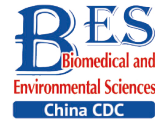# Original Article

# The Psychosomatic Traits of "People with the Five Elements in Traditional Chinese Medicine": A Qualitative Study[*]

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## Abstract

**Objective**   To identify the representative attributes of the five elements of a person with a qualitative methodology and provide the basis for the clinical diagnosis and treatment of "people with the five elements in traditional Chinese medicine (TCM)."

**Methods**   Data collected from the literature review, two sessions of brainstorming of experts with related experience in "people with the five elements in TCM" from October 2020 to December 2020, and six rounds of in-depth interviews with 30 participants who had various attributes of the five elements from March 2021 to October 2021 were analyzed. Triangulation was used in this study, and theming and synthesizing were used to analyze the data.

**Results**   A total of 31 experts and 30 interviewees participated in this study. The median age of the experts and interviewees were 48.0 and 38.5 years, respectively; 51.66% and 54.8% of experts and interviewees, respectively, were men. The descriptors of facial diagrams of "people with the five elements in TCM" were complexion, shape, distribution state of facial bones, convergence trend of facial muscles, and facial expression. A theoretical model of "people with the five elements in TCM" was shaped based on these findings.

**Conclusion**   The study suggests a possibility for bridging the gap between personality and bodily state, identifying an avenue for personality research from the perspective of TCM.

**Key words:** People with the five elements in TCM; Brainstorming; In-depth interviews; Triangulation; Personality; Traditional Chinese medicine

# INTRODUCTION

In traditional Chinese medicine (TCM), everyone is believed to have the attributes of the five elements (Wu Xing), i.e., wood, fire, earth, metal, and water. "Five elements" (Wu Xing) comes from a theory of TCM that classifies the five elements (wood, fire, earth, metal, and water) to match the inside and outside of the body, parts and the whole human, including the viscera, and the internal organs of the body (liver, heart, spleen, lungs, and kidneys), interpreting the relationship among the internal organs and their physiological and pathological features for effective diagnosis, medication, and treatment[1-3].

The theory of "people with the five elements in TCM" was published in the *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* in *Ling Shu* of *Huang Di Nei Jing* in the Spring and Autumn Period (770 BC–476 BC) and the Warring States Period (476 BC–221 BC)[4]. The concept of "people with the five elements in TCM" has been constantly annotated by physicians in each dynasty after it was first proposed. The "people with the five elements in TCM" are believed to have distinct, stable, recognizable, and integrated psychosomatic attributes and disease patterns[5-7]. For example, "the people with the metal element in TCM" refers to those who have characteristics that typically represent their nature, such as pale complexion, small head, narrow shoulders and back, flat abdomen, short hands and feet, and bony and light movements. Their personality traits include being uncorrupted, eager, quiet, fierce, and good at the execution of ideas. These people are prone to lung and liver diseases[8-10].

*Twenty-Five People with Yin Yang* was formally mentioned by Chen in 1986 in the modern literature[11]. The consistency between the facial diagrams and personality traits of "people with the five elements in TCM" is widely recognized and used clinically in TCM[12-14]. However, most of these studies on "people with the five elements in TCM" were based on personal understanding or clinical experiences. The inconsistency among researchers in evaluating the psychosomatic traits of "people with five elements in TCM"[15] remains. Defining the facial diagrams and personality traits of "people with the five elements in TCM" is challenging because human faces and personality traits are complex, and their characterization in ancient Chinese literature is simple and abstract. A relatively comprehensive theoretical model to interpret their relationshipshasnot been developed. This study aimed to develop more sophisticated descriptors for the facial diagrams, personality traits, and disease patterns of "people with the five elements in TCM" with a qualitative method and construct a model of these dimensions to aid clinicians in precise diagnosis and treatment.

# METHODS

The research design is contingent upon the nature of the research problem[16,17]. Qualitative inquiry was used in this study because it entailed employing various procedures and strategies in the research process, enabling the probing of the multiple realities of the field[18]. An outline of the qualitative interview of people with the five elements in TCM is presented in the supplementary materials.

