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Relations between Eastern Four Pillars Theory and Western Measures of Personality Traits

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Purpose: The present study investigated the validity of personality classification using four pillars theory, a tradition in China and northeastern Asia. **Materials and Methods:** Four pillars analyses were performed for 148 adults on the basis of their birth year, month, day, and hour. Participants completed two personality tests, the Korean version of Temperament and Character Inventory-Revised-Short Version (TCI) and the Korean Inventory of Interpersonal Problems; scores were correlated with four pillars classification elements. Mean difference tests (e.g., t-test, ANOVA) were compared with groups classified by four pillars index. **Results:** There were no significant correlations between personality scale scores and total yin/yang number (i.e., the 8 heavenly or earthly stems), and no significant between-groups results for classifications by yin/yang day stem and the five elements. There were significant but weak (r=0.18–0.29) correlations between the five elements and personality scale scores. For the six gods and personality scales, there were significant but weak (r=0.18–0.25) correlations. Features predicted by four pillars theory were most consistent when participants were grouped according to the yin/yang of the day stem and dominance of yin/yang numbers in the eight heavenly or earthly stems. **Conclusion:** Although the major criteria of four pillars theory were not independently correlated with personality scale scores, correlations emerged when participants were grouped according to the composite yin/yang variable. Our results suggest the utility of four pillars theory (beyond fortune telling or astrology) for classifying personality traits and making behavioral predictions.

Key Words: Yin-yang, personality tests, Eastern Asia, Western world

INTRODUCTION

In northeastern parts of Asia, especially China, predictions about personal destiny and explanations of personality are frequently based on a universal cosmology known as the "four pillars of destiny." Predictions and explanations are provided according to the concept of a moving cosmos and are based on the individual's birth year, month, day, and hour. This is in contrast with Western theories of human personality, which focus on individualistic analysis rather than trying to explain how a person's destiny or personality can be influenced in the context of a

cosmic process; that is, Western theory does not refer to human personality as part of the larger cosmos.

In Korea (as in China where the four pillars theory originated), the four pillars theory has not been a scholarly, academic subject but rather a matter of culture and everyday living. For example, the four pillars approach is used to read New Year's fortunes, name newborns, predict marital compatibility, select the date for a move, predict the results of important exams, and predict job promotions. However, the four pillars are generally regarded more as fortune telling or a form of astrology rather than as a serious topic of scholarly investigation. Indeed, some scholars view four pillars theory as having no scientific validity or empirical grounds.

In the present study, we classified and described personality and behavioral tendencies according to both the four pillars theory and objective personality tests developed in the context of the Western view of human personality; that is, based on nomothetic descriptions of personality traits. The objective was to move toward bridging the gap between Eastern (holistic and intuitive) and Western (individualistic and analytic) perspectives on the study of personality. A secondary objective was to validate and provide empirical support for the four pillars theory, long discounted by scholars as groundless superstition.

It is important to note that four pillars theory plays a considerable role in traditional and lay practices of psychiatric healing and psychological counseling in East Asia, including China, Japan, and Korea. We, therefore, expect that the present study could be a starting point for further systematic and cooperative investigations with psychiatrists and psychologists in China and Japan.

MATERIALS AND METHODS

Subject

Participants in the study were 148 adult men and women (38 college students, 75 office workers, and 35 students from a private educational institute) ranging in age from 18 to 53 years (M=29.33, SD=9.45). All participants gave written informed consent.

Assessment tools

The personality traits that can be described through the analysis of one's four pillars are both his inborn tendencies and acquired characteristics. At the same time, theory of four pillars provide individuals' personality descriptions in the context of interpersonal relationships. Considering these aspects, we thought that the appropriate assessment tools for this study should meet the following three requirements. First, the tool must have validity and reliability based on empirical and theoretical ground. Second, the tool must assess more global personality traits rater than specific or detailed aspect of personality. Finally, it must assess personality trait reflecting various interpersonal aspects. We concluded that the TCI-RS (Temperament and Character Inventory-Revised, Short Version) and Korean Inventory of Interpersonal Problems (K-IIP) could satisfy the purpose of our study. The TCI-RS was originally developed in the United States by Cloninger, et al.,[1] and later a standardized Korean version was developed by Min, et al.[2] The instrument contains 140 items measuring four temperament dimensions (novelty seeking, harm avoidance, reward dependence, and persistence) and three personality dimensions (self-directedness, cooperativeness, and self-transcendence). All items are rated on a 5-point Likert-type scale. The original K-IIP was developed based on the interpersonal circumplex model,[3] and standardized in Korea by Kim, et al.[4] The instrument consists of 127 items divided into eight interpersonal subscales (C1-domineering, C2-vindictive, C3-cold, C4-socially inhibited, C5-nonassertive, C6-overly accommodating, C7-self-sacrificing, and C8-intrusive), and five personality disorder scales (PD1-interpersonal oversensitivity, PD2-interpersonal non-acceptance, PD3-aggressiveness, PD4-need for social approval, and PD5-deficiency of sociability). All items are rated on a 5-point Likert-type scale. In addition, there are eight interpersonal deviant scales representing the differences of each circumplex subscale from the other circumplex subscales (C1D–C8D).

