

# Study of Personality Traits in Constitutional Types

Sang Kwan Lee<sup>1,2\*</sup>, Eui Suk Jeong<sup>2</sup>, Kang Keyng Sung<sup>1</sup>

1: Department of Internal Medicine, College of Oriental Medicine, Wonkwang University.

2: Department of Psychology, College of Social Science, Chonnam University

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The purpose of this study was to investigate the personality traits in constitutional types. The Questionnaire for the Sasang Constitution Classification II and Eysenck Personality Questionnaire were completed by 155 university students. Statistical analyses of the Questionnaire for the Sasang Constitution Classification II and Eysenck Personality Questionnaire scale scores and results are as follows : First, Personality differences in constitutional types are revealed significantly with respect to Eysenck Personality Questionnaire scales such as neuroticism, addiction, and criminality. Second, there is a significant difference between Eum(陰) type and Yang(陽) type along psychoticism and neuroticism. Third, sex difference is significant along the dimension of extraversion-intraversion.

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Key words : Constitutional type, Questionnaire for the Sasang Constitution Classification II, Eysenck Personality Questionnaire, Eysenck personality theory

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## Introduction

Je-ma Lee said that there are four types of human beings based upon the congenital formation of the organs, Tae-yang (太陽), So-yang(少陽), Tae-eum(太陰) and So-eum(少陰) and there are four kinds of inclinations in the human mind, the mean(鄙), the weak(薄), the avaricious(貪), and the sycophantic(儒). In other words, all human beings have mental traits of the mean, the weak, the avaricious, and the sycophantic, each of which is differently manifested according to their constitution types<sup>1)</sup>. Thus, it is important to figure out personality traits of constitutions.

There are typological approaches and dimensional approaches used in the measurement of personality traits, The former approaches put more emphasis on diagnostic classification, whereas the latter focus on measuring of personality<sup>2)</sup>. The transition from typological descriptions of personality to contemporary dimensional descriptions followed the development of multi-variate methods of statistical analysis. In these methods, it is revealed that personality traits occur in correlated clusters, which can be represented in a small number of statistical factors or dimensions<sup>3)</sup>.

In Eysenck's theory of personality, which has a biological

foundation, individual differences of personality are viewed as reflecting differences in neurological constitution<sup>4-6)</sup>. He systematized a theory of personality dimensions such as psychoticism, neuroticism, and extraversion on the biological basis of the classical notion of the excitation and inhibition process and the classical paradigm of conditioning<sup>7)</sup>. He also designed an inventory (Eysenck Personality Questionnaire<sup>8)</sup>, henceforth EPQ) to measure personality dimensions. Among early representative dimension researches of biological foundation are researches where extraversion and psychoticism are seen as indices of arousal level, and researches where people of higher psychoticism is revealed to have lower responses to electric skin stimulus than common people<sup>4,9-10)</sup>.

The Questionnaire for the Sasang Constitution Classification II<sup>11-12)</sup>(henceforth QSCC II) was developed to assess Lee Je-ma's four constitutional types; Tae-yang, So-yang, Tae-eum and So-eum. Tae-yang was excluded because of a scarcity of frequency in clinical fields.

In the present study, EPQ and QSCC II were used to investigate analyze the personality traits in constitution types.

## Materials and Methods

### 1. Participants

The sample consisted of 155 university students (47 females and 108 males) who participated in this study for credit as part of their regular classes. All participants were Wonkwang university oriental medical students of similar age

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\* To whom correspondence should be addressed at : Sang Kwan Lee, Gwang Ju Oriental Medicine Hospital of Wonkwang University, 543-8 Juweol-Dong, Nam-Gu, Gwang-Ju

· E-mail : sklee@wonkwang.ac.kr · Tel : 062-670-6407

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(about 23 years old).

2. Materials

1) Questionnaire for the Sasang Constitution Classification II (QSCC II)

It is a 121 item self report inventory, which yields three scores, each representing one of the three constitutional types. Some items (first to the fifteenth) are consisted of statements that the participant must choose depending on how accurately the statement describes them and the rest of items (the sixteenth to the last) are yes-no questionnaires. The internal consistencies of So-yang, Tae-eum and So-eum were  $\alpha=0.5708$ ,  $\alpha=0.5922$  and  $\alpha=0.6319$ , respectively.