Two literature reviews and two brainstorming sessions with a group of experts were organized, and six rounds of in-depth interviews were conducted to probe the multiple attributes of "people with the five elements in TCM". Triangulation of data sources and sample selection was used to keep the data reliable (Figure 1).

The first literature review focused on combining the understanding of "people with the five elements in TCM" and comparing this with one of the Western classical personality theories – the five-factor model[19]. The studies about facial diagrams of the "people with the five elements in TCM" were general and contradictory; this was insufficient to describe the facial diagrams consistently. This led to the second literature review in which the facial diagrams were clarified with holistic morphological characteristics[20].

Brainstorming was conducted in Beijing Anding Hospital Capital Medical University, and included integrated medical treatment, teaching and prevention, and some scientific research projects. Two sessions of brainstorming were organized with a total of 31 participants. These participants were experts with research backgrounds and clinical experience in the field of "people with the five elements in TCM". They were selected to identify the representative attributes observed among "people with one element in TCM" and those among "people with multiple elements in TCM". The content discussed in the brainstorming was mainly informed by the two literature reviews. Brainstorming was organized twice within three months (October to December 2020) (Table 1). The participants were

aged 35 to 61 years, with a median age of 48.0 years. Their professional title was associate professor or higher, with the working years ranging from 20 to 30 years.

Interviews were conducted in the tearoom at Howard Johnson Hotel in Jiyuan City, Henan Province, China, from March 2021 to October 2021. Interviews were conducted by the researchers and the team under the panel's supervision. A total of 30 interviewees participated in the six-round interviews (Table 2), each round including five participants. They were selected according to the attributes of "people with the five elements in TCM", identified by the two literature reviews and the brainstorming. Twenty participants who showed their representative attributes of the "people with the five elements" were selected. These participants showed

only one element more than the other four element out of the five. Ten participants who showed multiple attributes of "people with the five elements" were selected as the control group[21-24]. These participants showed two or three elements more than those in the experimental group. Most participants were volunteers, but some were targeted for divergence in background, working experience, and lifestyle. No participant dropped out of the study.

NVIVO 10 software was used to record and analyze memos of performing processes and creative imaginings[25]. A deductive thematic analysis[26-28] was used to identify, describe, and compare the facial diagrams, personality traits, and disease patterns among the participants. The following themes were obtained from the literature
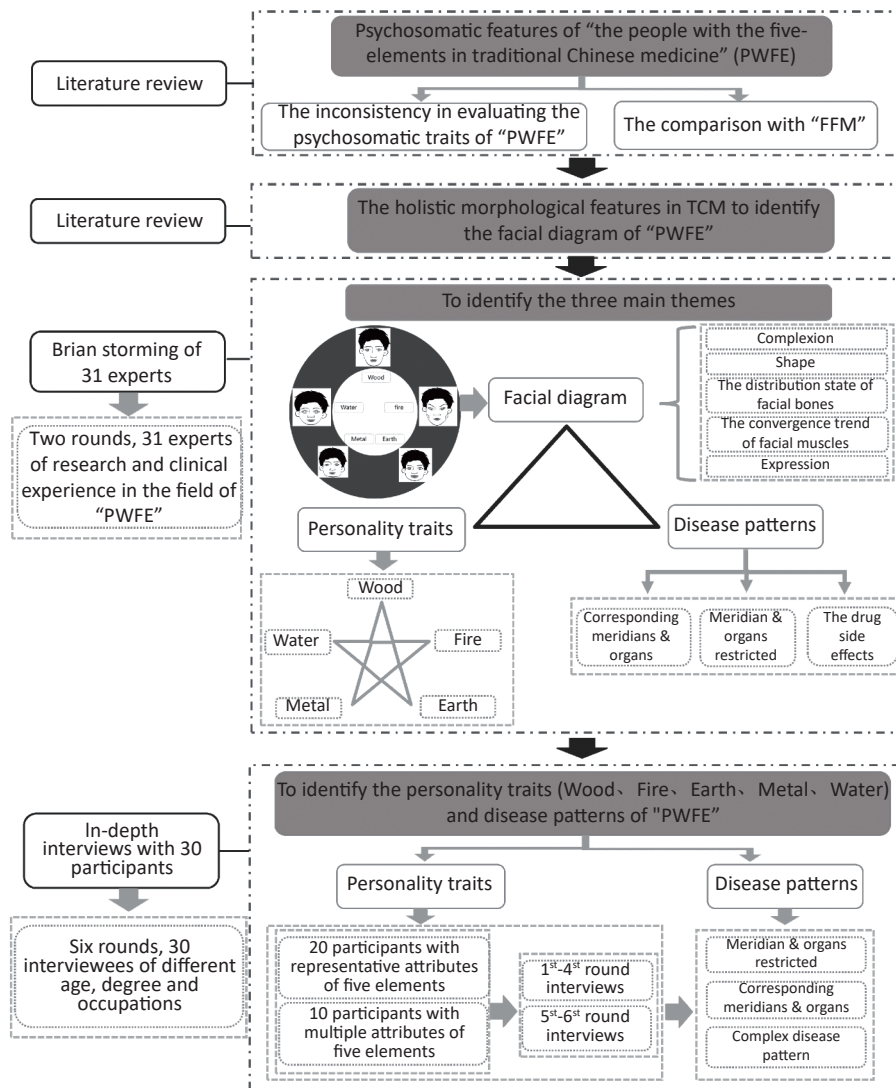


