
Toward a New Approach to the Study of Personality in Culture

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We review recent developments in the study of culture and personality measurement. Three approaches are described: an etic approach that focuses on establishing measurement equivalence in imported measures of personality, an emic (indigenous) approach that studies personality in specific cultures, and a combined emic–etic approach to personality. We propose the latter approach as a way of combining the methodological rigor of the etic approach and the cultural sensitivity of the emic approach. The combined approach is illustrated by two examples: the first with origins in Chinese culture and the second in South Africa. The article ends with a discussion of the theoretical and practical implications of the combined emic–etic approach for the study of culture and personality and for psychology as a science.

Keywords: indigenous, personality, cross-cultural, emic, etic, combined emic–etic

A long-standing challenge in studying the relationship between personality and its cultural context has been striking a balance between the search for universals in type or structure and the description of the rich variations in personality that are due to cultural and contextual differences. There are two dominant ways of looking at the interaction of personality and culture. One way is to compare measures of personality across cultures; studies that make such comparisons have been called *etic* studies (Pike, 1967). Generally, the goal of such studies is to address the universality of established Western personality models by examining the level of cross-cultural invariance of the personality structure. A second way to look at personality and culture is through in-depth analyses of personality in a specific cultural context, often called *emic* studies. There is an increasing appreciation that even within a single psychological domain such as personality, culture exerts effects on different levels (McAdams & Pals, 2006), including display rules, characteristic adaptations, and life meanings, and on different aspects of assessment (Cheung, 2009a). In this article, we suggest that combining the rich literature and methods of both approaches in a third approach, labeled the *combined emic–etic approach*, is necessary for advancing our understanding of personality in a culturally inclusive and integrative model.

We begin by describing the historical context of the three approaches, their strengths, and their limitations. The

combined emic–etic approach is then illustrated using two examples, one from China and one from South Africa. We conclude with recommendations for future research and practice.

Three Approaches to Culture and Personality

Three approaches to the study of personality in its cultural context can be distinguished: the cultural-comparative, or etic, approach; the indigenous, or emic, approach; and the approach that combines elements of both etic and emic studies (see the special issue on indigenous, cultural, and cross-cultural psychology of the *Asian Journal of Social Psychology*; Hwang & Yang, 2000). These three approaches resemble the three goals of cross-cultural psychology, which also describe three stages in the development of the field (Berry, Poortinga, Segall, & Dasen, 2002). The first goal is to “transport and test” (Berry et al., 2002, p. 3); since modern psychology began in the West, studies have examined the applicability of Western models and theories in new, non-Western cultural contexts. This goal corresponds to the stage of the “imposed etic,” in which the universal applicability of Western personality models is investigated. Such studies test Western ideas and constructs in other cultures to determine their generalizability and cultural validity; the methods used tend to be top-down and Western in origin (e.g., linear, positivistic, strictly empirical, and often lab-based). Apt examples in personality can be found in the work on the universality of the five-factor

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model, which has been conducted in a large number of cultures (McCrae et al., 2005).

The second goal in cross-cultural psychology is to “*explore* other cultures in order to *discover* psychological variations that are not present in one’s own limited cultural experience” (Berry et al., 2002, p. 3). This goal corresponds to the stage of indigenous psychology (emic approach) in which studies address culture-specific phenomena and examine whether Western personality structure may claim universal validity. Indigenous psychology seeks a bottom-up and culture-specific (typically non-Western) approach to the study of culture. In the study of personality, the lexical approach is commonly adopted to derive local constructs. Researchers typically begin by examining the dictionary of a given language to generate a comprehensive list of personality-descriptive adjectives. Local respondents will be asked to rate themselves or their peers on these adjectives. The researchers then use factor analysis to extract from these ratings the personality dimensions that are meaningful or important to that culture. These dimensions are then compared with the Western dimensions to identify cross-cultural similarities and differences (Ashton & Lee, 2005).

The third stage of development in cross-cultural psychology involves the internationalizing “attempt to assemble and *integrate* into a broadly based psychology the results obtained when pursuing the first two goals, and to *generate* a more nearly *universal* psychology . . . that will be valid for a broader range of cultures” (Berry et al., 2002, p. 3). Studies done with this guiding approach seek an integration and rapprochement between the etic studies of the first stage and the emic studies of the second stage. We propose that a combined emic–etic approach can help to make personality theory truly universal and can achieve

this goal by adding culturally specific components to current Western models (e.g., Leong & Brown, 1995). This approach provides a structure and taxonomy of emic and etic dimensions of personality that makes sense in local cultural realities. Below, we first review the etic and emic approaches.

The Etic Approach

In the past two decades, an impressive number of studies that often started from an etic perspective have addressed the comparability of personality traits across cultures (e.g., Barrett, Petrides, Eysenck, & Eysenck, 1998; De Raad et al., 2010). The main strengths of the etic approach are the large empirical database that has been built up and the sound methodological basis for its studies. Equivalence (or invariance) is the pivotal concept in comparative studies, and it deals with the question of whether the imported instrument measures the same construct across the cultures studied. Equivalence refers to the level of comparability of constructs or scores in a multigroup comparison (Meredith, 1993; Poortinga, 1989; Vandenberg, 2002; van de Vijver & Leung, 1997). There is construct equivalence if an instrument measures the same underlying concept in all groups. Metric equivalence implies similar identity of measurement units across groups. Scalar equivalence refers to full comparability of (interval-level) scores so that mean group differences can be tested. The statistical framework for equivalence testing of both exploratory and confirmatory models, the availability of relevant software, and the gradual increase in empirical utility of equivalence tests have provided major impetuses to the field of comparative personality research.

The etic approach has come under scrutiny from two perspectives: substantive and methodological. The main substantive challenge involves the implied emphasis on Western traits and assumptions in the etic approach. Although there is impressive evidence that the factor structure underlying the five-factor personality model is stable across many cultures (McCrae et al., 2005), De Raad et al. (2010) found evidence that only three of the five factors are replicable across a limited set of languages. Another substantive challenge involves the adequacy of imposed facets. For example, the Openness factor of the five-factor model could be retrieved in most cross-national studies, yet the coherence of some of its imposed etic facets was found to be inadequate in many Asian as well as other cultural samples (Ashton & Lee, 2001; Triandis & Suh, 2002). In indigenous lexical studies of personality in China, openness was not featured as a salient personality dimension. Even when indigenously derived scales were developed to tap openness-related personality characteristics, an independent Openness factor did not emerge in a comprehensive Chinese personality inventory (Cheung, Cheung, et al., 2008).

Heine and Buchtel (2009) noted that the measures of the five-factor personality model were developed through the exploration of English personality terms and largely with American participants. With a different collection of items that were more meaningful in other cultural contexts,



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a different underlying personality structure might emerge from factor analyses. What may be missing from imposed etic measures are indigenous constructs that are salient in the local folk concepts of personality and in the local taxonomy of person descriptions.

