

Sasangin Diagnosis Questionnaire: Test of Reliability

JUNG-HEE YOO, M.A.,¹ JONG-WON KIM, K.M.D., Ph.D.,¹ KYU-KON KIM, Ph.D.,²
JONG-YEOL KIM, K.M.D., Ph.D.,³ BYUNG-HEE KOH, K.M.D., Ph.D.,¹
and EUI-JU LEE, K.M.D., Ph.D.¹

ABSTRACT

Background: The concept of Sasang Constitutional Medicine (SCM) has been in existence in Traditional Korean Medicine for more than 100 years. It is of great importance that the Sasang constitution type be determined accurately before any therapeutic treatment.

Objectives: Reliability analyses were carried out to evaluate the Sasangin Diagnosis Questionnaire (SDQ).

Design: The data were collected through multi-center research in collaboration with the Departments of SCM in the nine Korean Colleges of Oriental Medicine. The internal consistency test and the test-retest method were applied in the reliability analysis.

Subjects: The test-retest data of 88 respondents were used to analyze the reliability. The internal consistency reliability analysis was carried out using the data collected from 423 respondents.

Results: The test-retest reliability was examined using the Pearson's correlation coefficients, which ranged from 0.44 to 0.74. The chi-square test results showed that there were five independent items in the retest that demanded careful attention. The Cronbach's alpha coefficient showed that all items were acceptable.

Conclusions: All the categories of SDQ can be accepted as being reliable scales.

INTRODUCTION

With the significant advances in anatomical and pathologic medical sciences since World War II, the disease-centered therapeutic medicine had also shown remarkable advances. However, with the development of modern day technologies such as the genetic analysis, the paradigms are beginning to shift towards the patient-centered personalized medicine. The concept of Sasang Constitutional Medicine, which shares similar views to the tailored medicine, has been in existence in Traditional Korean Medicine for more than 100 years.

The term "constitution" comprises the meaning of "the physical body" plus "the functional system," although the definition can differ slightly from person to person depending on their main field of study. The genetic factors and the

surrounding environment influence the constitution. Constitutional typology has been an area of interest in both Eastern and Western countries since ancient times.¹

In the Western world, Hippocrates (460 BC–377 BC) proposed the theory of the four humors. Galenus (131–201) added a new aspect on the theory in that there were four temperaments affecting the humors. Kretschmer (1888–1964) divided the general population into three psychosomatic types, whereas Jung (1875–1961) posed the theory of psychologic archetypes in humankind, namely, the "Jungian archetypes." Recently in the immunologic fields, the allergy types of patients have been divided into five types for clinical purposes, type I–type V.

On the other hand, in the Eastern world, the term "constitutional type" was first mentioned in *Hwang-jae Naegyung*, which is the oldest written medical book in China,

¹Department of Sasang Constitutional Medicine, College of Traditional Korean Medicine, Kyung Hee University, Seoul, Republic of Korea.

²Department of Information Statistics, Dongeui University, Pusan, Republic of Korea.

³Department of Medical Research, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea.

where it introduces a system of constitutional typing, namely, "the five types of people." The constitutional theory in the Ayurveda, which is a branch of traditional Indian medicine, explains the three metabolic body types: Vata, Pitta, and Kapha. In the Chosun dynasty of Korea, Lee Jae-ma (1837–1900) defined the four types of constitution (Sasang constitution) in his book, *Dong-Yi Su-Se Bo-Won*, which is currently being used in Traditional Korean Medical practice. Lee Jae-ma classified people into four types of constitution: Taeyangin, Soyangin, Taeumin, and Soeumin. He presented the physiology, pathology, and guidelines for a healthy life, in relation to the physical and psychologic attributes of each constitutional type. The division of Traditional Korean Medicine that studies these four types of constitution is called "Constitutional Medicine."²

It is of great importance that the Sasang constitution type be determined accurately before any therapeutic treatment. The process of classifying the Sasang constitution type is based on the attributes described in *Dong-Yi Su-Se Bo-Won*. These include the external appearance and somatotype, personality, general health condition and symptoms, and the reaction to medication. Various studies have been carried out in compliance with these criteria for diagnosing the constitution type, including somatotyping measurements,^{3,4} head and face measurements,⁵ biochemical analysis,⁶ genetic analysis,^{7,8} and analysis using diagnostic equipment.^{9,10}

However, this kind of constitutional diagnosis research is not only inappropriate for practical clinical application, but also tends to overlook the psychologic components. Therefore, there have been many studies using supplemented questionnaires that also account for various mental factors. Self-report questionnaires of similar kinds have often been used in the psychologic fields or in human sciences, and one of the most recent examples is the quality of life questionnaires for evaluating and measuring the health conditions.¹¹ The Sasangin Diagnosis Questionnaire (SDQ) was first constructed in 1985,^{12,13} and has since been updated and revised to become the questionnaire now widely used in medical practice.¹⁴ However, there are some questions regarding the narrow scope of the questions, the need to improve the surveying skills, and the low discrimination accuracy.^{15,16}

The Korea Institute of Oriental Medicine (KIOM) and The Society of Sasang Constitutional Medicine (SSCM) have collaborated in this research. Different items and questioning methods from the currently used questionnaire were adopted.^{17,18}

The data for the SDQ was collected through multicenter research in collaboration with the Departments of Sasang Constitutional Medicine in the nine Korean Colleges of Oriental Medicine. This paper reports the results of the reliability analysis of the SDQ.

