

Indigenous Measures of Personality Assessment in Asian Countries: A Review

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This article reviews attempts to develop multidimensional personality measures in Asia and their applications in clinical assessment. Indigenous personality assessment measures in India, Korea, Japan, the Philippines, and Taiwan are examined. These early attempts have not yielded a comprehensive personality measure that integrates a theoretical framework and an empirical program of validation. The Chinese Personality Assessment Inventory (CPAI) is cited as an example to illustrate the process of developing an indigenous measure that meets the testing standards of established assessment instruments. On the basis of the research findings from the CPAI, the authors discuss the relevance of indigenous measures in clinical assessment in native cultures as well as in informing mainstream personality assessment.

Although the importation of well-established Western personality tests provides Asian psychologists with a wealth of evidence to support their applications, the indigenization movement in Asian psychology has raised a number of concerns about the “transport and test” function of test importation since the 1970s. The coming of age in Asian psychology has led to the examination of the cultural relevance of Western theories and tools. Notwithstanding the conscientious efforts made in the adaptation of major Western instruments in recent years, challenges have been raised on both ideological and practical grounds. Sue (1983) criticized the predominance of the etic approach in psychology at the expense of the emic approach. The etic approach emphasizes “core similarities” in all human beings, whereas the emic approach “utilizes a culture-specific orientation” (p. 584) relevant to the local context. In particular, importation of Western theories and measures represents the imposed etic approach in which Western constructs are assumed to be universally applicable and are “imposed” on the local culture. Ideologically, this approach is considered a form of cultural imperialism undermining national identity and consciousness. The use of imposed etic measures would “cut the social-perceptual world” according to Western theories (Yik & Bond,

1993, p. 92), coax the observed patterns of behavior to the imposed model, and ignore the cultural meaning of the local conceptualization of the patterns of behavior. In practice, a major deficiency of the imposed etic approach lies in the omission of important culture-specific or emic personality constructs in the imported instruments (Cheung et al., 2001). Such personality constructs could have provided a fuller understanding of behavior in local cultural contexts.

Ho (1998) defined an indigenous psychology as “the study of human behavior and mental processes within a cultural context” in which cultural “conceptions and methodologies rooted in that cultural group [are] employed to generate knowledge” (p. 94). These studies were conducted from an indigenous perspective instead of an imported one. The most active movements of indigenous psychology are found in India, the Philippines, Korea, Japan, and Taiwan. Psychologists from these locations have identified unique personality constructs relevant to their cultural experiences that have been ignored in imported psychological theories. Kim and Berry (1993) identified a key aspect of indigenous psychologies as the emphasis on contextualized understanding rooted in a particular setting and the discovery and use of natural taxonomies. Many of the indigenous personality constructs reflect the relational nature of human experience, which defines selfhood in a social and interpersonal context (Ho, Peng, Lai, & Chan, 2001). Examples include the Chinese concepts of *harmony* and *face* (Cheung et al., 2001; Gabrenya & Hwang, 1996); the Japanese concept of *amae* (sweet indulgence); the Korean concept of *chong* (affection; Kim, Park, & Park, 1999); and the concept of selflessness, or “selfless self” in Taoism, Buddhism, and Hinduism (Ho et al., 2001; Verma, 1997). In the field of psychotherapy, indigenous Japanese ways of thinking and behaving have raised Western interest in forms of “quiet therapies” (Reynolds, 1980) such as *Morita* and *Naikan* therapies.

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Despite the long history of indigenous psychology movements, relatively few indigenous personality measures are available. Most of the indigenous personality measures are research scales targeting specific constructs. In this article, we review attempts to develop multidimensional personality measures in Asia and their applications in clinical assessment. We focus on locations where there is an active movement in indigenous psychology and identify measures through a search of the literature using the PsycINFO database and local journals as well as through direct communication with local psychologists. We use one major indigenous measure as an example to illustrate the process of development and discuss the relevance of emic and etic constructs in clinical assessment. Table 1 summarizes the available information on the indigenously derived multidimensional personality measures reviewed in the following sections.

Indigenous Asian Personality Measures

Indian Indigenous Measures

The indigenization of psychology started in India after its independence in 1947 (D. Sinha, 1997, p. 148). Studies of indigenous psychology in India have focused on the relationship between religion or spirituality and the transpersonal growth of the self (Verma, 1997). The indigenization movement attempts to integrate the logical positivistic approach of Western psychology, the ancient wisdom of psycho-spiritual nature, and folkways reflecting the social realities (J. B. Sinha, 2000). One impetus for the movement is the difference in the population structure between Indian and Western societies. A large portion of the Indian population

lives and works in rural areas, motivating the development of a “rural psychology” that involves variables and contexts very different from the industrialized urban culture in the West (D. Sinha, 1985, 1993). Consequently, the application of Western assessment tools was viewed critically in India.

