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Research on the influence of cultural distance on export of traditional Chinese medicine products - based on the empirical analysis of countries along the belt and road

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Abstract: In this era, when people are increasingly concerned about health, traditional Chinese medicine, with its unique theories and rich practical experience, has gradually increased its influence in the global health field. Against this background, this article focuses on conducting an in-depth exploration of the influencing factors of cultural distance on the trade of traditional Chinese medicine products between China and the countries along the "Belt and Road." Cultural differences (CD) have had a significant negative impact on the trade volume of traditional Chinese medicine products. That is to say, the greater the degree of cultural differences, the lower the trade volume of traditional Chinese medicine products. This fully indicates that cultural differences have formed certain obstacles in the trade of traditional Chinese medicine. Among the numerous control variables, gross domestic product (GDP) and per capita gross national income (GNI) of trading countries show a positive correlation with the volume of trade. This implies that sustained economic development and the relatively high income level of residents in these countries can effectively promote the import of traditional Chinese medicine products. Conversely, geographical distance (DIS) has brought negative effects to trade. Due to increased distance, trade costs rise, which in turn suppresses the export of traditional Chinese medicine products. Furthermore, common language (LAN) and population size (POP) have also played a promoting role in trade, with the role of common language being more crucial. Although the effect of free trade agreements (FTAs) in promoting trade is not yet fully clear at present, judging from the relatively large coefficient values, they have the potential to drive trade growth. To further analyze the influence mechanism of cultural factors in trade, a mechanism test was carried out in the research. The results show that the Power Distance Index (PDI) presents a significant positive correlation with trade volume. The Individualism and Collectivism Index (IDV), the Uncertainty Avoidance Index (UAI), and the Indulgence and Restraint Index (IVR) are all significantly negatively correlated with trade volume. The long-term orientation (LTO) is significantly positively correlated with the short-term normative orientation and trade volume. However, the dimensions of masculinity and femininity (MAS) have no obvious influence on trade volume. Through heterogeneity analysis, it was found that cultural differences have a more prominent inhibitory effect on the trade of traditional Chinese medicine in non-high-income countries. High-income countries, relying on their own advantages and with the assistance of economic factors that promote trade and a common language, can obtain more trade dividends. Meanwhile, geographical distance poses a more serious trade obstacle for non-high-income countries. These research results comprehensively and deeply reveal the intricate relationship between cultural distance and the trade of traditional Chinese medicine.

Keywords: *Belt and road countries, Cultural distance, Traditional Chinese medicine exports.*

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1. Introduction

Traditional Chinese medicine has a long history. Its theoretical and practical system is unique and is the crystallization of the wisdom of the Chinese nation for thousands of years. In recent years, with the orderly implementation of the Belt and Road Initiative, economic and trade exchanges between China and the countries along the routes have become increasingly close. The two sides have carried out in-depth cooperation in multiple fields such as economy, science and technology, and culture. The breadth of cooperation has been continuously expanded and the depth has been continuously extended. As a precious cultural heritage and characteristic industry of our country, traditional Chinese medicine has seized new opportunities for international development by taking advantage of this favorable wind.

However, in the complex environment of international trade, cultural distance is an important factor that cannot be ignored. Cultures of various countries around the world have their own characteristics, which leads to significant differences in the attitudes, understanding and acceptance of traditional Chinese medicine among people in different countries and regions. This difference, in the process of traditional Chinese medicine moving towards the international market, may either become a driving force for its development or turn into an obstacle hindering its progress.

Cultural distance involves multiple dimensions such as values, beliefs, language and social norms. The differences in these aspects will have an impact on consumers' purchasing decisions, the setting of market access conditions, and the implementation effect of marketing strategies. Because traditional Chinese medicine is deeply rooted in Chinese traditional culture, the challenges brought by cultural distance to it are more unique. For instance, the theory of "Yin and Yang" and the concept of "meridians" in traditional Chinese medicine are rather difficult for people who have been deeply influenced by Western culture to understand, which to some extent reduces their willingness to try traditional Chinese medicine products.

In the past, most studies in the field of international trade focused on economic factors such as tariffs, exchange rates and market size. Although these factors are crucial in international trade, the role of cultural distance in the trade of traditional Chinese medicine has long been overlooked. Under the background of the "Belt and Road Initiative", in-depth research on the impact of cultural distance on the trade of traditional Chinese medicine is of great significance for promoting the internationalization process of traditional Chinese medicine.

