in this paper was designed to investigate personal information, consumption preference for medicinal food, perceived consumption value of medicinal food, perceived consumption risk of medicinal food, identification with the culture of traditional Chinese medicine, and consumption intention of medicinal food.

3.2 Purpose of the survey

The main purpose of this paper is to analyse the positive influence of TCM cultural identity on the willingness to consume medicinal meals, the perceived value of consumption plays a positive mediating influence in the influence of TCM cultural identity on the willingness to consume medicinal meals, and the perceived risk of consumption positively regulates the influence of TCM cultural identity on the willingness to consume medicinal meals.

Therefore, based on the purpose of analysis, this paper selects Guangzhou residents who have a high degree of fondness for medicinal diets as survey respondents, and uses the questionnaire star platform and lets respondents fill in the questionnaire through multiple-choice questions and scale questions.

3.3 Sampling programme

Based on the research objectives of this study and the characteristics of the high mobility of the research population, the sampling method used in this study was random sampling. A total of 451 questionnaires were distributed in this study, and a total of 414 valid questionnaires were collected in the end, while probability-based sampling method was used, which allows the sample size to be determined through the overall collection process. The sample size and the formula for calculating it are as follows:

$$\begin{aligned} n &= \frac{N}{1+Ne^2} \\ &= \frac{18734100}{1+18734100\times 0.05^2} \\ &= 400 \end{aligned}$$

For the accuracy of the findings and the generalisability of the conclusions, this study was planned to determine a sample size of at least 400.

After the official survey, the questionnaire was distributed for a period of one month and 451 questionnaires were distributed. After excluding irregular answers, duplicate answers and invalid questionnaires, 414 valid questionnaires were eventually recovered, with a validity rate of 92%.

4 Data analysis and model validation

4.1 Descriptive statistical analysis of the sample

The 414 valid questionnaires returned and analysed show that health and wellness concerns span different economic levels, reflecting the prevalence of health awareness.

4.2 Reliability validity analysis

The reliability and validity Cronbach α coefficients of 0.961 and 0.899 can be learnt from the analysis of Spss software, so the reliability and validity are good.

5 Structural equation analysis

5.1 Covariance analysis (maths)

Around the dependent variable of consumption intention, the research model involves multiple independent variables such as perceived consumption risk, perceived consumption value, and Chinese medicine cultural identity. In order to avoid the impact of multicollinearity between independent variables on the model analysis, this study conducted a multicollinearity analysis on the self-programmed items of perceived consumption risk, perceived consumption value and TCM cultural identity to obtain Table 2.

In this paper, we use the frequently used VIF and tolerance values, as shown above, the VIF values are

between 1 and 10, and the tolerance values are all greater than 0.1. Taking the VIF value >10 as the criterion of covariance, from the above table, we can see that: there are 5 terms (U5, U13, U14, U21, U22) corresponding to the VIF value >10 , so this study will remove these 5 terms from the model in the following model analysis. removed from the model.

5.2 Validated factor analysis

After screening the covariance indicators, the convergent validity of the scale was assessed before analyzing the full range of influence pathways included in the model. Therefore, this study employed confirmatory factor analysis (CFA), using indicators such as AVE and CR for evaluation. The judgment criteria are shown in Table 3.

Table 3. Results of AVE and CR indicators for the model.

Factor	Mean variance extraction AVE value	Combined Reliability CR
Factor 1	0.691	0.899
Factor 2	0.656	0.930
Factor 3	0.673	0.924
Factor 4	0.856	0.922

This validated factor analysis (CFA) analysis for a total of 4 factors, and 19 analytical items revealed that the data from this analysis had good convergent (convergent) validity.

5.3 Model validation

After the screening of covariance indicators and the aggregation validity test, this study averaged all the items of each variable to form four comprehensive variables, including TCM cultural identity, consumption willingness, perceived consumption value, and perceived consumption risk, in order to develop the research hypotheses and model validation.

5.3.1 Influence of Chinese Medicine Cultural Identity on Consumption Intention

From Table 4, it can be seen that: when the cultural identity of Chinese medicine has an impact on consumption intention, the cultural identity of Chinese medicine will have a significant positive impact relationship on consumption intention, so H1 passes the test.