Some culturally appropriate measures have been developed, such as the Story-Pictorial Embedded Figures Test, which assesses psychological differentiation, and a “grain-sorting” test that measures levels of aspiration (D. Sinha, 1993). However, for personality assessment, there is little systematic study and development of indigenous Indian measures, despite the theoretical discussion and development of Hindu concepts of personality (Asthana, 1988; Berry, Poortinga, Segall, & Dasen, 1992). Indian psychologists usually adopt the “adaptive indigenization” (D. Sinha, 1997, p. 148) approach to measurement. For example, in the clinical assessment of children and adolescents, Indian tools are translated from Western tests, and some of the translated tests are given new names, probably leading to “the erroneous impression that these tests have been developed especially in India” (Kapur, 2000, p. 416). For the assessment of adult psychopathology, a Hindi translation of the Minnesota Multiphasic Personality Inventory (MMPI) and its short form have been used in a number of research studies (Mathur & Paliwal, 1986; Trivedi & Raghavan, 1991). However, there is little information on their translation, adaptation, or cross-cultural equivalence. Another Indian adaptation of the MMPI, the Multiphasic Questionnaire, has been developed and standardized in the Indian population (Chattopadhyay, Som, & Biswas, 1993). Information on its psychometric properties is sparse in English language literature. Recent research has found a four-factor solu-

Table 1
Indigenous Multidimensional Personality Measures

Language and test	Approach	Scales	Scales specifically included for clinical assessment
Filipino <i>Panukat ng Pagkataong Pilipino</i> <i>Panukat ng Mga Katangian ng Personalidad</i>	Inductive emic approach Lexical approach	19 scales 9 dimensions	Emotional Stability
Japanese Yatabe–Guilford Personality Inventory New Personality Inventory	Extension of Guilford’s personality inventories with local input Extension of imported measures with factor analysis	12 personality scales 12 personality scales, 1 lie scale	Depression, Emotional Instability, Nervousness Depression, Nervousness
Five-Factor Personality Questionnaire	Adaptation and extension of the five-factor model from a Japanese viewpoint	5 super traits, each with 5 component traits	Emotionality factor
Chinese Ko’s Mental Health Questionnaire	Extension of Minnesota Multiphasic Personality Inventory with local input	36 scales plus 2 validity scales (latest 1996 version)	Specifically designed clinical scales grouped under five factors: Neuroticism, Positive Expansive Mental Health, Negative Inhibitory Mental Health, Antisocial Practices, Obsession–Compulsion, and Careless Response
Cross-Cultural (Chinese) Personality Assessment Inventory—2	Combined emic–etic approach	28 personality and 12 clinical scales, plus 3 validity scales	Specifically designed clinical scales grouped under two factors: Emotional Problems and Behavioral Problems

tion from the Multiphasic Questionnaire: Psychopathology, Self-Acceptance, Sociability, and General Anxiety.

In a survey of Indian psychology in 1988, Asthana (1988) concluded that "except for a few attempts at adapting available tests, scales and inventories and applying them in the clinical and research setting, very little innovation is in evidence so far as personality assessment is concerned" (p. 177).

Filipino Indigenous Measures

One of the earliest Asian indigenization movements started in the Philippines in the early 1970s. *Sikolohiyang Pilipino*, the indigenization movement advocated by some Philippine psychologists "seeks to explain Philippine realities from the Filipino perspectives, taking into account the peculiarities and distinct values and characteristics of the Filipino which the Western models invariably fail to explain or consider" (Enriquez, 1992, p. 26). This movement promotes the development of indigenous instruments to measure personality constructs and relates them to various psychological characteristics of Filipino people, such as religiousness, emotional maturity, management style, stress coping, and maladjustment (Ortega & Guanzon-Lapeña, 1997, as cited in Guanzon-Lapeña, Church, Carlota, & Katigbak, 1998). Two examples of multidimensional Filipino instruments developed indigenously are the Panukat ng Pagkataong Pilipino (PPP; Carlota, 1985, as cited in Guanzon-Lapeña et al., 1998) and the Panukat ng Mga Katangian ng Personalidad (PKP; Church, Katigbak, & Reyes, 1996).

The PPP

This measure was developed through an inductive approach beginning in 1978 (Guanzon-Lapeña et al., 1998), drawing on materials collected in the local culture. Researchers elicited responses directly from respondents to generate personality descriptors. Open-ended questionnaires were distributed to Filipino respondents from a diverse range of occupations and age, asking them to describe the personality of three target persons. The authors ranked the personality dimensions mentioned and added dimensions from their literature review to derive 19 personality dimensions, including Emotional Stability, Sociability, Risk Taking, Cheerfulness, and Respectfulness. The initial version of the instrument was written in the Filipino language (Tagalog), had over 400 items, and was administered to a sample of 245 respondents. Item analysis was conducted to select items based on the item-total correlations, resulting in the 220-item first edition. The most recent version of the PPP has 210 items and is available in English and three other Philippine languages. Katigbak, Church, Guanzon-Lapeña, Carlota, and del Pilar (2002) found that some of the PPP dimensions were related to self-reported problem behaviors: PPP Honesty negatively correlated with smoking and drinking habits, PPP Thoughtfulness negatively correlated with the tendency to gamble, and PPP Intelligence and Creativity negatively correlated with accident proneness. In contrast, PPP Sensitiveness positively correlated with accident proneness.