This study aims to fill this research gap. By conducting an in-depth analysis of the impact of cultural distance on the trade of traditional Chinese medicine products between China and the countries along the Belt and Road Initiative, it delves into the internal influencing mechanism and conducts a comprehensive heterogeneity analysis, hoping to provide valuable references for traditional Chinese medicine enterprises, policymakers, and other relevant stakeholders.

2. Literature Review

Today, with the convenience of information transmission brought by the Internet, cultural exchanges among countries are becoming increasingly frequent, which has also drawn more attention to the impact of cultural distance on trade. Cultural distance, as a concept to measure the degree of cultural differences between countries or regions, is becoming increasingly important in international trade research. It involves differences in multiple dimensions such as language, values, and religious beliefs, and these differences have complex impacts on trade activities.

First of all, scholars have conducted research on the cultural distances existing among countries and the impact such distances have on international trade. Researchers took nine OECD member countries as the research objects and deeply explored whether cultural distance would hinder goods trade. Studies have found that cultural distance has an impact on goods trade to a certain extent, but this impact is not a simple linear relationship [1]. Cultural distance impacts different industries and products to different extents. Researchers not only paid attention to cultural distance but also made a distinction between perceived cultural distance and objective cultural distance, then explored how these two types of cultural distance affect innovation and export performance [2]. Studies show that the mechanisms by

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which different types of cultural distances affect export performance vary. Perceived cultural distance has a more significant impact on enterprise innovation and export decisions in some cases. From the perspective of import and export agency contracts, the cultural dimension will have an impact on the signing and execution of trade contracts. Cultural differences will influence the decisions of both trading parties in aspects such as the formulation of contract terms and risk sharing [3]. By using the stochastic frontier gravity model to examine the impact of cultural and institutional distances on the efficiency of China's outward foreign direct investment (OFDI), it can be seen that there is a complex relationship between cultural distance and OFDI efficiency, presenting different influence effects in different investment destinations and industries [4].

Secondly, with the deepening and relevance of research, more scholars have paid attention to cultural products, a special trade item, and studied the impact of cultural distance on the trade of cultural products. Taking the export of cultural products at the state - level in the United States as the research object, this study explores the moderating role of immigration factors between cultural distance and cultural product trade [5]. Research has found that immigration can alleviate the negative impact of cultural distance on the export of cultural products to a certain extent, because immigration can promote cultural exchange and information dissemination and reduce cultural barriers in trade. Research on the impact of cultural distance on bilateral trade flows and the role of immigration reveals that immigration plays a positive role in reducing the obstacles to trade posed by cultural differences. This finding offers a new perspective for the study of cultural product trade [6].

Against this background, Chinese medicinal materials have distinct cultural characteristics. Scholars have focused on traditional Chinese medicinal materials and explored the influencing factors of their trade. The study on the international trade situation of Chinese medicinal materials from 2000 to 2012 analyzes the changes in the scale, structure, and main trading partners of Chinese medicinal materials trade during this period, providing basic data for subsequent research on the influencing factors of Chinese medicinal materials trade [7]. Against the backdrop of the Regional Comprehensive Economic Partnership (RCEP), research on the potential of China's traditional Chinese medicine export trade explores the opportunities and challenges brought to the export trade of Chinese medicinal materials by provisions such as tariff reduction and market access under the RCEP framework [8]. From the perspective of service trade, An analysis has been conducted on the paths to achieve high - quality development of traditional Chinese medicine service trade under the new development pattern [9]. It also covered the relevant content of Chinese medicinal materials trade and emphasized the importance of cultural factors in traditional Chinese medicine service trade. An analysis of the international competitiveness of China's traditional Chinese medicine industry using the SWOT model reveals that cultural characteristics are both an advantage of China's Chinese medicinal materials industry and a challenge to be addressed in international competition, as cultural differences may affect the perception and acceptance of Chinese medicinal materials by foreign consumers [8]. Analysis of the development of China's traditional Chinese medicinal materials industry from the perspective of industrial layout provides a reference for studying the regional characteristics and influencing factors of traditional Chinese medicinal materials trade [10].

