



The Structure of Chinese Cultural Traditions: An Empirical Study of Business Employees in China

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ABSTRACT Five schools of Chinese cultural traditions that implicitly influence current management thought in China are used to create a four-factor Structure of Chinese Cultural Traditions (SCCT) model. A sample of 2658 people in businesses in Beijing was used to develop the dimensions that were then cross-validated in a nation-wide sample of 718 business employees. The four dimensions show plausible patterns of convergent and discriminant validity with generic domains of values represented by the Schwartz Value Survey (SVS). We suggest that the Structure of Chinese Cultural Traditions provides a unique model of Chinese culture that complements other generic measures, thereby allowing a deep understanding of Chinese culture.

KEYWORDS Chinese culture, empirical study, model building, values

INTRODUCTION

Foreign business people typically find it challenging to understand Chinese managerial ideology (Weiss & Bloom, 1990), since Chinese business people draw from a distinctive indigenous philosophical and cultural heritage dating back thousands of years (Rindova & Starbuck, 1997). Although traditional cultural characteristics are relatively stable and persistent (Hofstede, 2001; Lin, 2011; Weber, 1930), culture changes that are precipitated by social, political, and economic changes make the relevance of ancient traditions uncertain (Peterson & Smith, 2008; Ralston, Egri, Stewart, Terpstra, & Yu, 1999). Within the past century, very few countries have experienced the number and magnitude of societal changes that have occurred in China since the end of the Qing Dynasty in 1911 (Hsü, 2008). China's history, ideas, traditions, and present development make it unique (Kulich & Zhang, 2010). In this study, we provide clear evidence of the continuing influence of five major Chinese cultural traditions – Confucianism, Taoism, Buddhism, Legalism, and the Art of War – on current management in China.

The current study considers three general questions. First, can the influence of Chinese cultural traditions still be identified in the thinking of Chinese business employees despite periodic government efforts to de-emphasize tradition and despite the influence of foreign business ideas and practices? Second, if traditional ideas are still evident, how can the structure of cultural traditions be represented for research purposes? Third, what is the relationship between the structure of Chinese cultural traditions and the most established theoretical cultural models?

We consider these questions as they apply to state-owned, private, and foreign-invested business organizations rather than other types of organizations (e.g., government, hospital, military forces). We focus our research on ideas from classic schools of thought in Chinese culture, but we do not seek to represent ideas from folklore, mythology, allegory, or literature. As the reference point for comparing our analysis of Chinese cultural traditions to generic theories of values, we rely on the Schwartz Value Survey (SVS) as the most widely recognized comparative framework for studying individuals (Sagiv, Schwartz, & Arieli, 2011; Schwartz, 1992).

CONCEPTUAL BACKGROUND

Generic Culture Theory, Prior Chinese Culture Dimensions, and Chinese Cultural Traditions

As groups evolve over time, they face two basic challenges: internal integration and external adaptation (Triandis, 1996). As groups find solutions to these problems, they engage in collective learning among members and between generations that creates socially shared knowledge structures or schema (Triandis, 1972). Recognizing the wide variety of definitions of culture (Kroeber & Kluckhohn, 1963), we view culture as consisting of shared standards for perceiving, believing, evaluating, communicating, and acting among people who share a language, a historic period, and a geographic location (Triandis, 1996).

Over the centuries, many schools of thought have contributed to the Chinese approach to internal integration and external adaptation. Five of these are commonly accepted to have had uninterrupted impacts on Chinese society for more than two thousand years (Ames, 1983; Chan, 1963; De Bary, Chan, & Watson, 1960; Kim, 1981). One is based on ideas from Confucius (551–479 BC). Another is the Taoist school represented by the *Tao Te Ching*, the writings of Lao Tzu (604–531 BC). Third, Buddhism, originating in India, spread widely throughout China in the early centuries AD. Fourth, the Legalism school of thought is represented by the teachings of Han Fei Tzu (280–233 BC). Finally, the Art of War is based on ideas about military strategies from Sun Tzu (544–496 BC).

Confucianism. Confucius contributed substantially to Chinese philosophical humanism (Slote, & De Vos, 1998). The primary concern of Confucianism is to promote a good society based on ethical, effective government and harmonious human relations maintained by benevolence, consideration, and reciprocity within a hierarchical structure (Chai & Rhee, 2010; De Bary et al., 1960). Confucianism focuses on the cultivation of virtue, the training of superior character and behaviour, and the use of moral principles and persuasion rather than punishment or force (Smith, 1973).

