

# Study on the correlation between Chinese five-tone "Gong, Shang, Jue, Zhi, Yu" and skin

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## Introduction:

As a kind of external treatment of traditional Chinese medicine, five-tone is widely used in clinical, to participate in and help the treatment of diseases, especially the regulation of some emotions and the improvement of insomnia [3, 4]. It also includes directly solving some skin damage problems.

With the pursuit of health and beauty, more and more attention has been paid to the relationship between music, human health and beauty. The modern application of "Wuyin" in the field of beauty and skin care is worth exploring and thinking deeply.

The effect of rhythm on the skin has not been reported before. Therefore, by exploring the correlation between Chinese five-tone and skin, we can study the influence of temperament on skin, provide a theoretical basis for temperament assisted skin care, and also provide a new idea and method for skin care.

## Materials & Methods:

### 1. Research objects:

A total of 500 female volunteers were gathered in Shanghai, Guangzhou and Chengdu.

### 2. Contents and method:

Design network questionnaire to collect information. Including: general social demography, skin assessment and pentatonic preference scale. Skin evaluation adopts the "Skin Condition Subjective Self-assessment Questionnaire" compiled by unified design.

Five tone preference scale uses a 7-point scale: never tire of listening (7 points), very nice (6 points), a little nice (5 points), acceptable (4 points), a little unpleasant (3 points), very unpleasant (2 points), extremely unpleasant (1 point). Statistics of the number and percentage of five tone preference.

This study follows the Guqin playing method. The five tones "Gong, Shang, Jue, Zhi, and Yu" correspond to the first tunes "1" (do), "2" (re), "3" (mi), and "5" respectively. "(So), "6" (1a), played by professionals in guqin in a quiet room; each single tone lasts until the end of the surplus, and each single tone repeats 10 times.

The process design adopts the cross of filling in the skin self-assessment questionnaire and listening to the five tones. After filling in 6 questions, listen to the 5 scales in turn. The 5 scales are played randomly, and then the preference is scored. The listening is repeated three times in total.

### 3. Statistical analysis:

SPSS 20.0 software was used for statistical analysis. T-test was used to compare the score differences of five tone preference, with  $P < 0.05$  as statistically significant Spearman bivariate analysis and multivariate preference analysis were used to analyze the correlation between pentatonic preference and skin.

## Results & Discussion:

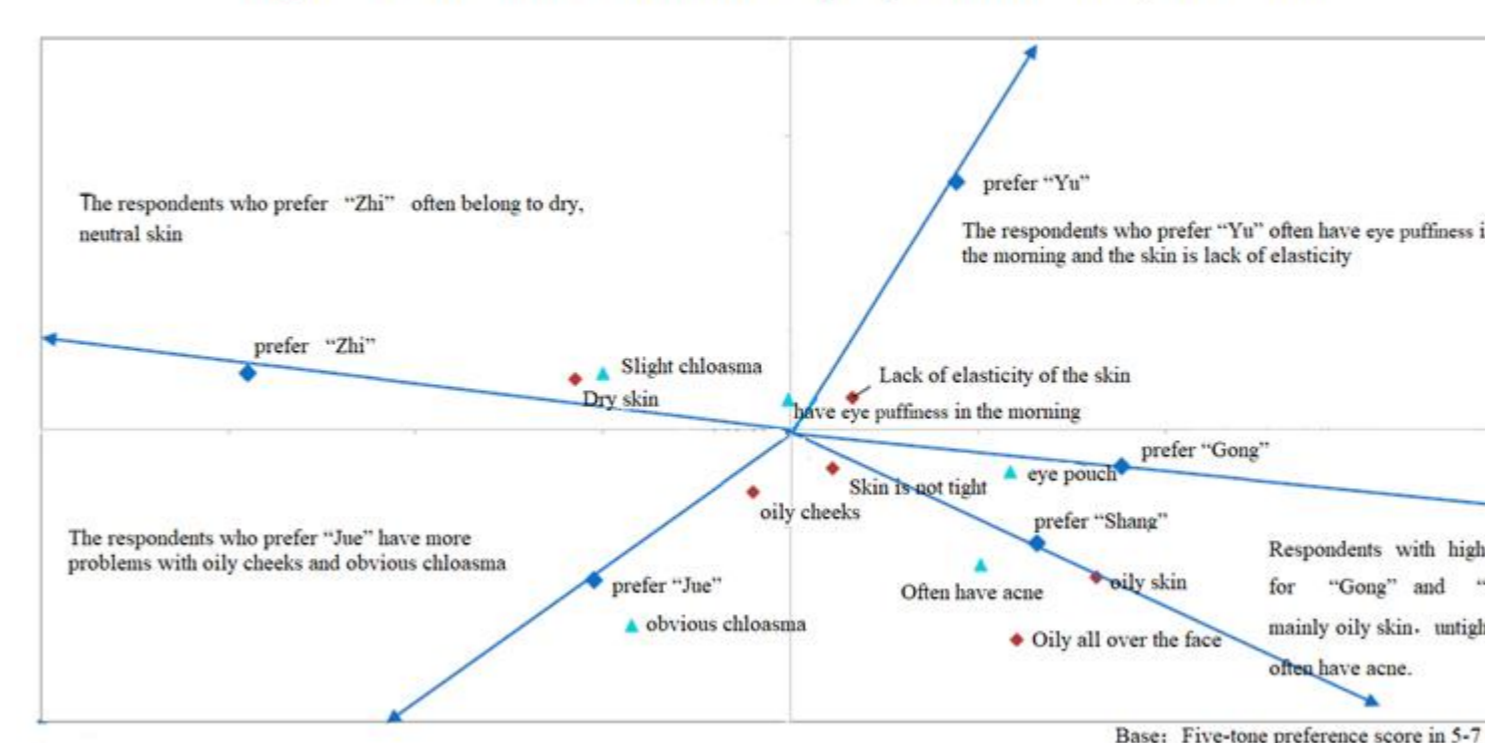
Table 1 Statistical results of the number of people with five-tone preference (percentage) [people (%)]