METHODS

Sample and data collection

The test–retest method was used in the reliability analysis. The subjects chosen were 99 mentally and physically healthy employees of the "S–Bank" in Seoul. The data were first collected through a self-report structured questionnaire on March 5, 2004, and the second retest was administered to the respondents of the first test 2 weeks later. There were 11 respondents who were considered insincere: 3 who gave partially incomplete responses in the first test, 5 who gave generally incomplete responses in the second retest, and 3 who gave partially incomplete responses in the second retest. These 11 insincere respondents were excluded, and the final assessment was based on the data from the remaining 88 respondents.

When the general characteristics of the subjects were examined, there was a gender distribution of 73 males (83%) and 15 females (17%), an average age of 36.82 ± 4.68 among the males and 29.87 ± 6.78 among the females, and an educational attainment distribution of 1 respondent with middle school education (1.1%), 1 with high school education (1.1%), 72 with college education (81.8%), and 14 with graduate-school education or more (15.9%).

The SDQ was produced as a result of multicenter research with the Departments of Sasang Constitutional Medicine in the nine Korean Colleges of Oriental Medicine. The data used in the internal consistency reliability analysis were collected between June and November 2004. The accumulated data promptly underwent data coding according to a predetermined form by trained researchers in each college and were uploaded onto the Web disc. The database uploaded from each college was put through a process of data cleansing before finally being made into data files. In order to remove the input errors that could have occurred in the data cleansing process, the variables of the entire database were examined through frequency analysis, and those judged to be erroneous were scrutinized in the central research centers and were rechecked and corrected in each college. The missing values were processed as missing.

A total of 434 respondents who had agreed to the purposes of this study completed the questionnaire. The final subjects chosen for the study were the 423 respondents remaining after excluding the 11 insincere respondents (6 who did not respond to more than 50% of the items, 5 who chose the same answer for more than 10 consecutive items). The subjects received interviews and physical examinations by the medical specialists in the Departments of Sasang Constitutional Medicine of each oriental medical hospital and had their constitutional tendencies diagnosed. The constitutional type of each subject was confirmed through a treatment with the corresponding constitutional medication for more than 4 weeks, and those who were found to show im-

TABLE 1. INTERNAL CONSISTENCY RELIABILITY AND TEST-RETEST RELIABILITY OF SDQ FOR EACH SCALE CATEGORY

Scale category	k^a	Internal consistency (Cronbach's Alpha coefficient) (n = 423)	Test-retest (Pearson's correlation coefficient) (n = 88)
Taeyang appearances	24	0.58	0.56
Taeyang personality	19	0.76	0.61
Taeyang symptoms	15	0.62	0.67
Soyang appearances	28	0.66	0.73
Soyang personality	12	0.59	0.44
Soyang symptoms	18	0.63	0.67
Taeum appearances	31	0.66	0.74
Taeum personality	13	0.49	0.64
Taeum symptoms	24	0.66	0.48
Soeum appearances	29	0.65	0.57
Soeum personality	11	0.66	0.69
Soeum symptoms	31	0.77	0.68

^aNumber of items.
SDQ, Sasangin Diagnosis Questionnaire.

provements on their chief complaints without any particular side effects were chosen. However, those who were incapable of communication and locomotion (e.g., from stroke), those less than 12 years (elementary school students), and those more than 80 years were excluded.

When the general attributes of the subjects were examined, the following Sasang constitutional distribution was observed: 16 Taeyangin (10 female, 6 male), 129 Soyangin (52 female, 77 male), 150 Taeumin (77 female, 73 male), 128 Soeumin (63 female, 65 male). Sociodemographically, Taeyangin is the least commonly found constitution type: the number varies between regions and races but usually averages around 3–10 per 10,000. The 16 Taeyangin subjects, though small in number, were all included in the analysis, because the aim of this research was to produce a questionnaire that can be used to classify all four types of constitution. The average age of the subjects was 44.00 ± 8.78 for Taeyangin, 44.12 ± 15.69 for Soyangin, 40.45 ± 17.25 for Taeumin, and 37.38 ± 15.31 for Soeumin. There were no significant age differences between the groups. The educational attainment distribution was as follows: 3 with no

education (0.8%), 35 with elementary school education (9.4%), 46 with middle school education (12.3%), 118 with high school education (31.6%), 172 with college education (50.0%), and 41 with graduate school education or more (11.0%).