Taoism. In the Taoist school, Tao is the One, the original unity and the ultimate reality, which exists before the creation and manifests itself in all things that are seen as interdependent and inseparable parts of the same cosmic whole (Waley, 1997). While Confucianism emphasizes social order and a worldly life, Taoism concentrates on harmonious natural order, tranquility, and a transcendental spirit (Chan, 1963). Lao Tzu proposed that following the Tao results in peace and success, while acting contrary to it leads to conflict and destruction (Kierman, 1981).

Buddhism. Buddhism focuses on the suffering and impermanence of this world. The cause of suffering is selfish desires – greed, envy, and addiction (Ross, 1981). The elimination of suffering can be achieved by the extinction of desires through abstention, placidity, and wisdom. With the extinction of suffering, only absolute quietness and peace, and perfect bliss, which constitute *nirvana*, remain (Story, 1985). The ultimate aim of Buddhism is the universal salvation of people in this physical world to help them attain Nirvana (LaFleur, 1988).

Legalism. Legalism has elements that resemble Western ideas of rule of law, bureaucracy, and Machiavellianism (Rubin, 1976). Aiming at control, Legalism rejects the moral standards of Confucianism and the religious sanctions of Buddhism in favour of the power of a system of rules backed up by severe punishments (Ames, 1983). By erecting institutional mechanisms, the ruler (leader) can restrict people with law (*fa*), drive people by political status or potential (*shih*), and manipulate people with artifice (*shu*) (Watson, 1967).

The Art of War. According to Sun Tzu, warfare is the art of deceit based on a thorough knowledge of oneself as well as the enemy, and on the use of detailed plans (Ames, 1993). Sun Tzu advocated that effective strategies must be flexible and change with the environment (Wu, 1990). The Art of War stresses that the acme of military skill is to subdue the enemy without even fighting (Cleary, 1988). Thus, ‘the best policy is to attack enemy’s strategies; the next to disrupt his alliances; the next to attack his army; and the worst is to assault walled cities’ (Griffith, 1971: 77–78).

Chinese Culture Research

Several projects use measures of values designed outside of China and link them to Chinese cultural traditions (Kulich & Zhang, 2010). These include the SVS project (e.g., Ralston et al., 1999), Culture's Consequences (Hofstede, 2001), and the GLOBE project (House, Hanges, Javidan, Dorfman, & Gupta, 2004). These projects are helpful for global comparison, but the value dimensions or domains they use do not correspond to ideas most familiar within China.

A number of projects offer measures that reflect Chinese cultural traditions. Kulich and Zhang (2010) review several projects that consider a single school of Chinese culture. Other research considers multiple traditions. Examples include the Chinese Culture Connection (1987) and projects by Yau (1994), Xing (1995), and Fan (2000). The major components in these frameworks are ideas from Confucianism followed by those from Taoism and Buddhism. They rarely include other equally important ideas, such as Legalism and the Art of War. The 40 values considered in the Chinese Culture Connection, for example, do not contain values from either Legalism or the Art of War.

The lack of attention to Legalism and the Art of War needs to be remedied. Since the Han Dynasty (202 BC–220 AD), Confucianism and Legalism have been synthesized for guiding governmental practices, while the Art of War thinking has been part of international relations. Chinese history can be viewed as a dynamic between the virtue and cultivation of Confucianism, and the control and punishment of Legalism (*Wai Ru Nei Fa*). China cannot survive without external competition or accommodation of the Art of War. By omitting Legalism and the Art of War, prior research disregards the very important value orientation of strife, coercion, and collision. This omission makes Chinese culture seem so soft that only mildness, kindheartedness, courteousness, thriftiness, and magnanimity (*Wen 溫, Liang 良, Gong 恭, Jian 簡, Rang 讓*) remain. In fact, Chinese culture has a yin and yang quality that unifies soft and hard, weak and strong, positive and negative (Fang, 2012). In our view, both prior research about Chinese traditions and generic comparative culture research lack a set of measures that provide a holistic view of the major dimensions of Chinese cultural traditions.

METHODS

Developing the Chinese Cultural Traditions Questionnaire

The research began by first identifying the major schools of traditional Chinese thought, then developing questionnaire items to represent their main elements. Using a Delphi method, Chinese culture scholars were consulted. Fifty enquiries were sent out and twenty-seven responses were obtained, for a return rate of 54 percent. Among twenty-seven researchers, twenty-two were from

mainland China in the fields of management (four), psychology (three), philosophy (nine), sociology (two), and Chinese language and literature (four); and five were from North America in the field of Chinese cultural studies. These scholars were asked to list five basic schools of thought, to identify ten values from the original writings for each school that have had the most profound influence on China's culture and history, and to explain the reasons for their choices.