**Figure 1.** The outline of this study.

reviews, brainstorming, and interviews:

i. The connotations of facial diagrams of the "people with the five elements in TCM".

ii. The personality traits of the "people with the five elements in TCM".

iii. The disease characteristics of the "people with the five elements in TCM".

### Reflexivity and Trustworthiness

The supervisory panel comprised a professor with qualitative research expertise, two researchers with a background in TCM, a professor of

psychology, and a professor of psychiatry responsible for evaluating the design and instructing the team.

The data from the brainstorming and interviews were all recorded with an iFLYTEK voice recorder. A group of team members transcribed them under the panel's supervision.

### RESULTS

The three main themes were synthesized based on the facial diagrams, personality traits, and disease

**Table 1.** Characteristics of 31 experts

| Characteristics | Total | First round | Second round |
|---|---|---|---|
| Gender, *n* (%) | 16 (51.6) | 8 (53.3) | 8 (50.0) |
| Male | 16 (51.6) | 8 (53.3) | 8 (50.0) |
| Female | 15 (48.4) | 7 (46.7) | 8 (50.0) |
| Age, years, median (min, max) | | | |
| 35–60 | 48.0 (38.0, 55.0) | 46.0 (40.0, 55.0) | 49.5 (36.3, 55.8) |
| Professional title, *n* (%) | | | |
| Chief Physician/ | 14 (45.2) | 7 (46.7) | 7 (43.7) |
| Associate Chief Physician | 0 (0.0) | | |
| Professor/ | 17 (54.8) | 8 (53.3) | 9 (56.3) |
| Associate Professor | 0 (0.0) | | |
| Work history (years), *n* (%) | 0 (0.0) | 0.0 (0.0) | 0 (0.0) |
| 1– | 0 (0.0) | 0.0 (0.0) | 0 (0.0) |
| 5– | 8 (25.8) | 4 (26.7) | 4 (25.0) |
| 10– | 4 (12.9) | 1 (6.7) | 3 (18.8) |
| 20– | 11 (35.5) | 6 (40.0) | 5 (31.2) |
| > 30 | 8 (25.8) | 4 (26.6) | 4 (25.0) |