Sasangin Diagnosis Questionnaire

The SDQ is a self-report questionnaire for Sasang constitution diagnosis, which was recently revised in 2003 through collaborated work by the SSCM and the KIOM. The items in the questionnaire were derived from the content of *Dong-Yi Su-Se Bo-Won* and were written in simple, everyday language. The questionnaire consisted of a total of 229 items, including 91 items related to the external appearance and somatotype, 54 items associated with the subjects' personality, and 84 items on the general health condition and symptoms. Each item was composed of a three-level scale, which required the respondent to choose one answer among three: "③ yes," "② moderate," and "① no." In terms of the constitutional groups, 27 items were mutual questions, and the re-

TABLE 2. COHEN'S KAPPA COEFFICIENT FOR MEASURE OF AGREEMENT

	k^a	Items
Kappa < 0.4	40	Q2(3), Q4(3), Q4(4), Q5(5), Q5(7), Q5(9), Q7(1), Q7(3), Q9(2), Q9(5), Q9(6), Q11(3), Q12(1), Q12(3), Q13(1), Q13(2), Q13(4), Q15(1), Q21, Q22, Q23, Q25, Q27, Q28, Q30, Q35, Q41, Q44, Q46, Q53, Q56, Q58, Q71, Q76(1), Q79(3), Q79(6), Q80(5), Q81(4), Q81(7), Q82(8)
0.4 ≤ Kappa < 0.8	182	Others
0.8 ≤ Kappa	1	Q75(%)

^aNumber of items.

maining items comprised 60 items for Taeyangin (23.4%), 56 items for Soyangin (21.8%), 67 items for Taeumin (26.1%), and 74 items for Soeumin (28.9%) (Appendix 1).

Analyses

In cases where none of the three possible choices (③, ②, or ①) in a particular item were checked, the results were processed as missing data.

The internal consistency test and the test–retest method were applied in the reliability analysis.

The Cronbach's alpha coefficient, which is based on the number of items in a set and the homogeneity of the items,¹⁹ was calculated in order to assess the internal consistency.

In the test–retest method, the Pearson correlation coefficients in the 12 scale categories were calculated, and the independence and the measure of agreement between each item were also tested. The test of independence was performed using cross-tabulation analysis with the chi-square test and *p* value. Because the SDQ items had three choices, Cohen's kappa coefficient for 3×3 was used in the agreement analysis.

RESULTS

The reliability of scales was assessed using Cronbach's alpha coefficient. The Soeum Symptoms category had the highest Cronbach's alpha coefficient value of 0.77, whereas the Taeum Personality category had the lowest value of 0.49 (Table 1).

The test–retest reliability was evaluated by asking 88 respondents to complete the questionnaire twice with an interval of 2 weeks. The Pearson product–moment correlation coefficients for the two test results ranged from 0.44 to 0.74 (Table 1).

The test–retest method was used to examine the independence before and after as well as for the agreement analysis. The test of independence was carried out using cross-tabulation analysis with chi-square test and *p* value. The following items were found to be independent: three items in the Taeyang category (Q7(5), Q16(4), Q82(1)), one item in the Taeum category (Q2(5)), and one item in the Soeum category (Q5(9)). The responses to these items in the first and second questionnaires proved to be unrelated to each other.

The Cohen's kappa coefficient for 3×3 was used in the agreement analysis because there were three choices for each SDQ item. If the values were concentrated in the diagonal cells of the 3×3 cross-tabulation table, the Cohen's kappa value would be $\kappa = 1$, whereas it would be $\kappa = 0$ if the values were distributed equally in all of the cells of the matrix. Three 2×3 items (Q2[5], Q69, Q82[1]) and one 1×2 item (Q82[3]) could not be analyzed. The kappa coefficient is

usually judged empirically because it has no *p* value. Generally, kappa values <0.4 indicate "a low degree of concordance," kappa values between 0.4 and 0.8 denote "a moderate degree of concordance," and kappa values >0.8 denote "a high degree of concordance." There were 40 items showing "a low degree of concordance," 1 item showing "a high degree of concordance," and the remainder (182 items) showing "a moderate degree of concordance" (Table 2).

DISCUSSION AND CONCLUSIONS

The Departments of Sasang Constitutional Medicine in the nine Korean Colleges of Oriental Medicine worked in collaboration to construct and validate the SDQ between June and November 2004. After excluding the 11 insincere subjects, the data from the final remaining 423 respondents were used in the analysis.

The reliability of the scales was assessed using the Cronbach's alpha coefficient. The highest Cronbach's alpha coefficient was found in the Soeum Symptoms category ($\alpha = 0.77$), and the lowest was found in the Taeum Personality category ($\alpha = 0.49$). In a test of reliability of the scales with the aim of comparing the specific groups, a high reliability can be inferred if the estimate value of Cronbach's alpha coefficient is greater than 0.5²⁰ or 0.7.²¹ If the baseline is set to 0.5, all the categories can be accepted as being reliable scales, which indicates that this questionnaire is acceptable for surveying purposes.