A school was scored '5' if a researcher placed it first on the list; it was scored '4' if it was placed second, and so on. The total score for a school was obtained by summing its scores for the twenty-seven responses. Confucianism, Taoism, Legalism, Buddhism, and the Art of War scored 115, 75, 67, 56, and 53, respectively. The scholars also identified schools other than these five, such as the Doctrines of Mo Tzu, the Foundationalism of Huang-Lao, and the Lixue school of Zhu Xi, but none of these obtained total scores greater than ten. Other schools, according to the scholars, are mainly combinations of, oppositions to, or derivations from the five main schools.

Once the five schools had been identified, the second step was to select items to represent each. We began with the lists of values that the Chinese culture scholars provided. Some of the items that scholars identified as *values* are phrased as being about causal relationships and so are closer to what psychologists would now consider *beliefs* than *values* (Kulich & Zhang, 2010; Leung et al., 2002; Schwartz, 1992). Those items phrased as beliefs, however, have a clear value-related moral, and the measurement structure analysis suggests that their value implications are clear to the respondents. We consider both kinds of ideas.

We evaluated each item considering both a score based on how many scholars mentioned it, and also its relevance to the workplace. The criterion for deciding how many items to use to represent each of the five schools began with the convergence of the experts' opinion. For Buddhism, Taoism, Legalism, and the Art of War, the experts' opinions diverged after the seventh item, while for Confucianism a sharp drop occurred after the ninth item. Ideas that are not related to the workplace, specifically two items about filial piety and mutual promotion between educator and learner, which were included among the nine items for Confucianism, were deleted. That left us with seven items for each school.

The thirty-five items were directly translated from the classic writings of their respective schools. After the five schools and thirty-five items were identified, the first author in this study traced each item back to the original writings. Then three of the experts confirmed that all the items represented the main ideas from the schools. After the thirty-five statements were obtained, they were translated into modern Chinese language so that the respondents could understand and answer easily. The five schools and the items for each school are as follows.

- **Confucianism** – *Harmony, Hierarchy, Reciprocity, Moderation, Consideration, Loyalty, Morality*
- **Taoism** – *Simplicity, Non-Motivation, Deregulation, Non-Action (WuWei), Non-Strife, Non-Extremism, Non-Greatness*
- **Buddhism** – *Suffering, Impermanence, Restraint, Mercy, Indifference, Retribution, Timeliness (Yuan)*
- **Legalism** – *Rule, Duty, Punishment, Manipulation, Concealing Weakness, Keeping Potential, Hiding Intention*
- **The Art of War** – *Deceit, Information, Non-Fight, Strategy-Attacking, Planning, Invincibility, Superiority*

Each of the thirty-five statements was rated on a six-point Likert scale with a range from 1 (very unimportant) to 6 (very important). A pilot survey was conducted with two hundred managers in training programs, and an open-ended group interview was arranged immediately after they finished the questionnaire. Several refinements were made based on their responses and comments.

Samples for Scale Validation

The measure design and validation project is based on two samples obtained during different time periods. The samples were obtained from state-owned, private, and foreign-invested business organizations. A firm is state-owned if 51 percent of the shares are held by the state or the local representatives of the state. A firm is private if 51 percent of the shares are held by private investors. Finally, a firm is a foreign-invested enterprise if 51 percent of the shares are held by foreign entities.

Sample 1 (2658 cases) was collected in the Beijing metropolitan area. Beijing is China's cultural and political centre and is a melting pot of all the regional cultures in China. Most people in Beijing are first- or second-generation 'immigrants' from the provinces. Therefore, we anticipated that the respondents sampled in this area would by and large represent the population of the country.

Sample 2 (718 cases) is part of a regional culture study investigating the differences of cultural orientation and decision-making behaviour of managers from different areas in China. The subjects in Sample 2 come from all twenty-seven provinces and the four cities directly affiliated to the Central Government. Statistical description of the samples on six demographic and organizational variables (Gender, Age, Education, Organization Ownership, Organization Size, and Position) is provided in Table 1.