The PKP

This instrument was developed using a lexical approach (Church et al., 1996). The lexical approach assumes that the salient

individual differences in a culture are encoded in its language (De Raad, Perugini, Hrebíková, & Szarota, 1998). A total of 6,900 personality descriptors were collected from a comprehensive Filipino dictionary by pairs of judges. The descriptors were then categorized and rated by nine Filipino judges and a large sample of Filipino college students, generating a list of 1,297 Filipino trait adjectives. Subsets of the list were administered subsequently to three samples of Filipino students (Church et al., 1996; Church, Reyes, Katigbak, & Grimm, 1997). Church et al. (1997) identified seven dimensions that were supposed to be a complete representation of Filipino personality: Conscientiousness, Concern for Others versus Egotism, Religiosity, Temperamentalness, Self-Assurance, Intellect, and Gregariousness. Two additional dimensions, Negative Valence and Positive Valence, were also included in the latest empirical study of the PKP (Katigbak et al., 2002). It was found that some of the dimensions in the 253-item version of the PKP were correlated with self-reported problem behaviors such as smoking, drinking, and gambling. PKP Conscientiousness and Concern for Others negatively correlated with smoking, whereas PKP Religiosity and Conscientiousness negatively correlated with drinking and gambling.

Korean Indigenous Measures

The Confucian tradition of Korean culture establishes the context for the development of Korean indigenous psychology. According to Kim et al. (1999), Korean indigenous psychology adopts a bottom-up approach to model building. In this approach, subjective experiences, including meaning, goals, and consciousness, are important building blocks for understanding Korean behaviors. Subjective experiences are considered essential to supplement the objective "third-person" analysis intrinsic to the positivistic Western approach to psychology. It also advocates a "transaction model of causality that focuses on the generative and proactive aspects" (Kim et al., 1999, p. 458) of human functioning. This model views the relationship between an individual and a group as a dynamic system of interaction and mutual influence.

According to Choi, Kim, and Choi (1993), Confucianism influences many aspects of behavior in Korean societies. The emphasis on relationships, which is related but not equivalent to collectivism, is prevalent in Korean culture. These influences lead to the emergence of concepts unique to Korean society. For example, studies have been conducted on *woori* (Korean conception of a collective pronoun), *cheong* (an affective emotion that binds individual members to a group; Choi et al., 1993), and *chemyon* (social face; Choi, Kim, & Kim, 1997).

Despite the rich theoretical development in Korean indigenous psychology, there is no major personality assessment instrument indigenous to Korean culture. Some indigenous tests of specific variables have been developed. For example, Kim et al. (1999) developed an indigenous self-efficacy scale based on Bandura's (1999) sociocognitive theory, in which the concepts and items for the subscales were derived from focus group interviews with Korean samples. However, no comprehensive personality measure has been developed for clinical assessment. Instead, imported instruments such as the MMPI-2, the Beck Depression Inventory (BDI), the Center for Epidemiological Studies—Depression Scale (CES-D), and the State-Trait Anxiety Inventory (STAI) have been

translated and standardized for local use (see Butcher, Cheung, & Lim, 2003; Leong, Okazaki, & Tak, 2003).

Japanese Indigenous Measures

For more than 100 years of its history, Japanese psychology has been following Western research trends. In the early stages, Japanese psychologists translated and modeled Western theories and concepts (Azuma, 1984). Initial attempts at indigenization approached psychology at a technical and culture-free level, followed by the advancement of new concepts related to culture-bound phenomena in Japan. There are recent attempts to integrate indigenous concepts with Western models to deepen the understanding of human nature.

Although indigenous scales for specific aspects of personality are available (e.g., Personal and Social Orientedness Scale; Ito, 1993), there are very few attempts to develop multidimensional indigenous measures. Personality psychologists generally preferred imported measures with rigorous translation and adaptation procedures, for example, the Japanese version of the MMPI (see Butcher et al., 2003) or the Japanese version of the Revised NEO Personality Inventory (NEO-PI-R; Shimonaka, Nakazato, Gondo, & Takayama, 1999).

The Yatabe–Guilford Personality Inventory

Among the adapted instruments, the Yatabe–Guilford Personality Inventory (Y-G; Tsujioka, 1965/1982) is one of the most frequently used personality inventories in psychological, educational, personnel, and clinical settings. The Y-G is composed of 12 scales (10 items each): Depression (pessimistic, guilty), Emotional Instability, Inferiority Complex (low self-esteem), Nervousness, Lack of Objectivity (imaginative, sensitivity), Lack of Agreeableness (discontented, not trusting), Disagreeableness (short temper, aggressive), General Activity, Easy-Goingness (laid-back, sensation seeking), Extroverted Thinking (lack of thoughtfulness, rough), Dominance/Controlling (leadership), and Social Extraversion (sociable). Y-G items include both translated items from three of Guilford's personality inventories and additional items that are deemed more appropriate to the Japanese. Despite its popularity, no study has been conducted to confirm the 12-factor structure (Tamai, Tanaka, and Kashiwagi, 1985; Tsudzuki, Oda, & Suzuki, 1970). These critical reviews motivated personality psychologists to construct alternative measures.