In order to assess the test–retest reliability, 88 respondents were asked to complete the questionnaire twice with an interval of 2 weeks in between.

The Pearson product–moment correlation coefficients for the two test results ranged from 0.44 to 0.74, showing a positive linear relationship of +0.3 to +0.7. The chi-square test results revealed five independent items that demanded close attention. The interviewer might be able to solve this problem by being more explicit in the questioning process, thereby guiding the respondent to an appropriate choice. In addition, in the agreement analysis, 181 of 223 items (81.2%) were found to have a kappa coefficient >0.4 . This suggests that the items in the questionnaire are generally concordant. The items that have a low degree of agreement would have to be corrected and improved through further analysis of a larger database.

It is necessary that more explicit explanations be given to the respondents in order to induce a more genuine response and that more data be accumulated. In addition, there would need to be validity and certain standardization processes that account for the variables associated with gender, age, educational attainment, and so on. Furthermore, a short form of the questionnaire would have to be developed to make it more convenient in a clinical setting.

ACKNOWLEDGMENTS

This work was supported by the Korea Institute of Oriental Medicine and Society of Sasang Constitutional Medicine, Daejeon, Republic of Korea, in 2004.

REFERENCES

1. Lee EJ. Taeyangin · Soyangin · Taeumin · Soeumin: Finding Out One's Constitutional Type. Seoul: Jipmoondang, 2002:11–12.
2. Song IB, Kho BH, Lee EJ, et al. Sasang Constitutional Medicine: 2nd ed. Seoul: Jipmoondang, 2004:325–335.
3. Lee MH, Hong SY. A study on the correlation between Lee Jae-ma's four types of essential physical constitution and physical form index. *J Sasang Const Med* 1990;2:71–86.
4. Huh MH, Song JM, Kim DR, Koh BH. A study on the morphological diagrammings of four constitutions. *J Sasang Const Med* 1992;4:107–148.
5. Koh BH, Song IB, Cho YJ, et al. A morphologic study of head and face for Sasang constitution. *J Sasang Const Med* 1996;8:101–186.
6. Cho HS, Ji SE, Lee EJ, et al. The studies on the objectification of Sasang constitution by biochemistry lab. *J Sasang Const Med* 1997;9:147–162.
7. Cho DW, Lee CS, Koh BH, et al. Genetic analysis study of Sasang constitution classification by DNA fingerprinting methods. *J Sasang Const Med* 1996;8:151–164.
8. Choi SH, Yim YB, Rhee JW, et al. Relationship between the Sasang constitution and ACE polymorphism. *J Sasang Const Med* 1998;10:283–290.
9. Kim JR, Kim DR. The study of verification bi-digital O-ring test by gausus. *J Sasang Const Med* 1995;7:69–102.
10. Kim JW, Koh BH, Song IB. A study of the correlativity in EAV (electroacupuncture according to Voll) measurement values, Sasang constitution classification and CVA (cerebrovascular accident). *J Sasang Const Med* 1995;7:59–88.
11. Ware JE, Sherbourne CD. The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection. *Med Care* 1992;30:473.
12. Kho BH, Song IB. The study of Sasangin diagnosis I. *J Kor Orient Med* 1985;6:40–47.
13. Kho BH, Song IB. The study of Sasangin diagnosis II. *J Kor Orient Med* 1987;8:146–160.
14. Song IB. The future prospect of the studies on the objectification of Sasang constitution. *J Sasang Const Med* 1998;10:1–12.
15. Park EK, Park SS. A study on comparison of responses to the questionnaire based on Sasang institution's differences—Questionnaire of Sasang constitution classification II. (QSCCII). *J Sasang Const Med* 2000;12:134–167.
16. Kim TY, Yoo JH, Lee EJ, et al. The study on the upgrade of QSCC II (I). *J Sasang Const Med* 2003;15:27–38.
17. Lee EJ. The Study of Development of Sasangin Classification Inventory Program 1 (I): Final Report. Seoul: Korea Institute of Oriental Medicine, 2003.
18. Lee EJ, Kim JW, Kim KK, et al. The test for the item-branch of Sasangin Diagnosis Questionnaire. *J Korean Data Analysis Soc* 2005;7:101–111.
19. Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika* 1951;16:297–334.
20. Jung CH, Choi YK. Statistical Analysis Using SPSSWIN: Reliability Test. Seoul: Muyek-kyengyoung, Inc., 1996:102–114.
21. Nunnally JC, Bernstein IR. In: McHorney et al. *Psychometric Theory*, 3rd ed. New York; McGraw-Hill, 1994.

Address reprint requests to:
Eui-Ju Lee, K.M.D., Ph.D.

