

Personality Measurement in Cross-Cultural Perspective

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ABSTRACT I first provide an overview of general issues in personality measurement across cultures (e.g., measurement bias and equivalence, levels of test adaptation or indigenization). Then, in keeping with the organization of this special issue, I discuss personality measurement from alternative theoretical perspectives that have addressed, in varying degrees, personality and its measurement in cross-cultural perspective (i.e., trait perspectives, projective techniques, cultural psychology and constructivist perspectives, evolutionary perspectives). An integrated measurement approach is advocated, incorporating diverse aspects or levels of personality, while drawing on the complementary strengths of alternative approaches.

To study personality across cultures we must measure it. This straightforward assertion belies the complexity of the task, however. Cross-cultural researchers differ on such issues as (a) the viability of adapting personality measures for use in other cultures or for cross-cultural comparisons; (b) the merits of imported versus indigenous measures; (c) the value of nomothetic and quantitative assessments versus idiographic and qualitative assessments; (d) the “level” or aspects of personality to be assessed; and (e) the very nature of personality across cultures.

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There are a number of distinctions that could be used to differentiate measurement approaches across cultures (e.g., indigenous versus imported, objective versus projective, nomothetic versus idiographic). In keeping with the structure of this special issue, however, I have organized this article around alternative theoretical perspectives—trait, projective (psychoanalytic), cultural, evolutionary, and indigenous—that have addressed, in varying degrees, personality measurement in cross-cultural perspective.

The trait perspective currently dominates cross-cultural personality research and is reviewed first. Projective techniques have often been interpreted from psychoanalytic perspectives, for example, in early culture-and-personality studies in anthropology. Cultural psychology perspectives have provided a critique of trait psychology, and there are a number of measures that are relevant in testing cultural psychology theory regarding culture and self. Evolutionary perspectives have not yet had a major impact on personality measurement across cultures, but do have potential implications. I address indigenous perspectives in two sections because indigenous constructs could be assessed from multiple theoretical perspectives (e.g., indigenous trait inventories, indigenous projective techniques).

First, however, I provide a brief overview of general measurement issues that are relevant to all theoretical perspectives. I focus on personality measurement in cross-cultural research, although many of the issues addressed are also applicable in the clinical assessment context. Space limitations prevent a discussion of the measurement of cultural identity or acculturation. Cultural identity can be viewed as an important aspect of one's self-concept or personality in its own right, can moderate personality test results, and can provide a culturally relevant context for test interpretation (e.g., see Cuellar, 2000; Dana, 1993).

General Measurement Issues

When personality measures are applied cross-culturally—particularly when scores for different cultural groups will be compared—issues of measurement bias and equivalence become important. Van de Vijver and Tanzer (1997; see also Van de Vijver & Leung, 1997) described three general types of bias in cross-cultural measurement: construct bias, method bias, and item bias. *Construct bias* occurs when the definitions or behavioral exemplars of the construct to be measured only partially

overlap across cultures. *Method bias* can take three forms: (a) *sample bias* (e.g., resulting from cultural samples being nonequivalent on such “nuisance variables” as education level or familiarity with the assessment procedure); (b) *instrument bias* (e.g., differential response styles); and (c) *administration bias* (e.g., resulting from communication problems between the assessor and assessee). Finally, *item bias*, or differential item functioning (DIF), can result from such factors as translation nonequivalence for particular items, or inclusion of items that are less relevant behavioral exemplars of assessed constructs in certain cultures. Bias in test interpretation—what Dana (2000) referred to as *interpretation bias*—could result from any combination of construct, method, or item bias.

Conversely, *construct equivalence* is present when construct definitions and behavioral exemplars are equivalent across cultures, indicating that the construct may be universal or etic in nature. *Measurement unit equivalence* is present when the measure has the same unit of measurement across cultures, but different origins, as might occur when sources of method bias cause shifts in mean scores in one or more cultures. *Scalar or full scale equivalence* (or *full score comparability*) is present when the measure has the same measurement unit and origin across cultures. The presence of item bias makes scalar or full score comparability questionable.