New Personality Inventory

Yanai, Kashiwagi, and Kokusho (1987) extended the Y-G and developed new scales for the New Personality Inventory (NPI) by means of extensive use of factor analysis, which was impossible at the time of Y-G development. The NPI was standardized with both undergraduate student and employee samples. It consists of 12 comprehensive personality scales and 1 lie scale (10 items each, 130 items in total): (a) Extraversion: sociable, talkative, cheerful, popular; (b) Activity: full of energy, dynamic; (c) Empathy; (d) Adventurous/Creativity; (e) Endurance; (f) Methodicalness/Orderliness; (g) Lie Scale; (h) Show-Off; (i) Aggressiveness; (j) Unagreeableness; (k) Inferiority Complex: not self-confident, dependent; (l) Nervousness: worrisome; and (m) Depression. The NPI

covers broader personality dimensions than the Y-G (Kokusho, Yanai, & Kashiwagi, 1990). In fact, compared with the structure of the five-factor model, the Y-G covered only extraversion and neuroticism (Natsuno & Tsuji, 1998), whereas the NPI covered all five dimensions (Wada, 1996).

Five-Factor Personality Questionnaire

Construction of the Five-Factor Personality Questionnaire (FFPQ) represents an attempt to reinterpret the Western five-factor model (Goldberg, 1990) to find a universal five-factor model that can provide a better fit for the Japanese viewpoint of personality (Tsuji, 1998; Tsuji et al., 1996). Although the test developers agreed that the five-factor model was a useful framework to capture the domains of personality, they reinterpreted the five domains to fit Japanese concepts of personality. The FFPQ is composed of five component traits for each of the five supertraits (6 items each, 150 items in total). The five supertraits are (a) Introversion versus Extraversion, (b) Separateness versus Attachment (instead of Agreeableness), (c) "Naturalness" versus Controlling (instead of Conscientiousness), (d) "Unemotionality" versus Emotionality (instead of Neuroticism or Emotional Instability), and (e) Practicality versus Playfulness (instead of Openness to Experience). It was noted that the FFPQ component traits for Attachment and Controlling were constructed earlier than the corresponding Agreeableness and Conscientiousness factors for the NEO-PI-R (Costa & McCrae, 1992). Attachment versus Separateness captures the notions of dependency and interdependency in *amae*, an important aspect of Japanese relationships. Controlling versus Naturalness represents different approaches to handling matters, by taking charge to make things change according to what one wants them to be or accepting things as they are. Neither pole suggests social desirability or negativity.

The FFPQ showed stable structure at both item- and scale-level factor analyses with good internal consistencies. Tsuji et al. (1997) confirmed the concurrent validity of the FFPQ with the NEO-PI-R (Shimonaka et al., 1999), the Big Five Scale (Wada, 1996), and other measures, including the University of Tokyo version of Egogram (TEG; Suematsu, Shinzato, & Wada, 1993), the Japanese version of the General Health Questionnaire (GHQ; Nakagawa & Daibo, 1985), the Japanese version of the Self-Directed Search (SDS; Takeda & Morishita, 1981), and the Y-G.

The FFPQ component traits are selected by the same top-down strategy as the NEO-PI-R facets. Future research using the lexical approach is planned to provide evidence that the FFPQ component traits are representative of, and important to, the measurement of Japanese personality. It is worth mentioning that the FFPQ uses neutral labels on both poles of traits to avoid evaluative judgments against some personality attributes (e.g., Emotionality instead of Neuroticism or Emotional Instability). It also highlights the positive side of a negative pole. For example, Naturalness (instead of Controlling) describes people who are harmonious with nature and would let things be. By avoiding judgmental and stigmatizing labels, the test developers hope that the personality measure would be more widely accepted.

Interdependence Disorders

In addition to adapting imported personality measures, recent studies in personality disorders in Japan have identified emic

conditions of interpersonal dysfunction that reflect the emphasis on interdependence of human relationships (Nathan, 2000). Using literature reviews, ethnographic interviews with professionals, and results from college students using a paper-and-pencil questionnaire based on the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) Axis II interview to assess personality disorders, Nathan described a group of specific disorders of interdependence in Japan. The better-known dysfunctions are *taijinkyofusho* (fear of or anxiety about interpersonal relations), *amaesugi* (excessive dependence on another's benevolence), and *amayakashisugi* (permitting others to overindulge themselves in one's good will, such as spoiling children). The highlight on interdependence as the basis of personality disorders provides an interesting direction for future studies of personality dynamics and personality assessment.