*Department of Sasang Constitutional Medicine
Kyung Hee Traditional Korean Medicine Hospital, 1
Heogi-Dong, Dongdaemun-Gu
Seoul #135-501
Republic of Korea*

E-mail: sasangin@paran.com

APPENDIX 1

Sasangin Diagnosis Questionnaire

This questionnaire was designed to determine your Sasang constitutional type. The constitutional type differs among persons and is in itself a nonjudgmental value.

■ How to fill out this questionnaire:
 Read carefully the questions on the following pages, and

1. Select the answer that would normally best represent you compared to your peers.
2. Respond in your “natural frame of mind.”
3. There are no time limits, but do not stay on a question for too long.
4. Ask the examiner should any confusion arise on how to fill out the questionnaire.

Personal Descriptions

(☞ Fill in the blanks within the bold-framed box)

Name		Date	Year	Month	Day
Date of birth	Year Month Day	(years old)	Height/weight		cm/ kg
Sex	① Female ② Male	Blood type	① Type A	② Type B	③ Type O ④ Type AB
Marital status	① Married ② Not married ③ Divorced ④ Spouse deceased ⑤ Others				
Education	① None ② Elementary school ③ Middle school ④ High school ⑤ Undergraduate ⑥ Graduate				

★ Appearances (Facial appearances)

1. At first sight, I give the impression of being

- | | |
|--------------------------------|-----------------------------|
| (1) charismatic and decisive | ③ Yes ② Moderate ① No |
| (2) clear-cut | ③ Yes ② Moderate ① No |
| (3) nimble and bold | ③ Yes ② Moderate ① No |
| (4) clever | ③ Yes ② Moderate ① No |
| (5) taciturn and mild-mannered | ③ Yes ② Moderate ① No |
| (6) reliable | ③ Yes ② Moderate ① No |
| (7) compliant | ③ Yes ② Moderate ① No |
| (8) calm | ③ Yes ② Moderate ① No |
| (9) cold | ③ Yes ② Moderate ① No |

2. My overall facial outline is close to this shape:

- | | |
|-------|-----------------------------|
| (1) ○ | ③ Yes ② Moderate ① No |
| (2) ◇ | ③ Yes ② Moderate ① No |
| (3) □ | ③ Yes ② Moderate ① No |
| (4) ▽ | ③ Yes ② Moderate ① No |
| (5) △ | ③ Yes ② Moderate ① No |

3. My face/head is characterized by

- | | |
|--------------------------|-----------------------------|
| (1) a large head | ③ Yes ② Moderate ① No |
| (2) a prominent forehead | ③ Yes ② Moderate ① No |

- (3) wide width
 (4) small facial features
 (5) large facial features
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
4. My forehead is
- (1) narrow
 (2) wide
 (3) bulging
 (4) characterized by unusual flatness between the eyebrows
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
5. On a cursory look at my eyes and eyebrows,
- (1) I have fierce, staring eyes
 (2) I have vivid, intense eyes
 (3) I have eyes that slant upward
 (4) I have huge, bovine eyes
 (5) I have eyes and eyebrows that slant downward
 (6) I have thick eyebrows
 (7) I have unusually short eyebrows
 (8) I have very dark eyes
 (9) my eyes are set distant from the eyebrows
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
6. On a cursory look at my nose,
- (1) I have a high-bridged nose
 (2) the tip of the nose is narrow and sharp
 (3) I have a big nose with a blunt tip
 (4) I have a small nose with inconspicuous nostrils
 (5) the tip of the nose is turned up
 (6) I have an aquiline nose
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
7. On a cursory look at my mouth and chin,
- (1) I have thin lips
 (2) I have thick lips
 (3) I have pouting lips
 (4) I have a big mouth
 (5) I have a protruding jaw that curls upward
 (6) I have a pointed chin
 (7) I have a square chin
 (8) I am buck-toothed
 (9) I am rabbit-toothed
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
8. On a cursory look at my ears,
- (1) I have huge ears
 (2) I have ears with thick earlobes
 (3) I have concave ears shaped like a small bowl
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
9. When I am speaking,
- (1) I have a sonorous and forceful voice
 (2) I have a clear and ringing voice
 (3) I have a raspy voice, or I just stay quiet
 (4) I have a soft and soothing voice
 (5) I become garrulous, giving a misimpression of shallowness
 (6) my manner of speech is logical and well-planned out
- ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No
 ③ Yes ② Moderate ① No

★ Body frame (Body)

10. Looking at my overall body frame, I am

- | | |
|-----------------|-----------------------|
| (1) big-boned | ③ Yes ② Moderate ① No |
| (2) small-boned | ③ Yes ② Moderate ① No |
| (3) fat | ③ Yes ② Moderate ① No |
| (4) thin | ③ Yes ② Moderate ① No |
| (5) muscular | ③ Yes ② Moderate ① No |

11. The part of my body that is the least developed is

- | | |
|-----------------------|-----------------------|
| (1) around the waist | ③ Yes ② Moderate ① No |
| (2) around the pelvis | ③ Yes ② Moderate ① No |
| (3) around the neck | ③ Yes ② Moderate ① No |
| (4) around the chest | ③ Yes ② Moderate ① No |

