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Regional Differences in Preferences for Managerial Leader Behavior in China

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Biographical Sketches

Ka Wai CHAN is Assistant Professor in Management in the Department of Management and Marketing at the University of Macau; she received her Ph.D. in Business Administration at University of South Australia in 2001. Dr. Chan is the author and co-author of book chapters, journal articles, and conference papers in a variety of areas including HR management and emotional intelligence. Also see: http://www.umac.mo/fba/staff/anitachan.html

Ilan ALON is the Petters Chair of International Business and Executive Director of Rollins China Center, Rollins College, Winter Park, Florida. He is the author, editor, and co-editor of 10 books and over 100 published articles, chapters, and conference papers. His three recent books *Chinese Culture, Organizational Behavior and International Business Management* (Greenwood, 2003), *Chinese Economic Transition and International Marketing Strategy* (Greenwood, 2003), and *Business and Management Education in China: Transition, Pedagogy and Training* (World Scientific, 2005) are widely distributed. Dr. Alon is a recipient of the Chinese Marketing Award, a dual award from the Tripod Marketing Association (China) and the Society for Marketing Advances (USA), and the prestigious Rollins College McKean Award for his work on education in China. He has taught courses in top Chinese MBA programs including Shanghai Jiao Tong University, Fudan University, and China Europe International Business School. He is also an international business consultant, with experience in China as well as other countries, and a featured speaker in many professional associations.

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Abstract

This study demonstrates the complexities of analyzing determinants of cultural differences between and within national cultures. Ralston, Yu, Wang, Terpstra, and He (1996) investigated geographic regional differences in values in China, finding significant differences among the regions. This study investigates geographic regional differences in preferred managerial leader behavior in four provinces. In 2002, 2003, 2004, and 2005 the Leadership Behavior Description Questionnaire XII (LBDQ XII) was administered to people working in business organization in Zhengzhou City, Henan Province; Suzhou City, Jiangsu Province; Guangzhou City, Guangdong Province; and in the Macau Special Administrative Region, in the Peoples' Republic of China. Significant differences were found among the samples for each of the twelve factors of the LBDQ XII, with the exception that the nearby regions of Guangzhou and Macau exhibited no differences. The results indicate that "cultural areas" exist in China, distinctly different from one another.

KEYWORDS: China, Regional Differences, Leadership, Management

"I invoke the first law of geography: everything is related to everything else, but near things are more related than distant things."
--Waldo Tobler (1970)

1. Introduction

The concept of "*cultural area*" in anthropology is a contiguous geographic area comprising a number of societies that possess the same or similar traits or that share a dominant cultural orientation. Otis T. Mason in 1896 published "Influence of Environment upon Human Industries or Arts", published in the Annual Report of the Smithsonian Institution. This article identified eighteen American Indian "culture areas." The concept is that tribal entities were grouped on an ethnographic map and related to a geographical aspect of the environment. The "culture area" concept was refined by Holmes (1914). In 1939, this same "culture area" concept was used by A. L. Kroeber in *Cultural and Natural Areas* (Harris 1968, p. 374). The concept defined by cultural area is supported in research and theory in sociology, societal cultures can

differ and regions within a society can vary, especially in large and complex societies (Robertson, 1993).

Today and for at least 2000 years (Eberhard, 1965; Rickett, 1985, 1998) Chinese have identified cultural areas by distinct behavioral stereotypes in regions (e.g., North, South), provinces, counties, and cities; see Cartier (2003) and Swanson (1995). Kuan Tze (pinyin: Guanzi, also "Kuan Tse", 4th - 3rd Century BC)[2] published treatises describing regional behavior stereotypes in China. The stereotypes of North and South China are generally (Eberhard, 1965):

- The stereotypical northerner is loud, boisterous, more open, and with a quick temper, quick to anger. (Perhaps tending to use extreme anchor points on a Likert scale item.)
- The stereotypical southerner is clever, calculating, hardworking, and less open in displays of emotion. (Perhaps tending to use less extreme anchor points on a Likert scale item.)

Though much maligned by the politically correct, stereotypes provide useful classification systems, providing a preliminary basis from which to refine judgments. Nicholson (1998) hypothesizes that as an evolutionary process, in order to make sense of a complicated universe, human beings developed prodigious capabilities for sorting and classifying information. In fact, researchers have found that some non-literate tribes still in existence today have complete taxonomic knowledge of their environment in terms of animal habits and plant life. They have systematized their vast and complex world. In the Stone Age such capabilities were not limited to the natural environment; to prosper in the clan, human beings had to become expert at making judicious alliances. They had to know whom to share food with, for instance- someone who would return the favor when the time came. They had to know what the appearance and behavior of untrustworthy individuals generally looked like, as it would be foolish to deal with them. Thus, human beings appear to be hardwired to stereotype people based on very small pieces of evidence, mainly their looks and a few readily apparent behaviors. Classification made life simpler and saved time and energy. Every time you had food to share, you did not have to figure out anew who could and could not be trusted. Your classification system told you instantly. Every time a new group came into view, you could pick out the high-status members whom not to alienate. In addition, the faster you made decisions like these, the more likely you were to survive. Sitting around doing calculus, that is, analyzing options and next steps, was not a recipe for a long and fertile life. Therefore, classification before calculus remains with us today. People naturally sort others into in-groups and out-groups-just by their looks and actions. We subconsciously (and sometimes consciously) label other people, "She's a snob" or "He's a flirt." Managers are not exempt. In fact, research has shown that managers sort their employees into winners and losers as early as three weeks after starting to work with them.

While it is true that people are complex and many sided; it is illuminating to know that we seem to be genetically programmed not to see them that way. This perhaps helps to explain why, despite the best efforts of managers, some groups within organizations find it hard to mix. The battle between marketing and manufacturing is as old as marketing and manufacturing. The

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[2] Guanzi was the author of the widely quoted, and misquoted,
"If you are thinking a year ahead, plant seeds.
If you are thinking ten years ahead, plant a tree.
If you are thinking a hundred years ahead, educate the people."

techies of IT departments often seem to have difficulty getting along with the groups they are supposed to support, and vice versa. Everyone is too busy labeling others as outsiders and dismissing them in the process.

A final point must be made on the matter of classification before calculus, and it comes in the area of skill development. If you want to develop someone's skills, the best route is to give them ways of classifying situations and behaviors. Lists are attractive and often memorable. However, advanced math and science education largely relies on sophisticated models of processes-complex explanations of cause and effect in different circumstances. It also advocates probabilistic ways of thinking, in which people are taught to weigh the combined likelihoods of different events together as they make decisions. Many people may come to understand and use these methods, weather forecasters and investment analysts are examples, but even lengthy training cannot fully eliminate our irrational and simplifying biases.