There are two methodological limitations of the etic approach, more specifically of the use of equivalence tests for assessing universality. The first is that there are more sources of cross-cultural bias (i.e., sources of systematic measurement problems) than can be identified by prevailing equivalence procedures. Bias can arise from three sources: constructs, methods, and items. An empirical example of construct bias can be found in Ho's (1996) work on filial piety (characteristics associated with being "a good son or daughter"). The Chinese concept, which includes the expectation that children should assume the role of caregiver of their elderly parents, is broader than the corresponding Western conception, which focuses more on love and respect toward parents. Method bias is due to systematic distortions in measurement-related aspects such as differential response styles. Harzing (2006) found consistent cross-cultural differences in acquiescence and extremity responding across 26 countries. Yet few studies address cross-cultural response style differences, despite the presence of statistical models for their analysis (e.g., Billiet & McClendon, 2000; de Jong, Steenkamp, Fox, & Baumgartner, 2008). Bias at the item level (differential item functioning) is frequently identified during test adaptation when the item content written for one culture is found to be inapplicable to another. Numerous statistical tools are now available and frequently employed to identify item bias (Osterlind & Everson, 2010).

Problems of nonidentified sources of bias (and hence of overly lenient inferences regarding the comparability of

constructs and scores) are particularly salient when a close translation of a Western instrument is administered in a non-Western culture. Culture-specific indicators of common constructs may have been missed. Equivalence testing of data gained with identical instruments in many cultures can lead to an emphasis on cross-cultural similarities. If one starts from an imported instrument, emic aspects of a construct will remain hidden. These emic aspects can only be adequately addressed when an instrument is culturally adjusted (Hambleton, Merenda, & Spielberger, 2005). Without extensive pretesting, the use of interviews to determine the accuracy of items, or the inclusion of additional instruments to check the validity of a target instrument, it is impossible to determine whether a closely translated instrument is an adequate rendering of a construct in a target culture or whether a more extensive adaptation is required.

The second methodological limitation of the etic approach is due to the gap between substantive theories of cross-cultural differences and models of equivalence. Extant models of cross-cultural differences are fairly rudimentary and focus on mean score differences (e.g., between independent and interdependent cultures). However, these models hardly ever address cross-cultural differences or similarities (a) in the relations between items and their underlying constructs, (b) in correlations between factors, and (c) in error variances. So the high level of detail in equivalence testing is not matched by an equally detailed level of theorizing about constructs and their cross-cultural similarities and differences. As a consequence, equivalence testing runs the risk of becoming a fact-finding exercise in which the researcher tries to interpret the pattern of (non)-invariant parameters on the basis of ad hoc arguments.

The Emic Approach

Ideologically, indigenous psychology began as a reaction to the increasing monopoly and dominance of Western models, which did not provide adequate models for understanding human behavior in non-Western contexts (Cheung, 2004; Cheung, Cheung, Wada, & Zhang, 2003; Kim, Yang, & Hwang, 2006; Sinha, 1993). Cross-cultural researchers have found that personality tests developed and applied in Western cultures have not proven to adequately capture their assumed underlying constructs in non-Western cultures. In response, they have developed methodologies and strategies to describe and understand local construct models with different measures. Some people have called this the indigenization of the discipline.

Adair (2006) described different stages of indigenous psychologies across the world, including that in Canada. He considered that the greater the cultural difference from the American context and the less developed the discipline, such as in Asia, the greater would be the need for indigenization of the discipline. In these indigenization approaches, cultural concepts and methodologies are employed to study human behavior from the natives' perspective. Sensitivity to the natural familial, social, cultural, and ecological contexts is incorporated in the research design. The development of indigenous psychologies has generally adopted a bottom-up approach, building

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theories on the basis of local phenomena and experiences originating within the culture. This focal approach to cultural description uses emic concepts to interpret and organize the data for that cultural group.

Since the 1970s, there have been calls for the development of a more socially and culturally relevant psychology. Psychologists from different parts of the world, including Europe and Latin America, have developed scales such as personality questionnaires based on lexically derived indigenous personality dimensions (Ashton et al., 2006; Díaz-Loving, 1999). The most active indigenous psychology movements took place in Asia, where the fledgling psychology discipline tried to grapple with cultural differences encountered in importing Western psychological theories and measures. Asian psychologists attempted to explain their local realities by taking into account the distinct cultural values and characteristics that the Western models failed to explain or consider (Cheung, Cheung, et al., 2003). The indigenous constructs that have been studied include the concept of the selfless-self in Buddhism and Hinduism in India (Verma, 1999); traditionalism–modernity, “face,” harmony, *renqing* (reciprocity in relationship), and *yuan* (predestined relationship) in Taiwan (Hwang, 2005; Yang, 2006); *cheong (jung)*, the “affective emotion that binds individual members to a group” (Choi, Kim, & Choi, 1993, p. 200), and *chemyon*, or “social face,” in Korea (Choi, Kim, & Kim, 1997); and *amae*, the pattern of attachment and dependence between mother and child, in Japan (Yamaguchi & Ariizumi, 2006).

Many of the indigenous personality constructs derived in Asia reflect the relational nature of human experience in a social and interpersonal context. Some emic measures were developed to study specific cultural personality constructs. However, few multidimensional personality mea-

sures have been developed to cover the wide spectrum of personality constructs within the local cultural contexts. Many of the early attempts to develop multidimensional personality measures adapted and modified imported Western measures to accommodate the emic constructs (Cheung, Cheung, et al., 2003). There have been a number of attempts to develop multidimensional personality measures using the bottom-up inductive approach to collect emic constructs in the Philippines and in China (Church, Katigbak, & Reyes, 1996; Yang, 2006).

One of the limitations of the early indigenization movements was the tendency of the local psychologists to emphasize cultural uniqueness and to underrate the potential relevance of incorporating universal aspects in cultural specifics; for example, maintaining face, often associated with Eastern cultures, can be viewed as a manifestation of a universal need for identity management. There is often a lack of a coherent model to integrate the unique emic constructs in evolving psychological research programs with relevance beyond the local culture (see Leong & Brown, 1995, for a discussion of integrating cultural validity and cultural specificity approaches). Mainstream psychology considered the uniqueness of the emic constructs to be peripheral to the scientific understanding of human behavior. With few studies published in English-language journals, the indigenization movements tended to be isolated from mainstream psychology.