Chinese Indigenous Measures

The indigenization movement in Chinese psychology began in Taiwan in the 1970s. Yang (1986, 1996) pioneered the movement with a focus on important personality constructs in Chinese societies, including traditionality–modernity and social orientation. Yang and his associates developed a number of scales to measure these indigenous social constructs and studied changes in the personality of Chinese people under societal modernization. His theoretical framework and studies have encouraged other psychologists to study the culture-specific aspects of social relationships and behaviors in Chinese societies. These constructs include *Face*, *Harmony*, *Renqing* (reciprocity in relationship), and *Yuan* (predestined relationship; Hwang, 2000; Yang, 1997). Most of these studies and measures are concentrated in the field of social psychology.

Ko's Mental Health Questionnaire

Ko's Mental Health Questionnaire (KMHQ; Ko, 1977, 1981) was Taiwan's first attempt to develop a multidimensional personality test for clinical assessment in the Chinese cultural context. Ko's intention was to construct an instrument that would be appropriate in terms of length and content for clinical use with the Chinese people. Finding the MMPI too lengthy for his clients, Ko adapted the MMPI items on the basis of his clinical experience in Taiwan. The KMHQ has undergone many revisions, with different numbers of items and scales for the various versions. The latest edition of the KMHQ, consisting of 300 items, was published in 1996 (Ko, 1997). Changes made in the latest edition include a 6-point scale instead of the yes–no response format, increasing the number of scales to 38, and 10 new scales to measure healthy personality traits. Examples of the scales measuring healthy personality traits are Independence, Empathy, and Ego Strength; unhealthy personality scales include Anxiety, Obsession, and Hysteria. Six validity scales were also added to identify social desirability, response consistency, and response deviance.

The reliability and validity of the KMHQ (Ko, 1997) were examined in samples of college and high school students in Taiwan. Cronbach's alphas for both healthy and unhealthy personality scales ranged from .50 to .97. The test–retest reliability was also examined in a subset of the sample. Most of the test–retest correlations for the personality scales were greater than .60. The validity

of the scales was studied by comparing scale scores between students with and without psychological problems (Ko, 1997).

Different from the editions of the early 1980s, factor analysis of the 36 scales (excluding 2 validity scales) suggested a six-factor solution (Ko, 1997). The first factor, which accounted for 41% of the total variance, was labeled Neuroticism. The remaining five factors are Positive Expansive Mental Health, Negative Inhibitory Mental Health, Antisocial Practices, Obsession–Compulsion, and Careless Response.

Only three clinical studies were reported on the early versions of the KMHQ, involving small groups of individuals with schizophrenic disorders, neurotic disorders, and sexual deviance. These studies were published in the 1970s and early 1980s. The other validation studies involved university students (Wu, Liang, & Hung, 2001).

Due to frequent revisions, it is difficult to identify the final version of the KMHQ in the literature. Publications on the KMHQ are mostly summary reports in Chinese with limited information on the original data. The continuous revision of the different versions has restricted users' access to the KMHQ.

Although there is a strong indigenization movement in Chinese psychology in Taiwan, the KMHQ was developed as an independent effort apart from mainstream theories in this movement. Ko focused more on the measurement of personality constructs that fit a general theoretical model of mental health without focusing on the emic personality constructs that have been widely studied by other Chinese psychologists. Despite its improved psychometric properties over earlier editions, the etic nature of the personality constructs measured by the 1996 edition of the KMHQ is essentially unchanged in the 2 decades. The question still remains as to whether emic constructs, which are important to the understanding of Chinese personality, have been left out in the KMHQ (Cheung & Leung, 1998). The limitations of the KMHQ resemble those of other indigenous measures in Asia. Few of the instruments have undertaken a standardization procedure to develop norms. Even when norms are developed, they are mostly based on student samples. Standardization using a representative sample of the general population is rare. Reports on these measures are found mainly in the local language with limited access to cross-cultural researchers. Due to the localized focus and lack of a broad-based theoretical framework for these measures, there is a limited venue for publication in mainstream psychology.

The Chinese Personality Assessment Inventory

One of the few examples of indigenous measures that has begun to receive international attention is the Chinese Personality Assessment Inventory (CPAI; Cheung et al., 1996), which was developed in a joint effort by psychologists in Hong Kong and mainland China. Based on their previous collaboration on the translation of the Chinese MMPI, the team decided to design an indigenous instrument covering personality characteristics for normal samples as well as diagnostic assessment of Chinese people. Adopting the convergence approach in cross-cultural psychology (Van de Vijver & Leung, 1997), the CPAI is a combined etic–emic measure that includes both universal and indigenous constructs. The determination of the personality constructs included in the CPAI was based on multiple input from a wide range of daily life experiences, paying special attention to culturally relevant con-

structs empirically derived in preliminary surveys as well as those reported in the psychological literature. For the clinically based personality constructs, references were made to the clinical experiences of local professionals and previous applications of the Chinese MMPI. The CPAI was constructed following the empirical procedures adopted in the development of Western instruments, such as the content scales of the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989). The development of the CPAI illustrates an approach for the construction of an indigenous personality measure that has relevance for local application as well as cross-cultural theoretical implications.