12. The part of my body that is the most developed is

- | | |
|-----------------------------------|-----------------------|
| (1) around the back and shoulders | ③ Yes ② Moderate ① No |
| (2) around the chest | ③ Yes ② Moderate ① No |
| (3) around the belly (abdomen) | ③ Yes ② Moderate ① No |
| (4) around the buttocks | ③ Yes ② Moderate ① No |

13. My shoulders are

- | | |
|----------------------------------|-----------------------|
| (1) sagging downward | ③ Yes ② Moderate ① No |
| (2) shifting upward | ③ Yes ② Moderate ① No |
| (3) closed (chest turned inward) | ③ Yes ② Moderate ① No |
| (4) open (chest turned outward) | ③ Yes ② Moderate ① No |
| (5) narrow | ③ Yes ② Moderate ① No |

14. When I move around, I usually walk

- | | |
|-----------------------------|-----------------------|
| (1) lightly and spryly | ③ Yes ② Moderate ① No |
| (2) slowly and heavily | ③ Yes ② Moderate ① No |
| (3) demurely and cautiously | ③ Yes ② Moderate ① No |

15. I have

- | | |
|---|-----------------------|
| (1) pale and dry skin | ③ Yes ② Moderate ① No |
| (2) thick and rough skin | ③ Yes ② Moderate ① No |
| (3) soft and gentle skin | ③ Yes ② Moderate ① No |
| (4) skin covered with thick hair and numerous sweat pores | ③ Yes ② Moderate ① No |
| (5) skin covered with thin hair and few sweat pores | ③ Yes ② Moderate ① No |

16. On a cursory look at my hands and feet,

- | | |
|---|-----------------------|
| (1) I have callused hands | ③ Yes ② Moderate ① No |
| (2) I have especially thin ankles | ③ Yes ② Moderate ① No |
| (3) I have thin, long fingers | ③ Yes ② Moderate ① No |
| (4) my thumb is remarkably thick and long | ③ Yes ② Moderate ① No |
| (5) my little finger is remarkably short, the tip of which is level with the second interphalangeal joint from the top of the fourth finger | ③ Yes ② Moderate ① No |

17. The part of the body that puts on especially more fat when I gain weight is

- | | |
|-----------------------------|-----------------------|
| (1) the face | ③ Yes ② Moderate ① No |
| (2) the chest and upper arm | ③ Yes ② Moderate ① No |
| (3) the belly (abdomen) | ③ Yes ② Moderate ① No |
| (4) the buttocks and thighs | ③ Yes ② Moderate ① No |

★ Personality

- | | |
|--|-----------------------|
| 18. I decide quickly | ③ Yes ② Moderate ① No |
| 19. I do my work in one go without much ado | ③ Yes ② Moderate ① No |
| 20. I achieve through tenacity and perseverance | ③ Yes ② Moderate ① No |
| 21. I am patient | ③ Yes ② Moderate ① No |
| 22. I am pretty straightforward and decent | ③ Yes ② Moderate ① No |
| 23. I am impatient | ③ Yes ② Moderate ① No |
| 24. I adhere to the principles | ③ Yes ② Moderate ① No |
| 25. I deal with problems rationally without getting emotional | ③ Yes ② Moderate ① No |
| 26. I have a passive life | ③ Yes ② Moderate ① No |
| 27. I do not care for third opinions | ③ Yes ② Moderate ① No |
| 28. I do not care for formalities or routines | ③ Yes ② Moderate ① No |
| 29. I just have to be the top guy at everything | ③ Yes ② Moderate ① No |
| 30. I am tolerant enough to encompass differences | ③ Yes ② Moderate ① No |
| 31. I am slow | ③ Yes ② Moderate ① No |
| 32. I do not bend in what I believe is right | ③ Yes ② Moderate ① No |
| 33. I have an active life | ③ Yes ② Moderate ① No |
| 34. I am an introvert | ③ Yes ② Moderate ① No |
| 35. I am meticulous and thorough | ③ Yes ② Moderate ① No |
| 36. I become uncontrollably angry when confronted with scorn or disrespect | ③ Yes ② Moderate ① No |
| 37. I am a perfectionist | ③ Yes ② Moderate ① No |
| 38. I rarely reveal my innermost feelings | ③ Yes ② Moderate ① No |
| 39. I am stubborn | ③ Yes ② Moderate ① No |
| 40. I am hotheaded | ③ Yes ② Moderate ① No |
| 41. I am moody, I have my fair share of ups and downs | ③ Yes ② Moderate ① No |
| 42. I rarely voice my opinions | ③ Yes ② Moderate ① No |
| 43. I hate outside meddling | ③ Yes ② Moderate ① No |
| 44. I have great social skills but true friends are rare | ③ Yes ② Moderate ① No |
| 45. I do not socialize well and I choose my friends carefully | ③ Yes ② Moderate ① No |
| 46. I give greater priority to other people's affairs than to mine | ③ Yes ② Moderate ① No |
| 47. I have many masculine traits | ③ Yes ② Moderate ① No |
| 48. I have many feminine traits | ③ Yes ② Moderate ① No |
| 49. I have conservative values | ③ Yes ② Moderate ① No |
| 50. I have liberal values | ③ Yes ② Moderate ① No |
| 51. I tend to come straight to the point | ③ Yes ② Moderate ① No |
| 52. I tend to voice out what I believe to be right | ③ Yes ② Moderate ① No |
| 53. I become greatly agitated when I am thwarted in my path | ③ Yes ② Moderate ① No |
| 54. I am cowardly | ③ Yes ② Moderate ① No |
| 55. I resist to changes in course | ③ Yes ② Moderate ① No |
| 56. I always try to see the contexts surrounding an event | ③ Yes ② Moderate ① No |
| 57. I rush through things in haste | ③ Yes ② Moderate ① No |
| 58. I cannot decide on matters easily | ③ Yes ② Moderate ① No |
| 59. I am timid | ③ Yes ② Moderate ① No |
| 60. I have the drive to pull things through | ③ Yes ② Moderate ① No |
| 61. I am creative | ③ Yes ② Moderate ① No |
| 62. I have a tendency for self-righteousness | ③ Yes ② Moderate ① No |
| 63. I do not procrastinate, I finish today's work before the day is over | ③ Yes ② Moderate ① No |
| 64. I tend to start out on a lot of stuff | ③ Yes ② Moderate ① No |
| 65. I am not good at rounding up stuff | ③ Yes ② Moderate ① No |
| 66. I live a sedentary life | ③ Yes ② Moderate ① No |
| 67. I care a lot about how I look | ③ Yes ② Moderate ① No |
| 68. I can be greedy when it comes to money matters | ③ Yes ② Moderate ① No |
| 69. Money can matter | ③ Yes ② Moderate ① No |
| 70. Honor is my priority | ③ Yes ② Moderate ① No |
| 71. I have strong jealous tendencies | ③ Yes ② Moderate ① No |