Analyses

Benson (1998) offers three stages of construct validation: substantive, structural, and external. In the substantive stage, items were designed to represent the schools

Table 1. Demographics

	<i>Sample 1</i>		<i>Sample 2</i>	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
Gender				
Male	1,403	52.8	397	55.3
Female	1,255	47.2	321	44.7
Age				
Under 25	625	23.5	113	15.7
26–35	1,267	47.6	422	58.8
36–45	541	20.4	143	19.9
46 and Older	225	8.5	40	5.6
Education				
High School	434	16.3	105	14.6
Undergraduate	1,836	69.1	484	67.4
Graduate	388	14.6	129	18.0
Organization Ownership				
State Owned	885	33.3	365	50.8
Private	1,067	40.1	265	36.9
Foreign Invested	706	26.6	88	12.3
Organization Size				
Fewer than 100	806	30.3	140	19.5
100–200	574	21.6	129	18.0
200–1,000	698	26.3	333	46.3
Over 1,000	580	21.8	116	16.2
Position				
Staff	1,431	53.8	78	10.9
Supervisor	439	16.5	387	53.8
Manager	600	22.6	205	28.6
Executive	188	7.1	48	6.7

of thought in Chinese cultural traditions as described above. In the structural stage, the reliability and validity of measures derived from the items were assessed, and a final model was selected considering the results of exploratory and confirmatory factor analysis. The final model of Chinese cultural traditions was then cross-validated.

We randomly divided Sample 1 into two parts, Sample 1-A (1289 cases) and Sample 1-B (1369 cases). Sample 1-A was used to conduct exploratory factor analysis (EFA) to build a set of competing models. The competing models then were tested and evaluated by confirmatory factor analysis (CFA) in Sample 1-B, and a final model was selected. Sample 1-B and Sample 2 were used for cross-validation by estimating the invariance of the final model of Chinese cultural traditions. In the external stage, the convergent and discriminant validity of the measures of Chinese cultural traditions were assessed in relation to measures from the SVS in Sample 2.

RESULTS

Exploratory Factor Analysis (EFA)

Conway and Huffcutt (2003) indicate that three major decisions need to be made in EFA: (i) the factor extraction model, (ii) the factor rotation method, and (iii) the number of factors to retain. Since the purpose of this research is to understand the latent structure of a set of variables, we followed their view and chose principal axis factoring as the extraction method. Among the five Chinese schools of thought, various aspects of some traditions have been distinctly opposed to one another, and some have been integrated with one another. Consequently, we selected an oblique (oblimin) rotation (Gorsuch, 1997). Owing to the pioneering nature of the research, we constructed several competing models and selected the number of factors using several methods (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Zwick & Velicer, 1986). The data show no problematic outliers or violations of normality (Marcoulides & Hershberger, 1997).

In the first step, we applied no preset criterion other than the commonly used eigenvalues-greater-than-one rule. A structure (Model 1) with six factors and twenty-six items emerged that explains 57.23 percent of the total variance in initial eigenvalues. Among the six factors in Model 1, factors 1, 2, 4, and 6 consist purely of items from the Art of War, Legalism, Confucianism, and Taoism, respectively. Factor 3 is a combination of Buddhism and Taoism, while factor 5 is a combination of Legalism and Confucianism.

Since our research is based on five schools of Chinese thought, a five-factor model might produce factors distinctly associated with each of the five schools. Model 2 specifying five factors has twenty-four items with high loadings and explains 54.57 percent of initial variance. The factor loadings do not correspond cleanly to the five schools, however. For Model 2, factors 1, 2, 4, and 5 are indeed composed of items from the Art of War, Legalism, Confucianism, and Taoism, respectively. As for Model 1, factor 3 of Model 2 combines Buddhism and Taoism.

Two points from the outcomes of Model 1 and Model 2 were considered in defining Model 3. First, one of the factors in both Model 1 and Model 2 consists of two items. When using factor structures as the basis for creating multiple item scales, at least three items should load on a factor (Chin, 1998). Second, Confucianism, Legalism, and the Art of War constitute three distinct factors, while Buddhism and Taoism consistently load on the same factor. Both Buddhism and Taoism are transcendent philosophies that emphasize detachment, tranquility, and restraint, so they might reasonably form a single factor. Hence, Model 3 specified a four-factor structure. The results show that eighteen items have high loadings, and that the four factors explain 54.76 percent of the variance of initial eigenvalues. Each factor has three or more items with high loadings. Factors 1, 3, and 4 consist of the Art of War, Legalism, and Confucianism, respectively. Factor 2 combines