**Table 2.** "People with the five-elements in TCM" of participants

| N | Gender | Age (years) | Degree | Position | Samples | How identified |
|---|---|---|---|---|---|---|
| 5 | 4M/1F | 35–55 | Bach, Master | Boss, deputy director, chairman, manager, vice president of the local court | Interviewees with representative attributes of five elements | The friends of author |
| 5 | 3M/2F | 26–45 | high school, | Waiters, security guards, cleaning staff | Ditto | Poster readers |
| 5 | 2M/3F | 28–50 | Bach, Master | Manager, administration staff, accountant, salesman, Receptionist | Ditto | Recommended by the boss of howard Johnson hotel |
| 5 | 1M/4F | 27–45 | Bach, Master | Nurse, doctor, cashier, delivery man, office worker | Ditto | Volunteers |
| 5 | 3M/2F | 28–45 | high school, Bach | Receptionist, chef administration staff, baker, policeman | Interviewees with multiple attributes of five elements | Mixed sources |
| 5 | 3M/2F | 27–43 | Bach, Master | Chef, office worker, real estate agent | Ditto | Mixed sources |

**Note.** F, Female; M, Male.

patterns of the "people with five elements people in TCM".

***Facial Diagrams of "People with the Five Elements in TCM"***

The facial diagram of "people with the five elements in TCM" can be expressed as five sub-themes: complexion, shape, distribution state of facial bones, convergence trend of facial muscles, and facial expression. Complexion refers to the skin color of the face; the shape is the shape of the face and head; the convergence trend of facial muscles is the tendency of the facial muscles to gather and disperse; and facial expression is the feeling conveyed by the facial expression and appearance.

Ancient archives defined complexion and shape of facial diagrams as follows: "people with the wood element" look dark green and small-headed with a long face; "people with the fire element" look red, sharp-faced, and small-headed; "people with the earth element" look yellow, round-faced, and big-headed; "people with the metal element" look pale, wide-faced, and small-headed; and "people with the water element" are black/dark and big-headed with an uneven face.

The literature review resulted in an expansion of complexion and shape characteristics to include trends and expressions. The brainstorming revealed that complexion, shape, trend, and expression in the literature review were identified, but the shape was divided into two types: 'head shape' and 'distribution state of facial bones'. This means that the features of facial morphology were constructed. Table 3 provides the sub-themes of the facial diagrams of the "people with the five elements in TCM" with typical characteristics.

***Personality Traits of "People with the Five Elements in TCM"***

The personality of the "people with the five elements in TCM" was developed into five sub-themes (wood, fire, earth, metal, and water) based on *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)*. The psychological traits of "people with the five elements in TCM" were extracted from the data of brainstorming informed by the literature review and in-depth interviews (P for participant, E for expert).

***Wood***    Theoretically, *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* defined the features of people with wood personality as "talented, worried, debilitated, concerned, and hard-working".

In the brainstorming and interviews, people with wood features were shown as "active, positive, fond of new things but a bit conservative, kind, sincere, considerate, being full of strategies and astuteness, hard-bitten, hard-working, capable and responsible" but "anxious, sensitive, depressed, worried, debilitated, resistant, depressed, angry, and self-abased".

*P1: "I want to have good performance in my workplace and everyday life. I always try my best. However, I feel I am short of driving force and action often. ...I am unwilling to participate in unspoken rules-related matters."*

*P6: "I feel a bit self-abased in my heart... My family and friends commented that I was sincere, capable, and responsible ... I often care and worry about them."*

*P11: "I often take the initiative to pursue what I want, but I might not be able to make it due to my own or environmental reasons ... I can put up with hard life and work."*

*P16: "I like new things, but when I was exposed to a new environment, I found myself conservative ... I easily get anxious and depressed ... I think it is necessary to spend more time planning and thinking before doing something."*

*E3: "The people with wood features are usually analytical, strategic, caring, benevolent, fair,*