Cheung, Cheung, et al. (2003) also noted that the early attempts to develop emic multidimensional personality measures failed to sustain the rigorous research program needed to build reliable and valid instruments for assessment, and few have standardized the measures on representative norm samples. Cross-cultural psychologists have further posed theoretical challenges to the indigenous approach in personality assessment. Church (2001) critiqued that in attempting to distinguish human universals and cultural differences, many indigenous measures identified culture-specific constructs that could also be subsumed under the universal models of personality. For example, Yik and Bond (1993) extracted eight factors from a linguistically balanced person perception scale derived from salient descriptors in both imported and indigenous inventories. They found that the imported, the indigenous, and the culturally balanced scales did not differ in terms of their power to predict real-life criteria. They concluded that the value of the indigenous dimensions lies in the way that the social-perceptual world is cut in the local reality. Katigbak, Church, Guanzon-Lapena, Carlota, and del Pilar (2002) compared indigenous Filipino personality scales with the five-factor model in the Philippines and found that although a few indigenous constructs were less well accounted for by the five-factor model, these constructs were not unknown in Western cultures but mostly differed in salience or composition. Through cross-cultural empirical studies, Yamaguchi and Ariizumi (2006) found that *amae* was also observed among Chinese and Americans. They argued that although the term may be indigenous to the Japanese, *amae* is presumably an etic phenomenon because it is based on the combination of a universal need for unconditional ac-

ceptance of the child by the parents and the need for control by the child.

Church (2001) argued that emic constructs and measures need to demonstrate that they provide incremental validity beyond that provided by etic measures. The emphases on the compatibility of emic and etic approaches and on the methodological rigor of indigenous studies are main characteristics of what could be called a second wave of indigenous studies.

Combined Emic–Etic Approaches to Personality Assessment

From a cross-cultural perspective, Western psychology may be considered a culture-specific approach that has become a scientific discipline earlier than psychologies in other non-Western cultures and thus is considered to be in the mainstream. The study of personality has been guided predominantly by Western research. The personality constructs and measures developed in Western psychology may provide a framework in which to consider human universals (Heine & Buchtel, 2009). On the other hand, studies in non-Western cultures could provide new perspectives in identifying what appear to be human universals and what is culturally variable in personality. Although the early indigenization movements attempted to develop local psychologies in non-Western cultures, they did not provide an integrated perspective to understand human universals. We need a combined perspective to expand our understanding of universal personality constructs. To paraphrase Kluckhohn and Murray (1953), personality in a certain culture is like personality in all other cultures, in some other cultures, and in no other culture. A comprehensive theory of personality should encompass all these elements (Church, 2009). This view implies that cross-cultural and indigenous studies of personality are complementary because they address different aspects. In order to make conceptual advances, the field of personality should delineate both the universal and culture-specific aspects of personality.

We argue that a combined emic–etic approach to developing indigenous personality measures may bridge the divide between mainstream and indigenous psychology and provide a comprehensive framework in which to understand universal and culturally variable personality dimensions. The combined emic–etic approach is not limited to cross-cultural studies of personality. A defining characteristic of the approach is the combined use of emic and etic measures (or stages in a study) so as to obtain a richer and more integrated and balanced view of the universal and culture-specific aspects of a target construct or theory than could be obtained by the use of an emic or etic method separately. An important goal of an integrative approach is to look for synergy and to overcome the limitations of methods that focus on either cultural specificity or universality (Morris, Leung, Ames, & Lickel, 1999). There is a dominant view in cross-cultural psychology that many psychological constructs are universal but that their manifestations may differ across cultures (Berry et al., 2002). A combined emic–etic perspective is helpful for delineating

both the universal and culturally specific aspects of psychological constructs. The combined approach can take on various forms and could comprise (a) the use of a combination of etic and emic measurement, (b) studies in which universal and culture-specific aspects are delineated in an iterative process of data collections with continually adapted instruments, and (c) the use of mixed methods (e.g., the use of an etic measure combined with interviews for collecting information about culture-specific features not covered by the etic instrument). In all these cases, the aim is to describe a construct or theory with an integrated and balanced treatment of universal and culture-specific aspects.

We illustrate this new approach with two examples of research programs that are developing comprehensive personality assessments in non-Western cultures, the Chinese Personality Assessment Inventory and the South African Personality Inventory. We discuss the challenges facing these research programs and future directions for integrating culture in personality research.

The Cross-Cultural (Chinese) Personality Assessment Inventory

The Chinese Personality Assessment Inventory (CPAI; Cheung et al., 1996) originated in a collaborative project between the Chinese University of Hong Kong and the Institute of Psychology at the Chinese Academy of Science. The aim of the project was to develop a culturally relevant multidimensional personality measure by adopting the scientific methodology of mainstream psychology. A combined emic–etic approach was adopted in the development of the CPAI and its revised version, the CPAI-2 (Cheung et al., 1996; Cheung, Cheung, et al., 2008; Cheung, Fan, Cheung, & Leung, 2008). Universal and indigenous personality traits considered to be important in the Chinese culture were generated in a bottom-up approach in order to develop a set of normal personality and clinical scales for comprehensive personality assessment. Instead of translating imported measures or extracting adjectives from dictionaries, the researchers explored multiple sources for folk descriptions of personality, including contemporary Chinese novels, Chinese proverbs, and the psychological research literature. They conducted focus groups with participants from diverse backgrounds, street surveys on self-descriptions, and surveys of various professionals on other-descriptions. Using a consensus method, the research team combined the conceptually related personality descriptors to form the preliminary list of personality scales to be included in the measure. Local expressions of these constructs were written as items. At the same time, the researchers did not ignore the existing literature on etic personality measures. The research team built on its experience of translating into Chinese and adapting the revised Minnesota Multiphasic Personality Inventory (MMPI-2). References were made to translations of other imported measures of similar constructs. Large-scale studies involving participants from a wide range of backgrounds were conducted for item selection and scale

development. Representative samples from different regions in China were used for the standardization studies and to develop the national norms for both the adult and the adolescent versions. This comprehensive collection of personality constructs provides the basis for examining the structure of Chinese personality.

Four normal personality factors and two clinical factors were extracted from the CPAI scales. For the CPAI-2, 28 normal personality scales load on four factors—Social Potency/Expansiveness, Dependability, Accommodation, and Interpersonal Relatedness, and 12 clinical scales load on the two clinical factors—Emotional Problem and Behavioral Problem (Cheung, Cheung, et al., 2008). The adolescent version (CPAI-A) consists of 25 normal personality scales that load on four factors—Social Potency/Expansiveness, Dependability, Emotional Stability, and Interpersonal Relatedness—and 14 clinical scales that load on two clinical factors similar to those in the CPAI-2 (Cheung, Fan, et al., 2008). Some of the indigenously constructed scales load on factors that are etic in nature; for example, “face” loads on the Dependability or Emotional Stability factors, while somatization loads on the Emotional Problem factor. The emic personality factor Interpersonal Relatedness consists of more indigenously derived scales, such as harmony and *renqing* (reciprocity in instrumental and affective relationships). In an extensive research program carried out by the research team and other researchers, the validity and applied utility of the CPAI as an assessment measure was built up.

