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The Chinese Personality Assessment Inventory as a Culturally Relevant Personality Measure in Applied Settings

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Abstract

This paper introduces the development of the Cross-Cultural (Chinese) Personality Assessment Inventory (CPAI) as a culturally relevant measure for personality assessment in collectivistic cultures. In addition to universal personality traits, the CPAI included indigenously derived scales that assessed the relational aspects of personality. We reported three studies that illustrated the usefulness of these indigenous scales in Chinese organizational settings. The Interpersonal Relatedness factor scales on the CPAI contributed additional value beyond scales from the universal factors of Social Potency and Dependability in profiling MBA students at senior-level positions, in assessing hotel workers' customer orientation, and in predicting senior executives' leadership behaviors.

While personality assessment constitutes a major function in applied psychology in many Asian countries (Cheung, Leong, & Ben-Porath, 2003), it has traditionally been an 'imported' discipline based on the Western paradigm in psychology. Most of the common personality tests currently used in Asia are tests translated from English. The development of personality assessment in professional psychology in Asia began with clinical psychology in the early 1970s, followed by industrial/organizational psychology in the 1990s (Cheung, 2004; Kao, Sinha, & Wilpert, 1999). In the business sector, Western psychological consultants are employed to serve the small clientele consisting mainly of multinational companies. The early personality tests that are often used in these settings are simple measures with relatively little research evidence. Local companies are generally unfamiliar with or skeptical about the usefulness and cost-effectiveness of personality assessment.

The growth of cross-cultural and indigenous psychology in Asian countries since the 1970s witnessed an increased interest in the use of evidence-based and culturally relevant tests for decisions in applied settings. Cross-cultural psychologists have raised concerns about the

'import and test' approach to psychological assessment (Cheung, 2004; Cheung, Leong et al., 2003). International testing experts have discussed the issues, problems, and procedures associated with the translation and use of psychological tests in cultures in which the tests were not developed (Hambleton, 2001; van de Vijver & Hambleton, 1996). The International Test Commission (2000) has developed guidelines for translation and adaptation of imported tests. When using psychological assessment in another culture, we need to consider issues related to the adequacy of the translation and adaptation, and appropriateness for the target culture, equivalence of the translated and the original instrument(s), local research on reliability and validity of the instrument(s), standardization of the translated instrument(s) in the target culture, implications of using the original or local norms, correctly interpreting cross-cultural differences in test scores, and culture-relative ethical standards and copyright issues in test use (Cheung & Cheung, 2003).

Despite the widely adopted and improved practice of translating personality tests, two theoretical gaps need to be addressed. First, translated tests are almost always based on imported Western measures. The personality constructs are *imposed-etic* concepts applied to the local culture under the assumption that they are universal concepts that are cross-culturally relevant (Cheung & Leung, 1998). Whether these imposed-etic personality constructs are universally applicable is an empirical question that needs to be investigated rather than assumed. Second, relevant indigenous constructs, i.e., the *emic* concepts, may be missing from these imported measures. Are there personality characteristics that are important to the understanding of personality in the local culture that have been left out in Western measures? These two gaps highlight the limitations of using only translated instruments. Some cross-cultural psychologists have proposed the adoption of the combined emic-etic approach in which the emic constructs complement the etic constructs in providing a comprehensive understanding of personality in non-Western cultures (van de Vijver & Leung, 1997).

Researchers of Chinese personality assessment have argued for the use of indigenously derived measures based on the combined emic-etic approach (Cheung & Leung, 1998; Cheung, Cheung, Wada, & Zhang, 2003). The Chinese Personality Assessment Inventory (CPAI; Cheung et al., 1996) was developed as a collaborative project involving psychologists in Hong Kong and mainland China to address the need for culturally relevant assessment. The objective of developing an indigenous personality measure is to construct a comprehensive personality inventory suited to the local needs, while retaining the psychometric standards of established assessment measures. The CPAI includes both universal personality constructs found in Western personality theories (e.g., leadership, optimism versus pessimism, emotionality) and indigenous personality constructs derived from the local context (e.g., family orientation, harmony, face, thrift versus extravagance, *Renqing*, i.e., relationship-orientation, and somatization).