Development of the CPAI. The CPAI was initially developed in the early 1990s. Several rounds of large-scale studies were conducted to select scale items and to standardize the scale scores. The original CPAI was standardized in 1993 on a representative sample of 2,444 Chinese adults with an age range of 18 to 65 from different regions in mainland China and Hong Kong. The samples from mainland China ($n = 1,998$) were based on a quota sample from seven major regions in mainland China, and the Hong Kong sample ($n = 446$) was based on random sampling from a territory-wide household survey. Standardized scores similar to the uniform T score of the MMPI-2 (Tellegen & Ben-Porath, 1992) were developed using this normative sample (Yung et al., 2000). A number of CPAI personality and clinical scales were developed based on constructs that are particularly relevant to Chinese culture but are not covered in other personality instruments. Factor analysis of the CPAI extracted four personality factors and two clinical factors. The four principal-component factors for the personality scales are Dependability, Interpersonal Relatedness, Social Potency, and Individualism. The two clinical factors are Emotional Problems and Behavioral Problems (see Cheung et al., 1996, 2001).

As a combined emic-etic instrument, the CPAI consists of personality scales that overlap those covered by Western tests (etic scales) as well as those that are particularly relevant to Chinese culture (emic scales). To examine its cultural relevance, the factor structure of the CPAI was compared with the NEO-PI-R (Costa & McCrae, 1992), a measure based on the dominant Western personality model, the five-factor model (Goldberg, 1990; McCrae & Costa, 1997). In a joint factor analysis of the CPAI and the NEO-PI-R, it was found that the scales of the CPAI were not totally subsumed under the five-factor model. The Interpersonal Relatedness factor, consisting of scales that are indigenously derived for the Chinese culture, including Harmony, Face, and Renqing (reciprocal relationship orientation), was unique to the CPAI and did not load on any of the Big Five constructs (Cheung et al., 2001). On the other hand, none of the CPAI scales loaded on the Openness factor of the NEO-PI-R. Similar results were found in a Singapore sample using an English version of the CPAI (Cheung, Leung, et al., in press).

Based on these earlier research results, a new set of culturally relevant openness scales were derived with input from indigenous concepts. The openness-related scales were developed by the same procedures as the other CPAI scales. Together with the addition of six new scales, the original CPAI was revised by shortening the number of items in the personality scales and increasing the number of items in the clinical scales. The revised version was restandardized in 2001, using the same sampling procedures as in the original CPAI. The restandardization sample consists of 1,911

adults ages 18 to 70, including a quota sample of 1,575 respondents from different regions of mainland China and a random sample of 336 respondents drawn from households in Hong Kong.

Cross-Cultural Personality Assessment Inventory—2. The CPAI-2 consists of 28 personality scales, 12 clinical scales (including 1 that is double-listed as a personality scale), and 3 validity indexes, with a total of 541 items. There are about 10 items on each personality scale and 20 items on each clinical scale. The items are self-descriptions of behavior to be answered in a true-false format. The average Cronbach's alpha coefficients for the personality scales are .69 for the mainland Chinese sample and .70 for the Hong Kong sample; for the clinical scales, they are .75 and .78, respectively.

Despite the addition of scales designed to measure openness, four personality factors and two clinical factors were again extracted from the CPAI-2 scales. The four personality factors are Social Potency, Dependability, Accommodation (similar to the original Individualism factor), and Interpersonal Relatedness. The clinical factors are Emotional Problems and Behavioral Problems. Table 2 lists the names of the CPAI-2 personality and clinical factors and scales. Factor analysis using Procrustes rotation results in very high factor congruence between the CPAI and CPAI-2 personality and clinical factors. The new openness scales do not form a separate factor but load primarily with the Leadership and Extraversion scales to expand the original CPAI Social Potency

Table 2
Scales of the Cross-Cultural (Chinese) Personality Assessment Inventory—2

Factor	Scale name
Personality scales	
Social Potency	Novelty, Diversity, Divergent Thinking, Leadership, Logical versus Affective Orientation, Aesthetics, Extraversion versus Introversion, Enterprise
Dependability	Responsibility, Emotionality, Inferiority versus Self-Acceptance, Practical Mindedness, Optimism versus Pessimism, Meticulousness, Face, Internal versus External Locus of Control, Family Orientation
Accommodation	Defensiveness (Ah-Q Mentality), Graciousness versus Meanness, Interpersonal Tolerance, Self versus Social Orientation, Veraciousness versus Slickness
Interpersonal Relatedness	Traditionalism versus Modernity, Renqing (Relationship Orientation), Social Sensitivity, Discipline, Harmony, Thrift versus Extravagance
Clinical scales	
Emotional Problem	Inferiority versus Self-Acceptance, Anxiety, Depression, Physical Symptoms, Somatization, Sexual Maladjustment
Behavioral Problem	Pathological Dependence, Hypomania, Antisocial Behavior, Need for Attention, Distortion of Reality, Paranoia
Validity scales	Infrequency Scale, Good Impression Scale, Response Consistency Index

factor. This suggests that openness is not used as an independent personality construct among the Chinese people.

