Research on the influencing factors of Chinese medicine cultural identity of international students in Chinese medicine schools

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Abstract. In order to explore the influencing factors of Chinese medicine cultural identity of international students from Chinese medicine schools, the paper questionnaire survey was conducted among overseas students with academic degrees from nine Chinese medicine colleges by means of convenient sampling, and the data were analyzed by multiple linear regression. In conclusion, the mean of Chinese medicine cultural identity score of international students from Chinese medicine colleges was (3.80±0.70), Chinese medicine cultural identity that there are statistically significant differences in the four variables: whether Chinese or not, motivation of studying abroad, medical training and home medicine (p< 0.05). Conclusion: The motivation of studying abroad is an important factor affecting the cultural identity of Chinese medicine for international students in China, and Colleges of Chinese medicine should enhance the education and guidance of cultural identity of Chinese medicine for international students in China.

1. Introduction
Since the start of international education in Chinese medicine in 1957, after more than 60 years of evolution and development, Chinese medicine colleges and universities have achieved remarkable results. Along with the significant increase in the number of international students from Chinese medicine colleges and universities, how to realize the transformation from the "quantitative change" of scale development to the "qualitative change" of quality improvement of education in China has become the focus of social attention. International students in China are the direct beneficiaries of Chinese medicine education, which is of great importance to the internationalization of TCM higher education and even the internationalization of TCM. The related research around international students in China mainly focuses on two major themes: intercultural adaptation [1] and cultural identity [2]. Cultural identity is the basis of cultural adaptation, existing studies tend to focus on China's cultural identity from the macro perspective, and the research focuses on the cultural identity of Chinese medicine is less. Therefore, taking Chinese medicine college international students as the research object, to discusses the medical level of cultural identity and its influence factors, is not only conducive to the better cross-cultural adaptation of Chinese medicine college international students, but also conducive to the international development of Chinese medicine.

2. Sources of Information and methodology

2.1. Sources of information
In this paper, nine Chinese medicine colleges across the country were surveyed through the design of the "Survey Questionnaire on Chinese Medicine Cultural Identity of International Students from Chinese Medicine Colleges". The survey is conducted anonymously by international students receiving academic education, and the questionnaire does not involve personal information, and no incentives are provided. A total of 750 paper questionnaires were distributed, and after eliminating invalid questionnaires such as incomplete answers and non-educated students, the actual valid questionnaires were 602. The response rate for the questionnaire was 80.27 percent.

2.2. Research methodology
In order to explore the status quo and influencing factors of Chinese medicine cultural identity of international students in Chinese medicine colleges, this paper uses spss25.0 to conduct descriptive statistical analysis and single factor analysis to explore the status quo of Chinese medicine cultural identity of international students and the differences among different groups; multiple linear regression analysis is used to explore the influence of related variables on the Chinese medicine cultural identity of overseas students. The difference was statistically significant (P < 0.05).

2.3. Variable settings
The interpreted variable in this paper is the level of Chinese medicine cultural identity of international students in China, using the Chinese medicine cultural identity scale [5], and the questionnaire items were adjusted in conjunction with the expert consultation method. In order to avoid the interference of language factors, the Chinese medicine cultural identity scale for international students in China is bilingual, and the 14 items of the scale are scored on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), the mean of 14 items was considered as the Chinese medicine cultural identity score. In this paper, the internal consistency coefficient of the Chinese medicine cultural identity scale for international students in China was 0.924. The explanatory variables in this paper include the demographic characteristics (including gender, age, education level, Chinese language level, religious belief, and whether or not they are of ethnic Chinese) of the international students from Chinese medicine colleges, the basic information of the home countries of the international students (including whether their home countries belong to the cultural circle of Chinese characters and whether they have traditional medicine similar to that of China), and the study of Chinese medicine by the international students (including the motivation for studying in China and whether they have received training in traditional medicine before coming to China), a total of 10 variables.