In deriving the personality constructs used in the Chinese culture, the CPAI researchers reviewed the psychological and popular literature, and conducted empirical surveys of person descriptions. Based on preliminary studies with large samples, the researcher selected scale items that met specified psychometric criteria. The first version of the CPAI was standardized in 1993 using representative samples of adults from different regions of mainland China, including Hong Kong ($N = 2,444$). Four personality factors and two clinical factors were extracted from the CPAI. The four personality factors are Dependability, Social Potency, Individualism, and Interpersonal Relatedness. When the CPAI was jointly factor analyzed with the revised NEO personality inventory (NEO-PI-R), it was found that the Interpersonal Relatedness factor was distinct from the Big Five of the Five-Factor Model (Cheung et al., 2001). On the other hand, the domain of openness was absent from the CPAI.

To explore whether openness was a relevant construct in Chinese personality, a new set of openness scales was developed for the CPAI using a similar approach as in the development of the original scales (Cheung et al., forthcoming). The second version of the CPAI – CPAI-2 – was restandardized in 2001 using the same sampling methods to obtain representative norms in mainland China and Hong Kong. The normative sample consists of 1,911 adults with an age range of 18 to 70 years. The CPAI-2 consists of 28 personality scales, 12 clinical scales (including one that is double listed as a personality scale), and 3 validity indexes, with a total of 541 items. Four personality factors and two clinical factors were extracted from the CPAI-2 using principal axis factor analysis and varimax orthogonal rotation. The four personality factors resembled those obtained in the original CPAI: Social Potency/Expansiveness, Dependability, Accommodation, and Interpersonal Relatedness. The two clinical factors, Emotional Problems and Behavioral Problems, were also similar to the original factor structure. Tables 1 and 2 list the CPAI-2 personality and clinical scales that loaded on the personality and clinical factors, respectively. Even with the addition of the new openness scales, a separate openness factor did not emerge. Four of the new openness scales merged with the existing extraversion and leadership scales to form a more complex Social Potency/Expansiveness factor. The other CPAI-2 openness scales were subsumed under the Accommodation and Interpersonal Relatedness factors. A detailed description of the CPAI and CPAI-2 is given in Cheung et al. (1996, 2001, forthcoming).

As an indigenously derived comprehensive personality measure, the distinctiveness of the CPAI and CPAI-2 from those imported personality measures from the West (e.g., the NEO-FFI or NEO-PI-R) can be demonstrated through the scales of the Interpersonal Relatedness. The Interpersonal Relatedness factor measures various aspects of interdependence and reciprocity in traditional social relationships, such as 'a strong orientation toward instrumental relationships; emphasis on occupying one's proper

Table 1 CPAI-2 personality scales that loaded on personality and clinical factors

Personality scales	Social Potency/ Expansiveness	Dependability	Accommodation	Interpersonal Relatedness
Novelty	0.79			
Diversity	0.78			
Divergent Thinking	0.74			
Leadership	0.70			
Logical versus Affective Orientation	0.63			
Aesthetics	0.58			
Extraversion versus Introversion	0.43			
Inferiority versus Self-Acceptance		-0.70		
Responsibility		0.68		
Emotionality		-0.67		
Optimism versus Pessimism		0.66		
Practical Mindedness		0.62		
Enterprise	0.52	0.53		
Face		-0.50		
Meticulousness		0.50		
Family Orientation		0.46		
Internal versus External Locus of Control		0.43		
Defensiveness			-0.72	
Graciousness versus Meanness			0.70	
Interpersonal Tolerance	0.40		0.53	
Veraciousness versus Slickness			0.47	
Self versus Social Orientation			-0.42	
Discipline				0.68
Renqing				0.56
Social Sensitivity				0.54
Thrift versus Extravagance				0.52
Harmony				0.47
Traditionalism versus Modernity				0.46
Variance explained (48.5% total)	15.0	14.6	10.0	8.9

