Analysis on the Influencing Factors of Traditional Chinese Medicine Culture Transmission Based on Elaboration Likelihood Model

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Abstract. As an important part of Chinese traditional culture and national soft strength, the transmission and inheritance of traditional Chinese medicine culture is the foundation and prerequisite for the development of Chinese medicine. On the basis of Elaboration Likelihood Model, this paper analyzes three different factors influencing the transmission process of TCM culture, explores the correlation among influencing factors through empirical analysis, and tries to provide new research ideas for TCM culture transmission.

1. Introduction

Traditional Chinese medicine culture is a treasure of Chinese civilization. Its transmission not only plays a vital role on the development of Chinese medicine and the promotion of traditional Chinese culture, but is conducive to the development and inheritance of traditional Chinese medicine. TCM culture also plays an important role in the pursuit of human health. The idea for a healthy life and the corresponding life style advocated by TCM culture both reflect the respect for life and reverence for nature, such as cultivating health under the conformation to the natural law according to “living things grow in spring, flourish in summer, harvest in autumn and store vital essence in winter” written in Huangdi Neijing [1], as well as the therapy for longevity derived from “preventive treatment” theory.

The Elaboration Likelihood Model (ELM) is a study of information processing in the field of social psychology [2], which has been influenced by a number of research scholars in the fields of consumer behavior, advertising, etc. And the application of this model to consumer behavior and advertising communication can help the audiences to understand the way to deal with the information. This paper attempts to take ELM as a tool to analyze the influencing factors of TCM culture transmission and provides a new perspective and ideas for the transmission of TCM culture.

2. Overview of Traditional Chinese Medicine Culture and Elaboration Likelihood Model

2.1 The concept of traditional Chinese medicine culture and its transmission

Culture is the sum of the spirit and matter created by a nation or nation, and the Chinese culture embodies distinctive ethnic and regional characteristics. TCM culture is an important part of traditional Chinese culture. As the traditional Chinese medicine, it has made great contributions to the survival and development of the Chinese nation, with its system of medical theory, diagnosis, treatment principle and formula prescription unique in the world of traditional medicine. TCM culture refers to the essence of integrating fine traditional Chinese medicine and unique value with ancient nature, philosophy, astronomy, geography and philosophers. The absorption and fusion of Chinese traditional culture make the culture of Chinese medicine consistent with traditional culture, and its spiritual culture, material culture and behavior culture make itself a spiritual, material and behavior integration with great connotation [3].

TCM culture transmission is to directly or indirectly transmit the culture, common sense, and
ideas of the traditional Chinese medicine from the communicator to the objects of communication, [4] so that the objects of communication have a corresponding understanding on the Chinese medicine culture and form the corresponding cognitive. As a result, they form a correct attitude towards the TCM culture, thus providing a good environment for the development of Chinese medicine.

Figure 1. The Central Path and Edge Path Processing of TCM Culture Transmission.

2.2 The concept of Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) was proposed by American psychologist Petty and Caciopp in 1986. According to this model, the information receivers mainly employ two paths, the center path and the edge path, to deal with the transmitted information. When people have the
motivation or the ability to carry out in-depth inquiry on the details of the transmitted information, they will try to fine the transmitted information, which can form a more lasting and stable attitude and is easy to predict the behaviors. This way is called the central path. If the audience has not enough motivation or the ability to carry out the fine processing when facing the information, they need to rely on the edge cues, such as the transmission situation, and the communicator’s prestige to change the attitude. At that time, the recipients only deal with part of the information to create one-sided, emotional, and relatively short attitude change, and then form the cognitive changes by changing the behavior, the way of which is the edge path. Therefore, the sophistication degree of the information audience in processing the transmitted information determines the path difference in the choice of information processing.

In the TCM culture communication activities, the central path of communication refers to the conscious thinking of the audience on the dissemination of TCM culture knowledge. After careful analysis and meticulous treatment, it integrated a wide range of knowledge, that is, to finely process the information, to understand the knowledge of TCM culture and form the corresponding attitude.

The edge path of TCM culture transmission means that the information audience is not interested in Chinese medicine culture without in-depth analysis and understanding. They would give a direct response based on some edge clues, such as interesting information explanation, communicator prestige and information interaction with a high degree.