To investigate construct equivalence, researchers have applied exploratory, targeted (e.g., Procrustes), and confirmatory factor analyses to determine whether the dimensions of an instrument are generalizable across cultures (i.e., *structural equivalence*; e.g., Katigbak, Church, & Akamine, 1996; Paunonen & Ashton, 1998). Cross-cultural comparisons of the nomological networks (e.g., behavioral correlates) of personality constructs are much less common, but are also relevant to construct equivalence.

One of the most frequently studied sources of method bias has been cultural differences in response biases (e.g., extreme responding on rating scales, acquiescence, social desirability). Grimm and Church (1999) reviewed many of these studies but found no consistent patterns of cultural differences. Furthermore, the few theoretical explanations that have been offered for various response biases do not make consistent predictions regarding cultural differences. In multilingual persons, the language of assessment is a potential source of method bias. In addition to concerns about language fluency, several hypotheses have been offered

to explain differences in results associated with the language of assessment (e.g., Marin, Triandis, Betancourt, & Kashima, 1983; Ralston, Cunniff, & Gustafson, 1995). The *cross-cultural accommodation hypothesis*, which predicts that respondents will endorse items in the direction valued by their native culture to a greater extent when responding in their native language, has garnered perhaps the most support, but the findings in this area are by no means consistent or definitive.

The first step in reducing item bias is to obtain a good translation of test items. A number of authors have discussed translation difficulties, methods, and issues (e.g., Butcher, 1996; Van de Vijver & Tanzer, 1997). Follow-up methods for investigating translation equivalence include comparisons of item and scale scores obtained by bilinguals (i.e., the bilingual test-retest method; e.g., McCrae, Yik, Trapnell, Bond, & Paulhus, 1998) and cross-language studies of differential item functioning (DIF; e.g., Bontempo, 1993). Paradoxically, items that show DIF across cultures, and which detract from scalar equivalence, may be of particular interest because they suggest possible cultural differences in the behavioral manifestations of traits.

Without demonstrations of scalar equivalence, cross-cultural mean comparisons may be misleading and contribute to inaccurate cultural stereotypes. Researchers will have more confidence in the cultural mean differences they find when the following conditions are met: (a) the cultural differences are replicated with different samples, instruments, and measurement methods; (b) the cultural differences are predicted a priori based on theory or previous findings; (c) interpretable patterns can be found in the content of items showing different response patterns across cultures; and (d) attempts are made to investigate measurement equivalence and the factors that can confound mean comparisons (i.e., sources of construct, method, and item bias).

Researchers who are pessimistic about obtaining measurement equivalence across cultures, or who are skeptical about the universal nature of personality constructs, may favor indigenous or culture-specific measures. Table 1 provides a summary of issues to consider when deciding whether to use imported (imposed-etic) or indigenous (emic) instruments. Although the etic-emic distinction (Berry, 1969) can be useful in discussing cross-cultural measurement, it is probably more descriptive to delineate a rough continuum of levels of test adaptation or indigenization (see Table 2). Sahoo (1995) developed a Test Indigenization Survey Instrument, which may be useful in quantifying the extent to

Table 1
**Considerations in the Use of Imported (Imposed-Etic) Versus
Indigenous (Emic) Personality Measures**

1. Efficiency

Although it is probably less time-consuming to translate and adapt an existing measure for use in a new culture than to develop a new indigenous measure, adaptation of imported tests may be less expedient than presumed if researchers conduct the studies needed to evaluate cross-cultural applicability and measurement equivalence. Also, training and resources for the development of indigenous measures may be limited in some cultural settings.

2. Constructs assessed

Imported measures assess constructs of interest to the researcher, and these constructs are often associated with extensive clinical and research data. However, construct equivalence across cultures needs to be demonstrated, and the researcher is more likely to identify culture-specific constructs using indigenous measures.