Although the CPAI is an indigenously derived measure, cross-cultural research was conducted in which it was compared with similar Western personality measures to examine the cultural universals and specifics in its personality constructs, thereby combining emic and etic approaches. For example, while the convergent validity of the CPAI and the MMPI-2 showed correspondence between many of the clinical scales, discrepancies between some of the scales highlighted possible cultural differences in the manifestation of psychopathology between Chinese and American cultures (Cheung, Cheung, & Zhang, 2004). Studies on the clinical and other applied utilities of the CPAI in organizational and educational settings illustrated the added value of the indigenous personality constructs in predicting various criterion variables (Cheung, Cheung, & Leung, 2008; Cheung, Fan, & To, 2008; Cheung, Kwong, & Zhang, 2003; see Cheung, Zhang, & Cheung, 2010, for a review of the applications of the CPAI).

The indigenously derived CPAI also provides a means to address the question of the universality of the personality structure defined in the five-factor model, which is the most widely researched theory of personality structure in mainstream psychology (McCrae et al., 2005). In a joint factor analysis between the CPAI and the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), it was found that the indigenous Interpersonal Relatedness factor—which covers personality features in instrumental interpersonal relationships in a collectivistic culture, such as harmony and reciprocity in relationship—did not load on any of the NEO PI-R factors (Cheung et al., 2001). In the

joint analysis of the revised version of the CPAI (CPAI-2; Cheung, Cheung, et al., 2008) and the NEO-Five Factor Inventory (NEO-FFI), the Interpersonal Relatedness factor was again found to be distinct. In a cross-cultural study using translated versions of the CPAI-2 in Korean, Japanese, and Asian American samples, the Interpersonal Relatedness factor was still retrieved in all samples as a unique factor in the joint analysis of the CPAI-2 and the NEO-FFI (Cheung, 2009b, July).

In Cheung et al.’s (2001) study, the NEO PI-R Openness factor did not load on any of the CPAI factors, which suggests that openness is more relevant to Western culture. To explore the relevance of openness in the Chinese cultural context, a set of indigenously derived openness scales were added to the CPAI-2. It was expected that a separate Openness factor would be extracted from the CPAI-2 after adding these scales. However, some of the openness scales loaded with extraversion to form the expanded Social Potency/Expansiveness factor, which depicts dynamic leadership, while the other interpersonally related openness scales derived from folk descriptions, interpersonal tolerance and social sensitivity, loaded with the Accommodation factor and the Interpersonal Relatedness factor, respectively. Although openness-related features of personality were recognizable in the CPAI-2, they were more complex than the Openness factor found in Western culture. They operate better in conjunction with other interpersonally oriented dimensions in defining the structure of personality in a Chinese context.

The replication of a four-factor structure in the CPAI-2 even after the addition of openness-related scales suggests that the lack of loading on the Openness factor in the joint analysis between the original CPAI and the NEO PI-R may reflect cultural differences in the underlying psychological meaning of openness. Although characteristics of people who are regarded as open could be described and recognized, openness is not an inherently distinct structure in the implicit theory and taxonomy of personality in the Chinese culture and has not been included as a major dimension in other lexical measures of Chinese personality (Cheung, Cheung, et al., 2008). Instead, these openness-related characteristics coexisted with other traits on the CPAI-2 to define a culturally relevant personality taxonomy. In other cross-cultural studies of the five-factor model, the Openness factor was found to be less robust even though it was retrieved as one of the five universal factors (Triandis & Suh, 2002). These cross-cultural differences can lead to further examination of the universality of the Openness factor as a derived etic construct.

Although the CPAI was developed in a Chinese cultural context, the relevance of its emic constructs could be examined in a reversed emic–etic approach. In order to test the cross-cultural relevance of its indigenously derived scales, the CPAI has been translated into English, Korean, Japanese, and more recently, into Dutch, Romanian, and Vietnamese. Cross-cultural samples have confirmed the congruence of the factor structure, especially among Asian and Asian American samples (Cheung, 2009b; Cheung, Cheung, Leung, Ward, & Leong, 2003; S. F. Cheung,

Cheung, Howard, & Lin, 2006). These findings suggested that some of the indigenously derived personality constructs are also cross-culturally relevant, which led to the renaming of the CPAI-2 as the Cross-Cultural Personality Assessment Inventory.

Lin and Church (2004) found that the indigenously derived Interpersonal Relatedness factor replicated well among Asian Americans and fairly well among European Americans, supporting its cross-cultural relevance. However, Asian Americans who were less acculturated to the American culture scored higher on this factor than more acculturated Asian American and European American participants. These results demonstrated the stronger salience of the Interpersonal Relatedness factor for individuals who are more closely identified with values from collectivistic cultures. The combined emic-etic approach allows the comparison of indigenously derived and imported concepts and measures in different cultural contexts so that a fine-grained picture emerges about the universal and culture-specific aspects of personality.

As Yang (2006) noted, in individualist cultures, personal-oriented personality traits are more developed, differentiated, and influential in everyday life, whereas in collectivist cultures, social-oriented personality traits are more developed, differentiated, and influential. The combined emic-etic approach to personality assessment provides the platform to compare indigenously derived and imported concepts and measures in different cultural contexts and to examine the relative emphasis of these culturally relevant dimensions in different settings.

The South African Personality Inventory¹

During apartheid in South Africa, psychological assessment was dominated by an import of Western tests, mainly from the United Kingdom and the United States. The imported tests were not evaluated for their adequacy in the 11 official language groups (nine Bantu languages, Afrikaans, and English; "The Languages of South Africa," n.d.) recognized after the abolishment of apartheid in 1994. The Employment Equity Act (Republic of South Africa, 1998) attempts to redress this uncritical use of imported instruments by stipulating that "psychological testing and other similar assessments of an employee are prohibited unless the test or assessment being used—(a) has been scientifically shown to be valid and reliable; (b) can be applied fairly to all employees; and (c) is not biased against any employee or group" (p. 16). Analogous to the situation in China that led to the development of the CPAI, the absence of African-centered personality tests provided the impetus for a large project to develop an emic personality instrument for South Africa, called the South African Personality Inventory (SAPI). So far, the development of the SAPI consists of a qualitative stage in which the research team used an indigenous approach to identify culturally and linguistically adequate personality descriptive terms for all 11 languages. Not all the languages have easily accessible dictionaries, which preempted a conventional lexical ap-

proach to inventory development. There were fewer sources of prior information available than were present in the Chinese project.