Table 2. Exploratory and Confirmatory Factor Analyses: Model 3 – the final model

Item	EFA Factors				CFA Factors			
	1	2	3	4	1	2	3	4
Planning	0.73	0.00	-0.04	0.04	0.75			
Information	0.72	-0.02	-0.04	0.02	0.54			
Strategy-Attacking	0.70	0.06	0.06	-0.05	0.72			
Invincibility	0.67	0.03	-0.09	0.06	0.74			
Non-Fight	0.58	0.03	0.12	-0.03	0.68			
Deceit	0.54	0.01	0.16	0.02	0.64			
Mercy	-0.03	0.72	-0.05	0.07		0.51		
Restraint	0.05	0.63	0.01	0.04		0.64		
Retribution	0.09	0.57	-0.06	0.13		0.68		
Indifference	0.09	0.54	-0.07	-0.03		0.67		
Simplicity	0.11	0.52	0.04	0.04		0.45		
Non-Strife	-0.18	0.45	0.13	-0.08		0.33		
Keeping Potential	-0.01	-0.08	0.78	0.04			0.69	
Concealing Weakness	0.04	-0.01	0.77	0.06			0.79	
Manipulation	0.16	0.10	0.49	-0.02			0.69	
Reciprocity	-0.09	0.00	0.09	0.81				0.56
Harmony	0.12	-0.02	-0.13	0.50				0.50
Hierarchy	-0.01	0.11	0.12	0.44				0.47
Eigenvalue	4.46	2.23	1.81	1.36				
% of Variance	24.77	12.41	10.04	7.54				
Cronbach's α	0.83	0.75	0.73	0.60	0.81	0.76	0.74	0.51

Notes:

The EFA was based on Sample 1-A (1289 cases). The CFA was based on Sample 1-B (1369 cases).

EFA Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

Rotation converged in seven iterations.

Factors 1, 3, and 4 consist of the Art of War, Legalism, and Confucianism, respectively. Factor 2 combines Buddhism and Taoism.

Buddhism and Taoism. Table 2 shows factor loadings for Model 3 in Sample 1-A. (Factor loadings for Model 1 and Model 2 are available from the authors.)

Confirmatory Factor Analysis (CFA)

We used CFA (Joreskog & Sorbom, 1996) in Sample 1-B to select among the three competing models. Values of SRMR and RMSEA below 0.08 indicate a reasonable fit (Browne & Cudeck, 1993; Hu & Bentler, 1999). Values of GFI, NNFI, and CFI above 0.90 represent an adequate model fit (Hoyle & Panter, 1995).

Model 1 and Model 2 are weaker than Model 3 and do not reach the normal minimum thresholds for goodness of fit indices (details available from the authors). Model 3 shows adequate fit (SRMR = 0.055; RMSEA = 0.064; GFI = 0.936; NNFI = 0.922; CFI = 0.935). Thus, we selected Model 3 as the final model and named it the Structure of Chinese Cultural Traditions (SCCT). The loading pattern of the CFA is also shown in Table 2.

Model Assessment

The key indicators of the Chinese Culture Structure from an EFA in Sample 1-A are provided in Table 3. All correlations among the factors (the means of the items) are statistically significant at the $p < 0.01$ level (two-tailed); however, they show enough discriminant validity to treat them as separate subscales (Tabachnick & Fidell, 2001). Cronbach's alphas for the subscales, except Confucianism, are greater than the minimum of 0.70 recommended by Nunnally and Bernstein (1994). Even a Cronbach's alpha coefficient of 0.60 for Confucianism reaches the minimum recommendation of 0.60 for a new instrument (Hair, Anderson, Tatham, & Black, 1998).

Cross-Validation

We conducted multi-sample structural equation modelling (Joreskog & Sorbom, 1996) to test the invariance of SCCT. Sample 1-B is a calibration sample, and Sample 2 is a validation sample (Kaplan, 2000). Our analysis progressively imposes more restrictive constraints on the model in seven steps: (1) Configural invariance (number of factors and loading pattern); (2) Metric invariance (the regression coefficient); (3) Scalar invariance (the regression intercept term); (4) Invariant uniquenesses (the regression residual variance); (5) Invariant factor variances; (6) Invariant factor covariances; and (7) Invariant factor means (Vandenberg & Lance, 2000). The χ^2 difference test ($\Delta\chi^2$) and ΔCFI are used to assess changes in fit at each step (Cheung & Rensvold, 2002).