3. Item content

Even when imported measures assess universal constructs, some proportion of the items may not tap relevant indicators of the construct in the new cultural setting, and important culture-specific indicators may be missed. This has implications for how well the construct is represented in each culture (i.e., content validity).

4. Universals versus culture-specifics

Investigators interested in demonstrating cross-cultural universality often favor imported instruments, whereas investigators interested in culture-specifics tend to favor indigenous measures. The use of imported measures may be biased toward findings of cross-cultural comparability, whereas the search for cultural differences may be facilitated by the development of more indigenous measures. Even when searching for universals, the case for universality is probably made more persuasively if researchers first allow indigenous data to structure themselves independently in different cultures, after which cross-cultural links between indigenous dimensions are sought.

5. Ease of cross-cultural comparisons

The use of imported measures facilitates direct cross-cultural comparisons of trait levels, assuming that scalar equivalence can be demonstrated. Trait levels on indigenous measures are not directly comparable, although the comparability of indigenous and imported dimensions can be compared using joint structural or regression analyses. Using Item Response Theory techniques, trait levels can be compared across cultures using sets of items that are only partially overlapping.

6. Development of indigenous and universal psychologies

Although it is short-sighted to uncritically reject imported theories, constructs, and methods, the emergence of indigenous and less ethnocentric scientific psychologies will probably be facilitated by decreased reliance on the importation of Western theories, constructs, and measures and increased focus on indigenous theory, constructs, and methods. Furthermore, it can be argued that the emergence of a more comprehensive universal psychology will result from the integration of indigenous psychologies that are derived with some degree of independence.

Table 2
Continuum or Levels of Test Adaptation/Indigenization

Imposed-etic	<ol style="list-style-type: none"> 1. Administration of an imported test in a non-native or second language. 2. Administration of an imported test in literal translation without item adaptations.
Indigenization from without; culture as target	<ol style="list-style-type: none"> 3. Items modified, where necessary, to be more relevant to the new culture. 4. Psychometric investigations of cross-cultural applicability and equivalence (e.g., local norm development; analyses of reliability, dimensional structure, validity, differential item functioning; differential response styles). 5. Indigenous items/content developed to assess constructs identified in (primarily Western) psychological literature (content indigenization).
Indigenization from within; culture as source; emic	<ol style="list-style-type: none"> 6. Indigenous constructs identified and assessed with indigenous items/content. 7. Consideration or incorporation of more culturally relevant response formats and administration procedures (format indigenization). 8. Consideration of appropriateness of item content, response formats, and administration procedures for diverse indigenous subpopulations (e.g., less Westernized or educated individuals). 9. Investigation of the reliability and construct validity of indigenous measures, including studies using indigenous criteria.

Note. Indigenization-from-without versus indigenization-from-within and culture-as-target versus culture-as-source terminology used by Enriquez (1994). Content versus format indigenization terminology used by Sahoo (1995). Imposed-etic versus emic terminology used by Berry (1969), among others.

which particular instruments are indigenous. Church and Katigbak (1988) discussed steps in the development of indigenous measures that are comparable to those used in test construction generally, but with special emphasis on the identification and definition of indigenous constructs and behavioral indicators.

Alternative Perspectives on Personality Measurement Across Cultures

Trait Perspectives

“Personality traits as basic tendencies are the core of personality.”
(McCrae & Costa, 1996, p. 69)

“If persons are not more or less prone to behave in certain ways on certain occasions, then the psychometric approach is out of business at the outset, as are all approaches to personality study.” (Wiggins, 1997, p. 98)

Given the centrality of the trait perspective in Western personality psychology, with its focus on stable internal attributes, it is not surprising that trait psychology has provided the theoretical basis for the majority of efforts to measure personality across cultures (Church, 2000; McCrae, 2001). Cross-cultural trait psychologists tend to treat culture as an independent variable, and thus as implicitly outside of, and distinguishable from, the individual personality. They tend to be optimistic about the universality of certain trait dimensions and to believe that the impact of culture will be primarily on the manifestation, level, and correlates of traits. Here, I focus on the status of imported and indigenous measures that assess a fairly comprehensive set of trait dimensions.