3. Results

3.1. Results of single factor analysis of Chinese medicine cultural identity of international students in China
Table 1 shows the average value and difference of Chinese medicine cultural identity of international students in Chinese medicine colleges in different characteristics. It can be seen that there is no significant difference in the average score of Chinese medicine cultural identity among the students of different gender, age, education level and time in China (p>0.05). There are statistically significant differences in the average scores of Chinese medicine cultural identity among foreign students with different religious beliefs, ethnic Chinese, Chinese level, motivation to study abroad, whether they belong to the cultural circle of Chinese characters, whether they have received traditional medicine training and whether their home country has similar traditional medicine as China (P<0.05).

| Variable                  | N  | X±S       | t/F | P   |
|---------------------------|----|-----------|-----|-----|
| Genders                   |    |           |     |     |
| Male                      | 353| 3.77±0.72 | 1.285| 0.199|
| Category                              | Value | Mean | SE  | T  | P   |
|---------------------------------------|-------|------|-----|----|-----|
| Woman                                | 249   | 3.84 | 0.66|
| Age                                   |       |      |     |    |     |
| 20 years and under                    | 132   | 3.85 | 0.77| 2.066| 0.104|
| 20-29 years old                      | 449   | 3.77 | 0.68|    |     |
| 30-39 years                          | 16    | 4.13 | 0.49|    |     |
| 40 years and over                    | 5     | 4.10 | 0.58|    |     |
| Education level                      |       |      |     |    |     |
| Undergraduate                         | 559   | 3.78 | 0.70| 1.145| 0.319|
| Master's degree students              | 33    | 3.96 | 0.48|    |     |
| PhD students                          | 10    | 3.92 | 0.85|    |     |
| Religious belief                     |       |      |     |    |     |
| Confucianism                          | 6     | 4.00 | 0.59| 11.564| <0.001|
| Taoism                                | 7     | 4.30 | 0.54|    |     |
| Buddhism                              | 87    | 4.10 | 0.54|    |     |
| Christianity                          | 70    | 3.94 | 0.49|    |     |
| Islam                                 | 305   | 3.65 | 0.72|    |     |
| Other                                 | 70    | 3.52 | 0.77|    |     |
| None                                  | 57    | 4.17 | 0.53|    |     |
| Ethnic Chinese or not                 |       |      |     |    |     |
| Be                                    | 75    | 4.27 | 0.52| 8.179| <0.001|
| Negate                                | 527   | 3.73 | 0.69|    |     |
| Chinese language level                |       |      |     |    |     |
| Did not take the exam                 | 149   | 3.96 | 0.73| 8.041| <0.001|
| HSK level 3 and below                 | 108   | 3.50 | 0.76|    |     |
| HSK level 4                           | 250   | 3.81 | 0.64|    |     |
| HSK level 5                           | 55    | 3.92 | 0.57|    |     |
| HSK level 6 and above                 | 40    | 4.11 | 0.69|    |     |
| Time to come to China                 |       |      |     |    |     |
| 1 year and less                       | 144   | 3.83 | 0.69| 2.391| 0.068|
| 2-3 years                             | 319   | 3.75 | 0.68|    |     |
| 4-5 years                             | 75    | 3.74 | 0.77|    |     |
| 6 years and above                     | 64    | 3.99 | 0.71|    |     |
| Motives for Studying Abroad           |       |      |     |    |     |
| Intrinsic motivation                  | 433   | 4.05 | 0.53| 16.781| <0.001|
| Exogenous motive                      | 169   | 3.13 | 0.63|    |     |
| Belong to the cultural circle of Chinese characters? |       |      |     |    |     |
| Be                                    | 42    | 4.04 | 0.50| 3.220| 0.002|
| Negate                                | 560   | 3.78 | 0.71|    |     |
| Access to medical training?           |       |      |     |    |     |
| Be                                    | 262   | 4.10 | 0.51| 10.493| <0.001|
| Negate                                | 340   | 3.56 | 0.74|    |     |
| Do similar medicines exist in the home country? |       |      |     |    |     |
| Be                                    | 467   | 3.92 | 0.63| 7.524| <0.001|
| Negate                                | 135   | 3.38 | 0.63|    |     |

3.2. The results of multiple linear regression analysis on the Chinese medicine cultural identity of international students

The mean values of the Chinese medicine cultural identity scores of the international students from Chinese medicine colleges were taken as the interpreted variable and the variables with statistically
significant differences in the single factor analysis were taken as the explanatory variables (see Table 2 for the specific assignment values) in the multiple linear regression analysis.