Beginning with CFAs conducted independently in each of the two samples, Table 4 shows that $\Delta\chi^2$ s are not statistically significant at the $p = 0.05$ level and ΔCFI s are less than 0.01 in each of the seven steps. Hence, the invariance of SCCT model across samples is verified, and the stability of the SCCT is cross-validated.

Table 3. The Structure of Chinese cultural traditions: EFA model indices

Factor	Mean	SD	Cronbach's alpha	Range of inter-item correlations	Factor correlations		
					1	2	3
1. Art of War	4.58	0.93	0.83	0.33–0.61			
2. Buddhism/Taoism	3.70	0.95	0.75	0.17–0.48	0.26**		
3. Legalism	3.06	1.11	0.73	0.38–0.60	0.24**	0.24**	
4. Confucianism	4.45	0.90	0.60	0.23–0.39	0.28**	0.28**	0.13**

Notes:

** $p < 0.01$.

Sample 1-A.

Table 4. Cross-validation

Step	df	χ^2	SRMR	RMSEA	GFI	NNFI	CFI	Δdf	$\Delta \chi^2$	ΔCFI
0. CFA in validation sample	129	452.52	0.06	0.06	0.93	0.93	0.94	-	-	-
1. Configural invariance	258	1,294.92	0.06	0.06	0.93	0.93	0.94	-	-	-
2. Metric invariance	272	1,302.54	0.06	0.06	0.93	0.93	0.94	14	7.62	0.000
3. Scalar invariance	286	1,324.60	0.06	0.06	0.93	0.93	0.94	14	22.06	0.000
4. Invariant uniquenesses	304	1,336.05	0.06	0.06	0.93	0.93	0.94	18	11.45	0.000
5. Invariant factor variances	308	1,338.30	0.06	0.06	0.93	0.93	0.94	4	2.25	0.000
6. Invariant factor covariances	314	1,339.37	0.06	0.06	0.93	0.93	0.94	6	1.07	0.001
7. Invariant factor means	318	1,348.32	0.06	0.06	0.93	0.93	0.94	4	8.95	-0.001

Notes:

Δ refers to the difference between the adjoining steps.
Sample 1-B compared to Sample 2.

Table 5. Regression models: Ten SVS dimensions as predictors to four SCCT factors (Stepwise)

	Benevol	Conform	Traditi	Securi	Power	Achieve	Hedon	Stimul	Selfstr	Unicers	F(df)	Adjusted R Square	R Square Change
Art of War	-	-	-0.10*	-	-	0.27**	-	-	-	-	38.87** (3,714)	0.14	0.05
Buddhism/Taoism	0.24**	0.13*	0.42**	-	-	-	-	-	-	0.40**	42.16** (5,712)	0.22	0.16
Legalism	-0.24**	-0.15*	0.13**	-	0.20**	-	0.12**	-	-	-	18.24** (6,711)	0.13	0.13
Confucianism	-	-	-	0.13*	-	-	-	-0.15**	-0.19**	-	18.44** (4,713)	0.09	0.04

Notes:

* $p < 0.05$, ** $p < 0.01$.
The numbers in the table are standardized coefficients-Beta.
Sample 2.

The Structure of Chinese Cultural Traditions and Schwartz Value Model

Having cross-validated the SCCT, we next assessed its relationship to the most widely used measure of personal values in the cross-cultural literature. The SVS (Schwartz, 1992) consists of ten individual-level value domains: *Benevolence*, *Conformity*, *Tradition*, *Security*, *Power*, *Achievement*, *Hedonism*, *Stimulation*, *Self-Direction*, and *Universalism*. In order to maximize reliability, we assign all fifty-six items to one of the ten domains based on the results originally reported by Schwartz (1992) rather than using the subset of forty-six items selected in later research to optimize the cross-cultural comparison (Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997). The reliabilities of the measures constructed in this way range from 0.81 (Benevolence) to 0.58 (Tradition), except for Hedonism, which is 0.36. Regression is applied to explore the relationship between the ten SVS individual-level value scales (Schwartz et al., 1997; Smith, 2004) and the four SCCT factors.

We expected that the SVS domains would be significantly related to the four SCCT dimensions, since the SCCT is largely comprised of items about values, as well as a few about cultural beliefs that have value implications. That is, we expect a certain degree of convergent validity. However, we also anticipated a sufficient amount of locally unique meaning in the SCCT measures so that a substantial amount of variance will not be predicted by the SVS domains. That is, we anticipated a substantial amount of divergent validity as well.