**Table 3.** Sub-themes of the facial diagrams among the "people with five-elements in TCM"

| Five elements | Face color | Shape | Distribution state of facial bones | Convergence trend of facial muscles | Expression |
|---|---|---|---|---|---|
| People with Wood-element | Dark green | Small-headed, Long face | Narrow and long | Face muscle distribution Is relatively flat | Melancholy |
| People with Fire-element | Red | Small-headed, Sharp-faced | Protruding Forward cheekbones | Concentrated to the cheekbones | Joyful |
| People with Earth-element | Yellow | Big headed, Round-faced | Thick facial bones | Thick, Concentrated towards the middle | Unsophisticated |
| People with Metal-element | White | Small-headed, Wide-faced | Wide cheekbones, prominent Jawbone | Firm, Close to the bones | Solemn |
| People with Water-element | Black | Big-headed, Round-faced | Wide mandible | Plump, Drooping down to the jaws on both sides | Humble |

*sensitive, and jealous; they think more but do less."*

This means the people with personality traits of wood were contradictory and full of strategies and astuteness. It is similar to the theoretical characteristics of wood. However, this was not described in the *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* in *Ling Shu* of *Huang Di Nei Jing*, and the negative characteristics of wood personality (being resistant, depressed, angry, and self-abased) were not clearly shown in this chapter of *Huang Di Nei Jing*.

**Fire**   Theoretically, *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* defined the features of people with fire personality as "energetic, regard money lightly, credulous, overthinking, insightful, and impatient".

In the brainstorming and interviews, people with fire features were shown as "keen, insightful, liking challenges, energetic, free, happy, socialized, flexible, straightforward, enthusiastic, having wide interests, problem-solvers, divergent and imaginative thinker, independent, courageous, quick, devoted, and warm-hearted" but "impatient, impulsive, impetuous, short-tempered, lacking stamina and endurance, credulous, and like spending money".

*P2: "I am optimistic, cheerful, and energetic ... I have insight into human nature and things. ... My thinking is divergent and imaginative. ... I like stage-changing and competitive work and life ... I enjoy spending money...."*

*P7: "I am a free and happy person who does not like to be bound by rules and disciplines. ... I tend to do things without consideration."*

*P12: "I like to do more than one thing at the same time. ... When something goes wrong, I am normally irritable and lose my temper, but the temper disappears soon, and I lose the bad mood easily. ... I am not defensive about people, and it is easy to trust others in life."*

*E11: "The people with fire features are usually bright, fraternal, outgoing, active, generous, understanding, engaging, communicative, socialized, adventurous, and impatient."*

It appears that the "overthinking" in the personality trait of fire in the *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* refers to being divergent thinkers with a strong connection to knowledge or the environment rather than being worried. This is different from the most current literal understanding.

**Earth**   Theoretically, *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* defined the features

of people with earth personality as "peaceful, ready to help others, dislike power, and dependent on others".

In the brainstorming and interviews, the people with earth features were considered "easy-going, obedient, comfortable, tolerant, peaceful, kind, forgiving, deliberate, empathetic, honest, content with the status quo, and tend to refer to other people's opinions" but "slow, tangled, hesitant, attention-seeking, stubborn, clingy, needing care and support, and easy to change their mind".

*P3: "I care about other people's ideas and normally put myself in others' shoes ... I am a person with a peaceful mind ... My family and friends say that I am an honest, generous person."*

*P8: "I often think things over and over and find it hard to make a decision ... My family and friends say that I am stubborn."*

*P13: "I am content with the status quo, enjoy a comfortable life ... My response is slower than tht of others in many circumstances."*

*P18: "I feel bad for myself if I cannot get the attention I deserve. ... Family members and friends say that I am clingy and rely on their care and support ... I can tolerate most people and things."*

*E9: "The people with earth features are usually obedient, self-effacing, steady, mature, hospitable, clingy, emotional, expect to be rewarded if they help others, and easily influenced by others."*

The personality traits of earth were objectively reflected in balance. This means the personality traits of people with earth features are moderate, which is the golden meaning of the Confucian school.

**Metal**   Theoretically, *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* defined the features of people with metal personality as "uncorrupted, eager, quiet, fierce, and good at execution".

In the brainstorming and interviews, the people with metal features were shown as "self-demanding, perfectionists, calm, controlling, logical, organized, regular, orderly, meticulous, determined, self-disciplined, clear-cut, neat, decisive, cautious, restrained, quiet and strong with execution" but "demanding, mandatory, constrained, sad, irritable, dogmatic, fixed, and rigid".