Note: Principal-axis factor extraction and varimax orthogonal rotation were applied. Only factor loadings with a magnitude of at least 0.40 are presented.

place and engaging in appropriate action; avoidance of internal, external, and interpersonal conflict; and adherence to norms and traditions' (Cheung et al., 2001, 425). This factor is derived indigenously from a collectivistic cultural context. However, these personality expressions have been found

Table 2 CPAI-2 clinical scales that loaded on personality and clinical factors

Clinical scales	Emotional	Behavioral
Anxiety	0.80	0.40
Inferiority versus Self-Acceptance	0.75	
Depression	0.74	
Somatization	0.66	
Physical Symptoms	0.63	
Sexual Maladjustment	0.52	0.46
Antisocial Behavior		0.74
Hypomania		0.71
Pathological Dependence		0.65
Need for Attention	0.42	0.64
Distortion of Reality	0.50	0.63
Variance explained (58.8% total)	31.2%	27.6%

Note: Principal-axis factor extraction and varimax orthogonal rotation were applied. Only factor loadings with a magnitude of at least 0.40 are presented.

to be relevant also in Western contexts (e.g., Kwan, Bond, & Singelis, 1997; Markus & Kitayama, 1991). Cross-cultural studies further showed that the factor structure of the CPAI and CPAI-2 were congruent in other Asian and Asian American as well as European American samples (Cheung, Cheung, Howard, & Lim, 2006; Cheung, Cheung, Leung, Ward, & Leong, 2003; Lin & Church, 2004). In other words, through the scales of the Interpersonal Relatedness, the CPAI or CPAI-2 has examined the personality traits that may be left out of imported measures based on traditional Western theories of personality.

A joint factor analysis between the CPAI and the NEO-PI-R showed that a six-factor model that included the Big Five and a distinct Interpersonal Relatedness factor was more interpretable (Cheung et al., 2001). The six-factor model was also supported in the joint factor analysis of the CPAI-2 and the NEO Five-Factor Inventory (NEO-FFI), in which an independent Interpersonal Relatedness factor was extracted even after the addition of six openness-related scales in the CPAI-2 (Cheung et al., forthcoming). It is acknowledged that interpersonal dimensions are not unique to the Chinese personality. Interpersonal constructs have been included in earlier Western models of personality (e.g., Sullivan, 1953; Wiggins, 1979) or in the discussion of culture and personality (e.g., Markus & Kitayama, 1991; Chodorow, 1989). However, the increased emphasis on the individualistic and independent nature of Western culture might have contributed to the decline in the attention to the interdependence dimensions in theories and assessment of personality in Western psychology (Cheung, Cheung, Wada, & Zhang, 2003).

The CPAI Interpersonal Relatedness factor has demonstrated incremental validity beyond the etic Western personality factors in predicting social

behavior, including filial piety, trust, persuasion tactics, and group communication styles in collectivistic cultures (Cheung et al., 2001; Sun & Bond, 2000; Zhang & Bond, 1998). The Interpersonal Relatedness factor also significantly explained additional variance in the CPAI clinical scales, especially the culturally relevant somatization scale (Cheung, Gan, & Lo, 2005).

The potential of indigenous personality traits as effective performance predictors was also demonstrated by Kwong and Cheung (2003) using the CPAI. The CPAI's harmony and face scales, which highlight the Chinese people's interpersonal relationship and social orientation, were particularly effective in predicting contextual behaviors that involve interpersonal interactions. Although these two scales and the Interpersonal Relatedness factor are indigenously developed in the Chinese culture, accumulated evidence has supported that they are relevant personality constructs, in addition to the Big Five, in other cross-cultural as well as American samples (Cheung, Cheung, Leung et al., 2003; Cheung et al., 2006), which led to the renaming of the CPAI as Cross-Cultural (Chinese) Personality Assessment Inventory (Cheung, Cheung, Wada et al., 2003).