5.3.2 The mediating role of perceived consumption value

It can be learnt from Table 5 that perceived consumption value plays a positive mediating influence in the activity of TCM cultural identity on medicinal dietary consumption willingness, and the role is partially mediated. However, from the size of the effect value, the main factor in promoting consumption willingness is TCM cultural identity, and the mediating role of perceived consumption value is small but cannot be ignored, so the promotion of perceived consumption value can be used as a complementary measure to promote the promotion of consumption willingness.

5.3.3 The moderating role of perceived consumption risk

(1)Analysis of the Moderating Role of Perceived Consumption Risk on the Influence of Chinese Medicine Cultural Identity on Consumption Intention of Medicinal Diets.

From Table 6, it can be learnt that perceived consumption risk has no moderating role in the influence of TCM cultural identity on the willingness to consume medicinal diets.

(2)Analysis of the Moderating Role of Perceived Consumption Risk in the Impact of TCM Cultural Identity on Perceived Consumption Value.

From Table 7, it can be learnt that perceived consumption risk has no moderating role in the influence of TCM cultural identity on perceived consumption value.

(3) Analysis of the Moderating Role of Perceived Consumption Risk in the Influence of Perceived Consumption Value on Consumption Intentions for Medicinal Foods.

As can be seen in Table 8, perceived consumption risk has no moderating role in the effect of perceived

Table 4. Summary table of model regression coefficients.

X	→	Y	Unstandardised path coefficients	SE	z (CR value)	p	Standardised path factor
Chinese Medicine Cultural Identity	→	consumption intention	0.926	0.052	17.982	0.000	0.839

Table 5. Intermediation test - horizontal format.

Term	notation	significance	Effect	95% CI		z value /t value	p-value	Reach a verdict
				lower limit	limit			
Chinese medicine cultural identity =>perceived consumer value =>willingness to consume	a*b	indirect effect	0.092	0.003	0.184	2.003	0.045	intermediary
Chinese medicine cultural identity =>perceived consumer value	a	X=>M	0.651	0.532	0.770	10.722	0.000	
Perceived consumer value =>willingness to consume	b	M=>Y	0.142	-0.005	0.288	1.996	0.049	
Chinese medicine cultural identity =>willingness to consume	c′	direct effect	0.802	0.662	0.943	11.193	0.000	
Chinese medicine cultural identity =>willingness to consume	c	total effect	0.894	0.790	0.998	16.849	0.000	

Table 6. Results of the analysis of the moderating effect corresponding to scenario H3-1.

	Model 1	Model 2	Model 3
constant	5.357** (82.958)	5.357** (83.165)	5.366** (79.871)
Chinese Medicine Cultural Identity	0.894** (16.849)	0.858** (14.330)	0.849** (13.555)
Consumer Perceived Risk		0.077 (1.293)	0.070 (1.129)
Cultural Identity of Chinese Medicine * Perceived Risk of Consumption			-0.014 (-0.508)
R^2	0.679	0.683	0.684
Adjustment R^2	0.677	0.679	0.677
F value	F (1,134)=283.884, p=0.000	F (2,133)=143.489, p=0.000	F (3,132)=95.212, p=0.000
ΔR^2	0.679	0.004	0.001
Δ F value	F (1,134)=283.884, p=0.000	F (1,133)=1.672, p=0.198	F (1,132)=0.258, p=0.612

Dependent variable: willingness to consume * p<0.05 ** p<0.01 t-values in parentheses

consumption value on willingness to consume medicinal meals.

In order to investigate the reasons for the lack of moderating effect of perceived consumption risk, this study analysed the correlation between perceived consumption value and perceived consumption risk, and by using Spearman's correlation coefficient, Table 9 were obtained by analysing the eleven question items of perceived consumption value and perceived consumption risk.