*P4: "Once I make a decision, I normally do it resolutely even if I face difficulties and receive no support. ... I always try to do the right things at the right time. ... I am good at putting things into action."*

*P9: "I often feel worried and hesitant ... I follow the rules and regulations even if some things might*

*offend the VIP. ... I have a strong will to win and to make everything perfect."*

P14: *"I think carefully and pay attention to details. ... Compared to others, I think I am more calm, logical, clear-cut, neat, decisive."*

P19: *"I have a strong desire for controlling. ... I like being alone and quiet in leisure time. ... Compared with others, my thinking might not be that open and active."*

E11: *"The people with metal features are usually introverted, restrained, strong, ruthless, resolute, self-reliant, self-improving, strict, sad, irritable, and self-demanding, with a lust for power."*

This means that personality traits with metal features were similar to the known definitions and interpretations in the *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)*. This is similar to the personality traits with wood features in terms of not supporting current views.

**Water**   Theoretically, *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)* defined the features of people with water personality as "disrespectful and good at deceiving".

In the brainstorming and interviews, the people with water features were shown as "smooth, relaxed, natural, unrestrained, unconstrained, visionary, good at self-censorship, resourceful, full of stratagems, conjecture, concealing, good at covering up, reserved" but "idle, go with the flow, empty, timid, apprehensive, panic-stricken, regretful, display malicious speculation, manipulative, disguising, shrinking back, and gives up easily".

P5: *"I think it is necessary to examine myself three times a day. ... If I am offended, I may not directly conflict with others; I may look for appropriate ways and opportunities to solve the problem and maximize my interests."*

P10: *"I always try to conceal my true thoughts. I often feel panic and resistant when facing challenges."*

P15: *"I have a sense of emptiness often. ... Compared to others, I have more patience, endurance, and humiliation. ... I often speculate maliciously about someone or something."*

P20: *"I tend to give up when facing disputes or competition but often regret what I have done. ... I am not easily driven by nearby changes ...I often make sufficient preparation for anything. ... If I hate a person, I will do bad things about him behind him and toss him."*

E9: *"The people with water features are usually self-cultivated, wise, witty, unrestrained, unconstrained, good at covering up, cunning, skillful,* *resourceful, and full of stratagems."*

The data showed that the merits and demerits of people with the features of water were developed. The people with the personality traits of water showed many merits. This differs from the definition in *Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren)*, in which only demerits were mentioned.

### Disease Patterns of "People with the Five Elements in TCM"

The disease characteristics of "people with the five elements in TCM" are complex in terms of theory interpretation. Theoretically, the representative attributes among "people with one element in TCM" tended to reflect the obvious element they showed in Air (Qi) and blood distribution characteristics of the dominant meridian. This is considered 'the corresponding meridians and organs'. Alternatively, the conflict-harmony co-existence principle of the five elements in TCM is important; this refers to the order in which these elements conflict but co-exist harmoniously. This order is that this element restricts the element after its next element. This is the meaning of 'the meridians and organs restricted.' For instance, earth is restricted by wood, water is restricted by earth, fire is restricted by water, metal is restricted by fire, and wood is restricted by metal. In this sense, once Water (Shui) was too strong, Fire (Huo) was relatively restricted. This means that although the disease characteristics of the "people with the five elements in TCM" are complex, 'the corresponding meridians and organs' and 'the meridians and organs restricted' lead to diseases. The main disease patterns from the data are as follows:

**A Pattern for 'Corresponding Meridians and Organs'**
The literature review showed that people with successive features of one element broke the balance of the five elements. This would lead to diseases in corresponding meridians.