Imported Trait Measures

Researchers who apply imported tests are generally trying to (a) investigate the universality of personality dimensions or, much less frequently, their behavioral exemplars; (b) investigate the nomological networks (e.g., behavioral correlates) of personality constructs across cultures; or (c) compare trait levels across cultures (e.g., see McCrae, 2001). Findings of replicable trait structure are often interpreted as evidence of an evolutionary biological basis for the dimensions. Comparable nomological networks can be used to support the generalizability of personality theory and to demonstrate the criterion validity of the trait dimensions. Cultural differences in mean trait levels are examined to clarify the role of cultural factors in personality. Research on imported inventories can be organized around several questions, which I address briefly in the following sections.

How well do the dimensions assessed by imported measures replicate across cultures? The answer to this question is “quite well,” with some cautions. Much of this research has focused on the replicability of the Five-Factor Model (Extraversion, Agreeableness, Conscientiousness, Emotional Stability versus Neuroticism, and Openness to Experience) and the overlapping dimensions of the Eysenck personality questionnaires (e.g., Barrett, Petrides, Eysenck, & Eysenck, 1998; McCrae & Costa, 1997). I note three cautions: First, the fact that researchers using different structural models of personality have been equally successful in replicating these structures across cultures suggests that imported measures do “impose,” to some extent, their structure in new cultural contexts (Church, 2000). Second, dimensions derived using indigenous approaches have sometimes carved up the personality space somewhat differently (Church, Katigbak, & Reyes, 1998; Katigbak et al., 1996; Yang & Bond, 1990). Third, factor analytic studies conducted at the scale level may only address the replicability of higher-order dimensions, while ignoring possible cultural differences in lower-order or primary personality dimensions.

To what extent do the behavioral exemplars of traits generalize across cultures? It is difficult to answer this question definitively. A review of translation reports for selected inventories suggests that very few items have required significant modification or replacement due to lack of cultural relevance (e.g., Ben-Porath, Almagor, Hoffman-Chemi, & Tellegen, 1995; Butcher, 1996; McCrae, Costa, del Pilar, Rolland, & Parker, 1998). Statistical analyses of item response data yield a more mixed picture. Alpha (α) reliabilities are often lower, sometimes substantially so, in target cultures than in source cultures (e.g., Ben-Porath et al., 1995; Katigbak et al., 1996; McCrae et al., 1998; Paunonen et al., 1996). In some studies with the Eysenck personality questionnaires, substantial numbers of items have failed to load significantly on the appropriate dimension in factor analyses (e.g., Eysenck, Makaremi, & Barrett, 1994).

Applications of differential item functioning (DIF) methods have yielded inconsistent results, with some researchers reporting small proportions of DIF items (i.e., 15% or less; Butcher, 1996; Ellis, Becker, & Kimmel, 1993; van Leest, 1997) and others reporting large percentages (e.g., 20–60%; Huang, Church, & Katigbak, 1997; Taylor & Boeyens, 1991; van Leest, 1997). Stelau and Angleitner (1994) described a test construction strategy for the Pavlovian Temperament Survey, in which

researchers in different languages select subsets of items from a total pool of 252, that have good item discrimination in their own cultural samples; only about 50% of the items selected between any two cultural forms of the instruments have overlapped.

Three points are worth noting regarding DIF items. First, one's conclusions about cultural mean differences can depend on whether one uses original scoring keys or rescores scales after eliminating DIF items (Huang et al., 1997). Second, items exhibiting DIF are not necessarily culture-specific; they may still have sufficient item discrimination in each culture to be considered culture-relevant indicators of the respective traits. Third, proportions of DIF items would probably be larger were it not for the limited contextual specificity of most personality items.