In conclusion, the existing research has conducted in-depth discussions on the relationship between cultural distance and trade from multiple perspectives, covering various fields such as goods trade, cultural product trade, and trade of traditional Chinese medicinal materials with cultural characteristics. In terms of research methods, a variety of methods such as empirical research, case analysis, and model construction were comprehensively employed, providing rich theoretical and practical basis for understanding the role of cultural distance in international trade. However, the current research still has some deficiencies, mainly in the insufficient classification of cultural distance and traditional Chinese medicinal materials.

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3. Theoretical Analysis and Hypotheses

3.1. Hofstede's Six Cultural Dimensions Theory

The Hofstede six-dimensional model of culture was pioneering and proposed by the renowned Dutch management scholar Geert Hofstede. It is a classic theoretical paradigm used for systematically analyzing and quantifying cultural differences among different countries and regions [11]. This model constructs the theoretical framework of cross-cultural research from six dimensions.

The first is Power distance. It mainly measures the degree of inequality in the distribution of power in society. In a culture of high power distance, the hierarchical system is strict, and the public generally respects authority and is accustomed to accepting top-down instructions. The culture of low power distance, on the other hand, is egalitarian and pursues the dispersion and sharing of power.

The second one is Individualism and collectivism. This dimension presents two completely different value orientations. Individualistic culture advocates individual independence and places personal goals first. Collectivist culture emphasizes the cohesion of the group. Individuals prioritize the interests of the collective and show a deep sense of belonging and loyalty to the collective they belong to.

Next is Masculinity and femininity. This dimension focuses on social value tendencies. Masculinized culture promotes the spirit of competition and regards career achievements and material wealth as important signs of success. Feminized culture pays more attention to emotional maintenance and interpersonal harmony, and pursues a balance in the quality of life and spiritual satisfaction.

Then, the Uncertainty avoidance. It reflects the tolerance of social members to unknown and ambiguous situations. The culture of high uncertainty avoidance minimizes the anxiety caused by uncertainty by establishing strict rules and regulations and standardized processes. The culture of low uncertainty avoidance holds an open and inclusive attitude towards changes and is more innovative and adventurous [12].

What's more, here are Long-term orientation and short-term orientation. Reflect the differences in the concept of time among different cultures. The long-oriented culture adheres to long-term planning, advocates the qualities of savings and tenacity, and is committed to achieving long-term goals. Short-term-oriented culture pays more attention to immediate returns in the present and attaches great importance to immediate interests and short-term benefits.

Lastly, the Self-indulgence and restraint. This dimension revolves around the management of personal desires. Indulgent culture encourages people to release their nature and enjoy life. Restrictive culture emphasizes self-discipline and restrains individual behavior through social norms and moral standards.

3.2. Demand Preference Similarity Theory

In 1961, the Swedish economist Staffan B. Linder proposed the theory of similar demand preferences, which is also known as the theory of similar preferences or the theory of overlapping demands. Different from traditional international trade theories, this theory takes a different approach and conducts research from the demand side, breaking through the inherent model of traditional theories that only analyze the causes of trade from the supply perspective. It is mainly used to explain trade phenomena within industries.

The core of this theory lies in that the closeness of the trade relationship between two countries depends on the similarity of their demand structures. In Linde's view, the per capita income level plays a key role in influencing the demand structure [13]. When the per capita income levels of two countries are similar, consumers' consumption preferences and demand structures will also tend to be similar, and thus overlapping demands are more likely to occur.

The theory of similar demand preferences also indicates that, considering the reduction of risks and costs, enterprises generally give priority to meeting domestic market demands and organizing production. Once the domestic market scale is difficult to meet the development needs of enterprises, enterprises will turn their targets to countries with similar demand structures abroad, which to a large extent promotes the development of international trade [14]. The reason is that in countries with

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similar demand structures, enterprises can meet the demands of local consumers without making large-scale adjustments to their products, thereby effectively reducing R&D and production costs.

3.3. Analysis of Cultural Character of the "Belt and Road" Countries and their Cultural Distance with China

The Belt and Road Initiative involves many countries, which have rich and diverse cultural characteristics and different cultural distances from China.