2. Culture Areas

Culture areas are seen to reflect clusters of behavior that often reflected similar ecological adaptive strategies. Thus, culture areas could be defined by trait lists, those uniquely present, and those uniquely absent. The number and placement of culture areas varies depending upon authors and their particular theoretical interests. As we see in Figure 1, any monolithic description of the Chinese people will be in error. Even within the majority Han ethnic group there are many subtleties in their beliefs and practices that make it difficult to categorize this group as one homogenous group. Depending upon where a Chinese comes from, the spoken language, religion, and cultural practices can be different from other Chinese.

In China, the Han Chinese ethnic group constitutes 95% of the nation's population and is the largest ethnic group in the world. The remaining 5% of China's population (still 6.5 million people) are made up of 55 other ethnic groups. Although many of these minorities live in China, they do not consider themselves as Chinese. The minority population is spread primarily in the western part of China, the border regions around India, Afghanistan, Russia, Central Asia, and Vietnam. The three largest minority groups include the Tibetans, the Uighurs in Xinjiang province in northwestern China, and the Mongolians in the northern grasslands of Inner Mongolia (Ferroa, 1991).

Though Chinese writing is standardized upon either the "Traditional" (primarily outside Mainland China) or "Simplified" (primarily within Mainland China) characters, there are more than a dozen major Chinese oral dialects within Mainland China, many of them geographically based, and frequently identified by the province (though this is not geographically accurate). E.g., "Henan hua", or Henanhua, is "Henan Province speech". People who speak these dialects do not necessary understand each other's oral speech. The largest minority oral dialect is "Wu", spoken in and around Jiangsu and Zhejiang Provinces, and "Cantonese" ("Guangdong hua" or Guangdonghua, the oral dialect of Guangdong Province). The majority oral dialect is "Mandarin" ("Putonhua", or common speech), from Beijing and surrounding Hebei Province. A comparable European classification of languages would be the "Romance Languages", the Latin-derived Italian, French, Spanish, Portuguese, and Romanian.

Fig. 1. Ethnolinguistic Cultural Areas in Mainland China

Figure, Palka (2001), full color version:
http://bcs.wiley.com/he-bcs/Books?action=resource&bcsId=1806&itemId=0471152242&resourceId=2730&chapterId=8853

Outside of Mainland China, the majority of Overseas Chinese speak Cantonese (Wertz, 2006). Chinese from Hong Kong share the Cantonese dialect with the Chinese from Southeast Asia, e.g., Singapore. Although they may speak the same dialect and mutually understand each other, their religions, beliefs, daily practices or the food they eat can be different due to local influences. The Chinese people are very heterogeneous and their differences can be quite subtle to a non-native person.

Important issues in the study of management and leadership in China is to first understand where the Chinese samples studied are from and the dialects and languages they speak. [3]

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[3] The national language of the People's Republic of China, Putonhua or Mandarin, was chosen by a national assembly after Sun Yatsen, led a movement to overthrow the Manchurian dynasty. The Putonhua (Beijing/Hebei) dialect won by one vote. We should note that Sun was from the southern province of Guangdong; Chiang Kai-shek was from Jiangsu; Mao Zedong was from Hunan, and Deng Xiaoping was from Sichuan. All of these leaders had to learn Putonhua, and they spoke it with heavy accents.

Data for this study were collected from four regions, people working in business organizations in hotels in Zhengzhou City, Henan Province in 2002; at a trade show in Suzhou City, Jiangsu Province in 2003; Guangzhou City, Guangdong Province in 2004; and in the hospitality industry in the Macau Special Administrative Region, in 2005. Brief descriptions of the regions follow.

2.1. Sources of Cross-Regional Differences

Ralston, Yu, Wang, Terpstra, and He (1996), in a study of regional differences in values in China, selected an ecological-materialist approach as a theoretical foundation for discussing regional differences as it integrates both the evolution and the structure of a society, for further justification of this approach see the article. The materialistic approach identifies a culture as consisting of three components:

1. The implicit cultural values, an ideological superstructure consisting of the opinions, attitudes, beliefs, norms, and values shared by the members of a society.
2. A social structure composed of the explicit behavioral patterns of the members. The social structure is differentiated from the superstructure in that the social structure consists of what people actually do rather than what they think (Sanderson, 1991).
3. Both the superstructure and the social structure are determined by the infrastructure. That is, the values and behaviors of individuals in a society are shaped by the influences of their infrastructure (Harris, 1979), these can include aspects of the physical environment, the resources, tools, and processes producing and distributing goods, and the demographics of the inhabitants. Therefore, to understand the values and behaviors of individuals in a given society, one needs to identify the society's infrastructure that shapes a society's values (Sanderson, 1991).

Ralston et al. (1996) is a seminal modern work on evaluation of Chinese infrastructure influences. They indicated that some influences were homogeneous countrywide, and therefore not pertinent for regional comparisons, e.g., politics and law have been nearly universal across the regions since the installation of the 1949 Communist government. However, for 2000 years the one ideological constant in China has been Confucianism, defining the core values and exemplary behaviors of China since the Han dynasty (206 BC - 220 AD). The tenets of Confucianism are deeply embedded in the cultural ideology and values of the Chinese. Societal core values change very slowly, and even Mao's Great Cultural Revolution (1966-76), having as one objective the elimination of Confucianism from Chinese society, could not destroy the centuries of adherence to Confucian values.

Ralston et al. found regional differences in China to be influenced by historic precedents, geographic location, economic development, educational level, and technological sophistication. Historic/geographic comparisons indicate that a clear dichotomy occurred historically due to the geographic differences between China's coastal and inland cities. As in many other countries, development began on the coast. China's coastal cities, Shanghai, Guangzhou, and Dalian, have been the international commercial and trading centers for many centuries. Thus, the historic/ geographic comparisons identify a definite coastal-inland contrast.

2.2. Cultural Area Variables Relating to the Samples in this Study

Zhengzhou, Henan (Honan)**.** Zhengzhou City in east-central China is capital of Henan Province. It is an important railroad and industrial center in the Huang He (Yellow River) valley at the western edge of the Huabei Pingyuan (North China Plain). Major manufactures include cotton textiles, machinery, electric equipment, aluminum, and processed food. Founded during the Shang (Yin) dynasty (1766?-1027? BCE), the city was known (1913-1949) as Cheng-hsien. After suffering heavy damage from floods in the Second Sino-Japanese War (1937-1945), it was rebuilt and systematically developed as a major industrial metropolis. It replaced Kaifeng as the capital of Henan in 1954. Population (1991) is approximately 2 – 3 million. The local Chinese dialect is "Henanhua", Henan speech, and the city is in the "Southern Mandarin" ethnolinguistic region.