**Table 2.** Variable assignment and its descriptive statistical analysis.

| Variable                        | Description of variables                                                                 | Mean   | Standard Deviation |
|---------------------------------|----------------------------------------------------------------------------------------|--------|--------------------|
| **Interpreted Variable**        |                                                                                         |        |                    |
| Chinese medicine cultural identity | Mean values of 14 items of the Chinese medicine cultural identity scale                  | 3.80   | 0.70               |
| **Explanatory Variables**       |                                                                                         |        |                    |
| Religious belief                | Confucianism 1, Taoism 2, Buddhism 3, Christianity 4, Islam 5, other 6, no religion 7   | 4.83   | 1.19               |
| Chinese language level          | Did not take the test is 1, HSK 3 and below is 2, HSK 4 is 5, HSK 5 is 4, HSK 6 and above is 5. | 2.55   | 1.15               |
| Cultural distance               | 1 for home country belonging to the cultural circle of Chinese characters and 0 for not belonging to it. | 0.07   | 0.26               |
| Ethnic Chinese or not           | 1 for ethnic Chinese, 0 for non-ethnic Chinese                                          | 0.12   | 0.33               |
| Motives for studying abroad     | Endogenous motivation is 1, exogenous motivation is 0                                   | 0.72   | 0.45               |
| Medical training                | 1 for training in traditional medicine before coming to China, 0 for no training        | 0.44   | 0.50               |
| Home country medicine           | The traditional medicine similar to China in the mother country is 1, while the difference is 0 | 0.78   | 0.42               |

From Table 3, it can be seen that the coefficient of determination value of the influencing factor model for the Chinese students' Chinese medicine cultural identity is 0.445 and the F value is 67.996 (p<0.001), indicating that the model was constructed appropriately and the fit is good. According to the results of standardized regression coefficients, three variables, namely, religious belief, Chinese language level and cultural distance, could not significantly predict the international students' Chinese medicine cultural identity score (p>0.05); the four variables of ethnic Chinese or not, motivation to study abroad, medical training and home country medicine can be significantly positive predicted the Chinese medicine cultural identity score of international students coming to China (p<0.001). Further tests revealed that the VIF values of each variable were less than 3, indicating that there is no collinearity among the explanatory variables, and the results of the model with reliability.

**Table 3.** Results of multiple linear regression analysis of Chinese medicine cultural identity.

| Variable                        | B (β)          | t       | P       | VIF   |
|---------------------------------|----------------|---------|---------|-------|
| Constant                        | 3.031          | 13.458  | <0.001  | -     |
| Religious belief                | -0.004 ( -0.007) | 0.204 | 0.839   | 1.114 |
| Chinese language level          | 0.017 (0.029)  | 0.895   | 0.371   | 1.116 |
| Cultural distance               | -0.075 ( -0.028) | 0.864 | 0.388   | 1.089 |
| Ethnic Chinese or not           | 0.359 (0.170)  | 5.302   | <0.001  | 1.104 |
| Motives for studying abroad     | 0.739 (0.477)  | 14.364  | <0.001  | 1.179 |
### 4. Discussion

According to the results of single factor analysis and multiple linear regression analysis, this paper draws the following conclusions: the Chinese medicine cultural identity of international students from Chinese medicine colleges needs to be further improved; the motivation for studying in Chinese medicine colleges is an important factor influencing the Chinese medicine cultural identity of international students; whether students have participated in traditional medicine training before coming to study in China has a significant impact on their Chinese medicine cultural identity; whether there are traditional medicines similar to those in China in their home countries has a significant impact on their Chinese medicine cultural identity.

#### 4.1. The Chinese medicine cultural identity of students from Chinese medicine colleges needs to be further improved.

The results of the study showed that the average score of Chinese medicine cultural identity score of international students in Chinese medicine colleges was 3.80, and there was no significant difference in age and education level (P<0.05), which was different from the relevant research results[6]. This may be due to the fact that the educational focus of Chinese medicine colleges in China is at the undergraduate education level, and the number of master's and doctoral students is relatively less, coupled with the fact that international students at the undergraduate level have less knowledge of TCM culture before coming to China, has led to the overall Chinese medicine cultural identity was low and differences in age and education level were not statistically significant.

#### 4.2. The motivation of studying abroad is an important factor influencing the Chinese medicine cultural identity of international students from Chinese medicine colleges.