2) Eysenck's Personality Questionnaire (EPQ)

EPQ is a 79 item Yes-No questionnaire which measures Psychoticism, Extraversion, Neuroticism, Lie, Addiction and Criminality. The internal consistencies of the dimensions were  $\alpha=0.672$ ,  $\alpha=0.807$ ,  $\alpha=0.836$ ,  $\alpha=0.810$ ,  $\alpha=0.763$  and  $\alpha=0.808$ , respectively.

3. statistical analysis

Statistical analyses were carried out using the SPSS-PC 12.0 for windows statistical package. Analyses included  $\chi^2$  test on frequencies of sex, one-way analyses of variance (henceforth ANOVA) on the dimensions of EPQ and constitutional three types, and t-test between Eum(陰) and Yang(陽) of constitutional types. All data were represented as mean $\pm$ SE. Mean values were compared using Scheffe's multiple comparison (post-hoc) after ANOVA:  $p < 0.05$  was considered significant.

Results

1. Frequency and ratio of sex and constitutional types

Frequency and ratio of sex and constitutional type for the full sample were presented in crosstabulation (Table 1). The distribution of constitutional types according to sex, 108 males and 47 females, was as follows : 47 males and 20 females for So-eum; 28 males and 18 females for So-yang; 33 males and 9 females for Tae-eum. The order of constitutional types was as follows : So-eum (30.3%), Tae-eum (21.3%) and So-yang (18.1%) for males ; So-eum (12.9%), So-yang (11.6%) and Tae-eum (5.8%) for females. There is no significant differences between the frequencies of male and female through  $\chi^2$  test .

2. The personality differences of constitutional three types

The personality data of three constitutional three types were presented in ANOVA table (table 2). According to

ANOVA, Neuroticism, Addiction and Criminality were significantly different among three groups. According to Scheffe's multiple comparisons (post-hoc), the score of So-eum is significantly higher than that of So-yang in Neuroticism scale, the score of So-eum is significantly higher than that of So-yang in Addiction scale and there were no significant differences in Criminality scale.

Table 1. Descriptive statistics of constitutional three types and sex

		constitutional type			total
		So-eum(少陰)	So-yang(少陽)	Tae-eum(太陰)	
male	frequency	47	28	33	108
	ratio	30.3%	18.1%	21.3%	69.7%
female	frequency	20	18	9	47
	ratio	12.9%	11.6%	5.8%	30.3%
total	frequency	67	46	42	155
	ratio	43.2%	29.7%	27.1%	100.0%

Table 2. The ANOVA table of personality differences by constitutional three types

	three constitutional types			MS	F(2,132)
	So-eum (n=67)	So-yang (n=46)	Tae-eum (n=42)		
P	17.24 $\pm$ 1.68	18.16 $\pm$ 1.39	17.32 $\pm$ 1.66	7.54	F(2,132) = 2.90
E	20.39 $\pm$ 1.62	20.06 $\pm$ 1.71	20.11 $\pm$ 2.15	1.59	F(2,131) = .49
N	31.56 $\pm$ 2.10	30.06 $\pm$ 2.66	30.45 $\pm$ 2.47	28.64	F(2,131) = 5.00**
L	23.15 $\pm$ 1.65	22.94 $\pm$ 2.02	22.55 $\pm$ 1.50	4.35	F(2,133) = 1.52
A	22.95 $\pm$ 1.48	21.93 $\pm$ 1.84	22.05 $\pm$ 1.86	13.47	F(2,132) = 4.46*
C	26.50 $\pm$ 1.58	25.48 $\pm$ 2.06	25.71 $\pm$ 1.87	12.15	F(2,131) = 3.69*

Each data represents the mean  $\pm$ SE. \*:  $p < .05$ . \*\*:  $p < .01$  P: Psychoticism, E: Extraversion, N: Neuroticism, L: Lie, A: Addiction, C: Criminality, MS: mean square

3. The personality differences of Eum and Yang constitutional types

To investigate the personality differences between Eum and Yang constitutional types, So-eum and Tae-eum were classified into Eum type and So-yang was classified into Yang type. The personality data of two types were presented in t table (Table 3.) According to t-test, Psychoticism and Neuroticism were significantly different between two groups. The score of Yang type was significantly higher than that of Eum type in Psychoticism scale. The score of Eum type was significantly higher than that of Yang type in Neuroticism scale.