Jiangsu. (Chiang-su; Postal System Pinyin: Kiangsu) Jiangsu province is populated by Han, Hui, Manchu and other ethnic groups. Its population totals 73.54 millions. The old name for Jiangsu was "Wu". South Jiangsu was the base for the Kingdom of Wu (one of the "Three Kingdoms") from 222 to 280. The province was established in the 17th century. Southern Jiangsu was been the dominant region, wealthier and more influential than the northern. Southern Jiangsu exhibits characteristics of Southern Chinese culture. Culturally, North Jiangsu exhibits characteristics of North China, but has been considerably influenced by South China culture.

The neighbouring areas of Jiangsu are Shandong Province in the north, Anhui Province in the west, Shanghai Municipality and Zhejiang Province in the south. Suzhou is a a historic city in China and also the centre of cotton, silk and wool production. The predominant dialect is the Wu dialect, spoken in areas from Changzhou southward In Nanjing, Zhenjiang, Yangzhou and the Xuhai area, the northern dialect is used (with the exception of Gaochun in Nanjing where Wu dialect is used). However, there are great differences within sub-dialects. Major Wu dialects include those of Shanghai, Suzhou, Wenzhou, Hangzhou, Yongkang and Shaoxing. The Northern Wu dialects are not mutually intelligible with the Southern Wu dialects. As of 1991, there are 87 million speakers of Wu Chinese, making it the second largest form of Chinese after Mandarin Chinese (which has 800 million speakers).

Guangzhou, Guangdong. Guangzhou (Canton, Kuang-chou, Kwangchow), in southern China, is capital of Guangdong Province and is an ancient settlement of obscure origins. Guangzhou was brought into the Chinese Empire in the 3rd century BCE. Arab, Persian, Hindu, and other merchants traded here for centuries before the Portuguese arrived in quest of silk and porcelain in the 16th century. They were followed by British merchants in the 17th century and French and Dutch traders in the 18th century. Guangzhou became a treaty port in 1842, but restrictions on trade continued until a sandbank in the Pearl River (later developed into Sha-mien Island) was ceded (1861) for unrestricted foreign trading and settlement; it was returned to Chinese control in 1946. Guangzhou was a centre of activity during the Republican Revolution (1911), led by Sun Yatsen, which resulted in the establishment of the Republic of China, and it was the early headquarters of the Guomingdong (Kuomintang). The Japanese occupied and heavily damaged the city during 1938-45. Extensive urban redevelopment, begun in the 1920s, was resumed after 1949, when it was combined with a major program of beautification, industrial expansion, and port improvement. Population (1991) is approximately 4 – 5 million. The local Chinese dialect is "Guangdonghua", Guangdong speech, also called Cantonese. There are at least four major dialect groups of Cantonese. *Yuehai*, the majority dialect, includes the dialect spoken in Guangzhou, Hong Kong and Macau

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Macau. Macau (Macao or Aomen), is a Special Administrative Region of China, on the southeastern coast. Portuguese traders first traveled to the South China coast in the early 1500s, and in 1556 they established a settlement at Macau, eventually establishing a Portuguese colony. The government of China did not formally recognize Portuguese control of Macau until 1887. Macau returned to Chinese administration in December 1999, when it became a Special Administrative Region (SAR) of China with a status similar to that of Hong Kong (Xianggang) after that region's transfer from British to Chinese rule in 1997. As an SAR of China, Macau maintains its capitalist economic system for 50 years after 1999, an arrangement China refers to as "one country, two systems." Macau is located west of the mouth of the Zhu Jiang (Pearl River) estuary and borders China's Guangdong Province to the north. It is about 60 km (about 40 mi) southwest of Xianggang and about 110 km (about 70 mi) south of the city of Guangzhou. The city of Macau is the territory's largest settlement. The local Chinese dialect is "Guangdonghua", Guangdong speech, also called Cantonese. There are at least four major dialect groups of Cantonese. *Yuehai*, the majority dialect, includes the dialect spoken in Guangzhou, Hong Kong and Macau

3. Recent Literature Concerning Regional Differences

Huo and Randall (1991) conducted an exploratory data analysis of the sub-cultural value differences among managers all sharing the Chinese culture but living in different geographic regions. Using survey responses to Hofstede's VSM, a comparison was made of the values among Chinese living in Taiwan, Beijing, Hong Kong, and Wuhan. Strong sub-cultural differences were revealed.

Ralston et al. (1996) reviewed literature concerning subculture research in China and did not identify any cultural frameworks that were specifically appropriate for a cross-regional comparison of Chinese work values. Ralston et al. investigated regional differences region-clusters based on the infrastructure characteristics of six regions. They point out that when doing business in China "… it is important for Western business people to understand the diverse values held across the various regions of China, because just as societal cultures can differ, regions within a society can vary, especially if that society is large and complex …". Further note:

However, while China's large population makes it an appealing new market, differences due to regional diversity can contribute to the confounding nature of Chinese business tactics. China's billion-plus people speak a multitude of dialects, consist of distinct ethnic groups, and follow local customs that have remained substantially intact over time …. This regional isolation was initially due, in large part, to China's limited infrastructure and hostile terrain … . Over the past half century, this isolation has resulted more from Communist government policy that has severely limited movement within the country … . The sustained lack of contact with others outside one's region means that values may have evolved differently for individuals from the various regions based on their own unique environmental influences. Thus, in order to understand the values of Chinese business people, it is necessary to look at the work values held by business people in the various regions of China because these values may differ.

Ralston et al. collected data in the North: Beijing, East: Shanghai, Central-South: Guangzhou, Northeast: Dalian, Southwest: Chengdu, and Northwest: Lanzhou. These cities were selected as all have populations of more than one million and are economic canters of the

regions. Thus, while this analysis may not capture all the within-region nuances, it should provide an empirical foundation for understanding where there are work value differences across the regional business centers of China. Ralston et al. found Beijing being somewhat more like Shanghai and Guangzhou (i.e., not clustering with the two inland cities), and conversely, Dalian, a north coastal city being somewhat more like the interior cities of Chengdu and Lanzhou.

Ralston et al. employed the Schwartz Value Survey (SVS, see Schwartz, 1992, 1994) in their study. In this study we used the Leader Behavior Description Questionnaire XII.