Analysis and statistics

A four pillars table for each participant was calculated using the "ten thousand year calendar"[5] and his/her birth year, month, day, and hour. For the present analysis, the main variables derived from the four pillars tables were as follows: 1) yin/yang on the 4 heavenly stems and 4 earthly branches for the four pillars of year, month, day, and hour; 2) the five elements for each of the 8 stems and branches; and 3) the five categories of the six gods (officer, resource, parallel, hurting god, wealth), which are established by the mutual relationship between the five elements of the day stem (which represents the self) and the five elements of the year, month, and hour stems and branches. This is not done by subjective

decisions but by standard calculations of four pillars theory. The five elements (wood, fire, earth, metal, water) are mutually generating (i.e., enhancing) or mutually overcoming (i.e., destructive) in the circular system of the universe. For example, in the enhancing circle, wood generates fire, fire generates earth, earth generates metal, and metal generates water. In contrast, in the destructive circle, water extinguishes fire, fire melts metal, metal cuts wood, wood enroots earth, and earth hinders water. If one's day and month stem elements (or year or hour stems) are the same, the two elements are said to be competing, and they are called "parallel" or "sibling" god. The day stem element and the other stems (or branches) elements form four other relationships, which, along with the parallel relationship, are collectively known as the "six gods": supporting (resource), loosing (hurting god), overcoming (officer), and surrendering (wealth). As is customary, the main four pillar variables (yin/yang, five elements, six gods) were all calculated using each participant's four pillars table. The analysis and interpretations were based on the combination of the main variables according to four pillars theory.

For the statistical tests, we conducted a correlation analysis to test relationships between the four pillars variables (number of yin/yang, five elements, and six gods) and each personality scale score. Between-groups differences were assessed using t-tests (i.e., groups formed by whether the individual had yin or yang for their day stem, and groups according to the dominance of yin or yang over the 4 stems and 4 branches) and ANOVAs (between the five elements groups, six gods groups, and dominant five element and six gods groups). As a rule, though multivariate analysis must be applied to these forms of data, we conducted univariate analysis (t-test, ANOVA) on the ground of three reasons. First, because the magnitude and directions of correlation coefficients in TCI-RS and K-IIP scales varied greatly, we concluded that the multivariate analysis, which considers all the variables simultaneously, might produce misleading or non-specific results. Second, though there were correlations between some scales, every TCI-RS and K-IIP scales have no overlapping items between scales. Therefore, we first tested the significance of the overall sum-scales, and then tested the significance of each sub-scales. Third, through the initial analysis to identify normality of distribution and equality of variance, we came to conclude that our analysis could meet the statistical assumptions of t-test and ANOVA. All statistics were computed using SPSS Statistics, version 20.0 (IBM SPSS inc., Chicago, IL, USA).

RESULTS

Relationships between yin/yang and personality scale scores

There were no significant correlations between the TCI-RS scales and yin/yang numbers in the four stems and four branches (on the four pillars tables). However, for the K-IIP, there were significant positive correlations between the yang numbers and C2D-vindictive (r=0.193, p=0.035) and PD5-deficiency of sociability (r=0.181, p=0.050). Because interpretation of the four pillars is generally conducted by focusing on the day stem, we conducted a group comparison according to the yin/yang of the day stem. For this analysis, only the nonassertive deviant score (C5D) on the K-IIP showed significant differences [t(145)=2.088, p=0.039] between the yin (52.64±8.74) and yang (49.58±8.99) groups.