On the other hand, joint factor analysis between the CPAI-2 and the NEO Five-Factor Inventory (NEO-FFI) again extracts an independent Interpersonal Relatedness factor. The identification of a unique Interpersonal Relatedness factor not covered by translated Western measures has led to research on the incremental validity of this personality dimension. The Interpersonal Relatedness factor adds predictive value beyond those contributed by the Big Five dimensions in predicting a variety of Chinese social behaviors, including filial piety, trust, persuasion tactics, and group communication styles (Cheung et al., 2001; Sun & Bond, 2000; Zhang & Bond, 1998).

Clinical validity of the CPAI. In the original standardization study, the 2,444 respondents from mainland China and Hong Kong in the normative sample were asked to indicate their level of life satisfaction in addition to completing the CPAI scales. The Life Satisfaction Index consists of ratings in terms of satisfaction with one's job, physical health, mental health, family, and global life satisfaction. The Life Satisfaction Index had significant negative correlations with all of the CPAI clinical scales. Similar findings were obtained in the restandardization of the CPAI-2, in which all the clinical scales correlated negatively with the Life Satisfaction Index.

Among the four original CPAI personality factors, high Interpersonal Relatedness and Individualism and low Dependability and Social Potency contributed significant variance to the prediction of the scores on the Somatization, Depression, and Antisocial Behavior scales in the 1993 normative sample. In particular, the Interpersonal Relatedness factor was a strong second predictor of Somatization, contributing an additional 16% to the variance explained beyond the 21% from the Dependability factor. Among the Interpersonal Relatedness factor scales, high scores on Face and Harmony predicted Somatization.

The convergent validity of the CPAI was examined by comparing its patterns of correlations with the MMPI-2. A valid sample of 149 Chinese participants from mainland China and Hong Kong took both the CPAI and the MMPI-2. Results confirmed the convergence between most of the CPAI clinical scales and the relevant MMPI-2 content and clinical scales (Cheung, Cheung, & Zhang, in press). The CPAI personality scales also illustrate the patterns of personality features associated with the MMPI-2 scales. In particular, the indigenously derived CPAI scales provide clues to the protective and risk factors for psychopathology in a Chinese cultural context. For example, the Family Orientation, Graciousness versus Meanness, and Pragmatism scales on the CPAI Dependability factor were negatively correlated with many of the MMPI-2 clinical and content scales. In addition, the Face and Defensiveness scales highlight culturally relevant risk factors and defense mechanisms commonly adopted by Chinese people. Individualistic orientation and defensiveness are associated with poorer psychological adjustment as indicated by the significant correlations with most of the MMPI-2 content scales.

The inclusion of Somatization as an indigenous clinical scale in the CPAI illustrates more sensitively the tendency to present psychological problems in somatic idioms among Chinese people (Cheung, 1995, 1998). The somatization tendency among Chinese people has been widely discussed in the literature. As indicated in its convergent and discriminant validity with the clinical and

content scales of the MMPI-2, it is distinct from conversion hysteria as measured by Scale 3 (Hysteria) on the MMPI-2. Somatization reflects a lack of awareness of the psychological nature of problems or a reluctance to seek mental health intervention in the presence of general psychological distress. The moderate correlations with Scale 7 (Psychasthenia) on the MMPI-2 clinical scales and Anxiety, Obsessiveness, Type A Personality, Negative Treatment Indicators, and Health Concerns on the MMPI-2 content scales show that somatization among Chinese people does not necessarily imply a denial of psychological distress. Measurement of this cultural tendency helps the clinician to understand the contexts in which individuals present their problems and to predict the treatment approach likely to be acceptable to them.

The clinical validity of the CPAI was examined in two studies involving a group of 167 male prisoners in Hong Kong and a group of 339 psychiatric patients in mainland China (Cheung, Kwong, & Zhang, 2003). Elevated scores on the clinical scales were obtained for the clinical samples. Logistic regression analyses confirmed that the CPAI scales were useful in differentiating between psychiatric patients and a matched group from the normative sample in mainland China and between male prisoners and normal male respondents in Hong Kong. A large-scale clinical validation study is underway to examine the CPAI-2 personality profiles of over 2,000 psychiatric patients in different regions of mainland China, Hong Kong, and Taiwan based on the *DSM-IV* Axis I and II diagnostic criteria. The attending doctors will provide information on the patients' history and symptoms. Family members will also rate the patients' personality and clinical features.