As a first step, interviews were held with a sample of about 120 first-language speakers per language (stratified on sex and socioeconomic status). The participants were asked to describe various persons they knew well (such as a parent, child, friend of the same sex, friend of the opposite sex, and least and most favorite teachers). Through consultations among researchers, meetings with international experts, and workshops with South African linguists with knowledge of several languages and cultures, the initial set of over 50,000 utterances in different steps were reduced first to 550 subfacets, then to 191 facets, 37 subclusters, and 9 clusters. The nine clusters are extraversion (with subclusters of dominance, expressiveness, positive emotionality, and sociability), emotional stability (ego strength, emotional sensitivity, emotional control, neuroticism, courage/fearful, and balance), conscientiousness (achievement orientation, dedication, orderliness, self-discipline, and thoughtlessness), openness (broadmindedness, epistemic curiosity, materialism, and openness to experience), intellect (aesthetics, reasoning, skillfulness, and social intellect), relationship harmony (approachability, interpersonal relatedness, conflict seeking, meddlesome), soft-heartedness (amiability, egoism, empathy, active support, and hostility), integrity (trustworthiness and fairness), and facilitating (providing guidance and encouraging others). The transition from 37 subclusters to nine clusters was cross-validated in a sample of South African students who were asked to rate the relatedness of all pairs of subclusters. A cluster analysis of the relatedness ratings yielded a solution that was comparable to the nine-cluster solution of the qualitative analysis (Meiring, van de Vijver, Rothmann, & Barrick, 2005; Nel, Rothmann, van de Vijver, Meiring, & De Bruin, in press).

The first findings of the qualitative study suggest that the five-factor personality model is well represented, but the South African clusters are more elaborated with regard to the social and relational aspects of personality. Contrary to what was found in the CPAI, the Openness factor was well represented. Further quantitative studies in which the instrument is compared with various other measures, such as the CPAI-2, may well confirm the Chinese factor of Interpersonal Relatedness in a South African context. Another striking finding is the relatively low frequency of abstract personality terms in the Bantu lan-

¹ A project involving the South African Personality Inventory (SAPI) aims to develop this indigenous personality measure for all 11 official language groups in South Africa. Participants in the project are Byron Adams (University of Johannesburg, Johannesburg, South Africa), Deon de Bruin (University of Johannesburg), Karina de Bruin (University of Johannesburg), Carin Hill (University of Johannesburg), Leon Jackson (North-West University, Potchefstroom, South Africa), Deon Meiring (University of Stellenbosch, Stellenbosch, South Africa), Alewyn Nel (North-West University), Ian Rothmann (University of Namibia, Windhoek, Namibia), Michael Temane (North-West University), Velichko Valchev (Tilburg University, The Netherlands), and Fons van de Vijver (North-West University and Tilburg University).

guages; personality descriptions were often given through examples of concrete behaviors. In addition, the preference for using situational descriptions could be a consequence of an implicit view of the importance of situational factors in behavior. Persons in collectivistic countries show less trait- edness (Church, 2009) and are more likely to attribute behavior to external conditions such as situational constraints than are persons in individualistic countries, who are more inclined to point to traits as causes of behavior.

Although the SAPI project is still in an early developmental stage, like the CPAI project it illustrates the initial emic stages of generating indigenous personality constructs and includes etic procedures for identifying relevant imported personality clusters. In later stages, the SAPI could be compared with existing etic personality instruments to identify universal as well as culturally salient personality characteristics that are relevant to the different ethnic-linguistic contexts in South Africa.

Recommendations for Future Psychological Research and Practice

Research on the Chinese and South African indigenous personality inventories illustrates what we can learn from an integration of emic and etic perspectives. Both research programs demonstrate that Western models of personality structure may provide a comprehensive picture of the intra-individual aspects of personality but should be complemented by non-Western models of personality that focus more on the social and relational aspects of personality. More studies are now needed to provide conclusive evidence that the Interpersonal Relatedness factor, found in the Chinese research, is universal. The goal of such studies is not only to demonstrate universality but also to provide an understanding of the cultural variations in the presence of personality factors and, if certain factors are present, an understanding of cross-cultural differences in their mean scores and their cultural salience.

Although at very different stages in their development, the CPAI and SAPI projects illustrate the cultural sensitivity and scientific rigor that are needed to develop indigenous measures of personality. Daunting as such projects may appear to some psychologists in emerging economies who are trying to develop their own personality measures, the framework of the combined emic–etic approach offers a useful blueprint to ensure comprehensive coverage of the psychological constructs and their cultural relevance to the local context. This framework also provides a balance to the tendency of some indigenous approaches to forge cultural uniqueness where shared indicators of traits in cross-cultural studies suggest more universality.

On the basis of our experiences with the CPAI and the SAPI projects, we would like to end with some practical recommendations for developing indigenous personality measures to advance the goals of cross-cultural and indigenous psychology. The development of an indigenous measure requires a well-thought-out program of research that takes into account the existing literature on the current state

of affairs and the gaps in that literature. A comprehensive review of the research literature on personality assessment in the target culture should be conducted first. If the intent is to develop a personality instrument for the general population, it is essential that the study enable the identification of the full range of constructs in that target population.

Given the complexity of developing indigenous measures, it would be most helpful to use a team approach and to ensure that both the etic and emic perspectives are represented on that team. It would also be desirable to have team members from multiple cultures or at least a member of the target culture who has knowledge of the target culture and is familiar with indigenous psychology constructs and approaches to ensure that the indigenous perspective is represented. To avoid “imposing an etic,” the research team should invest time in evaluating measurement equivalence of the measure at different stages. Team members should include researchers with knowledge of qualitative, ethnographic methods, such as interviewing and content analysis, as well as those familiar with quantitative analyses and cross-cultural methodology (Byrne et al., 2009). If such individuals cannot be found, then consultants could be enlisted to help deal with equivalence issues, provide hands-on training to deal with cultural differences, and at the same time help maintain effective intercultural communication among and between team members. In essence, we are recommending the establishment of international research teams, as we have in this article, to conduct such studies and also to share their experiences in providing training of psychological scientists from a global perspective.

Our review has led us to conclude that we need to move beyond the emic–etic schism in personality assessment. The old and sometimes staunchly defended dichotomy should give way to the view that both approaches are complementary and needed. In the past, the direct importation of Western personality tests has been perceived by some non-Western test users and researchers as a form of cultural imperialism. The reactions of indigenous psychologies to the imposed etic approach of assessment may have overemphasized the culturally unique or national characteristics at the expense of cross-cultural understanding. On the other hand, by adopting a scientific approach rooted in cultural context, indigenous psychology contributes to the understanding of cultural universals. The cross-cultural research on the CPAI beyond Asian cultures illustrates the move beyond the critiques of imperialism and nationalism to a level of international cooperation with greater cultural sensitivities. Although the original objective of developing the CPAI was to offer Chinese psychologists a culturally relevant instrument for their applied needs, cross-cultural research with the CPAI presents an opportunity not only to explore the emic and etic continuum of Chinese personality but also to expand our understanding of personality beyond the existing mainstream models that are mostly rooted in Western culture. The emic–etic dichotomy may become a “straw person” if we reconsider these mainstream models as emic structures derived originally in Western cultures.

The combined emic–etic approach serves as a bridge linking indigenous psychology and cross-cultural psychology.