★ Digestion

72. Eating habits

- | | |
|---------------------------|-----------------------|
| (1) I overeat | ③ Yes ② Moderate ① No |
| (2) I eat a lot in one go | ③ Yes ② Moderate ① No |
| (3) I eat fast | ③ Yes ② Moderate ① No |
| (4) I am a picky eater | ③ Yes ② Moderate ① No |

73. Foods that don't go down too well

- | | |
|--|-----------------------|
| (1) I get stuffy from eating meat | ③ Yes ② Moderate ① No |
| (2) I get stuffy from eating seafood | ③ Yes ② Moderate ① No |
| (3) I get stuffy from eating greasy, rich food | ③ Yes ② Moderate ① No |
| (4) I get stuffy from eating wheat products | ③ Yes ② Moderate ① No |
| (5) I get diarrhea from drinking beer | ③ Yes ② Moderate ① No |
| (6) I get diarrhea from eating spicy food | ③ Yes ② Moderate ① No |
| (7) Hard-to-chew foods (cuttlefish, peanuts) can upset the stomach | ③ Yes ② Moderate ① No |

74. Digestive patterns

- | | |
|--|-----------------------|
| (1) Vegetarian meals go easy on the stomach | ③ Yes ② Moderate ① No |
| (2) I sometimes regurgitate food | ③ Yes ② Moderate ① No |
| (3) I have no tolerance for hunger | ③ Yes ② Moderate ① No |
| (4) I often have an upset stomach | ③ Yes ② Moderate ① No |
| (5) I hardly drink any water | ③ Yes ② Moderate ① No |
| (6) I drink water slowly and in little sips | ③ Yes ② Moderate ① No |
| (7) I have well-developed taste buds that allow me to discriminate tastes minutely | ③ Yes ② Moderate ① No |
| (8) I enjoy eating meat | ③ Yes ② Moderate ① No |

★ Sleep

75. Sleeping habits

- | | |
|--|-----------------------|
| (1) I get insomnia when things are not going according to plan | ③ Yes ② Moderate ① No |
| (2) I get insomnia with a change in the sleeping environment | ③ Yes ② Moderate ① No |
| (3) I sleep lightly | ③ Yes ② Moderate ① No |
| (4) I sleep with my feet sticking out of the blanket | ③ Yes ② Moderate ① No |
| (5) I snore | ③ Yes ② Moderate ① No |
| (6) I sleep lying face down | ③ Yes ② Moderate ① No |
| (7) I sleep quietly | ③ Yes ② Moderate ① No |
| (8) I go to bed early | ③ Yes ② Moderate ① No |
| (9) I do not sleep into late mornings even when I am tired | ③ Yes ② Moderate ① No |