**A Pattern for 'Meridians and Organs Restricted'**
The brainstorming revealed that the disease characteristics of the meridians and organs restricted were offered under the conflict-harmony co-existence principle of the five elements in TCM, as shown in the data:

E6: *"The people with 'wood' features tend to have spleen and stomach diseases because the relationship between 'wood' and 'earth' is conflicted, and 'earth' is the element restricted."*

**Complex Disease Patterns**   Theoretically, there are more than 30 mathematically possible patterns in

which the five elements can be arranged and rearranged. This means the disease patterns among the "people with the five elements in TCM" are multiplex, mainly reflected in 'the corresponding meridians and organs' and 'the meridians and organs restricted'.

Interviews showed that two of the five elements (Wu Xing) were interrelated and interacted. Sometimes, three or four elements were also interrelated.

P10: "I suffer from coronary heart disease. I often feel flustered and chest tightness."

P20: "I often have a bitter mouth and diarrhea after drinking alcohol, which was diagnosed as damp heat affecting the liver in TCM."

This means 'the corresponding meridians and organs' and 'the meridians and organs restricted' were interrelated. Additionally, 'the meridians and organs restricted' showed close relationships with disease patterns of the five elements. More importantly, the three elements unrelated to 'the corresponding meridians and organs' and 'the meridians and organs restricted' were also interrelated. Table 4 provides the disease patterns of the "people with the five elements in TCM".

### Drug Side Effects of "People with the Five-Elements in TCM"
Brainstorming revealed that the "people with the five elements in TCM" had different side effects of drugs, particularly drugs for mental diseases.

E5: "The extrapyramidal reaction caused by antipsychotic drugs was higher in 'people with wood features' than in people with the other four elements."

E13: "The metabolic syndrome caused by antipsychotic drugs was higher in 'people with earth features' and 'people with water features' than in people with the other three elements."

The side effects of drugs among "people with the five elements in TCM" came from experts' clinical observations. However, it was neither shown in the Twenty-Five People with Yin Yang (Yin Yang Er Shi Wu Ren) nor verified in the interviews.

## DISCUSSION

The complexion and shape of the facial map of "people with the five elements in TCM" were first reported in the Neijing, which has been the main basis for judging the attributes of the five elements, identifying personality features through facial diagnosis in TCM, and playing an important role in predicting susceptibility to diseases. The description of the facial map of "people with the five elements in TCM" has gradually become concrete, microscopic, and three-dimensional with the deepening of people's understanding of facial features. Previous studies observed that "people with the earth element in TCM" had round faces and rich facial muscles[29]. Other studies showed that humans could infer personality traits from other people's facial expressions, considered the basic structure of "facial feature space"[30]. Previous study reported that the geometric morphometrics of male facial shapes are related to physical strength, perceived attractiveness, dominance, and masculinity[31]; our study described that the distribution state of facial bones is an important feature of facial three-dimensional presentation. Notably, our study analyzed five sub-themes of "people with the five elements in TCM", including complexion, shape, facial bones, convergence trend of facial muscles, and facial expressions. An extension of the descriptors for facial maps could identify the faces of "people with the five elements in TCM" more clearly and provide more detailed judgment criteria for the diagnosis and treatment.

The model of "people with the five elements in TCM" has been the main model of five-element personality description in TCM for more than 2000

**Table 4.** The disease patterns of the "people with five-elements in TCM"

| Five elements | Corresponding meridians & organs | Dominant element | Restrictedelement | Meridians & organs restricted |
|---|---|---|---|---|
| People with Wood-element | Liver meridian of foot-jueyin, Gall bladder meridian of foot-shaoyang | Wood | Earth | Spleen meridian of foot-taiyin, Stomach meridian of foot-yangming |
| People with Fire-element | Heart meridian of hand-shaoyin, Small intestine meridian of hand-taiyang | Fire | Metal | Lung meridian of hand-taiyin, Large Intestine meridian of hand-yangming |
| People with Earth-element | Spleen meridian of foot-taiyin, Stomach meridian of foot-yangming | Earth | Water | Kidney meridian of foot-shaoyin, Bladder meridian of foot-taiyang |
| People with Metal-element | Lung meridian of hand-taiyin, Large Intestine meridian of hand-yangming | Metal | Wood | Liver meridian of foot-jueyin, Gall bladder meridian offoot-shaoyang |
| People with Water-element | Kidney meridian of foot-shaoyin, Bladder meridian of foot-taiyang | Water | Fire | Heart meridian of hand-shaoyin, Small intestine meridian of hand-taiyang |