Of course, the combined emic–etic approach also suffers from limitations. It is a time-consuming process to build up the comprehensive nomological network of constructs to reach a universal coverage. With different constellations of constructs across cultures, the choice of the constellation to form the anchor for the emic–etic comparison is inevitably “ethnocentric.” For example, using the five-factor model as the anchor, three of the CPAI personality factors can be subsumed under the Big Five, with the sixth factor being Interpersonal Relatedness. Conversely, with the CPAI as the anchor, the Big Five factors would be merged to form the first three CPAI factors. Empirical validation is also needed to demonstrate that the combined approach provides incremental predictive validity above and beyond that provided using either the emic or etic approach singly.

What can be learned from an integration of mainstream and indigenous perspectives? As this integrated perspective is still emerging, we can only describe the contours of what we have learned. Interesting work in this area has been conducted by Church (2000, 2009) in his “integrated trait and cultural psychology” derived from both trait models and cultural psychology. He confirmed the hypothesis that cross-situational consistency is exhibited in all cultures (as predicted by trait theory) and is stronger in individualistic cultures than in collectivistic cultures (as predicted by cultural psychology). This integration of mainstream psychological and cultural perspectives is at the core of the new approach.

The integration of mainstream and cultural approaches can broaden the scope of mainstream psychology by developing culture-inclusive models of personality that highlight both universal and culture-specific aspects. First, the approach can inform studies dealing with diversity within societies. With the increase of expatriates, sojourners, immigrants, refugees who come in prolonged contact with other cultures, and members of mainstream cultures who are in frequent contact with other cultures through work or marriage, living in a multicultural environment is becoming the norm rather than the exception in many societies. Although there is a long tradition of establishing psychometric norms of new instruments in monocultural populations, the increasingly multicultural nature of societies calls into question the wisdom of assuming the homogeneous nature of a population. For example, what is the referent population in a global recruitment drive of a human resource professional working in the Singapore branch of a multinational company? We need models and instruments that can be used to describe the personalities of individuals living in culturally heterogeneous environments (Ponterotto, 2010). In addition to establishing and validating norms in heterogeneous groups (Bartram, 2008), the study of multicultural personality can best be informed by combining universal (global) and culture-specific (local) perspectives. The SAPI project illustrates a useful direction for developing personality measures for multicultural societies. Second, the approach can help us to identify new

aspects of psychological functioning needed in multicultural societies, such as flexibility and empathy. The interconnectivity of individuals from various cultural, linguistic, and religious backgrounds is well represented in studies of heterogeneous groups and multicultural personality (Jensen, 2003; van der Zee & van Oudenhoven, 2000). Third, the combined emic–etic approach is helpful in dealing with research questions in other domains of psychology, such as delineating universal aspects of leadership and cross-cultural management (Bond, Fu, & Pasa, 2001), social justice in social psychology (Smith, Bond, & Kagitcibasi, 2006), and definitions of happiness in individualistic and collectivistic countries being associated with achievement and interconnectedness, respectively (Uchida, Norasakkunkit, & Kitayama, 2004). We hope that raising these issues will contribute to the development of a more culturally sensitive and empirically informed approach to psychology, an approach respectful of and responsive to the unique contributions of “indigenous psychologies.” Even psychologists not working in cross-cultural psychology can no longer ignore cross-cultural differences and their impact on what we study and how we practice. There are both legal and ethical foundations requiring us to develop a science of psychology that is not culturally biased or imperialistic.

As psychology adapts to the globalization movement, a cross-cultural perspective that takes into account universals and indigenous dimensions should become an integral part of its scholarship and a basic tenet of its training. The American Psychological Association has passed a resolution on culture and gender awareness in international psychology (American Psychological Association, 2010), published “Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists” (American Psychological Association, 2003), and established a task force initiated by the Division of International Psychology and the Division of Measurement, Evaluation, and Statistics to identify methodological aspects of cross-cultural research that are in need of improvement and to promote training in these aspects (Byrne et al., 2009). Although these initiatives are generally recognized and welcomed by cross-cultural psychologists, American graduate and professional training programs usually lag behind in adopting these new perspectives. We have proposed that integrating indigenous approaches into mainstream psychology in the preparation and subsequent practices of psychologists will significantly advance the science of psychology. Our proposal, as delineated in this article, should be added to the ongoing dialogue within APA on how to create a more culturally appropriate and integrative science of psychology.

REFERENCES

- Adair, J. (2006). Creating indigenous psychologies: Insights from empirical social studies of the science of psychology. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 467–485). New York, NY: Springer. doi:10.1007/0-387-28662-4_21
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for