From Table 9, it can be learnt that perceived consumption risk is highly correlated with perceived consumption value. Therefore, in order to explore the influence relationship between perceived consumption value and perceived consumption risk, so the perceived consumption risk is put into the model of TCM cultural identity, consumption willingness, and perceived consumption value for the path analysis to get Figure 2.

As shown in Figure 2, perceived consumption value

Table 7. Results of moderating effects analysis for scenario H3-2.

	Model 1	Model 2	Model 3
constant	5.357** (60.328)	5.357** (60.291)	5.363** (55.910)
Perceived consumer value	0.711** (9.327)	0.655** (6.695)	0.646** (5.912)
Consumer Perceived Risk		0.086 (0.915)	0.084 (0.888)
Perceived value of consumption *Perceived risk of consumption			-0.007 (-0.181)
R^2	0.394	0.397	0.398
Adjustment R^2	0.389	0.388	0.384
F Value	F (1,134)=86.991, p=0.000	F (2,133)=43.862, p=0.000	F(3,132)=29.039, p=0.000
Δ R^2	0.394	0.004	0.000
ΔF value	F(1,134)=86.991, p=0.000	F(1,133)=0.838, p=0.362	F(1,132)=0.033, p=0.857

Dependent variable: willingness to consume * p<0.05 ** p<0.01 t-values in parentheses

Table 8. Scenario H3-3 Results of the analysis of the moderating effect.

	Model 1	Model 2	Model 3
constant	5.730** (77.594)	5.730** (87.890)	5.764** (85.765)
Chinese Medicine Cultural Identity	0.651** (10.722)	0.474** (7.823)	0.441** (7.042)
Consumer Perceived Risk		0.378** (-6.239)	0.351** (-5.663)
Cultural Identity of Chinese Medicine * Perceived Risk of Consumption			-0.049 (-1.846)
sample size	136	136	136
R^2	0.462	0.584	0.594
Adjustment R^2	0.458	0.577	0.585
F Value	F(1,134)=114.971, p=0.000	F(2,133)=93.213, p=0.000	F(3,132)=64.402, p=0.000
Δ R^2	0.462	0.122	0.010
Δ F value	F(1,134)=114.971, p=0.000	F(1,133)=38.920, p=0.000	F(1,132)=3.406, p=0.067

Dependent variable: willingness to consume * p<0.05 ** p<0.01 t-values in parentheses

Table 9. Spearman Correlation-Delta Line Format.

	1	2	3	4	5	6	7	8	9	10	11
U1	1										
U2	0.667**	1									
U3	0.649**	0.724**	1								
U4	0.630**	0.597**	0.727**	1							
U5	0.465**	0.414**	0.420**	0.456**	1						
U7	0.343**	0.381**	0.356**	0.365**	0.725**	1					
U8	0.390**	0.377**	0.332**	0.318**	0.697**	0.726**	1				
U9	0.273**	0.351**	0.324**	0.295**	0.613**	0.673**	0.623**	1			
U10	0.403**	0.417**	0.445**	0.430**	0.542**	0.570**	0.442**	0.646**	1		
U11	0.433**	0.408**	0.350**	0.394**	0.617**	0.686**	0.593**	0.640**	0.812**	1	
U12	0.480**	0.393**	0.442**	0.483**	0.642**	0.671**	0.619**	0.564**	0.610**	0.744**	1

Table 10. Results of linear regression analysis.

	Unstandardised coefficient		Standardised coefficient	T	P	Covariance Diagnostics	
	B	Standard Error	Beta			VIF	Tolerance
Constant	0.523	0.320	-	1.635	0.105	-	-
U15	0.129	0.064	0.121	2.000	0.048*	1.715	0.583
U16	0.265	0.087	0.272	3.046	0.003**	3.744	0.267
U17	-0.085	0.072	-0.095	-1.188	0.237	2.977	0.336
U19	0.170	0.082	0.190	2.067	0.041*	3.956	0.253
U20	0.402	0.077	0.456	5.248	0.000**	3.531	0.283
R^2				0.722			
AdjustmentR^2				0.712			
F			F (5,130)=67.676, p=0.000				
D-W value				1.857			