Next, two groups (yin and yang) were newly constructed by combining two criteria. Specifically, the groups were defined by the consistency between 1) dominance of yin or yang in the 8 stems and branches and 2) yin or yang in the day stem (which represents the self). In short, the yin or yang groups were made up of only participants who had the same direction for these two variables. For example, we assigned a participant into the yin or yang group when 1) the yin/yang number was more than 4 of a possible 8, and 2) the yin or yang of the day stem matched this established yin/yang dominance. We then compared group differences (yin, n=22; yang, n=32) on the personality scales using t-tests (results are shown in Table 1). There was no significant group difference in the TCI-RS scales, but there were several significant differences in the K-IIP scales: C1-domineering, yin<yang; nonassertive (C5D), yin>yang; C6-overly accommodating, yin<yang; C-total score, yin<yang; PD3-aggressiveness, yin<yang; PD4-need for social approval, yin<yang; and PD-total score, yin<yang.

Relation between the five elements and personality scale (TCI-RS and K-IIP) scores

We created five groups on the basis of the five elements of each participant's day stem. ANOVA analysis of these groups revealed no significant differences in scores on any TCI-RS or K-IIP scale based on which of the five elements was reported on participants' day stems (fire, n=28; water, n=26; wood, n=23; metal, n=36; earth, n=35). We then re-categorized dominant element groups (or skewed groups) according to whether there were three or more of the same ele-

Table 1. Mean Yin/Yang Group Differences in Korean Inventory of Interpersonal Problems Scale Scores

Scale	Yin (-), Yang (+)	n	M	SD	t
C1‡	-	22	43.91	9.98	-2.203*
	+	31	49.65	8.87	
C2‡	-	22	43.18	8.13	-1.234
	+	31	45.87	7.59	
C3‡	-	22	41.41	8.52	-1.738
	+	31	46.32	11.14	
C4‡	-	22	43.14	8.76	-1.710
	+	31	48.19	11.73	
C5‡	-	22	46.09	9.60	-0.871
	+	31	48.68	11.34	
C6‡	-	22	47.64	8.90	-1.178
	+	31	50.94	10.77	
C7‡	-	22	49.09	10.29	-1.238
	+	31	52.90	11.55	
C8‡	-	22	47.86	7.59	-2.783†
	+	31	55.06	11.24	
Ct§	-	22	42.95	10.24	-2.367*
	+	31	49.52	9.73	
PD1‖	-	22	48.14	10.43	-1.219
	+	31	51.71	10.57	
PD2‖	-	22	42.23	7.07	-1.404
	+	31	45.26	8.19	
PD3‖	-	22	44.05	8.54	-2.326*
	+	31	49.19	7.49	
PD4‖	-	22	49.77	9.00	-2.474*
	+	31	56.61	10.51	
PD5‖	-	22	43.91	8.49	-1.742
	+	31	48.84	11.17	
PDt¶	-	22	65.41	16.18	-2.315*
	+	31	75.68	15.71	

*$p<0.05$.
†$p<0.01$.
‡C1=domineering, C2=vindictive, C3=cold, C4=socially inhibited, C5=nonassertive, C6=overly accommodating, C7=self-sacrificing, C8=intrusive.
§Total score on the C scales.
‖PD1=interpersonal oversensitivity, PD2=interpersonal non-acceptance, PD3=aggressiveness, PD4=need for social approval, PD5=deficiency of sociability.
¶Total score on the PD scales.

ments in the four stems and four branches (fire=14, water =13, wood=7, metal=16, earth=28). Comparison of mean personality test scores for the five newly composed groups by ANOVA revealed some significant differences in K-IIP scales: C1-domineering [F(4,72)=2.496, p=0.050], PD3-aggressiveness, [F(4,72)=2.756, p=0.034], and PD-total [F(4,72)=2.726, p=0.036]. A post-hoc analysis (Scheffé's method) with these scales (C1-domineering, PD3-aggressiveness, and PD-total) showed no significant differences between the five groups; however, there was a tendency toward higher scores for all three personality variables in the wood and metal groups compared with those in the fire, water, and earth groups.

We regarded groups with co-occurring and similar dominant and day-stem elements as dominant elemental groups. When the groups were so classified, they became smaller (fire=9, water=4, tree=2, metal=10, earth=10). ANOVAs comparing these groups revealed significant differences in two K-IPP scales: C7-self-sacrificing [F(4,30)=3.548, p= 0.017] and PD4-need for social approval [F(4,30)=2.882, p=0.039]; however, there were no significant differences in the TCI-RS scales. A post-hoc analysis (Scheffé's method) for the two scales (C7-self-sacrificing, PD4-need for social approval) showed significant differences only in the C7 scale (wood>water). The results of these statistical analyses are summarized in Table 2.