★ Stool

76. Stool

- | | |
|--|-----------------------|
| (1) I get flaccid stools | ③ Yes ② Moderate ① No |
| (2) I get finger-thin stools | ③ Yes ② Moderate ① No |
| (3) I get stools without fixed shape | ③ Yes ② Moderate ① No |
| (4) I take long turns in the toilet | ③ Yes ② Moderate ① No |
| (5) I have regular bowel habits (timewise) | ③ Yes ② Moderate ① No |

77. Bowel habits

- | | |
|--|-----------------------|
| (1) I do not feel particularly uncomfortable with stools coming out every 4 ~ 5 days | ③ Yes ② Moderate ① No |
| (2) I seldom get diarrhea | ③ Yes ② Moderate ① No |
| (3) I get "goat stool" (tightly packed, small balls of stool) | ③ Yes ② Moderate ① No |
| (4) Changes in bowel habits are the first signs of general unwellness | ③ Yes ② Moderate ① No |
| (5) Constipation can cause agitation | ③ Yes ② Moderate ① No |

- (6) Exposure to stress can cause more frequent bowel movements ③ Yes ② Moderate ① No
 (7) I have a lot of flatulence ③ Yes ② Moderate ① No
 (8) I have frequent bouts of diarrhea ③ Yes ② Moderate ① No
 (9) A lot comes out in stool compared to how much I eat ③ Yes ② Moderate ① No
 (10) I have a cold lower belly ③ Yes ② Moderate ① No

★ Sweat

78. The parts of my body that sweat the most are
 (1) the face and head ③ Yes ② Moderate ① No
 (2) the hands ③ Yes ② Moderate ① No
 (3) the feet ③ Yes ② Moderate ① No
 (4) the armpits ③ Yes ② Moderate ① No
 (5) the genitals and buttocks ③ Yes ② Moderate ① No

79. Sweating patterns

- (1) My genitals are cold and damp ③ Yes ② Moderate ① No
 (2) I sweat in the face but not in the feet ③ Yes ② Moderate ① No
 (3) I sweat at night when I am tired ③ Yes ② Moderate ① No
 (4) I have had sticky, glutinous sweat on a previous occasion ③ Yes ② Moderate ① No
 (5) I feel invigorated after a good sweat ③ Yes ② Moderate ① No
 (6) I hardly sweat ③ Yes ② Moderate ① No

★ Urine

80. Urinary habits

- (1) I am a frequent bathroom-goer ③ Yes ② Moderate ① No
 (2) I get signs of cystitis when I am tired ③ Yes ② Moderate ① No
 (3) I rush to the toilet right after drinking ③ Yes ② Moderate ① No
 (4) A lot comes out in urine compared to how much I drink ③ Yes ② Moderate ① No
 (5) My urine turns darker and loses volume when I am tired ③ Yes ② Moderate ① No

★ Frequently found symptoms

81. Fatigue

- (1) I feel fatigued in the mornings ③ Yes ② Moderate ① No
 (2) I feel fatigued in the afternoons ③ Yes ② Moderate ① No
 (3) I feel fatigued in the evenings ③ Yes ② Moderate ① No
 (4) I get urinary problems when I am tired ③ Yes ② Moderate ① No
 (5) I get constipation when I am tired ③ Yes ② Moderate ① No
 (6) My fatigue improves with sweating ③ Yes ② Moderate ① No
 (7) I get digestive problems when I am tired ③ Yes ② Moderate ① No
 (8) I become sensitive to odors when I am tired ③ Yes ② Moderate ① No
 (9) I become sensitive to tastes when I am tired ③ Yes ② Moderate ① No

82. Frequently found symptoms

- (1) I gather foam in the mouth ③ Yes ② Moderate ① No
 (2) My face swells up often, especially in the eyes ③ Yes ② Moderate ① No
 (3) I have had a premature menopause in my early forties (women only) ③ Yes ② Moderate ① No
 (4) I get hot sensations in the palms of my hands and feet ③ Yes ② Moderate ① No
 (5) I get stuffy and hot sensations in the back and chest ③ Yes ② Moderate ① No
 (6) My colds start in the throat ③ Yes ② Moderate ① No
 (7) I have had an insidious lower back pain since childhood ③ Yes ② Moderate ① No

- | | | | |
|---|-------|------------|------|
| (8) I gain weight when I am not healthy | ③ Yes | ② Moderate | ① No |
| (9) I have a dry throat | ③ Yes | ② Moderate | ① No |
| (10) I often get uncomfortable sensations of having foreign substances in the throat ¹²¹ | ③ Yes | ② Moderate | ① No |
| (11) My eyes feel dry | ③ Yes | ② Moderate | ① No |
| (12) The back of my neck feels constrained | ③ Yes | ② Moderate | ① No |
| (13) My colds start in the nose | ③ Yes | ② Moderate | ① No |
| (14) I have cold hands and feet | ③ Yes | ② Moderate | ① No |
| (15) I do not like cold winds | ③ Yes | ② Moderate | ① No |
| (16) I sigh from time to time | ③ Yes | ② Moderate | ① No |