In this paper, we further illustrated the relevance of the CPAI/CPAI-2, particularly its indigenously derived scales, to organizational settings in three studies in Hong Kong and China.

The CPAI-2 Personality Profiles of MBA Students in Hong Kong

MBA students form an elite group of future business leaders in Hong Kong. We have assessed the personality profiles of each incoming class of MBA students in one of the top business schools in Hong Kong for four consecutive years. In this study, we compared the personality profile of MBA students with the average Chinese adult, using the Hong Kong normative sample from the standardization study of the CPAI-2 (Cheung, Cheung, & Zhang, 2004). We also examined the differences in personality traits among different groups of MBA students based on the level of their current or previous job positions.

The sample included 474 MBA students with various job positions from different organizations. They were classified into five groups in terms of the level of their current or previous positions in their respective organizations: (i) officer/nonmanagerial ($N = 164$); (ii) junior-level executive ($N = 158$); (iii) middle-level executive ($N = 113$); (iv) senior-level executive ($N = 39$); and (v) chief executive officer (CEO)/managing director ($N = 5$). Due to the small number of CEOs, only the first four groups of students were included in the group comparison.

We used multivariate analysis of variance to compare the individual CPAI-2 personality scales between the MBA students and the CPAI-2 Hong Kong normative sample, and among various groups of MBA

students. The raw scores of each scale were converted into standard T scores with a mean of 50 and a standard deviation of 10. Wilks' lambda test showed that there were significant differences in the personality profiles among the four groups of MBA students and the normative sample ($\Lambda = 0.79$, $F(112, 3053) = 1.68$, $p < 0.001$, $\eta^2 = 0.06$). Univariate analyses were further used to identify the significant differences in the mean scores of specific personality scales. Table 3 presents only those scales with significant differences.

Table 3 showed significant differences in 8 of the 28 CPAI-2 personality scales among the different groups. We examined these eight scales in terms of the factor structure of the CPAI-2. For the Social Potency/Expansiveness factor, significant results among the groups were found in the Divergent Thinking, Leadership, and Enterprise scales. MBA students in more senior positions scored significantly higher on the three subscales than those in the junior positions did. Furthermore, the scores on the Leadership and Enterprise scales for the MBA students in senior positions were significantly higher than Hong Kong norm. The findings were very consistent with the results of the hotel study of Kwong and Cheung (2003) in which the supervisory-level staff exhibited stronger social potency characteristics than the normative sample did. The results confirmed that those who were in senior positions reported more leadership characteristics included in the Social Potency/Expansiveness factor of the CPAI-2. On the CPAI-2 Dependability factor, the mean scores of the MBA students in junior positions were lower in three scales – Practical Mindedness, Extraversion versus Introversion, and Family Orientation – than those of the students in senior positions. On the Accommodation factor, the MBA students, especially those in junior positions, scored lower on the Interpersonal Tolerance scale than the normative sample. On the Interpersonal Relatedness factor, the MBA students, especially those in more senior positions, scored higher on the Renqing (Relationship Orientation) scale, reflecting their greater attention to social propriety and reciprocal favors that are often expected in business relationships.

The overall personality profiles of the senior-level executives reflected a sense of responsibility, self-confidence, adventurousness, and leadership. Compared to those in the junior ranks, they tended to be more practical minded. In addition to the universal traits, the significant differences found among the MBA groups and the normative sample on two of the indigenously derived personality scales, Family Orientation and Renqing (Relationship Orientation), contributed to our understanding of the profile of Chinese business leaders. The findings are very consistent with the expected roles of leaders or supervisors in the Chinese culture. While work and family are considered distinct domains in Western culture, a stable and happy family background and harmonious interpersonal relationships are considered to be valued characteristics of a Chinese leader (Hsu, 1971; Yang, 1999).