- psychologists. *American Psychologist*, 58, 377–402. doi:10.1037/0003-066X.58.5.377
- American Psychological Association. (2010). *Resolution on culture and gender awareness in international psychology*. Retrieved from <http://www.apa.org/about/governance/council/policy/gender.aspx>
- Ashton, M. C., & Lee, K. (2001). A theoretical basis for the major dimensions of personality. *European Journal of Personality*, 15, 327–353. doi:10.1002/per.417
- Ashton, M. C., & Lee, K. (2005). The lexical approach to the study of personality structure: Toward the identification of cross-culturally replicable dimensions of personality variation. *Journal of Personality Disorders*, 19, 303–308. doi:10.1521/pedi.2005.19.3.303
- Ashton, M. C., Lee, K., de Vries, R. E., Perugini, M., Gnisci, A., & Sergi, I. (2006). The HEXACO model of personality structure and indigenous lexical personality dimensions in Italian, Dutch, and English. *Journal of Research in Personality*, 40, 851–875. doi:10.1016/j.jrp.2005.06.003
- Barrett, P. T., Petrides, K. V., Eysenck, S. B. G., & Eysenck, H. J. (1998). The Eysenck Personality Questionnaire: An examination of the factorial similarity of P, E, N, and L across 34 countries. *Personality and Individual Differences*, 25, 805–819. doi:10.1016/S0191-8869(98)00026-9
- Bartram, D. (Ed.). (2008). Global norming [Special issue]. *International Journal of Testing*, 8(4).
- Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (2002). *Cross-cultural psychology: Research and applications* (2nd ed.). New York, NY: Cambridge University Press.
- Billiet, J. B., & McClendon, M. J. (2000). Modeling acquiescence in measurement models for two balanced sets of items. *Structural Equation Modeling*, 7, 608–628. doi:10.1207/S15328007SEM0704_5
- Bond, M. H., Fu, P. P., & Pasa, S. F. (2001). A declaration of independence for editing a new International Journal of Cross Cultural Management? *International Journal of Cross Cultural Management*, 1, 24–30. doi:10.1177/147059580111005
- Byrne, B. M., Oakland, T., Leong, F. T. L., van de Vijver, F. J. R., Hambleton, R. K., Cheung, F. M., & Bartram, D. (2009). A critical analysis of cross-cultural research and testing practices: Implications for improved education and training in psychology. *Training and Education in Professional Psychology*, 3, 94–105. doi:10.1037/a0014516
- Cheung, F. M. (2004). Use of Western- and indigenously-developed personality tests in Asia. *Applied Psychology: An International Review*, 53, 173–191. doi:10.1111/j.1464-0597.2004.00167.x
- Cheung, F. M. (2009a). The cultural perspective in personality assessment. In J. N. Butcher (Ed.), *Oxford handbook of personality assessment* (pp. 44–56). New York, NY: Oxford University Press.
- Cheung, F. M. (2009b, July). *Factor congruence of the CPAI-2 in Asian and American samples*. “In F. M. Cheung & M. P. Born (Co-chairs), *From the East to the West: Generalizability of the Cross-cultural Personality Assessment Inventory (CPAI) in Western Contexts*.” Symposium conducted at the 11th European Congress of Psychology, Oslo, Norway.
- Cheung, F. M., Cheung, S. F., & Leung, F. (2008). Clinical validity of the Cross-Cultural (Chinese) Personality Assessment Inventory (CPAI-2) in the assessment of substance use disorders among Chinese mean. *Psychological Assessment*, 20, 103–113. doi:10.1037/1040-3590.20.2.103
- Cheung, F. M., Cheung, S. F., Leung, K., Ward, C., & Leong, F. (2003). The English version of the Chinese Personality Assessment Inventory: Derived etics in a mirror position. *Journal of Cross-Cultural Psychology*, 34, 433–452. doi:10.1177/0022022103034004004
- Cheung, F. M., Cheung, S. F., Wada, S., & Zhang, J. X. (2003). Indigenous measures of personality assessment in Asian countries: A review. *Psychological Assessment*, 15, 280–289. doi:10.1037/1040-3590.15.3.280
- Cheung, F. M., Cheung, S. F., & Zhang, J. X. (2004). Convergent validity of the Chinese Personality Assessment Inventory and the Minnesota Multiphasic Personality Inventory-2: Preliminary findings with a normative sample. *Journal of Personality Assessment*, 82, 92–103. doi:10.1207/s15327752jpa8201_14
- Cheung, F. M., Cheung, S. F., Zhang, J. X., Leung, K., Leong, F. T. L., & Yeh, K. H. (2008). Relevance of openness as a personality dimension in Chinese culture. *Journal of Cross-Cultural Psychology*, 39, 81–108. doi:10.1177/0022022107311968
- Cheung, F. M., Fan, W., Cheung, S. F., & Leung, K. (2008). Standardization of the Cross-Cultural (Chinese) Personality Assessment Inventory for adolescents in Hong Kong: A combined emic–etic approach to personality assessment. *Acta Psychologica Sinica*, 40, 839–852. [in Chinese]
- Cheung, F. M., Fan, W. Q., & To, C. W. W. (2008). The CPAI as a culturally relevant personality measure in applied settings. *Social and Personality Psychology Compass*, 2, 74–89. doi:10.1111/j.1751-9004.2007.00045.x
- Cheung, F. M., Kwong, J., & Zhang, J. X. (2003). Clinical validation of the Chinese Personality Assessment Inventory (CPAI). *Psychological Assessment*, 15, 89–100. doi:10.1037/1040-3590.15.1.89
- Cheung, F. M., Leung, K., Fan, R. M., Song, W.-Z., Zhang, J.-X., & Zhang, J.-P. (1996). Development of the Chinese Personality Assessment Inventory (CPAI). *Journal of Cross-Cultural Psychology*, 27, 181–199. doi:10.1177/0022022196272003
- Cheung, F. M., Leung, K., Zhang, J.-K., Sun, H.-A., Gan, Y.-Q., Song, W.-Z., & Xie, D. (2001). Indigenous Chinese personality constructs: Is the five-factor model complete? *Journal of Cross-Cultural Psychology*, 32, 407–433. doi:10.1177/0022022101032004003
- Cheung, F. M., Zhang, J. X., & Cheung, S. F. (2010). From indigenous to cross-cultural personality: The case of the Chinese Personality Assessment Inventory. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 295–308). New York, NY: Oxford University Press.
- Cheung, S. F., Cheung, F. M., Howard, R., & Lin, Y.-H. (2006). Personality across the ethnic divide in Singapore: Are “Chinese traits” uniquely Chinese? *Personality and Individual Differences*, 41, 467–477. doi:10.1016/j.paid.2005.12.023
- Choi, S. C., Kim, U., & Choi, S. H. (1993). An indigenous analysis of collective representations: A Korean perspective. In U. Kim & J. W. Berry (Eds.), *Indigenous psychology: Research and experience in cultural context* (pp. 193–210). Newbury Park, CA: Sage.
- Choi, S. C., Kim, U., & Kim, D. I. (1997). Multifaceted analyses of cheomyon (“social face”): An indigenous Korean perspective. In K. Leung, U. Kim, S. Yamaguchi, & U. Kashima (Eds.), *Progress in Asian social psychologies* (pp. 3–22). Singapore: Wiley.
- Church, A. T. (2000). Culture and personality: Toward an integrated cultural trait psychology. *Journal of Personality*, 68, 651–703. doi:10.1111/1467-6494.00112
- Church, A. T. (2001). Personality measurement in cross-cultural perspective. *Journal of Personality*, 69, 979–1006. doi:10.1111/1467-6494.696172
- Church, A. T. (2009). Prospects for an integrated trait and cultural psychology. *European Journal of Personality*, 23, 153–182. doi:10.1002/per.700
- Church, A. T., Katigbak, M. S., & Reyes, J. A. S. (1996). Toward a taxonomy of trait adjectives in Filipino: Comparing personality lexicons across cultures. *European Journal of Personality*, 10, 3–24. doi:10.1002/(SICI)1099-0984(199603)10:1<3::AID-PER234>3.0.CO;2-M
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- de Jong, M. G., Steenkamp, J.-B. E. M., Fox, J.-P., & Baumgartner, H. (2008). Using item response theory to measure extreme response style in marketing research: A global investigation. *Journal of Marketing Research*, 45, 104–115. doi:10.1509/jmkr.45.1.104
- De Raad, B., Barelds, D. P. H., Levert, E., Ostendorf, F., Mlačić, B., Di Blas, L., . . . Katigbak, M. S. (2010). Only three factors of personality description are fully replicable across languages: A comparison of 14 trait taxonomies. *Journal of Personality and Social Psychology*, 98, 160–173. doi:10.1037/a0017184
- Díaz-Loving, R. (1999). Sociological and cultural social psychology in the Latin American context. In C. Kimble, E. Hirt, R. Díaz-Loving, H. Hosch, G. W. Lucker, & M. Zárate (Eds.), *Social psychology of the Americas* (pp. 367–382). Needham Heights, MA: Pearson Custom.
- Hambleton, R. K., Merenda, P., & Spielberger, C. (Eds.). (2005). *Adapting educational and psychological tests for cross-cultural assessment*. Hillsdale, NJ: Erlbaum.
- Harzing, A. (2006). Response styles in cross-national survey research: A