2.3 The recipient factor affecting the path selection

According to ELM, the likelihood of elaboration of the audience in dealing with information depends on its MAO level in the cultural transmission of Chinese medicine, that is, the audience receives the motivation (M) level of TCM culture, the ability (A) level, and whether the conditions of exposure to TCM culture are conducive to the opportunity (O) level of facilitating information processing. Only simultaneously in meeting these three conditions can the information be fine processed. If the audiences have a higher level of MAO when encountering less content but more emotional information, they will be agreed that the dissemination of content is only simple without more time to think; and if the information is of strong theory, they will select the center path in processing the information. On the contrary, if the audiences have a lower level of MAO and there is no strong edge clue to the communication activities, its theoretical content will confuse the audiences because of the lack of appropriate motivation or ability. At this time, the sensual transmitted information with more edge clues is relatively easier for the audience to accept.

3. Influencing Factors of TCM Culture Transmission Based on ELM

In the TCM culture transmission, there are quite differences in the effect of attitudinal change between the central path and the edge path. Although the attitudinal change of the edge path is more intense than the central path, the duration is short. So the information audience will gradually restore the original attitude over times. And the attitude that goes through the information processing of the central path is more durable and not vulnerable to negative view.

3.1 The motivation level affecting the audience in accepting the transmitted information

Studies have confirmed that the main factors that affecting the audience’s motivation (M) level in accepting the TCM culture transmission (M) are: first is the degree of involvement. [5] The degree of involvement in the transmission of TCM culture refers to the relevance and attention of the information recipient to their knowledge. The information recipient feels that the communication is more relevant to itself, there is a greater degree of concern for it, the degree of involvement will be higher, and the more detailed knowledge will be produced. For example, the liver Qi is generated from Wood element. With living things growing to mid-Spring, the liver Qi is prone to be excessive and harms the spleen. Therefore, Sun Simiaio wrote in Thousand Golden Prescription (Qian Jin Fang) that “Reducing taking in sour flavor and having more sweet flavor from the 72nd day on in Spring to cultivating the spleen Qi”. [6] At this point, the diet health knowledge will have a higher
degree of involvement for the information recipient, which will increase the concern for the dissemination of knowledge, conform to the contents to eat nourishing food to spleen and stomach, and reduce the greasy and acid food. Second are the cognitive needs, which refer to the participation desire of the audience in the dissemination situation. High-cognition needs the information recipient likely to study the problem deeply. After the fine processing, an attitude is formed and changed often through the central path; while low cognition needs the information recipient likely to study the problem slightly. The attitudinal change is through the edge path. Third is the emotional state. When the communicator communicates the positive emotions of the information audience, the positive emotions of the audience to the communicator are generalized to the transmitted information, thus consciously recognizing and accepting the communication message.

### 3.2 The ability level affecting the audience in accepting the transmitted information

The main factors that affecting the audience’s ability (M) level in accepting the TCM culture transmission are: first is the knowledge level. In the TCM culture transmission, people with high level of knowledge will produce more associative associations than those with lower level of knowledge, and thus tend to process information from the central path and form attitudes. If the information recipient does not understand what the dissemination activity is saying, he may form an attitude from the edge path. Second is the understanding ability. When the content of the communication is obscure or the information recipient’s knowledge level is low, they will tend to process information from other sources, such as the authority of the disseminator and the reliability of the information source, rather than the transmitted information itself. On the winter health of traditional Chinese medicine cultural knowledge, “Huangdi Nei Jing–Suwen” said that: “The vital energy of kidney flourishes in winter. The corresponding meridians for treatment are the Kidney Meridian of Foot Shaoyin and the Urinary Bladder Meridian of Foot Taiyang”; “…This is the way corresponding to the Qi of winter, which accords with the Tao of preservation of vital energy. Action that contrary to this law would harm the kidney…”; at this time, the water is hidden in the body, kidney gas is exuberant, and eating too much salty will make the kidney gas too exuberant. Therefore, we should eat lightly, such as cabbage and radish. If kidney gas is too prosperous, the heart is weak and we should eat bitter to save Yin, that is, “consolidating Yin”. In the acceptance of such information, people with different understanding abilities tend to have different information processing methods. People with strong understanding would integrate the logic of information, and then conclude that the winter diet should be light and bitter. While people with weak understanding will tend to remember the popular idiom, “Winter prefers to radish and summer ginger” in the transmission process.

### 3.3 The opportunity level affecting the audience in accepting the transmitted information

The main factors that can influence the level of audience opportunities (O) are: first is the medium. The degree of adhesiveness is the time for the information recipient to read and understand the content of TCM culture. When the degree of adhesiveness between the information receiver and the communication activity is higher, the more likely he would follow the central path. For example, the brochure is more readable than the broadcast medium, so it also allows the information recipient to have more time and opportunity to fine-tune the information. Second is the degree of participation. Participation refers to the number of times a person has a conscious association of personal experience and information per minute. Under low participation, the audience will be affected by the transmitted information. But under repeated stimulation, they are likely to cause “excessive exposure”, resulting in the transformation from short-term memory into long-term memory. The cognitive structural changes are not changes in attitude because the information receiver itself does not carry on the fine processing to the information and forms the understanding. In a number of contacts and practices of TCM culture, people will understand the transmitted information through participation, and finally lead to changes in attitude. High participation is usually easier to form feedback. In the Internet, this new mode of communication, the information audience will have the initiative to search information needed, and then compare similar
information to filter, which is a typical high participation learning style. The attitude change caused at this time is lasting because the information receivers understand it and make the information audience the opinion leader to promote the spread of TCM culture.