Table 2. Mean Group Differences in Personality Test Scores for Each of Five Dominant Element Groups

K-IIP	5 s[†]	n	M	SD	F	Scheffé's
Class 1[‡]						
C1-domineering	F	14	47.29	7.47	2.496*	
	W	13	40.38	5.16		
	Wd	6	49.33	11.98		
	M	16	50.00	10.28		
	E	28	48.61	9.63		
PD3-aggressiveness	F	14	45.36	6.45	2.756*	
	W	13	40.85	4.78		
	Wd	6	47.50	8.76		
	M	16	50.13	8.11		
	E	28	48.29	9.80		
PD-total score	F	14	66.93	14.32	2.726*	
	W	13	60.77	16.74		
	Wd	6	73.00	12.81		
	M	16	77.13	14.21		
	E	28	72.82	14.02		
Class 2[§]						
C7-self-sacrificing	F	9	51.22	0.97	3.548*	Wd>W
	W	4	42.50	6.76		
	Wd	2	67.50	13.44		
	M	10	50.40	7.96		
	E	10	54.90	9.71		
PD4-need for social approval	F	9	53.67	5.83	2.882*	
	W	4	50.50	11.27		
	Wd	2	73.50	3.54		
	M	10	53.80	8.46		
	E	10	55.00	9.19		

K-IIP, Korean Inventory of Interpersonal Problems.
*$p<0.05$.
[†]The five elements (F: fire, W: water, Wd: wood, M: metal, E: earth).
[‡]Dominant element group 1 (i.e., each element group is classified as dominant when one element is more than 3 of five elements).
[§]Dominant element group 2 (i.e., when the day-stem element is the same as for group 1).

We computed simple correlation coefficients to further explore the relationship between scores on the personality scales (TCI-RS and K-IIP) and numbers for the total of the five elements in the four stems and four branches. There were significant correlations between the following: 1) the number of "fire" elements and "cooperativeness" on the TCI-RS (r=0.248, p=0.007); 2) the number of "metal" elements and the K-IIP scales of C5-nonassertive (r=0.206, p=0.025), C6-overly accommodating (r=0.290, p=0.001), C7-self-sacrificing (r=0.227, p=0.014), C3D-cold (r=-0.211, p=0.022), C2D-vindictive (r=-0.241, p=0.009), and PD1-interpersonal oversensitivity (r=0.188, p=0.042); 3) the number of "earth" elements and cooperativeness on the TCI-RS (r=-0.222, p=0.016), the K-IIP scales of C6-overly accommodating (r=-0.202, p=0.029), and C2D-vindictive (r=0.253, p=0.006).

Relation between six gods and personality scale scores

In the correlation matrix for the relationships between personality scale scores (TCI-RS and K-IIP) and the number of six gods (officer, resource, parallel, hurting god, wealth), significant correlations were found for "parallel" and "hurting god." There were significant correlations between the following: 1) parallel and "harm avoidance" scale of the TCI-RS (r=0.197, p=0.034); 2) parallel and the K-IIP scales of C2-vindictive (r=0.212, p=0.021), C3-cold (r=0.268, p=0.003), C4-socially inhibited (r=0.246, p=0.007), C7-self-sacrificing (r=0.211, p=0.022), C8-intrusive (r=0.201, p=0.029), C6D-overly accommodating (r=-0.192, p=0.037), C5-nonassertive (r=-0.211, p=0.022), C1D-domineering (r=-0.218, p=0.018), PD2-interpersonal non-acceptance (r=0.183, p=0.047), PD4-need for social approval (r=0.254, p=0.005), PD5-deficiency of sociability (r=0.197, p=0.033),

and PD-total (r=0.226, p=0.014); 3) hurting god and cooperativeness on the TCI-RS (r=0.227, p=0.014); and 4) hurting god and the K-IIP scales of C2-vindictive (r=-0.185, p=0.045) and C6D-overly accommodating (r=0.224, p=0.015).