years, which plays an important role in diagnosing and predicting psychosomatic diseases. The personality characteristics of the five elements in TCM were considered the characteristics of the five elements. A brief description of the psychological characteristics, for example, in Twenty-Five *Peoplewith Yin Yang* (Yin Yang Er Shi Wu Ren), regarding the personality features of the fire element in TCM are the characteristics of fire; 'energetic' is similar to the heat of the fire, 'over-thinking' is the spreading power of the fire, 'insightful' is the penetrating power of the fire, and 'impatient' is the explosive power of the fire. The description of the five elements of personality is gradually concretized and enriched with the deepening of people's understanding of the personality. A previous study supplemented the personality traits of "people with the water element in TCM"[10]. Pan et al. considered that the personality features of "people with the wood element in TCM" had obvious advantages and limitations and were supplemented[14]. Based on the personality features of "people with the five elements in TCM" and the literature published, the present study further supplemented and improved the personality features of "people with the five elements in TCM", particularly for human perception. The improved personality features of the five elements can define the psychological characteristics of "people with the five elements in TCM" more clearly and provide more detailed judgment criteria for diagnosis and treatment in TCM.

*Neijing* described the disease patterns of "people with the five elements in TCM". "People with the five elements in TCM" were considered susceptible to diseases with 'the corresponding meridians and organs'. Literature reported that "people with the five elements" are susceptible to diseases with 'the meridians and organs restricted' due to the inter-restriction relationship among the five elements'[8]. Pathogenesis in TCM is believed to be the unbalanced state of the five elements. The relationship between the five elements is complex, and there is a connection between every two or more elements. The integrity and connection of the five elements and the conflict-harmony co-existence principle of the five elements lead to the complexity of disease characteristics. The complex disease patterns were confirmed in the interview in our study. Thus, our study included dominant and restricted meridians and organs disease patterns and complex disease models, could provide more detailed guidance for clinical diagnosis and treatment of people with the five elements in TCM.

Generally, peoples' personalities are often deduced based on their faces[32-33], forming the first impression. Specific facial regions (facial symmetry, width-to-height ratio, facial pre-touch space)[34-36] or expressions[37-38] are associated with certain traits ofa person's personality. Literature suggested that agreeableness, conscientiousness, and extraversion were significantly associated with specific facial patterns[39]. Human facial phenotypes have rich biological significance and have been widely used to identify age[40-41], sex temperament[42], and attractiveness[43]. Previous studies revealed that personality also has a biological basis[44-45], indicating a potential link between facial phenotype and personality. Modern medicine suggests that genetic background[46-47], hormonal drive[48-49], and habitual patterns of emotional expression[50] may have a relationship with face and personality.

Some studies found a relationship between personality and diseases. Lewis et al. reported that neuroticism was an important personality factor affecting depression and anxiety[51]. Another three-year longitudinal study of Australian children aged 8-19 years with diabetes found that conscientiousness and agreeableness were important personality factors in predicting the prognosis of children with diabetes[52]. However, no comprehensive mind-body theory explains the relationship and guides medical practice. This study reported the possibility of bridging the gap between personality, body state, and disease patterns from TCM through the model of "Twenty-Five People of Yin and Yang".

The limitations of the present study include its small sample size from one site and bias in the interpretation of the results. However, the study has several strengths. To our knowledge, this is the first study to explore the relationship among facial diagrams, personality characteristics, and disease patterns through qualitative research method; we found that the descriptors of facial diagrams of "people with the five elements in TCM" are complexion, shape, the distribution state of facial bones, the convergence trend of facial muscles, and facial expression. Further shaping a theoretical model of "people with the five elements in TCM", the findings could provide a reference for precise diagnosis. A multi-center study is required to confirm our findings.

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