3.4 Analysis of MAO level of information audience

Due to the combined effect of various psychological indicators, the MAO level of information audience will vary from person to person. In order to measure the processing level of TCM culture information, this study conducted a questionnaire survey, and randomly selected 200 samples of data using SPSS for analysis.

First, we prove the correlation degree of cognition needs, the emotional state, involvement degree and the psychological motive. Since we discuss the straight line correlation, we use the Pearson correlation coefficient to conclude that:

The correlation coefficients between mental motivation and involvement degree, cognitive requirement and emotional state are 0.716, 0.855 and 0.899 respectively, and the bilateral P value of the correlation coefficient is less than 0.001. Therefore, it is considered that there is statistically significant on the positive correlation of psychological motivation and involvement degree, the cognitive needs and the emotional state. Similarly, the level of competence is positively correlated with the level of knowledge and understanding, and the level of opportunity is positively correlated with the media and participation.

Then, in order to verify the correlation between the MAO level of the audience and the psychological motivation, the ability level and the opportunity level, the nonparametric statistics on correlation coefficient would be included. It can be seen that the Spearson correlation coefficients are respectively 0.67, -0.635, -0.446, the P value is less than 0.001, and the MAO level is positively correlated with the psychological motivations at the level of $\alpha = 0.05$. The MAO level is reduced with the audience’s ability and opportunity level dropping.

Similarly, the independent variables, including the level of motivation, the level of ability, and the level of opportunity, the MAO level regression equation is statistically significant in the test model with the removal of the irrelevant variables. The results are shown in Table 1:

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standardized coefficient</th>
<th>Standardized coefficient</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standard error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>60.446</td>
<td>1.100</td>
<td>.691</td>
<td>54.930</td>
</tr>
<tr>
<td>Mental Motivation</td>
<td>2.503</td>
<td>.070</td>
<td></td>
<td>35.836</td>
</tr>
<tr>
<td>Ability level</td>
<td>-1.733</td>
<td>.079</td>
<td>-.514</td>
<td>-21.913</td>
</tr>
<tr>
<td>Opportunity Level</td>
<td>-1.120</td>
<td>.120</td>
<td>-.220</td>
<td>-9.356</td>
</tr>
</tbody>
</table>

A. Dependent variable: total score

The analysis finally results in a regression equation containing three independent variables as follows:

MAO level = 60.446 + 2.503 * Mental motivation -1.733 * Ability level -1.12 * Opportunity level

At the same time, the questionnaire also conducted the corresponding correlation linear analysis on the MAO level, the age, and the occupation of the sample. Analysis showed that the correlation coefficient on the MAO levels and the ages of the sample audience is 0.195, and P value of the correlation coefficient test is 0.006, greater than 0.001. Therefore, it can be considered that there is not statistically significance on the positive correlation between the two variables, namely, the ages and the audience’s MAO level. The correlation coefficient on the MAO levels and the education of the audience is 0.264, and P value is less than 0.001. Therefore, it can be considered that there is statistically significance on the positive correlation between the two variables. Namely, with the improvement of education level, the audience’s MAO level has gradually become higher.
4. Conclusion

Generally speaking, the audience’s MAO level varies from person to person. In the mathematical statistics analysis, the MAO level of the sample audience can be further studied by means of SPSS and other professional data analysis tools. For different audiences at different levels of MAO, communicators also need to develop different communication strategies. From the persuasion effect, the attitude change caused by the information processing of the central path is more lasting and stronger than the edge path [5]. Therefore, it is necessary to improve the level of MAO in improving the Elaboration Likelihood Model of Traditional Chinese medicine culture. And it is more likely through rational persuasion to activate the central path to change its attitude. Therefore, it is necessary to analyze the psychological characteristics and reality of the audience to meet their needs, solve their social problems related to their interests, and let them feel that the cultural knowledge of Chinese medicine and their lives are closely related to improve their involvement; secondly, it is through the means of education, such as accelerating the popularization of education, to improve the knowledge of information audiences and enhance their understanding; thirdly is to make the information audience have sufficient time to understand and digest the TCM culture communication knowledge.

References