Table 3 Mean T scores on CPAI-2 personality scales with significant differences among the MBA students and the Hong Kong normative sample

Scale	Univariate test <i>F</i> (4, 795)	Group					Post hoc test
		a M (SD)	b M (SD)	c M (SD)	d M (SD)	e M (SD)	
Social Potency /Expansiveness							
DIT	2.62*	48.20 (10.52)	51.03 (9.83)	50.28 (9.75)	52.70 (8.18)	49.47 (9.99)	a < b*, a < d*
LEA	2.47*	48.58 (4.99)	49.04 (5.26)	49.92 (4.88)	51.34 (4.27)	48.01 (10.71)	a < d*, c > e*, d > e*
ENT	2.58*	48.86 (9.87)	48.97 (10.75)	50.24 (9.69)	53.71 (7.43)	48.62 (10.50)	a < d*, b < d*, d > e**
Dependability							
PRA	4.62**	48.34 (10.86)	49.80 (9.64)	51.68 (9.34)	52.88 (8.28)	51.94 (9.98)	a < c**, a < d*, a < e**, b < e*
I_E	3.03*	49.52 (9.62)	48.57 (9.81)	51.58 (10.33)	53.17 (10.59)	50.71 (9.19)	a < d*, b < c*, b < d**, b < e*
FAM	2.87*	48.00 (10.03)	51.10 (10.16)	51.59 (8.98)	49.73 (10.89)	50.51 (10.38)	a < b**, a < c**, a < e**
Accommodation							
INT	5.66***	49.67 (10.59)	50.10 (9.88)	50.06 (10.23)	50.77 (7.33)	53.29 (9.32)	a < e***, b < e**, c < e**
Interpersonal Relatedness							
REN	7.43***	49.85 (8.27)	49.46 (8.00)	48.82 (7.86)	52.86 (7.00)	46.45 (10.89)	a > e***, b < d*, b > e*, c < d*, c > e*, d > e***
Valid case (N)		163	155	112	39	331	

Note: (1) Groups: a, officer/non-managerial; b, junior-level executive; c, middle-level executive; d, senior-level executive; e, Hong Kong normative sample.

(2) CPAI-2 Scales: DIT, Divergent Thinking; LEA, Leadership; ENT, Enterprise; PRA, Practical Mindedness; I_E, Introversion versus Extroversion; FAM, Family Orientation; INT, Interpersonal Tolerance; Ren, Renqing.

(3) 'a < b' denotes the differences between the corresponding means of the two groups were significant; the rest modes denote similar meaning.

(4) * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The CPAI-2 Predictors of Customer Service Orientation

In view of the potential value of the relationship-oriented personality scales on the CPAI, we further explored their contributions to predicting work attitudes and behaviors that are relational in nature. Attitudes towards customers contribute to the success of a service organization. The significance of work attitudes toward customers in the service industry has been explored since the 1930s (e.g., Waters, 1931). A number of studies indicated that personality affects employees' attitudes toward customers or customer service (e.g., Bettencourt, Gwinner, & Meuter, 2001; LeBreton, Binning, Adorno, & Melcher, 2004). In the following study, we explored the contributions of personality traits using the CPAI to predict Chinese hotel employees' attitudes toward customers. In particular, we examined the predictive value of indigenously derived scales on the CPAI in addition to those measuring universal traits.

A total of 580 hotel staff (from four hotels in a Hong Kong four-star hotel chain) took part in the study. Among this group, 442 were front-line staff and 138 were supervisory grade staff from different departments. The respondents completed the personality scales of the CPAI and a 12-item self-report questionnaire on customer orientation on a voluntary basis. For the Customer Orientation Questionnaire, the respondents rated themselves on a seven-point scale with one denoting that the item did not describe them at all and seven denoting that the item described them extremely well. One sample item from the questionnaire was 'I enjoy responding quickly to my customers' requests'.