Dependent variable: willingness to consume * p<0.05 ** p<0.01

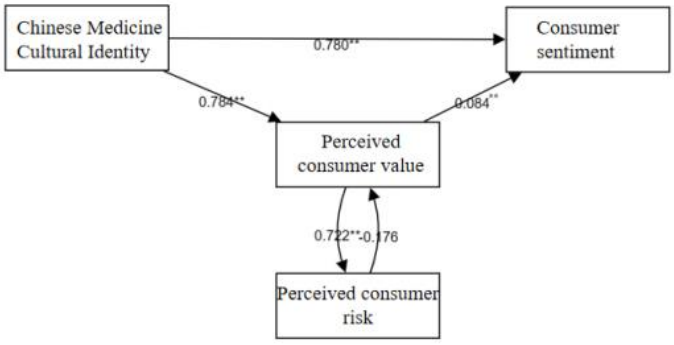


Figure 2. Relationship between perceived consumption risk and perceived consumption impact pathways.

has a significant positive correlation with perceived consumption risk (see Table 9), while perceived consumption risk does not have a significant positive impact on perceived consumption value. This result is consistent with the findings from the previous cluster analysis: individuals with higher perceived consumption value tend to be more concerned about medicinal foods. However, due to the imperfect development of the medicinal food industry, these highly concerned consumers in turn generate more worries and concerns about medicinal foods.

5.4 Exploring the development path of medicinal food in the context of Chinese medicine identity

Through the test, it is learnt that perceived consumption value plays a positive mediating influence in the activity of TCM cultural identity on the consumption intention of medicinal diets, and the role is partially mediated, which indicates that TCM cultural identity can promote the consumption intention by influencing the perceived consumption value, in addition to its own promotion of the consumption intention of medicinal diets. However, in terms of the magnitude of the effect value, the main factor that promotes consumption intention is TCM cultural identity. Therefore, this study conducted linear regression analyses of TCM cultural identity (covariates were excluded) and consumption intention to explore the development path of medicinal food in the context of TCM identity.

From the above Table 10, it can be learned that "U15" in thinking style identity, "U16" in emotional identity, "U19" in behavioral identity and "U20" in behavioral identity will have a significant positive influence on consumption intention.

6 Conclusions and recommendations

6.1 Conclusion of the study on the development path of medicinal food in the context of Chinese medicine and Chinese medicine cultural identity

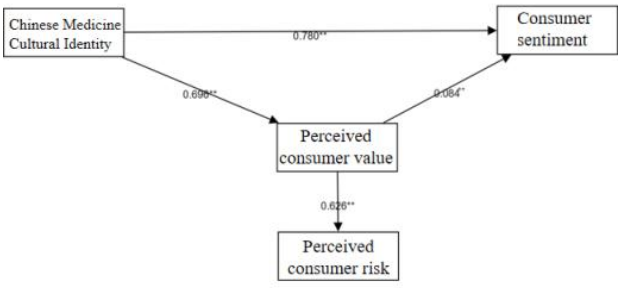


Figure 3. Development path of medicinal food in the context of Chinese medicine cultural identity.

Through the research hypothesis and model validation to get Figure 3, the hypothesis H1 Chinese medicine cultural identity will have a significant positive impact on consumption intention relationship is supported, the hypothesis H2 perceived consumption value in Chinese medicine cultural identity on the influence of medicinal dietary consumption willingness to play a positive intermediary impact of the activity is supported and the role of part of the intermediary, Chinese medicine cultural identity in addition to the influence of the perceived value of consumption on the consumption of In addition to promoting willingness to consume by influencing perceived consumption value, Chinese medicine cultural identity can also promote willingness to consume medicinal meals by itself. Study H3 Perceived consumption risk positively regulates the influence of TCM cultural identity on medicinal dietary consumption intention is not supported, of which, H3-1: Perceived consumption risk positively regulates the influence of TCM cultural identity on medicinal dietary consumption intention, H3-2: Perceived consumption risk positively regulates the influence of TCM cultural identity on perceived consumption value, H3-3: Perceived consumption risk positively regulates the influence of perceived consumption value on medicinal dietary consumption intention are not supported. None of the effects of willingness to consume were supported. By analysing perceived consumption risk and perceived consumption value, it was found that the two are highly correlated, thus indicating that people with high perceived consumption value are also highly concerned about medicinal diets, and due to the imperfections in the development of the medicinal diets industry, those who are highly concerned about medicinal dietary foods in turn have more worries and concerns. By exploring the influence relationship between perceived consumption value and perceived consumption risk, it is learnt that perceived consumption value will have a significant positive influence on the perceived consumption model.