Beyond cultural uniqueness. The goal of indigenous psychology is not only to identify unique aspects of human functioning from a native perspective. The identification of culturally relevant dimensions can challenge the encapsulation of mainstream psychology. The original objective in the development of the CPAI was to provide Chinese psychologists with an instrument that captured important personality dimensions of Chinese people. The research findings have led the research team down a more theoretical path to look at how the cultural reality that is cut by this indigenous instrument reflects on the imposed reality based on borrowed instruments and borrowed theories (Cheung, 2002). Initial research using an English version of the CPAI with Hawaiian (Cheung et al., 2001) and Caucasian American (Cheung, Cheung, Leung, et al., in press) students has shown that the same four personality factors of the CPAI, including the Interpersonal Relatedness factor, can also be extracted from non-Chinese samples. In addition to the English version, the CPAI is currently being translated into Korean and Japanese to examine the relevance of its personality dimensions in other Confucian-related cultures. In these studies, the uniqueness of the Interpersonal Relatedness factor will be examined in joint factor analyses of the CPAI and the NEO-FFI. This indigenously identified personality dimension can enhance our understanding of personality dynamics in psychopathology, not only in collectivistic cultures, but also in what Markus and Kitayama (1991) argued to be a "highly individualist Western culture, [where] most people are still much less self-reliant, self-contained, or self-sufficient than the prevailing cultural ideology suggests that they should be" (p. 247). Research with the CPAI suggests that Western theories could be adapted to reflect the neglected interdependent nature of Western cultures. As

such, the CPAI-2 has been renamed the Cross-Cultural (Chinese) Personality Assessment Inventory.

Discussion

Whereas the interests of academic indigenous psychologists are theoretical, the demands for assessment by clinicians are practical. Importing and adapting Western psychological tests provide clinicians with usable assessment techniques within a short time frame. However, cross-cultural differences in test results and gaps in culturally relevant constructs in these measures has led to the yearning for indigenous tools in clinical assessment.

Development of indigenous personality measures in Asian countries requires the same research standards as in mainstream psychology. The early attempts of indigenous psychologies in Asia focused on the search for national identities in the study of psychology. Indigenous measures were developed to study specific cultural constructs, often related to social behavior. Most of the early attempts to develop indigenous multidimensional personality measures failed to sustain the rigorous discipline needed to build reliable and valid instruments for clinical assessment. Few of the measures were designed specifically for clinical assessment. Only a few studies involving community-based clinical samples were found. For use in clinical assessment, more empirical research with clearly diagnosed clinical groups is needed on these measures. So far, none of the existing indigenous measures has accumulated the wealth of research findings on clinical validation comparable to existing Western measures such as the MMPI-2. To meet the standard for clinical assessment as in Western measures, a vigorous research program is needed to establish the concurrent and predictive validity of these indigenous measures.

In terms of dissemination of research findings, the language of publication poses a dilemma for indigenous psychologists. Most of the publications on indigenous psychologies are in the native language. The lack of such publications in English limits international access to these tools, along with scientific scrutiny by the international academic community. On the other hand, the inaccessibility of English language publications in local communities and the lack of interest in indigenous issues in Western psychology deter the efforts of indigenous psychologists to communicate beyond their local circle. The linguistic divide encapsulates the development of both Western and indigenous psychologies.

The CPAI provides an example of developing a culturally relevant instrument in a non-Western culture. It was developed using standard psychological assessment methods in mainstream psychology. The CPAI researchers learned from their experience of translating Western tests, recognized the gaps in those measures, and addressed the needs of practitioners for a comprehensive measure that covers both normal and diagnostic personality assessment. The CPAI meets the standards of psychometric properties expected of established assessment measures. It illustrates the importance of a combined emic-etic approach encompassing the universal and culturally salient personality dimensions that make up the personality structure of the Chinese people. The integration of theoretical and applied orientations behind the CPAI grounds its research program in a cross-cultural theoretical framework while building its criterion validity through empirical studies. With bilingual publications in international and local venues, the CPAI has been able to attract cross-cultural interest. The CPAI is the first

Asian personality inventory that has been translated into English and other languages. With a research program designed to establish its clinical validity, the CPAI holds promise as an indigenous clinical assessment measure.

The inclusion of indigenously derived scales that form an Interpersonal Relatedness factor on the CPAI fulfills the need of indigenous psychologists to study the relational aspect of selfhood. The interest in personality disorders based on interdependence in Japan concurs with the importance of this factor in Asian cultures. Originally believed to be indigenous to the Chinese culture, the Interpersonal Relatedness factor has been confirmed in other non-Chinese samples. Given the cross-cultural relevance of this factor, the original name of the Chinese Personality Assessment Inventory has been renamed the Cross-Cultural Personality Assessment Inventory. Ho et al. (2001) defined personality from a relational perspective as the "sum total of common attributes manifest in, and abstracted from, a person's behavior directly or indirectly observed across interpersonal relationships and situations over time" (p. 940). The social nature of the self and the person in relational contexts are emphasized in the study of personality across Asia. This relational perspective also contributes to our understanding of psychopathology. What were considered "indigenous" constructs in Asia may inform the blind spot in Western trait measures of personality.

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Manuscript submission patterns make the precise date of completion of the 2004 volumes uncertain. Current editors, Mark B. Sobell, PhD, and James L. Dannemiller, PhD, respectively, will receive and consider manuscripts through December 31, 2003. Should 2004 volumes be completed before that date, manuscripts will be redirected to the new editors for consideration in 2005 volumes.