Score	Gong(4.16)	Shang(4.33)	Jue(4.31)	Zhi(4.47)	Yu(4.41)
never tire of listening (7 points)	10 (2)	20 (4)	15 (3)	15 (3)	15 (3)
very nice (6 points)	70 (14)	80 (16)	80 (16)	85 (17)	85 (17)
a little nice (5 points)	110 (22)	115 (23)	120 (24)	155 (31)	130 (26)
acceptable (4 points)	165 (33)	165 (33)	165 (33)	155 (31)	170 (34)
a little unpleasant (3 points)	100 (20)	95 (19)	95 (19)	65 (13)	75 (15)
very unpleasant (2 points)	30 (6)	20 (4)	20 (4)	20 (4)	20 (4)
extremely unpleasant (1 point)	10 (2)	10 (2)	10 (2)	10 (2)	10 (2)

Table 2 Correlation test between the overall preference of five-tone and skin conditions/problems

Description	The overall preference of five-tone
Current skin type	-0.003
Sensitivity of facial skin	0.101**
The facial skin is dull	-0.25*
Facial skin laxity	0.121*
The skin is not delicate enough	-0.018
Dry facial skin	-0.040**
Greasy facial skin	0.069**
Uneven facial skin tone	0.021
Chloasma	-0.062**
Face telangiectasis	-0.024*
Acne	0.035**
Dry lines/fine lines/wrinkles	0.002
Eye puffiness / Pouch	0.054**
Dark circles	0.051**

Figure 1. The skin conditions of people attracted by five-tone



- Table 1.** The rank averages of Gong, Shang, Jue, Zhi, Yu were 4.16, 4.33, 4.31, 4.47 and 4.41. The rank mean value of "Zhi" was the highest ( $P < 0.05$ ), while "Gong" was the lowest ( $P < 0.05$ ). The most selected option for "Zhi" is a little nice (5 points) and acceptable (4 points), the corresponding proportion of people is 31%.
- Table 2.** Five-tone preference was significantly positively correlated with facial skin sensitivity, greasy skin, acne, eye puffiness /pouch and dark circles ( $P < 0.01$ ), and significantly positively correlated with facial skin laxity ( $P < 0.05$ ).
- Figure 1.** The respondents who prefer "Yu" often have eye puffiness in the morning and the skin is lack of elasticity; Most of the respondents who prefer "Zhi" often belong to dry, neutral skin; Respondents with high preference for "Gong" and "Shang" are mainly oily skin, untightened skin and often have acne. Those who prefer "Jue" have more problems with oily cheeks and obvious chloasma.

## Conclusions:

- The overall acceptance of the five-tone is higher, among which the acceptance of "Zhi" is the highest, and the acceptance of "Gong" is the lowest, which may be related to the tone characteristics.
- There is a significant positive or negative correlation between the degree of five-tone preference and the skin state and problems, of which two situations are focused on. One is that the more obvious or serious the skin problems are, including skin sensitivity, slack, greasy, eye puffiness / pouch, the higher the degree of five-tone preference. The other is the opposite situation, such as chloasma, the more serious the problem is, the lower preference of five-tone.
- People attracted by five-tone have different skin conditions, and when it comes to a specific skin problem, they show a preference for different tones.

## Aknowledgments:

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