4. The Leader Behavior Description Questionnaire

Stodgill (1974, pp. 128-141) discussed the Ohio State Leadership Studies from 1945 through 1970. Several factor analytic studies produced two factors identified as *Consideration* and *Initiation of Structure in Interaction*. Stodgill (1948, 1963, 1974 pp. 142-155) noted that it was not reasonable to believe that the two factors of Initiating Structure and Consideration were sufficient to account for all the observable variance in leader behavior relating to group achievement and the variety of social roles. Stodgill's theory suggested the following patterns of behavior are involved in leadership, though not equally important in all situations.

Representation measures to what degree the leader speaks as the representative of the group.

Demand Reconciliation reflects how well the leader reconciles conflicting demands and reduces disorder to system.

Tolerance of Uncertainty depicts to what extent the leader is able to tolerate uncertainty and postponement without anxiety or getting upset.

Persuasiveness measures to what extent the leader uses persuasion and argument effectively; exhibits strong convictions.

Initiation of Structure measures to what degree the leader clearly defines own role, and lets followers know what is expected.

Tolerance of Freedom reflects to what extent the leader allows followers scope for initiative, decision and action.

Role Assumption measures to what degree the leader exercises actively the leadership role rather than surrendering leadership to others.

Consideration depicts to what extent the leader regards the comfort, well-being, status and contributions of followers.

Production Emphasis measures to what degree the leader applies pressure for productive output.

Predictive Accuracy measures to what extent the leader exhibits foresight and ability to predict outcomes accurately.

Integration reflects to what degree the leader maintains a closely-knit organization; resolves inter-member conflicts.

Superior Orientation measures to what extent the leader maintains cordial relations with superiors; has influence with them; is striving for higher status.

4.1. Assumptions and Limitations of the Leader Behavior Paradigm

Judge, Piccolo, and Ilies (2004) attempted to identify all possible studies of the relationships between Consideration, Initiating Structure, and relevant organizational criteria. They searched the PsycINFO database (1887–2001) for studies (articles, book chapters, dissertations, and unpublished reports) that referenced the two general keyword categories in various combinations and expressions. Their search yielded 165 articles and 36 doctoral dissertations, and examination of each study resulted in 130 studies met the criteria for inclusion in their analysis database (117 journal articles and 13 dissertations). These studies reported 593 correlations computed from 457 independent samples. Judge et al. fond that the LBDQ versions reliably and validly measured leader effectiveness.

The LBDQ XII has been used in several countries to study leadership behavior, Black and Porter (1991), Littrell (2002a, 2002b, 2004), Littrell and Baguma (2005), Littrell and Nkomo (2005), Littrell and Valentin (2005); Lucas et al. (1992); Schneider and Littrell (2003), Selmer (1997) and Stogdill (1963), with results demonstrating an ability of the LBDQ XII to discriminate between cultures on several factors yielding differences that are consistent with the literature.

5. Hypotheses

From the preceding discussions we can hypothesize that due to the membership in ethnolinguistic groups and geographic proximity, mean preferred leader behavior factor scores for the samples from Guangzhou and Macau will be similar to one another. The mean factor scores for Suzhou and Zhengzhou will be different from one another and different from Guangzhou and Macau.

Hypothesis 1. The mean factor scores for the Guangzhou and Macau samples will be more similar to one another than to the other two samples, as indicated by multiple comparison analyses of covariance.

Hypothesis 2. The mean factor scores for the Suzhou sample will be different from all other samples, as indicated by multiple comparison analyses of covariance.

Hypothesis 3. The mean factor scores for the Zhengzhou sample will be different from all other samples, as indicated by multiple comparison analyses of covariance.

6. Method

Data were collected using the Chinese language version of the LBDQ XII. In 2002 data were collected from managers and supervisors in two international hotel chains in downtown Zhengzhou City in Henan Province. In 2003 data were collected in Suzhou in Jiangsu Provinces at a marketing conference sponsored by the Shanghai Spenor Business Management Co Ltd with the surveys voluntarily completed by conference attendees and conference staff. In 2004 data were collected from local business people in Guangzhou in Guangdong Province. In Guangzhou a research assistant from Sun Yatsen University employed by the author collected surveys by canvassing business people in the city. In 2005 students from Macau University collected data from hotel employees in Macau by canvassing business people in the hotels and casinos in the city. In Guangzhou and Macau the surveys were delivered and retrieved in person.

6.1. Pace of Culture Change

The major research project dealing with global culture change is the World Values Survey (WVS) managed by Inglehart (1977, 1990, 1995, 1997, 2005). Inglehart argues that economic development, cultural change, and political change go together in coherent and, to some extent, predictable patterns. Inglehart theorizes that once a society begins industrialization, this leads to related changes such as mass internal migration and diminishing differences in gender roles. The changes in worldviews seem to reflect changes in the economic and political environment, but they take place with a generational time lag. Given the findings of the WVS, we would not expect to see significant cultural changes in the areas studied over the period 2002 – 2005.

7. Analysis

Reliability analyses of the scales and items yielded Cronbach alphas of 0.63 as the lowest (F2: Demand Reconciliation), with the remainder ranging from 0.72 – 0.76. These are acceptable reliability estimates.

7.1. Demographics

Ralston et al. (1996) identified education as an influential infrastructure variable. For the four samples in this study, the distribution of education attainment can be seen in Table 1. Chi-Square Tests and correlation analyses on the distribution of education levels indicated that the distributions of education levels and the distributions of gender were not significantly different among the samples.

The Zhengzhou sample, due to the initial intent of the study at the time that was directed toward managerial leader development, did not include employees below the supervisory level.

The gender distribution seems to indicate greater opportunity for females in the hotel industry, discussions of the reasons for this are beyond the scope of this paper (see Cooke (2001) for further information).

In Table 2 correlating the major demographics we see that Macau and Zhengzhou have a low, non-significant negative relationship between job level and age, indicating possible beginnings of deviation from the traditional practice in China of promotion based upon longevity rather than ability. As these two samples are drawn from the hospitality industry, which was one of the first opened to foreign management, these data could indicate the effects of implementation of merit-based human resource development practices. Deviations were observed between all samples relating to job and education.