Table 3. Means and standard deviation on all measures by Eum (陰)-Yang(陽) constitutional types

	two constitutional types		t value
	Eum(陰) type (n = 109)	Yang(陽) type (n = 46)	
P	17.28 $\pm$ 1.65	18.06 $\pm$ 1.46	-2.42*
E	20.27 $\pm$ 1.82	20.03 $\pm$ 1.69	.67
N	31.13 $\pm$ 2.37	31.03 $\pm$ 2.6	2.23*
L	22.92 $\pm$ 2.37	23.06 $\pm$ 2.03	-.41
A	22.60 $\pm$ 1.76	22.00 $\pm$ 1.80	1.69
C	26.18 $\pm$ 1.77	25.50 $\pm$ 2.03	1.82

Each data represents the mean  $\pm$ SE. \*:  $p < .05$ . \*\*:  $p < .01$  P: Psychoticism, E: Extraversion, N: Neuroticism, L: Lie, A: Addiction, C: Criminality

#### 4. Sex differences

Mean values and standard deviations of the EPQ are presented in t table (Table 4) It shows that one of the six variables examined showed significant sex difference. Females had higher scores on the Extraversion scale.

Table 4. Means and standard deviation on all measures by sex

	sex		t value
	male (n=108)	female (n=47)	
P	17.51±1.74	17.46±1.42	.13
E	19.99±1.85	20.64±1.61	-1.97*
N	31.78±2.60	31.12±2.10	-.74
L	23.02±1.81	22.93±1.40	.30
A	22.35±1.84	22.80±1.58	-1.37
C	25.97±1.90	26.20±1.66	-.66

Each data represents the mean ±S.E. \*, p < .05, \*\*, p < .01 P: Psychoticism, E: Extraversion, N: Neuroticism, L: Lie, A: Addiction, C: Criminality

## Discussion

The Eysenck Personality Questionnaire has a number of important advantages over other systems of personality descriptions and measurement. The first advantage is that it is restricted to measurement of the small number of fundamental personality dimensions that can be identified in all of the best researched systems of personality description<sup>13</sup>. Another advantage is that the Eysenck system was derived originally from the differences observed between criterion groups, whereas most other well-known system of personality description have been derived mainly from the analysis of questionnaire data using statistical procedures that do not provide unique or theoretically meaningful solutions<sup>14</sup>.

EPQ shows several dimensions of personality: Psychoticism(P), Extraversion(E), Neuroticism(N), Lie(L), Addiction(A), and Criminality(C). Individuals who score high on psychoticism are generally aggressive, aloof, egocentric, impulsive, unempathic, and tough-minded, while low scorers are sensitive, able to control impulses, and conforming. Extraversion reflects individual differences in social interest and activity level. Individuals who scores high on extraversion are sociable, lively, active, assertive, and sensation seekers, while low scorers are shy, quiet, passive, and careful. Neuroticism reflects differences in emotional reactivity to negative environment stimuli. High scorers are prone to anxiety, depression, guilt, low-self esteem and moodiness, while scorers are calm and less reactive. Individuals who score high on lie are prone to hide their opinions, find fault with others even while admitting their own faults, always think of their habits and acts as good, and show too much pride. High scorers on addiction are often seen among the individuals who suffer from diet disorder and drug addiction. In addition, they

contribute to charities, while they tend to deprive possessions of others, to deceive others, and to think of friendship as easily broken. Individuals of higher criminality tend to be irritable and easily hurt. They are easily tired of their works and afraid that something terrible may break out. Very often they are concerned about health, suffered from insomnia, think of others as liars<sup>13,15</sup>.

Personality differences in constitutional types are revealed significantly with respect to EPQ's dimension such as neuroticism, addiction, and criminality. Individuals of So-eum type are significantly higher in the dimension of neuroticism than so-yang persons. This is consistent with Park et al's research on constitution and NEO-PI-R<sup>16</sup>. They showed that so-eum persons is significantly higher in emotional sensitivity than individuals of other types. In particular, significant differences are revealed along such subscales as anxiety, depression, self-consciousness, and impulsiveness. This is entirely similar to EPQ's neuroticism properties. It is thought that this can be an important factor used to explain personality traits which are unique to so-eum persons. It shows that So-eum persons are prone to anxiety, depression, guilt, low-self esteem and moodiness. In addition, so-eum persons are shown to be significantly higher than so-yang persons. This is in agreement with what is written in 'The Discourse on the Establishment and Supplement(擴充論)' of Dongyi Soose Bowon (東隣壽世保元): "The head of the so-eum person has to be cautious about being covetousness. If his head has on covetousness, he will certainly have the magnificent discernment of the Great Man<sup>1</sup>." However, no difference have been found between So-eum persons and Tae-eum persons in the dimension of addiction. This implies that it is difficult to distinguish between So-eum persons and Tae-eum persons. Therefore, shared and different properties need to be found out between the two types along more detailed subscales. With respect to criminality, there is a difference among constitutional types in ANOVA, but no difference is seen in multiple comparison. Therefore, a tendency which constitutional types show in criminality also needs to be figured out along more detailed subscales.