With a prior regression step that controls for response bias by removing the effects of the mean score for all SVS items (Schwartz, 1992; 2005), Table 5 shows stepwise regression results predicting the four SCCT factors from the 10 SVS domains. The Art of War is predicted by Achievement and Tradition. This result is plausible since these two predictors represent the value propensities of ambition and competition, which are the main components of the Art of War. The regression model predicting Buddhism/Taoism plausibly contains four predictors: Benevolence, Conformity, Tradition, and Universalism. The regression model of Legalism includes Benevolence, Conformity, Tradition, Power, and Hedonism. Three SVS predictors, Security, Stimulation, and Self-Direction, reflect Confucianism's collectivistic and conservative quality and its emphasis on social order.

The ten SVS domains explain no more than 16 percent of the variance in any of the four SCCT factors. The SVS value domains are plausibly related to the SCCT dimensions, but the relationships are not strong enough to suggest that the two are the same.

DISCUSSION

Chinese culture has experienced tremendous cultural and technological influence from both internal and foreign sources during the past century, but evidence of

the enduring influence of its ancient cultural roots remains strong (Lin, 2011). A considerable amount of research about indigenous Chinese culture focuses on a single dimension of traditionalism or a dimension representing a very limited domain of Chinese culture. The four SCCT dimensions that we present here suggest that substantial refinements are possible. Our analyses indicate that, while there may be differences between more and less traditional people in China, some tend to accept the principles of one tradition, while others tend to accept other traditions. Since the two samples in this research were drawn from different targeted respondents, the cross-validation confirms the stability of the SCCT across different groups of Chinese employees. No matter where in Mainland China the respondents grew up or currently live, and no matter whether they are ordinary staff or middle managers, similar results are obtained. The SCCT dimensions represent a stable set of cultural indices for people working for businesses in contemporary China.

By beginning from theories familiar to Chinese culture specialists in multiple social science disciplines and connecting the results to established projects for global comparison, we stay within the tradition of learning from the dynamic relationship between emic and etic methods (Leung, 2009; Lytle, Brett, Barsness, Tinsley, & Janssens, 1995; Peterson & Pike, 2002). The project illustrates the complementary strengths of international comparative measures as compared to indigenous measures.

In general, the values in the SVS tend to have an active, positive, and optimistic quality that distinguishes them from many of the SCCT items. On the positive side, Buddhism and Taoism are conservative, content, and detached. On the less positive side, however, Legalism is generally aggressive, pragmatic, and negative. The items in Legalism emphasize political stratagem and power games in social relations and interactions. The Art of War includes coercion and deception. If the Schwartz Value Model included a dimension with items about power and political games such as the ideas from Machiavellianism, this dimension would be close to Legalism. Even items that use the same basic terms as the SVS items differ in their tone from somewhat similar SCCT items. Compare, for example, the SCCT item 'Reciprocity: Emphasize affection and reciprocation in mutual relationships' with the SVS item 'Reciprocation of favours (avoidance of indebtedness)'. To some extent, the qualities of the SCCT are likely to be unique to China. However, comparing it with the SVS suggests ways in which the SVS or similar future value measures designed for global comparison might be improved by placing a stronger emphasis on values that a substantial number of people are likely to reject.

Based on the procedure we followed to develop items and on the empirical results, we believe that the factors of the SCCT identify and extract the core aspects of each of the schools. For example, the results suggest that the uppermost concern of Confucianism is a conflict-free society based on harmonious mutual relations in a hierarchical social structure (Lin, 2011). We expect that other ideas, such as

Moderation, Consideration, Loyalty, and Morality, are not included in the final model because they are less central. We expect that these are not core elements, but are instead ideas which respondents view as the *means* to cultivate virtue and moral perfection of individuals that lead to social harmony. Similarly, our results suggest that the core characteristic of Legalism is controlling people. Other aspects of Legalism, such as adherence to strict rules, are *means* of controlling people. We expect that the power to enforce and modify rules is also secondary, because Legalism treats this power as remaining in the hands of a ruler. These are, we believe, the reasons why *Manipulation, Concealing Weakness, and Keeping Potential* turned out to be the items that most characterize Legalism, whereas *Rule and Punishment* did not fit as well with the Legalism dimension.