We used hierarchical multiple regression (stepwise) analyses to identify the most significant personality predictors of the respondents' customer orientation. We conducted separate analyses for the frontline workers and the supervisors. The results of the analyses were reported in Table 4. Several CPAI scales, including two indigenously derived dimensions, significantly contributed to the prediction of hotel employees' customer orientation.

The results show that both the Harmony and Leadership scales significantly predicted the customer orientation of the frontline and supervisory hotel employees. With the increasing demand and competition in the service industry, hotel employees at all levels have to deal with customers

Table 4 CPAI predictors of hotel employees' customer orientation

Employees	R ²	β_1	β_2	β_3	β_4	β_5	F	df
Frontline	0.17	0.20 _{HAR} ***	0.19 _{LEA} ***	0.13 _{DIS} **	0.10 _{REN} *	0.10 _{PRA} **	17.23***	5,421
Supervisory	0.13	0.28 _{LEA} **	0.20 _{HAR} *				9.29***	2,129

Note: (1) CPAI scales: LEA, Leadership; PRA, Practical Mindedness; DIS, Discipline; REN, Renqing; HAR, Harmony.

(2) * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

directly. In addressing customers' demands, they need to make independent decisions and take the initiative to solve problems. The direct interactions with customers require them to maintain a harmonious relationship while taking charge of the specific problems. As expected, the leadership trait played a more important role among the supervisors, while harmony was more important in influencing the attitudes of the frontline employees. In addition, three other personality scales, Discipline, Renqing, and Practical Mindedness, significantly contributed to the prediction of the frontline employees' attitudes. These employees were engaged in more direct interaction with customers in their work environment. They operated under more constraints and had to learn to be disciplined as well as pragmatic in handling different customer demands. In the Chinese cultural context, to maintain reciprocity of one's relationship with others that is reflected in the Renqing scale, people are more likely to accommodate to others' needs.

The CPAI-2 Predictors of Leadership Behaviors

Given the emphasis on interpersonal relationships in Chinese business transactions, we further explored the relevance of the CPAI-2 personality scales in senior-level management. In a study with senior Chinese business executives from both Hong Kong and mainland China between 2002 and 2005 (To & Cheung, 2005), the CPAI-2 was used to examine how various personality characteristics related to one's leadership behaviors and subsequent leadership effectiveness in a Chinese cultural context. The relational aspect of defining selfhood is salient in collectivistic cultures, and has been considered to be an important component of Chinese leadership behaviors (Ho, Chen, & Chiu, 1991; Tu, 1985). Yet this aspect of personality has been neglected in leadership models developed in the West. The CPAI indigenously derived personality scales provide an opportunity to examine the relational aspect of personality among Chinese leaders.

To study Chinese leadership behaviors, we borrowed the behavioral complexity model developed by Quinn (1988) as a basic framework, and then integrated indigenous leadership concepts that are rooted in the Chinese culture. In our model, leadership behaviors were conceptualized as a constellation consisting of five aspects: Leading Change (focus on innovations and transformation of organization), Producing Results (focus on goal accomplishment and task performance), Managing Processes (focus on efficiency of internal systems and procedures), Relating to People (focus on commitment to human resources), and Exhibiting Moral Behaviors (focus on moral righteousness as a person).

In the present study, the sample of senior executives ($N = 152$) was at directorate level or above, including 22 CEOs and managing directors from business organizations in Hong Kong and China. They completed a set of online survey questionnaires that included the CPAI-2 personality

scales, a leadership behavior questionnaire, and a leadership effectiveness questionnaire. Their immediate superiors ($N = 111$) and at least two immediate subordinates ($N = 334$) were also invited to complete another set of online questionnaires about their perceptions towards the executives on their leadership behaviors and leadership effectiveness.