There is a significant difference between Eum type and Yang type along psychoticism and neuroticism. Yang type is significantly higher than Eum along the dimension of psychoticism, whereas along the dimension of neuroticism the result is quite the opposite. Eysenck views 'normal' and 'abnormal' as of a continuum, and think of psychoticism and neuroticism as a matter of degree<sup>9,13</sup>. In this respect, the personality tendencies of Eum type and Yang type are relatively evaluated along the single axis, of which psychoticism

and neuroticism stand at either poles.

Sex difference is significant along the dimension of extraversion-intraversion. Eysenck views both extroversion and psychoticism as indices of arousal level. Introversive persons have higher level in cortical arousal than extraversive persons. Cortical arousal level is controlled by Ascending Reticular Activating System (henceforth ARAS) in brain. Introversive persons' ARAS is easily activated, whereas extroversive persons are slow in response and come to be more inhibited<sup>9, 17)</sup>. However, it is not evident whether this results from the measurement of introversion-extroversion reflecting arousal level or the mixture of various factors such as cultural properties. From all these results, it is suggested that personality differences present in constitutional types will be helpful to determine the constitutional type of people.

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### References

1. Lee JM, Choi SH(Eds). Longevity & Preservation In Oriental Medicine. Seoul, Korea. Kyung Hee University Press. 1996.
2. Widiger TA. Categorical versus dimensional classification : implications from and for research. *J. Pers Disord* 6, 287-300, 1992.
3. Robinson DL. How brain arousal systems determine different temperament types and the major dimensions of personality. *Personality and Individual Differences* 31, 1233-1259, 2001.
4. Eysenck HJ. *The biological basis of personality*, Thomas, Springfield, 1967.
5. Faravelli C, Albanesi G. Agoraphobia with panic attacks : one year prospective follow up. *Compr Psychiatry* 28, 481-487, 1987.
6. Saviotti FM, Grandi S, Savron G, Ermenteni R, Bartolucci G, Conti S, Fava GA : Characterological traits of recovered patients with panic disorder and agoraphobia. *J. Affect Disord* 23, 113-117, 1991.
7. Pavlov IP. *Conditioned reflexes*, Oxford University Press, New York, 1927.
8. Eysenck HJ, Eysenck SBG. *The manual of the Eysenck personality questionnaire*, Hodder & Stoughton, London, 1975.
9. Lee HY, Kook SH, Yoon JS, Shim IS. Personality dimensions of Eysenck and their relations with sleep characteristics. *J. Korean Neuropsychiatr Assoc* 38, 1077-1088, 1999.
10. Robinson TN, Zahn TP. Psychoticism and arousal: Possible evidence for a linkage of P and psychopathy. *Personality and Individual Differences* 6, 47-66, 1985.
11. Kim SH, Ko BH, Song IB. The validation study of the Questionnaire for Sa-sang constitution classification. *J. Constitutional Medicine* 7, 247-294, 1996.
12. Lee JC, Ko BH, Song IB. A study on the standardization of QSCC II. *J. Constitutional Medicine* 7, 187-246, 1996.
13. Eysenck HJ, Eysenck MW. *Personality and individual differences : a natural science approach*, Plenum Press, New York & London, 1985.
14. Robinson DL. *Brain, mind, and behavior: a new perspective on human nature*, Praeger Press, Westport CT and London, 1996.
15. Steven M. Shatz. The relationship between Horney's three neurotic types and Eysenck's PEN model of personality. *Personality and Individual Differences* 37, 1255-1261, 2004.
16. Park HI, Lee KI. A study of personality traits in Sasang constitution according to comparative analysis of QSCC II & NEO-P-I-R. *J. Constitutional Medicine* 12, 104-122, 2000.
17. Robinson DL. Sex differences in brain activity, personality, and intelligence : a test of arousal theory. *Personality and Individual Differences* 25, 1133-1152, 1998.