This paper classifies the motivations of international students coming to China from Chinese medicine schools into endogenous and exogenous motivations. The former's transfer to China is due to the interest and affection of foreign students on Chinese medicine culture and China, and the concern for emotion. The latter also moved to China to study abroad for the purpose of education, work and other practical needs. Related research indicates that there is a significant positive correlation between professional learning motivation and self-identity, that is, the higher the learners' the better the identity status [7]. To a certain extent, this explains the reason why the Chinese medicine culture identity level of international students with endogenous motivation in this paper is higher, international students come to China to study more out of their love for Chinese medicine culture and even Chinese culture, full of positive emotions, so their higher levels of recognition.

#### 4.3. Participation in traditional medicine training before coming to study in China has a significant impact on the Chinese medicine cultural identity of international students.

The study found that international students' participation in training in traditional medicine before coming to China had a significant positive effect on their Chinese medicine cultural identity (P<0.05). Before formal academic education, the understanding of traditional medicine related knowledge can enhance the reserve of relevant knowledge of international students, and effectively reduce the transition period of studying in China. At the same time, in the process of education and teaching, according to their own thinking and observation, they can have a selective and targeted understanding.
of their interesting and confused knowledge points, enhance the mastery of Chinese medicine related knowledge, strengthen cognition, and thus enhance Chinese medicine culture identity.

4.4. The existence of traditional medicine similar to that of China in the home country has a significant influence on the Chinese medicine cultural identity of international students.

The study found that international students whose home countries had traditional medicine similar to that of China had significantly higher Chinese medicine cultural identity scores than those home countries did not have traditional medicine similar to China. The theory of social identity points out that when an individual is in a new culture which is quite different from that of his home country, the construction of his cultural identity will be challenged. Cultural identity is based on a certain cultural foundation. The smaller the difference between the two cultures, the easier the process of individual cross-cultural adaptation is, and the more likely it is to construct cultural identity. The traditional medicine in the home country is similar to that in China, which reduces the difference between the Chinese medicine culture and the home country of international students to a certain extent, so that they can recognize the culture of traditional Chinese medicine more quickly and better.

5. Conclusions

5.1. Focus on education and training of traditional medicine knowledge before studying in China

Encourage international students to receive some basic education and training in traditional medicine before studying in China, such as reading books about traditional medicine, and international students with parents or relatives engaged in traditional medicine can also conduct on-site observation and learning. Through reading and personal experience of relevant books, foreign students' interest and thinking in traditional medicine are stimulated, and their intrinsic motivation to study in China is further strengthened.

5.2. Emphasis on the education and guidance of Chinese medicine cultural identity of international students in China

Chinese medicine cultural identity is an individual's positive acceptance and recognition attitude towards Chinese medicine culture, an internalization process of Chinese medicine culture. And it is a process of gradual development from the outside to the inside and from the shallow to the deep. Therefore, in the process of education and guidance of Chinese medicine cultural identity for international students in Chinese medicine colleges, we should respect the law of identity formation and strengthening on the basis of the cognitive habits and knowledge base of international students, Chinese medicine colleges should encourage international students to go out of the classroom and campus and apply the classical theories of Chinese medicine flexibly, so that they can realize the unity of knowledge and practice. Chinese medicine colleges should popularize the culture of Chinese medicine to the daily study and life of international students in China, and make use of various kinds of Chinese medicine cultural practice activities to let international students learn Chinese medicine. While experiencing the charm of Chinese medicine culture, international students will also be able to stimulate their thinking, arouse their awareness and strengthen their identity.

5.3. Strengthen the dissemination of Chinese medicine culture worldwide

The spread of Chinese medicine in the world not only helps to expand the popularity of Chinese medicine, but also enables Chinese medicine to serve people in more countries and regions and give full play to the unique role of Chinese medicine in the field of human health. Therefore, it is necessary to further explore the propaganda of Chinese medicine by overseas Chinese and international students graduated in China, and give full play to its advantages of flexible dissemination and interpersonal communication. At the same time, it is necessary to further expand the coverage of Chinese medicine overseas centers and Chinese medicine Confucius institutes, so that Chinese medicine can take root abroad and integrate into the daily life of foreign people.
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