In Southeast Asia, such as low-income countries like Cambodia and Laos, Buddhist culture has a profound influence. Religion holds an important position in social life, and people are generally gentle, friendly and attach great importance to etiquette. In high-income countries like Singapore, the characteristics of multicultural integration are presented. Chinese culture, Malay culture, Indian culture and Western culture converge here, creating an inclusive and open cultural atmosphere. In terms of cultural distance, Southeast Asian countries are geographically close to China. In some of these countries, there are a large number of Chinese people, and the Chinese language and customs are widely spread. Cultural exchanges are frequent and in-depth, and the cultural distance is relatively close.

Countries in South Asia such as India and Pakistan have profound Hindu and Islamic cultural heritages, rich religious ceremonies and traditional festival activities, and distinctive art forms such as singing and dancing, painting and architecture. It is separated from our country by the Himalayas, which poses certain geographical obstacles to cultural exchanges. However, historically, there have been many cultural exchanges through the Silk Road and others, and the cultural distance is at a medium level.

In Central Asia, countries such as Kazakhstan and Kyrgyzstan are a blend of nomadic and Islamic cultures. The residents are hospitable, and the traditional nomadic lifestyle has left unique immarks such as equestrianism and yurt culture. The ancient Silk Road promoted exchanges between Central Asia and China in trade, religion, art and other aspects. There were certain commonalities in culture and the cultural distance was moderate.

The religious culture in West Asia is diverse, and Islam, Christianity and Judaism all have significant influences here. Wealthy countries like Saudi Arabia and the United Arab Emirates, while adhering to Islamic cultural traditions, have also been impacted by modern Western culture. This region has significant cultural differences from our country and a relatively long cultural distance. However, historically, the Silk Road promoted exchanges between the two sides in terms of commodities, technologies and cultural concepts.

Most Central and Eastern European countries are influenced by Christianity and have unique historical and cultural heritages as well as artistic styles, such as the architectural art of the Czech Republic and the musical culture of Hungary. Due to the distant geographical location and significant cultural background differences, the cultural distance between the two sides is considerable. However, in recent years, with the advancement of the "Belt and Road Initiative", cultural exchanges between the two sides have gradually increased.

Cis countries such as Russia combine the cultural characteristics of both the East and the West, and have achieved remarkable accomplishments in fields such as literature, art and science. Russia and China have had long-term political, economic and cultural exchanges in history. Under the framework of the "Belt and Road Initiative", cooperation has been continuously deepened and the cultural distance shows a trend of narrowing.

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Table 1.
Cultural Character of Countries along the Belt and Road.

Region	Cultural Character	Cultural Distance
Southeast Asia	In some countries, Buddhist culture dominates, while in countries like Singapore, multiculturalism is integrated	Relatively close
South Asia	Hinduism and Islam have profound cultures and distinct artistic features	Medium
Central Asia	The fusion of nomadic culture and Islamic culture, the tradition of hospitality	Moderate
West Asia	Religious culture is diverse and is impacted by modern culture	Relatively far away
Central Europe	Influenced by Christianity, its historical and cultural heritage is unique	Relatively far away
CIS and others	It combines the cultural characteristics of both the East and the West and has a profound cultural heritage	a trend of narrowing

3.3. Hypotheses

Based on the analysis above, following hypotheses are derived:

H_1: Cultural distance has a significant negative correlation with China's exports of traditional Chinese medicine products to the countries along the "Belt and Road"

4. Research Design

4.1. Sample Selection

This study referred to the countries along the Belt and Road Initiative selected by most scholars and finally determined 65 countries along the route. Based on this, this paper selects the statistical data of China's exports of traditional Chinese medicine products to the countries along the "Belt and Road" from 2017 to 2022, constructs a trade gravity model, and uses the regression analysis method to systematically examine the impact of cultural distance and the six dimensions of culture on the exports of Chinese traditional Chinese medicine products to the countries along the "Belt and Road", and conducts empirical research.

4.2. Model Specification

This study is based on the theoretical framework of the traditional gravity model and sets the cultural distance between various countries and China as the core explanatory variable. Meanwhile, elements such as gross domestic product (GDP), per capita gross national income (GNI), geographical distance between the two countries, population size, whether a common language is shared, and whether the importing country has concluded a free trade agreement are selected as control variables to construct the research model.

$$\ln(T_{ijt}) = c + \beta_1 cd_{ij} + \beta_2 \ln(GDP_{it}) + \beta_3 \ln(GNI_{it}) + \beta_4 \ln(POP_{it}) + \beta_5 \ln(DIS_{ij}) + \beta_6 FTA_{ij} + \beta_7 \text{lan}_{ij} + U_i + V_t + \varepsilon_{it}$$

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4.3. Variables Definition

Table 1.
Variables Definition.