We used multiple regression analyses to examine the relative contributions of the CPAI-2 personality factors in predicting the leadership variables. Table 5 shows that the CPAI-2 Social Potency/Expansiveness factor related positively to all of the five leadership behavior dimensions. The Dependability factor related positively to four of the self-rated leadership behavior dimensions, except Relating to People. The Interpersonal Relatedness factor related positively to Managing Processes, Relating to People, and Exhibiting Moral Behaviors. The Accommodation factor did not associate with any of the leadership behavior dimensions. In addition, the Social Potency, Dependability, and Interpersonal Relatedness factors related positively to the executives' own perception of their Leadership Effectiveness.

Apart from prediction of self-ratings of leadership behaviors, the CPAI-2 Social Potency and Interpersonal Relatedness factors also significantly predicted the subordinates' ratings of the executives' leadership behaviors (Table 6). The executives' Social Potency factor score was a significant predictor of the subordinates' ratings of Leading Change, Producing Results, and Relating to People. In addition, the executives' scores on the Interpersonal Relatedness factor contributed to the prediction of the subordinates' ratings of their leadership behaviors in the Relating to People domain.

The pattern of results demonstrates that the relational aspects of personality contributed to the prediction of leadership behaviors and effectiveness in Chinese work settings, beyond those contributed by universal personality dimensions. The indigenous scales in both Dependability

Table 5 CPAI-2 personality factors as predictors of self-rated leadership behaviors and leadership effectiveness

Leadership behaviors and effectiveness	R^2	β_1	β_2	β_3
Leading Change	0.38*	0.52 _{Soc} **	0.17 _{Dep} **	
Producing Results	0.25*	0.39 _{Soc} **	0.23 _{Dep} **	
Managing Process	0.26*	0.34 _{Soc} **	0.29 _{Dep} **	0.22 _{IR} **
Relating to People	0.25*	0.43 _{Soc} **	0.24 _{IR} **	
Moral Character	0.31*	0.45 _{Soc} **	0.26 _{Dep} **	0.26 _{IR} **
Individual Effectiveness	0.32*	0.43 _{Soc} **	0.24 _{Dep} **	0.15 _{IR} **

Note: (1) CPAI factors: Soc, Social Potency; Dep, Dependability; IR, Interpersonal Relatedness.

(2) * $p < 0.05$; ** $p < 0.01$.

Table 6 CPAI-2 personality factors as predictors of subordinate-rated leadership behaviors and leadership effectiveness

Leadership behaviors and effectiveness	R^2	β_1	β_2
Leading Change	0.20*	0.32 _{Soc} *	
Producing Results	0.22*	0.23 _{Soc} *	
Managing Process	–		
Relating to People	0.23*	0.21 _{Soc} *	0.19 _{IR} *
Moral Character	–		
Individual Effectiveness	–		

Note: (1) CPAI factors: Soc, Social Potency; IR, Interpersonal Relatedness.

(2) '–' refers to that no significant results were found on the corresponding dimensions.

(3) * $p < 0.05$.

and Interpersonal Relatedness factors of the CPAI-2, such as Family Orientation and Harmony, highlight the important relational personality dimensions in the Chinese culture. Taking a closer look at the specific personality scales of the Interpersonal Relatedness factor, we noted that executives who emphasized reciprocal social relationships (Renqing), showed sensitivity towards others' feelings (Social Sensitivity), complied to rules and prescribed guidelines (discipline), and were concerned about personal and interpersonal harmony (harmony), were perceived as more behaviorally complex and effective. These personality characteristics reflect the core ideas of Confucian philosophy that emphasizes humanity and propriety, as well as illustrates an interdependent self-concept. As such, executives high on Interpersonal Relatedness were likely to emphasize reciprocity and obligation. Similarly, concepts such as Face and Family Orientation included in the Dependability factor also highlight the importance of the relational aspect of defining oneself. In order to maintain a coherent 'relational' self-conception, they were likely to attempt to meet various demands and obligations and are more likely to be considered dependable in the Chinese context.