We categorized a group as dominant if there were three or more of the same six gods in both the 4 heavenly stems and the 4 earthly branches. We then tested whether there were significant mean differences between these dominant groups (officer, n=16, resource, n=10, parallel, n=20, hurting god, n=15, wealth, n=13). There were no significant differences between these groups on any of the TCI-RS subscales; for the K-IIP, however, there was a significant difference in the C6D-overly accommodating subscale between the groups [F(4,69)=2.995, p=0.024]. There was also a tendency for high scores on hurting god and resource, and low scores on officer; however, differences were not significant.

DISCUSSION

The present findings provide some empirical support for describing or explaining personality according to the four pillars theory, an important folkloric tradition in East Asia. This was more evident when the analytic variables driving the four pillars theory were combined than when the variables were considered separately. In four pillars practice, the analytic modes of combining variables are complex and multi-layered, and it is therefore difficult to apply statistical analysis. However, our analyses did suggest correspondence between scores on the personality scales (TCI-RS and K-IIP) and aspects of the four pillars tables. Relationships were stronger when we categorized participants into groups in accordance with both day-stem and dominance of yin/yang across the four pillars; however, relationships were weaker when we analyzed the data independently with respect to yin/yang of the day-stem or total yin/yang number. Significant correlations were centered on a few variables, and almost similar correlations were revealed by comprehensive review of the correlation matrix for the four pillars variables and personality scale scores. In summary, the yin and yang variable showed consistency with the personality traits such as assertiveness, self-centeredness, domineering, aggressiveness, or intrusiveness (C1-domineering, PD3-aggressiveness, C5D-nonassertive, C8-intrusiveness), and need for social approval (PD4). For these personality traits, the yang group tended to have higher scores than the yin group. This personality trait profile of the yin and yang groups corresponds to the general content of interpretations by four pillars theorists made on the basis of a person's birth year, month, day, and hour.

There were some consistent results for the five element-related variables derived from the four pillars tables; however, correlations were weaker and less consistent than for the yin/yang variables. For example, significant correlations were found only for the metal and earth elements. In metal-dominant participants, there were tendencies toward higher personality scale scores for non-assertiveness, self-sacrificing, overly accommodating, and interpersonal oversensitivity, but lower scores for vindictiveness. These findings are somewhat inconsistent with general interpretations in four pillars theory, and therefore, more extensive research is needed. However, for earth-dominant participants, findings better supported the four pillars theory: the number of earth elements was negatively correlated with cooperativeness (i.e., the cooperative subscale of the TCI-RS) and positively correlated with self-centeredness and assertiveness (i.e., the C6-overly accommodating and C2-vindictiveness subscales of the K-IIP, respectively). In the group comparison analysis, especially for the re-categorized five elements groups, wood- and metal-dominant groups showed higher scores on the domineering and aggressiveness dimensions than did the fire-, water-, or earth-dominant groups. These findings are consistent with descriptions derived from four pillars theory.

For the six gods analysis, significant differences were also centered on two variables, parallel and hurting god. Only one variable, parallel, showed significant correlations with many personality-disorder-related scales, including harm avoidance, self-directedness in TCI-RS, cold, socially inhibited, self-sacrificing, intrusive, non-assertive, interpersonal non-acceptance, need for social approval, and deficiency of sociability. The hurting god variable also significantly correlated with C, SD, and overly accommodating traits. These results were somewhat unexpected; although four pillars theory suggests possible association of the parallel or hurting god (i.e., six gods) variables with such personality traits, only the parallel variable was expected to correlate with the personality disorder scales of the K-IIP (i.e., PD2, PD4, PD5, and PD-total). This result requires further study with larger sample sizes and wider variety of demographic characteristics.

The current findings together suggest that four pillars theory, which have hardly been subjected to empirical tests, may have some rational and empirical bases. Our findings are especially meaningful because all of the variables de-

rived from the four pillars interpretations are completely independent of the personality scale scores. In other words, the source of four pillars' variables (i.e., one's birth year, month, day, hour) and that of personality descriptions (i.e., self-reporting results on the personality tests used in our analysis) are independent with each other. However, there are some limitations to the current study. First, the sample size was not sufficient to test all the combination variables typically used in four pillars practice. Second, the effective sizes of the computed correlation coefficients were relatively small (<0.30). Third, the personality descriptions used in four pillars practice have ambiguous operational definitions, therefore, it was difficult to establish objective and valid study criteria. We, therefore, suggest that the current study should be extended to include more participants and variable combinations, and investigate the reliability of the four pillars interpretations.

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