Table 1. Some Demographics for the Four Samples

Sample	Mo	GZ	SZ	ZZ	Mo	GZ	SZ	ZZ	Mo	GZ	SZ	ZZ
Variable	Ed	Ed	Ed	Ed	Job	Job	Job	Job*	Age	Age	Age	Age
Minimum	1=low	1	1	1	1=low	1=low	1	2=low	17	20	18	20
Maximum	5=high	5	5	4	4=high	5=high	5	4=high	62	70	57	51
1	9.0%	4.4%	5.3%	1.3%	0.0%	62.1%		71.9%				
2	51.4%				68.6%	5.7%	55.3%	14.5%				
		44.4%	57.3%	54.7%			23.6%					
3	30.6%				24.8%	26.4%		11.5%				
		38.9%	12.3%	16.9%			15.7%					
4	9.0%				6.7%	4.6%	3.8%	2.1%				
		11.1%	19.9%	26.7%								
5	0.0%	1.1%	5.3%	0.4%	0.0%	1.1%	1.6%	0.0%				
Mean	2.7	2.6	2.6	2.4	1.4	1.7	1.8	2.4	26.5	28.7	30.5	30.1
Median	2	2	3	2	1	1	1	2	23	26	27	28
Mode	2	20	20	2	1	1	1	2	21	23	24	24
Std. Deviation	0.9	1.0	0.8	0.9	0.8	1.0	1.1	0.6	8.3	8.2	8.7	7.5
Skewness	0.6	0.8	.4	0.4	1.63	1.3	1.0	1.4	1.6	1.9	1.3	1.3
Std. Error Skewness	.16	.13	.25	.23	.13	.14	.26	.24	.13	0.13	.25	.24
Kurtosis	-1.2	-.43	1..0	-0.2	1.5	.96	-0.4	0.83	2.2	3.9	0.8	1.06
Std. Error Kurtosis	.32	.26	.50	.46	.27	.28	.51	.47	.27	.26	.50	.47
Total Ns	344	344	92	112								
N Males (non-blank)	46.2%	63.2%	63.7%	55.5%								
N Females (non-blank)	53.8%	36.8%	36.3%	44.5%								

Keys: Education: 1=attended high school, 2=graduated h.s., 3=attended college/prof. certificate, 4=bachelor degree, 5=post-graduate; Job Level: 1=worker, 2=supervisor, 3=middle manager, 4=senior manager, 5=C.E.O.

Homogeneity of variance tests indicated that variances were not consistently homogenous across samples

Table 2. Correlations for Education, Job Level, and Age by Samples

** Correlation is significant at the 0.01 level (2-tailed).

		Mo Ed	Mo Job	Mo Age	GZ Ed	GZ Job	GZ Age	SZ Ed	SZ Job	SZ Age	ZZ Ed	ZZ Job	ZZ Age
Ed	ρ	--	0.12	-0.11	--	-.19**	.34**	--	0.13	.27**	--	.42**	-.10
	Sig.		.07	0.11		0.001	0.00		.238	0.10		0.00	0.31
Job	ρ		--	.45**		--	.11		--	.20		--	.14
	Sig.			0.00			0.06			.06			.16

Other correlations indicate that the age and job-level of the subjects are significantly positively related to the grand averages of scores on all 100 LBDQXII survey items (correlations approximately 0.20; p<0.01).

These results from four samples from separate regions in China lead us to the conclusion that perceptions of preferred managerial leader behavior are affected by a large number of variables, among these are primarily age and job-level, with education apparently having a lesser effect.

8. Results

ANOVA and chi-square analyses of the data in the samples indicated significant differences in age, education level, and job level. Due to these differences, Multivariate Analysis of Covariance was employed to compare the sample means, with these three variables as covariables. Analysis of covariance for the 12 factors indicated no significant differences in responses by gender for the samples as a whole.

8.1. Sample Differences for LBDQXII Factors

In Appendix 1 and Figure 2 we see the means and groupings of the twelve factor scores for the four samples. In general, Zhengzhou means were unique and always higher, followed by Suzhou means, usually standing alone, then Guangzhou means, and Macau means as lowest, with the later two samples not differing significantly across any of the twelve LBDQ XII factors. As we see in Appendix 1, the Guangzhou and Macau samples clustered together for all of the 12 factors. This finding and the finding of differences between these samples and the Suzhou and Zhengzhou samples provides support to the existence of a cultural area in China in the Guangzhou/Macao region.

The Suzhou sample generally stood alone in the middle range, clustering with the Guangzhou and Suzhou samples on factor F10: Predictive Accuracy, and with Zhengzhou on F6: Tolerance of Freedom. The consistency of differences and similarities indicate that there is a good probability that we are sampling subjects from three different cultural areas in China. Accurate interpretation of the causes of these differences will require data from more demographically diverse samples in the four areas, and from other suspected cultural areas.

Unresolved issues around response bias as a cultural variable (see Smith, 2004, and Schwartz, 1992), confound interpretations of the "Northern" and "Southern" differences until further data is collected and analyzed.

Fig. 2. Means of Samples Grouped by Factors
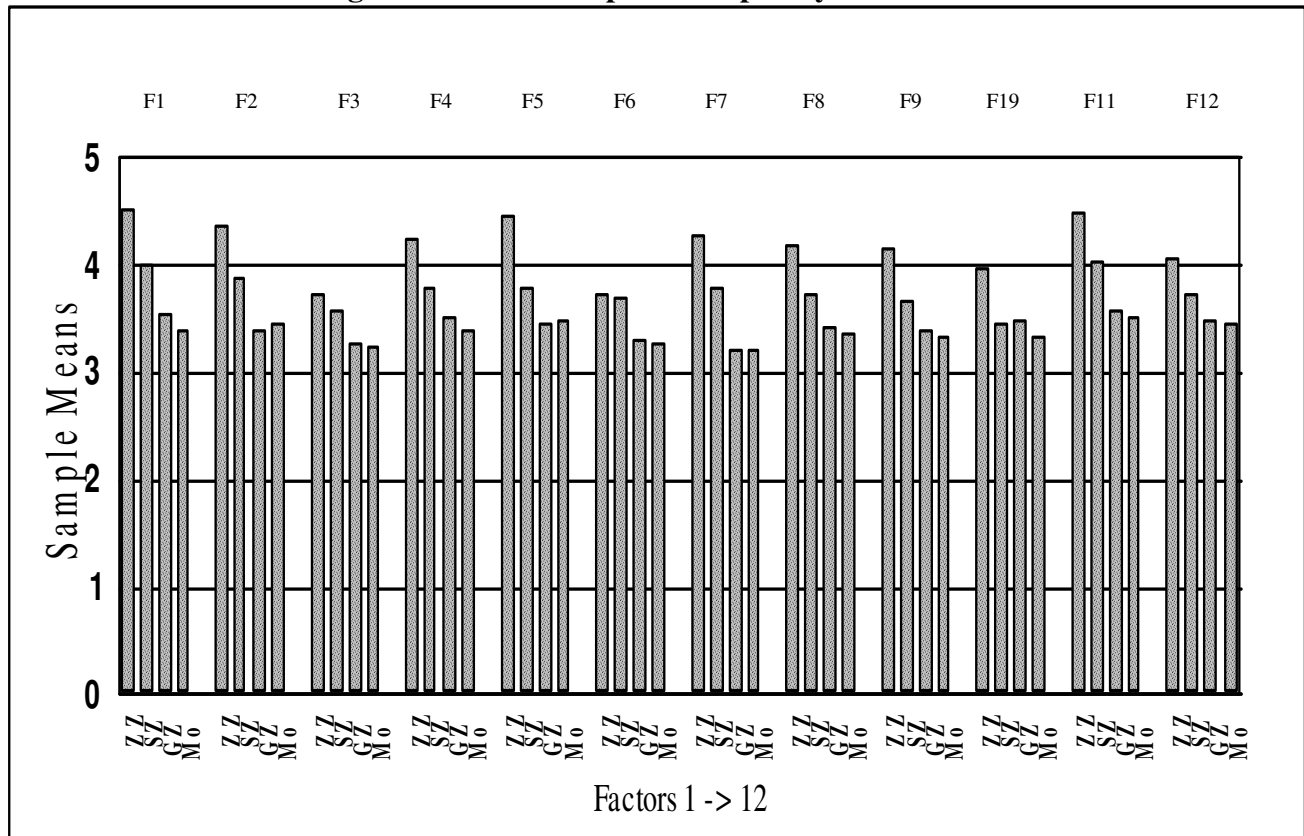
9. Conclusions