Type	Var-name	Source	Illustration
Independent variable	T	UN Comtrade	Trade volume of Chinese medicinal materials exported from China to trading countries
Dependent variable	cd	Hofstede's official website	The degree of cultural differences between the two countries
Control Variable	GNI	World Bank WDI database	Gross national income per capita of a trading nation
	GDP	World Bank WDI database	Gross domestic product
	DIS	CPEII	The direct distance between the trading country and our country
	POP	World Bank WDI database	Population of trading country
	FTA	China Free Trade Service Network	Whether trading countries have signed free trade agreements with our country
	LAN	CPEII	Whether the trading countries have a common language with our country

The data sources of this study are highly reliable and authoritative. Among them, the export trade volume of Chinese medicinal materials from China to the countries along the "Belt and Road Initiative" is collected from the United Nations Commodity Trade Statistics Database (UN Comtrade); Economic and social data such as gross domestic product (GDP), per capita gross national income, and population size are all sourced from the official website of the World Bank. The geographical distance between China and the capitals of trading nations, and whether there is a common language between the two countries, are obtained from the professional database of the French Centre for International Outlook and Information (http://www.cepii.fr/); The relevant data on whether trading partner countries have signed free trade agreements with China comes from the public reports on China Trade Service Network. The cultural distance and the six dimensions of culture indicators are directly taken from the official websites of Hofstede (geerthofstede.com and hofstede-insights.com). All data are sourced from authoritative institutions and professional platforms, ensuring the scientific and rigorous nature of the research foundation.

Table 2.
Descriptive Statistical Analysis

VarName	Mean	SD	Min	Max
LN(T)	14.101	13.987	6.452	19.526
LN(CD)	0.839	0.545	-1.625	1.785
GDP	25.281	1.67	15.607	28.952
DIS	8.557	0.388	7.067	8.952
GNI	8.775	1.096	4.605	11.163
POP	16.341	1.718	11.846	21.072
FTA	0.0362	0.431	0	1
LAN	0.2454	0.1872	0	1

In the export trade of Chinese medicinal materials, the trade volume of different trading countries fluctuates significantly, and the standard deviation of T is as high as 13.987. Its minimum value is 6.452 and the maximum value reaches 19.526, which indicates that the export scale varies greatly among different countries. The standard deviation of the logarithm of cultural distance (LN (CD)) is 0.545. This data reveals the differences in the degree of cultural differences between various countries and China. The value range from -1.625 to 1.785 further supports this conclusion.

It can be known from relevant data that there are obvious differences among the countries along the "Belt and Road" in terms of population size, economic development level and other aspects. After logarithmic processing of these indicators, the extreme value differences are obvious, fully reflecting the

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overall difference characteristics of each country. This disparity not only affects the market demand and consumption capacity of each country itself, but also has a profound impact on the competitive landscape of international trade.

5. Empirical Results and Analysis

5.1. Correlation Analysis

Table 3.
Correlation Analysis.

	T	GDP	DIS	POP	GNI	LAN	CD	FTA
T	1							
GDP	0.394***	1						
DIS	-0.165**	0.0490	1					
POP	0.227***	0.499***	-0.212***	1				
GNI	0.019*	0.242***	0.431***	-0.402***	1			
LAN	0.1521*	0.2112**	0.085	0.129*	0.288***	1		
CD	-0.329***	0.0312	-0.2512**	0.0995	-0.224**	-0.1881*	1	
FTA	0.0250	0.021**	-0.328***	0.198**	-0.255***	-0.212***	0.025	1

Note: *** p<0.01, ** p<0.05, * p<0.1.

To deeply explore the intrinsic correlations among various variables, this paper conducts a correlation test. The results show that the correlation coefficients between the explanatory variables and the explained variables, as well as among the explained variables themselves, are all less than 0.8. Meanwhile, most of the correlation coefficients show significance. This indicates that there is no serious multicollinearity problem among the various variables, laying a good foundation for subsequent studies such as regression analysis.

5.2. Regression Analysis

Table 4.
Regression Analysis.