- 26-country study. *International Journal of Cross Cultural Management*, 6, 243–266. doi:10.1177/1470595806066332
- Heine, S. J., & Buchtel, E. E. (2009). Personality: The universal and the culturally specific. *Annual Review of Psychology*, 60, 369–394. doi: 10.1146/annurev.psych.60.110707.163655
- Ho, D. Y. F. (1996). Filial piety and its psychological consequences. In M. H. Bond (Ed.), *Handbook of Chinese psychology* (pp. 155–165). Hong Kong: Oxford University Press.
- Hwang, K.-K. (2005). From anticolonialism to postcolonialism: The emergence of Chinese indigenous psychology in Taiwan. *International Journal of Psychology*, 40, 228–238. doi:10.1080/00207590444000177
- Hwang, K.-K., & Yang, C.-F. (2000). Guest Editors' preface [Introduction to special issue on indigenous, cultural, and cross-cultural psychologies]. *Asian Journal of Social Psychology*, 3, 183. doi:10.1111/1467-839X.00062
- Jensen, L. A. (2003). Coming of age in a multicultural world: Globalization and adolescent cultural identity formation. *Applied Developmental Science*, 7, 189–196. doi:10.1207/S1532480XADS0703_10
- Katigbak, M. S., Church, A. T., Guanzone-Lapena, M. A., Carlota, A. J., & del Pilar, G. H. (2002). Are indigenous personality dimensions culture specific? Philippine inventories and the five-factor model. *Journal of Personality and Social Psychology*, 82, 89–101. doi:10.1037/0022-3514.82.1.89
- Kim, U., Yang, K.-S., & Hwang, K.-K. (Eds.). (2006). *Indigenous and cultural psychology: Understanding people in context*. New York, NY: Springer. doi:10.1007/0-387-28662-4
- Kluckhohn, C., & Murray, H. A. (1953). *Personality in nature, society, and culture*. New York, NY: Knopf.
- The languages of South Africa. (n.d.). Retrieved from <http://www.southafrica.info/about/people/language.htm>
- Lin, E. J.-L., & Church, A. T. (2004). Are indigenous Chinese personality dimensions culture-specific? An investigation of the Chinese Personality Assessment Inventory in Chinese American and European American samples. *Journal of Cross-Cultural Psychology*, 35, 586–605. doi: 10.1177/0022022104268390
- Leong, F. T. L., & Brown, M. (1995). Theoretical issues in cross-cultural career development: Cultural validity and cultural specificity. In W. B. Walsh & S. H. Osipow' (Eds.), *Handbook of vocational psychology* (2nd ed., pp. 143–180). Hillsdale, NJ: Erlbaum.
- McAdams, D. P., & Pals, J. L. (2006). A new big five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61, 204–217. doi:10.1037/0003-066X.61.3.204
- McCrae, R. R., Terracciano, A., & 78 members of the Personality Profiles of Cultures Project. (2005). Universal features of personality traits from the observer's perspective: Data from 50 cultures. *Journal of Personality and Social Psychology*, 88, 547–561. doi:10.1037/0022-3514.88.3.547
- Meiring, D., van de Vijver, F. J. R., Rothmann, S., & Barrick, M. R. (2005). Construct, item, and method bias of cognitive and personality tests in South Africa. *South African Journal of Industrial Psychology*, 31, 1–8.
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, 58, 525–543. doi:10.1007/BF02294825
- Morris, M. W., Leung, K., Ames, D., & Lickel, B. (1999). Views from inside and outside: Integrating emic and etic insights about culture and justice judgments. *Academy of Management Review*, 24, 781–796. doi:10.2307/259354
- Nel, J. A., Rothmann, S., van de Vijver, F. J. R., Meiring, D., & De Bruin, G. P. (in press). An approach for exploring the personality structure in South Africa. *South African Journal of Psychology*.
- Osterlind, S. J., & Everson, H. T. (2010). *Differential item functioning* (2nd ed.). Newbury Park, CA: Sage.
- Pike, K. L. (1967). *Language in relation to a unified theory of structure of human behavior* (2nd ed.). The Hague, the Netherlands: Mouton.
- Ponterotto, J. G. (2010). Multicultural personality: An evolving theory of optimal functioning in culturally heterogeneous societies. *The Counseling Psychologist*, 38, 714–758. doi:10.1177/0011000009359203
- Poortinga, Y. H. (1989). Equivalence of cross-cultural data: An overview of basic issues. *International Journal of Psychology*, 24, 737–756.
- Republic of South Africa. (1998, October 19). Employment Equity Act, 1998. *Government Gazette*, 400 (19370). Retrieved from <http://www.info.gov.za/view/DownloadFileAction?id=70714>
- Sinha, D. (1993). Indigenous psychology in India and its relevance. In U. Kim & J. W. Berry (Eds.), *Indigenous psychologies: Research and experience in cultural context* (pp. 30–43). Newbury Park, CA: Sage.
- Smith, P. B., Bond, M. H., & Kagitcibasi, C. (2006). *Understanding social psychology across cultures*. London, England: Sage.
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology*, 53, 133–160. doi:10.1146/annurev.psych.53.100901.135200
- Uchida, Y., Norasakkunkit, V., & Kitayama, S. (2004). Cultural constructions of happiness: Theory and empirical evidence. *Journal of Happiness Studies*, 5, 223–239. doi:10.1007/s10902-004-8785-9
- Vandenberg, R. J. (2002). Toward a further understanding of and improvement in measurement invariance methods and procedures. *Organizational Research Methods*, 5, 139–158. doi:10.1177/1094428102005002001
- van der Zee, K. I., & van Oudenhoven, J. P. (2000). The multicultural personality questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality*, 14, 291–309. doi:10.1002/1099-0984(200007/08)14:4<291::AID-PER377>3.0.CO;2-6
- van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.
- Verma, J. (1999). Hinduism, Islam and Buddhism: The source of Asian values. In K. Leung, U. Kim, S. Yamaguchi, & U. Kashima (Eds.), *Progress in Asian social psychologies* (pp. 23–36). Singapore: Wiley.
- Yamaguchi, S., & Ariizumi, Y. (2006). Close interpersonal relationships among Japanese: Amai as distinguished from attachment and dependence. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 163–174). New York, NY: Springer. doi:10.1007/0-387-28662-4_7
- Yang, K. S. (2006). Indigenous personality research: The Chinese case. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 285–314). New York, NY: Springer. doi:10.1007/0-387-28662-4_13
- Yik, M. S., & Bond, M. H. (1993). Exploring the dimensions of Chinese person perception with indigenous and imported constructs: Creating a culturally balanced scale. *International Journal of Psychology*, 28, 75–95. doi:10.1080/00207599308246919