First we consider some issues of theory and methodology.

9.1. Issues in Interpreting Differences in Means

Smith (2004) comments that cross-cultural researchers who utilize questionnaires to collect data have long been aware of cultural variations in several types of response sets. These response sets are often named "response bias". Particularly when Likert-type response categories are employed, consistent differences are found in utilization of the different anchor points on response scales across cultures. Watkins and Cheung (1995) found evidence for five types of cultural variations in aspects of response format among high school students in Nigeria, Australia, China, Nepal, and the Philippines, namely, positivity bias, negativity bias, low standard deviation, inconsistency of related items, and consistency of unrelated items. The tendency to use both extremes of a response scale has been shown to be greater among Hispanic Americans than among Caucasian Americans (Marin, Gamba, & Marin, 1992). Studies using bilingual respondents have indicated that ratings also vary with language of response. For example, Hispanics showed more extreme responses when completing questionnaires in Spanish as opposed to in English (Hui & Triandis, 1989). The principal focus of published research has most usually been with the extremity of response at the positive end of response scales, sometimes called "acquiescent response bias". The Marin et al. (1992) study also showed greater acquiescent response bias among Hispanic Americans than among Caucasians.

An argument can be made that response bias is a cultural variable, with some cultures tending to greater use of extreme anchors on Likert-type scales, and some tending to generate response sets with smaller variance.

The authors believe that response sets are a valuable, discriminatory cross-cultural dependent variable, and should be studied as such.

Schwartz et al. (1997) examined meanings of scale use as an individual difference variable. Smith (2004) discusses correlates of scale use differences at the level of cultures, and postulates that individual differences in the mean of the Schwartz Values Survey value dimensions are largely a scale use bias. This assertion is grounded both in theory and empirically.

A first theoretical ground is the assumption that, across the full range of value contents, everyone views values as approximately equally important. Some attribute more importance to one value, others to another. However, on average, values as a whole are of equal importance. This assumption is dependent on the further assumption that the value instrument covers all of the major types of values to which people attribute importance. Empirical evidence to support this assumption appears in Schwartz (1992) and Schwartz et al. (1997) contend that to the extent that individuals' attribute the same average importance to the full set of values, their mean rating score (MRAT) should be the same. Differences in individual MRATs therefore reflect scale use and not value substance. Of course, differences in MRAT may reflect some substance, but the empirical analyses suggest that substance is a much smaller component of MRAT than scale use bias is.

A second theoretical ground is that values are of interest because they form a system of priorities that guide, influence, and are influenced by thought, feeling and action. Values do not function in isolation from one another but as systems. For example, a decision to vote for one or another party is influenced by the perceived consequences of that vote for the attainment or frustration of multiple values--promoting equality or freedom of expression versus social power or tradition. The trade-off among the relevant values affects the vote. Consequently, what are really of interest are the priorities among the values that form an individual's value system. Correcting for scale use with MRAT converts absolute value scores into scores that indicate the relative importance of each value in the value system, i.e., the individual's value priorities.

The empirical basis for viewing differences in MRAT as bias is the findings of many analyses (50 or so, at least) that related value priorities to other variables--attitudes, behavior, background. The associations obtained (mean differences, correlations) when using scores corrected for MRAT are consistently more supportive of hypotheses based on theorizing about how values should relate to these other variables than the associations with raw scores. Indeed, with raw scores associations sometimes reverse. In no case have raw score associations made better sense than those corrected for MRAT.

One might propose that a more refined way to measure MRAT is possible. Separate MRATs may be calculated for each of the ten individual value dimensions. For this purpose, the average response on all items other than those that index a value is computed as the MRAT for each value. Scores on the items that index each of the 10 values are then centered on their own MRAT. Alternatively, the particular MRAT for each value is used as the covariate when correlating that value with other variables. Schwartz' studies indicate that using this more refined method with the SVS has virtually no effect on observed differences.

Ralston, Cunniff, and Gustafson, 1995, and Ralston in various subsequent studies comparing value dimensions across cultures, employ raw-score means from Likert-item scales (non-MRAT) in comparisons, without discussion of the issue.

To remain consistent with Ralston's earlier studies in China, raw score means were employed in the analysis.

9.2. Hypothesis Testing

The following outcomes were obtained:

Accepted Hypothesis 1. The mean factor scores for the Guangzhou and Macau samples will be more similar to one another than to the other two samples, as indicated by multiple comparison analyses of covariance. Pairwise comparisons indicated significant differences among the Zhengzhou, Suzhou, and the cluster of Guangzhou+Macau, for the 12 leadership behavior variables, with Guangzhou and Macau clustering for all factors, and Zhengzhou and Suzhou clustering together only for F6: Tolerance of Freedom. These findings support Hypothesis 1, which proposes that cities geographically near each other share similar culture and values, and conversely.

Generally Accepted Hypothesis 2. The mean factor scores for the Suzhou sample will be different from all other samples, as indicated by multiple comparison analyses of covariance. This sample indicated differences on 10 of the 12 factors, clustering with Guangzhou+Suzhou on F10 and Zhengzhou on F6. Suzhou is geographically remote from the other samples, and the people speak the Wu dialect, as opposed to Cantonese and Southern Mandarin.