	(1)	(2)
Variables	**T**	**T**
CD	-0.498***	-0.598***
	-0.1658	-0.168
GDP		1.089***
		-0.436
DIS		-0.965**
		(-0.47)
GNI		0.687***
		-0.145
FTA		483.1
		-381.8
LAN		2.512***
		-0.8266
POP		0.764*
		0.416
Country	YES	YES
Year	YES	YES
Constant	-225***	-298
	-74.503	-248.356
Observations	368	368
R-squared	0.85	0.89

Note: *** p<0.01, ** p<0.05, * p<0.1.

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From the perspective of the core variable, the degree of cultural difference (cd), in both columns of the benchmark regression results, its coefficients were significantly negative. This clearly indicates that the greater the degree of cultural differences, the lower the trade volume of China's Chinese medicinal materials exported to the countries along the Belt and Road. Cultural differences act as a barrier between trade exchanges, hindering the export of traditional Chinese medicine products.

In terms of control variables, if the gross domestic product (GDP) coefficient of trading countries is positive and significant, it means that the expansion of the economic scale of trading countries will drive the demand for China's traditional Chinese medicine products and promote the growth of trade volume. The coefficient of the straight-line distance (DIS) is significantly negative, indicating that the increase in geographical distance will pose obstacles to trade. The farther the distance, the higher the trade cost may be, thereby suppressing the export of traditional Chinese medicine products.

Per capita gross national income (GNI) is positively correlated with trade volume, indicating that the increase in the income level of residents in trading countries is conducive to increasing the import of traditional Chinese medicine products. Although the Free Trade Agreement (FTA) does not indicate significance, its coefficient value is large, highlighting its promoting effect on the export of traditional Chinese medicine products. The policy preferences brought by the agreement can effectively promote trade. Having a common language (LAN) also significantly promotes exports. The interconnection of languages reduces communication barriers and is conducive to trade development. Population size (POP) has a certain promoting effect on trade, but the significance is relatively weak.

Furthermore, the model controls for country and year factors. Moreover, after introducing more control variables in the second column, the goodness of fit is higher and the explanatory power for the changes of the dependent variable is stronger. Overall, these conclusions provide empirical basis and strategic directions for China's traditional Chinese medicine products to expand the "Belt and Road" market and address the challenges posed by cultural distance and other factors.

5.3. Mechanism Test

Table 5.
Mechanism Test.

	(1)
Variable	**T**
PDI	0.352**
	(0.172)
IDV	-0.558***
	(-0.0019)
MAS	-0.0092
	(-0.0115)
UAI	-0.353***
	(0.1142)
LTO	0.235**
	(0.1163)
IVR	-0.559***
	(-0.1875)
Country	YES
Year	YES
Constant	-245**
	(-104)
Observations	368
R-squared	0.66

Note: *** p<0.01, ** p<0.05, * p<0.1.

PDI refers to Power Distance Index. Individualism Versus Collectivism (IDV) refers to the contrast between prioritizing individual interests and those of the group. Masculinity Versus Femininity (MAS)

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represents the difference in social values leaning towards assertiveness and competitiveness (masculine) or modesty and caring (feminine). Uncertainty Avoidance Index (UAI) is about the degree to which a culture feels threatened by uncertain and ambiguous situations and tries to avoid them. Long Term Orientation Versus Short Term Normative Orientation (LTO) concerns the focus on long - term goals and perseverance in a culture compared to short - term gratification and adherence to traditional norms. Indulgence Versus Restraint (IVR) reflects the extent to which a society allows people to enjoy life's pleasures and satisfy their desires (indulgence) or restricts such behaviors through strict social norms (restraint).