Limitations

Our decision to focus on major schools of thought has the limitation that it leaves out aspects of Chinese culture that continue to be very important to certain aspects of Chinese life. Kulich and Zhang (2010) provide a list of twenty-three Chinese values without specific reference to particular traditional schools. For example, the Yin-yang principle that is among the most ancient of Chinese philosophical principles (Fang, 2012) is reflected in the overall design of the research to include contradictory philosophical traditions. However, it is not reflected in any specific question about embracing contradiction. Our choices of schools based on the recommendation of expert advisors also assume that some traditional schools of thought (such as the Mo Tzu tradition) are largely represented by the rejection of certain aspects of other schools (such as Confucianism).

Future Research Implications

This research is largely an exploratory measurement development study. We see several priorities for further research. First, future research should consider other types of work organizations besides businesses in order to enhance generalizability. Second, *longitudinal research would be useful to consider the influence of both internal forces and foreign influences that may affect SCCT over time.* Third, the SCCT measures can be used to predict managerial issues such as business strategy, leadership, decision-making, teamwork, human resource policy, job stress, and burnout. Fourth, the SCCT measures have been designed at the individual level, whereas the SVS is used in different ways for individual level and societal level research. Fifth, possible situation dependent Yin-yang dynamics could be considered in the emphasis that individuals may place on alternative values (Fang, 2012).

Further measure development work would also be useful. The present SCCT items have been prepared in Chinese for Chinese respondents. The English translations only provide a basic idea about the meaning of the items. Preparing a

version of the survey that would be meaningful to non-Chinese speaking respondents is an area for further research. Further research using the SCCT items for Chinese subcultures, perhaps at the province level within China, could be conducted in a way that is analogous to nation-level comparative research.

Future research can be conducted to test the expectations about the central and more peripheral aspects of Chinese cultural traditions that we note above, and to determine whether additional multiple-item dimensions could be constructed to represent additional aspects of some schools of thought. Some of the separate items that did not become part of a scale might provide a starting point for future research to identify other significant constructs. With the help of scholars of the ancient traditions, one might systematically search the ancient texts to find other quotations that appear likely to be related to items that are not included in any of the dimension measures. The same approach could perhaps be taken to adding items that could increase the stability of the somewhat shorter and somewhat less reliable measures that we have already designed for the SCCT.

Although the advisors who provided the items used in the Chinese cultural traditions survey were asked to identify values, some of the items consist of ideas that current cross-cultural psychologists would describe as beliefs. Complementing Schwartz's (1992) theory of values, Leung et al. (2002) have presented a model of beliefs or 'social axioms'. These axioms are 'generalized beliefs about oneself, the social and physical environment, or the spiritual world, and are in the form of an assertion about the relationship between two entities or concepts' (Leung et al., 2002: 289). Leung et al. provide measurement development information for cynicism, social complexity, reward-for-application, religiosity, and fate control. Most of the SCCT items are in the form of values, but some refer to beliefs. All three Confucianism items, all three Legalism items, four of the six Buddhism/Taoism items, and two of the six Art of War items are phrased in a way that refers explicitly to desirable conduct. Others are phrased in a way reminiscent of social axioms, such as the Planning item that is part of the Art of War: 'With careful and detailed planning, one can win; with careless and less detailed planning, one cannot win, let alone if one does not plan at all'. Both the face content of the items phrased as beliefs and their empirical relationship with the items phrased as values indicate clear value-like behaviour implications. In the case of the Art of War items, the implication is that, *assuming* one wants to win, here are the causal relationships (e.g., between planning and victory) that suggest that one must engage in careful planning. More generally, future cross-cultural research about the relationships between beliefs and values should consider the extent to which a broadly recognized moral is more clearly implicit in some belief statements than in others. For the SCCT questions closer to the now current view of values, the 'how important' phrasing has the meaning of the extent to which the behaviour prescribed in the item is followed. For the questions closer to social axioms, the 'how important' phrasing has the meaning of the extent to which belief in the specified causal

relationship is part of the judgement process that the individual uses to make choices.

CONCLUSION

The research findings have satisfactorily answered the three general questions proposed in the introductory section. Through exploratory and confirmative factor analyses, a four-factor structure is extracted and verified as providing a basic set of value constructs underlying the five schools of thought of Chinese cultural traditions. These constructs can be used to represent the cultural tradition orientation of people in business organizations of China. We have provided evidence that the Structure of Chinese Cultural Traditions cannot be reduced to generic values like those in the Schwartz Value Survey model. The Structure of Chinese Cultural Traditions model converges in reasonable ways with models designed for comparative projects, yet it also contributes uniquely to understanding the historically rooted nature of Chinese cultural traditions.

NOTE

The specific phrasing in Chinese, as well as English translations, are available from the first author.

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