Accepted Hypothesis 3. The mean factor scores for the Zhengzhou sample will be different from all other samples, as indicated by multiple comparison analyses of variance. This sample indicated significant differences with all the samples, with means being universally higher, on 11 of the 12 factors. Zhengzhou is geographically remote from the other samples, and the people speak the Southern Mandarin and Henanhua dialects.

The data indicate significant regional differences that may be influenced by language and geographic proximity. The Macau and Guangzhou samples had no significant differences in factor means. As noted above, Macau and Guangzhou are geographically very near one another, and speak the same Chinese dialect.

The "culture area" concept was discussed by Holmes (1914), Harris (1968), and Robertson (1993) among others, and supported in research and theory in sociology. The results of this study support the idea that regions within a society can exhibit significant cultural variation, especially in a large and complex society such as China.

As this study employed a measure of preferred explicit leader behavior, we should consider the statement of House, Hanges, Javidan, Dorfman, and Gupta (2004), "Given the increasing globalization of industrial organizations and the growing interdependencies among nations, the need for a better understanding of cultural influences on leadership and organizational practices has never been greater." This study and that of Ralston et al. (1996) indicate that gaining a better understanding of cultural influences in China might be more complex than anticipated. The two studies indicate that the intra-national cultural influences in countries with several cultural area groups complicate matters both for expatriate managerial leaders and subordinates and from "local expatriates" moving from a cultural area to another in a single country.

10. Shortcomings and Future Plans

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Many significant differences were found between the several samples for the factors of preferred leader behavior; to further identify cultural areas, data will be collected to better match the demographics of the samples and to expand the breadth and size of samples.

More detailed analysis of the possible sources of cultural differences in areas in China is required to gain understanding of the effects of the differences on manager and employee behavior preferences.

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Appendix 1
Analyses of Covariance, Means, Standard Deviations, and Pairwise Comparisons of the Samples

Based on estimated marginal means
*The mean difference is significant at the 0.05 level.
a Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Dependent Variable	(I)City	(J)City	Mean	Std. Dev.	Mean Difference (I-J)	Std. Error	Sig.(a)
F1	Zhengzhou	Suzhou	4.53	0.42	.480(*)	.097	.000
		Guangzhou	4.01	0.58	.947(*)	.077	.000
		Macau	3.55	0.67	1.046(*)	.083	.000
	Suzhou	Zhengzhou	3.44	0.70	-.480(*)	.097	.000
		Guangzhou	3.67	0.74	.467(*)	.079	.000
		Macau	4.38	0.50	.566(*)	.083	.000
	Guangzhou	Zhengzhou	3.87	0.65	-.947(*)	.077	.000
		Suzhou	3.40	0.59	-.467(*)	.079	.000
		Macau	3.44	0.59	.100	.058	**.084**
	Macau	Zhengzhou	3.59	0.67	-1.046(*)	.083	.000
		Suzhou	3.74	0.41	-.566(*)	.083	.000
		Guangzhou	3.57	0.49	-.100	.058	**.084**
F2	Zhengzhou	Suzhou	3.28	0.43	.486(*)	.088	.000
		Guangzhou	3.21	0.50	.960(*)	.070	.000
		Macau	3.34	0.50	.866(*)	.075	.000
	Suzhou	Zhengzhou	4.23	0.53	-.486(*)	.088	.000
		Guangzhou	3.78	0.55	.474(*)	.072	.000
		Macau	3.53	0.67	.380(*)	.075	.000
	Guangzhou	Zhengzhou	3.41	0.59	-.960(*)	.070	.000
		Suzhou	3.59	0.66	-.474(*)	.072	.000
		Macau	4.47	0.39	-.094	.052	**.074**
	Macau	Zhengzhou	3.79	0.45	-.866(*)	.075	.000
		Suzhou	3.47	0.54	-.380(*)	.075	.000
		Guangzhou	3.47	0.56	.094	.052	**.074**
F3	Zhengzhou	Suzhou	3.63	0.62	.186(*)	.069	.008
		Guangzhou	3.73	0.65	.477(*)	.055	.000
		Macau	3.70	0.52	.514(*)	.059	.000
	Suzhou	Zhengzhou	3.32	0.57	-.186(*)	.069	.008
		Guangzhou	3.29	0.53	.291(*)	.056	.000
		Macau	3.40	0.59	.328(*)	.059	.000
	Guangzhou	Zhengzhou	4.27	0.43	-.477(*)	.055	.000
		Suzhou	3.78	0.53	-.291(*)	.056	.000
		Macau	3.22	0.39	.036	.041	**.377**
	Macau	Zhengzhou	3.20	0.49	-.514(*)	.059	.000
		Suzhou	3.40	0.58	-.328(*)	.059	.000

Dependent Variable	(I)City	(J)City	Mean	Std. Dev.	Mean Difference (I-J)	Std. Error	Sig.(a)
		Guangzhou	4.18	0.54	-.036	.041	**.377**
F4	Zhengzhou	Suzhou	3.74	0.58	.438(*)	.092	.000
		Guangzhou	3.44	0.56	.685(*)	.073	.000
		Macau	3.35	0.53	.761(*)	.078	.000
	Suzhou	Zhengzhou	3.53	0.61	-.438(*)	.092	.000
		Guangzhou	4.17	0.36	.247(*)	.074	.001
		Macau	3.68	0.45	.323(*)	.078	.000
	Guangzhou	Zhengzhou	3.39	0.45	-.685(*)	.073	.000
		Suzhou	3.32	0.47	-.247(*)	.074	.001
		Macau	3.49	0.53	.076	.054	**.160**
	Macau	Zhengzhou	3.97	0.65	-.761(*)	.078	.000
		Suzhou	3.47	0.60	-.323(*)	.078	.000
		Guangzhou	3.48	0.68	-.076	.054	**.160**
F5	Zhengzhou	Suzhou	3.32	0.64	.662(*)	.078	.000
		Guangzhou	3.48	0.68	.981(*)	.062	.000
		Macau	4.50	0.51	.933(*)	.067	.000
	Suzhou	Zhengzhou	4.02	0.63	-.662(*)	.078	.000
		Guangzhou	3.58	0.72	.319(*)	.064	.000
		Macau	3.53	0.70	.271(*)	.067	.000
	Guangzhou	Zhengzhou	3.72	0.75	-.981(*)	.062	.000
		Suzhou	4.07	0.46	-.319(*)	.064	.000
		Macau	3.74	0.45	-.048	.046	**.299**
	Macau	Zhengzhou	3.49	0.56	-.933(*)	.067	.000
		Suzhou	3.44	0.54	-.271(*)	.067	.000
		Guangzhou	3.57	0.57	.048	.046	**.299**
F6	Zhengzhou	Suzhou	4.53	0.42	.027	.085	**.747**
		Guangzhou	4.01	0.58	.413(*)	.067	.000
		Macau	3.55	0.67	.433(*)	.072	.000
	Suzhou	Zhengzhou	3.44	0.70	-.027	.085	**.747**
		Guangzhou	3.67	0.74	.385(*)	.069	.000
		Macau	4.38	0.50	.406(*)	.072	.000
	Guangzhou	Zhengzhou	3.87	0.65	-.413(*)	.067	.000
		Suzhou	3.40	0.59	-.385(*)	.069	.000
		Macau	3.44	0.59	.020	.050	**.686**
	Macau	Zhengzhou	3.59	0.67	-.433(*)	.072	.000
		Suzhou	3.74	0.41	-.406(*)	.072	.000
		Guangzhou	3.57	0.49	-.020	.050	**.686**
F7	Zhengzhou	Suzhou	3.28	0.43	.483(*)	.068	.000
		Guangzhou	3.21	0.50	1.052(*)	.054	.000
		Macau	3.34	0.50	1.025(*)	.059	.000
	Suzhou	Zhengzhou	4.23	0.53	-.483(*)	.068	.000