The PDI coefficient is 0.352**, indicating that the power distance index is significantly positively correlated with the trade volume of traditional Chinese medicine from China to the countries along the "Belt and Road". This means that in countries with a greater power distance, the trade volume of traditional Chinese medicine is more likely to increase. The IDV coefficient is -0.558***, indicating that the stronger the individualistic tendency (the higher the IDV value), the lower the trade volume of traditional Chinese medicine, showing a significant negative correlation. Perhaps under the individualistic culture, individuals pay more attention to their own unique needs and have a low acceptance of traditional Chinese medicine, which is collectively recognized by the tradition. In collectivist culture, it is easily influenced by the group, has a high acceptance of traditional Chinese medicine, and is conducive to trade. The MAS coefficient was not significant (-0.0092, standard error - 0.0115). It indicates that in this study, whether the social values of trading countries lean towards masculine traits (such as competition and achievement) or feminine traits (such as care and harmony) has no significant impact on the trade volume of traditional Chinese medicine in China. The UAI coefficient is -0.353***, and the standard error is 0.1142. It indicates that the higher the degree of uncertainty avoidance, the lower the trade volume of traditional Chinese medicine. Perhaps in countries with high uncertainty, people have a high perception of the risks of new things and new products. As a traditional product with some relatively unfamiliar concepts, traditional Chinese medicine is difficult to be accepted. The LTO coefficient is 0.235**, indicating that the higher the degree of long-term orientation, the higher the trade volume of traditional Chinese medicine. The long-term orientation culture emphasizes long-term planning and traditional inheritance. The profound historical background and long-term conditioning concept of traditional Chinese medicine are in line with it and are likely to be recognized. The IVR coefficient is -0.559***, which means that the higher the degree of indulgence (the higher the IVR value), the lower the trade volume of traditional Chinese medicine. Perhaps in a culture of indulgence, people tend to pursue immediate pleasure more and pay insufficient attention to traditional Chinese medicine, which requires long-term consistent consumption and conditioning.

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5.4. Heterogeneity Analysis

Table 6.
Heterogeneity Analysis.

	High Income Countries	Other Countries
	(1)	(2)
Variables	T	T
CD	-0.398***	-0.656***
	(-0.165)	(-0.154)
DIS	-0.559**	-0.812**
	(-0.21)	(-0.354)
GNI	0.569***	0.325
	(0.125)	(0.159)
GDP	0.982***	0.617**
	(0.187)	(0.225)
LAN	1.887***	1.278**
	(0.356)	(0.412)
POP	0.433**	0.271
	(0.225)	(0.252)
FTA	355	215
	(215)	(154)
Country	YES	YES
Year	YES	YES
Constant	-150***	-254***
	(-51.212)	(-60.215)
Observations	368	368
R-squared	0.715	0.654

Note: *** p<0.01, ** p<0.05, * p<0.1.

Cultural differences (CD) In high-income countries, the inhibitory effect of cultural differences on the trade volume of traditional Chinese medicine is relatively small, while in other countries, the inhibitory effect is greater, possibly because high-income countries have a high degree of cultural inclusiveness and more channels for understanding traditional Chinese medicine. Distance (DIS) is negatively correlated in both cases. However, other countries are more significantly hindered by distance, which may offset some of the distance disadvantages due to better logistics and other conditions in high-income countries. In high-income countries, GNI and GDP have a more significant promoting effect on trade volume because of their strong economy and consumption capacity. The economic foundation of other countries is weak, and the promoting effect is slightly inferior. Common language (LAN) has a promoting effect, with high-income countries having a slightly stronger role, perhaps because high-income countries have more language communication resources and demands. The population of high-income countries has a certain positive impact on trade volume, while it is not significant in other countries, or because the consumption power and demand structure of the population in high-income countries are more favorable. Although the coefficient of the Free Trade Agreement (FTA) is not significant, the value for high-income countries is large, indicating that the signing of the agreement has a large potential space for promoting trade among high-income countries.

6. Conclusion

In conclusion, cultural differences have a significant negative impact on the trade volume of traditional Chinese medicine and become trade barriers. Among the control variables, GDP, GNI, common language and population size to a certain extent have a positive impact on trade, while distance has a negative impact on trade. Free trade agreements also show potential promoting effects. Mechanism tests show that power distance is significantly positively correlated with trade volume, while individualism, uncertainty avoidance and indulgence are significantly negatively correlated with

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trade volume. Long-term orientation is positively correlated with trade volume, while the influence of masculinity and femininity is not significant. In the heterogeneity analysis, cultural differences have a less inhibitory effect on the trade of traditional Chinese medicine in high-income countries than in other countries. High-income countries also benefit more from factors such as GNI, GDP and the common language in promoting trade. Distance has a more serious impact on other countries, possibly due to differences in logistics. Although the free trade coefficient is not significant, the value of the free trade coefficient in high-income countries is relatively large, indicating that they have greater potential for trade promotion.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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