6.2 Recommendations on the development of medicinal diets

At the government level, we should play a leading role in providing a strong guarantee for the healthy development of the medicinal diet industry; at the hospital level, we should give full play to our professional advantages and promote the sustainable development of the medicinal diet business; at the level of the Chinese medicine industry, we should insist on the development of products and lay the foundation for the development of the medicinal diet market; at the level of the resident community, we should enhance the cultural identity and promote the popularity and popularisation of the medicinal diet in the community; at the level of the consumer, we should raise the level of knowledge of the medicinal diet and cultivate the awareness of the medicinal diet consumption. At the consumer level, it is necessary to improve the level of knowledge of medicinal diets and cultivate the awareness of medicinal diet consumption.

7 Limitations of the study and future plans

7.1 Restricted questionnaire area

At present, the research area of this paper is limited to Guangzhou City, the collected receipts are not comprehensive enough and only represent the information feedback of some regional groups, for this reason, in the future, we can distribute questionnaires through multimedia platforms such as Jitterbugs to carryout surveys in a wider area.

7.2 The classification of Chinese medicine cultural identity has not yet formed a unified consensus

This study attempts to categorise the cultural identity of TCM on the basis of previous studies, but it mainly relies on theoretical support and lacks the validation of actual cases. In the existing studies, it is only explored through interviews and literature reviews. Therefore, academics have not yet reached a consensus on the categorisation of TCM cultural identity, which suggests that further in-depth research and discussion on the method of categorisation of TCM cultural identity is still needed.

Data Availability Statement

Data will be made available on request.

Funding

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Conflicts of Interest

The authors declare no conflicts of interest.

Ethical Approval and Consent to Participate

Not applicable.

References

[1] Chen, Y., & Guan, C. (2020, September). Research on the influencing factors of Chinese medicine cultural identity of international students in Chinese medicine schools. In *Journal of Physics: Conference Series* (Vol. 1629, No. 1, p. 012005). IOP Publishing. [CrossRef]

[2] Zhao, H., Zhang, R., & Chen, Y. (2023). The influencing role of cultural values on attitudes of the Chinese public towards traditional Chinese medicine (TCM) for the control of COVID-19. *Patient preference and adherence*, 3589-3605. [CrossRef]

[3] Conroy, D. M., Gan, C., Errmann, A., & Young, J. (2021). Fortifying wellbeing: How Chinese consumers and doctors navigate the role of functional foods. *Appetite, 164*, 105296. [CrossRef]

[4] Frewer, L., Scholderer, J., & Lambert, N. (2003). Consumer acceptance of functional foods: issues for the future. *British food journal, 105*(10), 714-731. [CrossRef]

[5] Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite, 96*, 122-128. [CrossRef]

[6] Lim, N. (2003). Consumers' perceived risk: sources versus consequences. *Electronic commerce research and applications, 2*(3), 216-228. [CrossRef]

[7] Jacoby, J., & Kaplan, L. B. (1972). The components of perceived risk. In M. Venkatesan (Ed.). In *Proceedings of the Third Annual Conference of the Association for Consumer Research* (pp. 382–393). Association for Consumer Research.

[8] Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of consumer psychology, 12*(2), 163-176.[CrossRef]

[9] Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research, 22*(2), 159-170. [CrossRef]

[10] Carvalho, S. W., Block, L. G., Sivaramakrishnan, S., Manchanda, R. V., & Mitakakis, C. (2008). Risk perception and risk avoidance: The role of cultural identity and personal relevance. *International journal of research in marketing, 25*(4), 319-326. [CrossRef]