Dependent Variable	(I)City	(J)City	Mean	Std. Dev.	Mean Difference (I-J)	Std. Error	Sig.(a)
		Guangzhou	3.78	0.55	.569(*)	.056	.000
		Macau	3.53	0.67	.542(*)	.058	.000
	Guangzhou	Zhengzhou	3.41	0.59	-1.052(*)	.054	.000
		Suzhou	3.59	0.66	-.569(*)	.056	.000
		Macau	4.47	0.39	-.027	.041	.505
	Macau	Zhengzhou	3.79	0.45	-1.025(*)	.059	.000
		Suzhou	3.47	0.54	-.542(*)	.058	.000
		Guangzhou	3.47	0.56	.027	.041	**.505**
F8	Zhengzhou	Suzhou	3.63	0.62	.445(*)	.082	.000
		Guangzhou	3.73	0.65	.749(*)	.065	.000
		Macau	3.70	0.52	.790(*)	.070	.000
	Suzhou	Zhengzhou	3.32	0.57	-.445(*)	.082	.000
		Guangzhou	3.29	0.53	.304(*)	.066	.000
		Macau	3.40	0.59	.344(*)	.070	.000
	Guangzhou	Zhengzhou	4.27	0.43	-.749(*)	.065	.000
		Suzhou	3.78	0.53	-.304(*)	.066	.000
		Macau	3.22	0.39	.041	.048	**.398**
	Macau	Zhengzhou	3.20	0.49	-.790(*)	.070	.000
		Suzhou	3.40	0.58	-.344(*)	.070	.000
		Guangzhou	4.18	0.54	-.041	.048	**.398**
F9	Zhengzhou	Suzhou	3.74	0.58	.471(*)	.067	.000
		Guangzhou	3.44	0.56	.759(*)	.053	.000
		Macau	3.35	0.53	.779(*)	.058	.000
	Suzhou	Zhengzhou	3.53	0.61	-.471(*)	.067	.000
		Guangzhou	4.17	0.36	.288(*)	.055	.000
		Macau	3.68	0.45	.308(*)	.057	.000
	Guangzhou	Zhengzhou	3.39	0.45	-.759(*)	.053	.000
		Suzhou	3.32	0.47	-.288(*)	.055	.000
		Macau	3.49	0.53	.020	.040	**.618**
	Macau	Zhengzhou	3.97	0.65	-.779(*)	.058	.000
		Suzhou	3.47	0.60	-.308(*)	.057	.000
		Guangzhou	3.48	0.68	-.020	.040	**.618**
F10	Zhengzhou	Suzhou	3.32	0.64	.487(*)	.096	.000
		Guangzhou	3.48	0.68	.470(*)	.076	.000
		Macau	4.50	0.51	.567(*)	.082	.000
	Suzhou	Zhengzhou	4.02	0.63	-.487(*)	.096	.000
		Guangzhou	3.58	0.72	-.017	.078	**.825**
		Macau	3.53	0.70	.081	.082	**.323**
	Guangzhou	Zhengzhou	3.72	0.75	-.470(*)	.076	.000
		Suzhou	4.07	0.46	.017	.078	**.825**
		Macau	3.74	0.45	.098	.057	**.085**

Dependent Variable	(I)City	(J)City	Mean	Std. Dev.	Mean Difference (I-J)	Std. Error	Sig.(a)
	Macau	Zhengzhou	3.49	0.56	-.567(*)	.082	.000
		Suzhou	3.44	0.54	-.081	.082	**.323**
		Guangzhou	3.57	0.57	-.098	.057	**.085**
F11	Zhengzhou	Suzhou	4.53	0.42	.454(*)	.102	.000
		Guangzhou	4.01	0.58	.897(*)	.081	.000
		Macau	3.55	0.67	.921(*)	.087	.000
	Suzhou	Zhengzhou	3.44	0.70	-.454(*)	.102	.000
		Guangzhou	3.67	0.74	.443(*)	.083	.000
		Macau	4.38	0.50	.467(*)	.087	.000
	Guangzhou	Zhengzhou	3.87	0.65	-.897(*)	.081	.000
		Suzhou	3.40	0.59	-.443(*)	.083	.000
		Macau	3.44	0.59	.024	.060	**.689**
	Macau	Zhengzhou	3.59	0.67	-.921(*)	.087	.000
		Suzhou	3.74	0.41	-.467(*)	.087	.000
		Guangzhou	3.57	0.49	-.024	.060	**.689**
F12	Zhengzhou	Suzhou	3.28	0.43	.318(*)	.080	.000
		Guangzhou	3.21	0.50	.561(*)	.063	.000
		Macau	3.34	0.50	.574(*)	.068	.000
	Suzhou	Zhengzhou	4.23	0.53	-.318(*)	.080	.000
		Guangzhou	3.78	0.55	.243(*)	.065	.000
		Macau	3.53	0.67	.256(*)	.068	.000
	Guangzhou	Zhengzhou	3.41	0.59	-.561(*)	.063	.000
		Suzhou	3.59	0.66	-.243(*)	.065	.000
		Macau	4.47	0.39	.013	.047	**.780**
	Macau	Zhengzhou	3.79	0.45	-.574(*)	.068	.000
		Suzhou	3.47	0.54	-.256(*)	.068	.000
		Guangzhou	3.47	0.56	-.013	.047	**.780**