Although the sample size of this study is relatively small, the findings on the importance of relational aspect of personality shed light on future directions in exploring the interpersonal aspects of executive leadership in Chinese as well as cross-cultural samples.

Conclusion

In summary, we showed from these three studies that both universal and culturally relevant personality dimensions in the CPAI/CPAI-2 demonstrated reasonably valid and meaningful applications in the field of industrial/

organizational psychology in the Chinese context. For instance, the Social Potency/Expansiveness factor scales of the CPAI and CPAI-2 (e.g., Leadership, Divergent Thinking, and Enterprise) contributed to the distinction among MBA students and between the MBA students and the general population. These scales also predicted both frontline and supervisory employees' customer orientation attitudes in the hotel industry. In particular, the Social Potency/Expansiveness factor was a key predictor of all five aspects of leadership behaviors among Chinese senior executives. Beyond the universal personality dimensions, the CPAI or CPAI-2 indigenous scales, including Harmony, Family Orientation, and Renqing, contributed additional value to the prediction of employees' customer orientation attitudes and the relational aspects of leadership behaviors and effectiveness. The relevance of these indigenous dimensions in the Chinese working settings illustrated the importance of using culturally relevant measures to capture the gaps in imported personality measures in cross-cultural personality assessment.

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Short Biographies

Fanny Cheung's research interests include cross-cultural personality assessment and gender equality. She has published widely on these topics in international journals, including *Psychological Assessment* and *Journal of Cross-Cultural Psychology*. She is the translator of the Chinese version of the Minnesota Multiphasic Personality Inventory and the principal author of the CPAI. She has served on the editorial board of six international journals/book series. Her current position is Professor of Psychology and Chair of the Department of Psychology at the Chinese University of Hong Kong. From 1996 to 1999, Cheung took leave from the university to become the Founding Chairperson of the Equal Opportunities Commission of the Hong Kong government. Cheung received her BA in Psychology from the University of California, Berkeley and her PhD in Psychology from the University of Minnesota. She is a fellow and a past president of the Hong Kong Psychological Society and a fellow of the American Psychological Association. She currently serves as a member on the Board of Directors of the International Association of Applied Psychology and the Board of the International Testing Commission.

Wei-qiao Fan's research is located in personality assessment, intellectual styles, e-learning, psychological well-being, and career counseling for Chinese adolescents. He has authored or coauthored papers in teaching styles and well-being among Chinese teachers, and in college students' thinking styles and achievement motivation in traditional and e-learning environments in regional and international journals, including *Chinese Applied Psychology* and *Educational Psychology*. His current position is a postdoctoral fellow in the Department of Psychology at the Chinese University of Hong Kong. He has previously served as a teacher in Psychology at Shanghai Normal University. Fan holds a BS in Geography from Shanxi Normal University and a PhD in Psychology from the University of Hong Kong.

Clara To's primary research interests is in leadership. She has over the past 10 years dedicated her work to the assessment and development of executives and leaders in organizations in the Greater China and Asia regions. She has served as an organizational consultant, a project manager of large-scale human resource consultancy projects, a lecturer, an applied researcher, and more recently, an executive coach. To is currently the director and senior consultant at the Mobley Group Pacific (HK) and a part-time lecturer in the Department of Management at the City University of Hong Kong. She also works as a project consultant at the Assessment and Training Centre at the Chinese University of Hong Kong where she has previously worked as the manager to launch the new unit to serve as a platform to synergize academic research and organizational applications. In her previous role as a management consultant at PA Consulting Group, she has driven the cultural adaptation process of a range of assessment tools that were originally developed in the UK. To received her BSSc in Psychology and her PhD in Psychology from the Chinese University of Hong Kong.

Endnote

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