Can imported measures predict relevant criteria across cultures? The answer is “yes.” Several reviewers have reported cross-cultural findings in which imported inventories showed sensible relationships with external criteria (Church, 2000; Paunonen & Ashton, 1998). Nonetheless, there is a need for more systematic cross-cultural comparisons. Imported constructs need not have identical nomological networks across cultures to be valid; the implications of various traits could differ somewhat across cultures.

Have meaningful cultural differences in personality traits been identified with imported measures? Of the questions raised here, this is the most difficult one to answer with confidence. Direct comparisons of mean scores across cultures have often led to results that seemed consistent with cultural expectations (e.g., McCrae, Yik, et al., 1998; Ying, 1990). On the other hand, the finding that certain MMPI-2 scales (e.g., F, 2, 8, and 9) exhibit elevations of 10 or more *T*-score points in normal samples in several cultures (Butcher, 1996) serves as a reminder that such comparisons are potentially confounded by construct, method, and item bias.

Indigenous Trait Measures

Here, I address two related questions: (a) How culture-specific are indigenous trait measures and the constructs they assess? and (b) Do they contribute incremental validity beyond that provided by imported measures?

Many of the personality inventories developed around the world—for example, the German Trier Personality Inventory, Trier Behavioral Control Inventory, and Freiburg Personality Inventory; the Spanish Dimensions of Interpersonal Orientation; and the Dutch RPDV and NPVJ inventories (e.g., Silva, Martinez-Arias, Rapaport, Ertle, & Ortet, 1997; van Leest, 1997)—do not feel very culture-specific, despite their local origins, because they assess constructs that are familiar to Western psychologists. This may result from test authors drawing on a shared Western literature, or from cross-national convergence in the constructs considered important to assess. Some test development projects turn out to be more imposed-etic (imported) in strategy than they appear at first glance. For example, test developers consulted American personality questionnaires and construct definitions in developing a “new personality inventory” (NPI) in Japan (Yanai, Kashiwagi, & Kakusha, 1987) and the South African Personality Questionnaire (see Taylor & Boeyens, 1991), although in both cases items were written locally.

Other test development projects have been more thoroughly indigenous in their approach. Taxonomic studies of trait lexicons in various languages (see Saucier & Goldberg, 2001) provide one source of indigenous measures, and the frequent emergence of Big-Five-like dimensions in these studies is one of the best sources of support for the universality of the Five-Factor Model. In addition, indigenous inventories have been developed for Filipinos (Guazon-Lapeña, Church, Carlota, & Katigbak, 1998), Indians (Das, 1991; Pande & Naidu, 1992), and Chinese (Cheung & Leung, 1998). Recent research with the Chinese Personality Assessment Inventory, which was developed using a combined etic-emic approach, has provided the best support for the existence and incremental validity of an indigenous dimension beyond the Five-Factor Model, labeled Interpersonal Relatedness (Cheung et al., 2001).

Despite the importance of determining whether unique personality dimensions exist in different cultures, there is presently little basis for concluding that such dimensions will be readily identified. Indeed, Big-Five-like dimensions appear to be ubiquitous even in relatively indigenous lexical and inventory measures (Katigbak, Church, Guazon-Lapeña, Carlota, & del Pilar, *in press*). However, few truly indigenous multidimensional measures have been constructed, so further efforts may yet result in the discovery of dimensions that are relatively culture-specific.

Projective Techniques Across Cultures

“The principles of interpretation . . . that work within Western European culture may or may not be relevant for interpreting the responses of individuals from societies in other parts of the world. . . . [Without further validation] it seems unwise to employ projective tests in nonliterate societies as the basis for providing personality inferences.” (Lindzey, 1961, p. 191)

“With the wisdom of hindsight, it is now apparent that interpretive fiascos have occurred from using the Rorschach cross-culturally.” (Dana, 1993, p. 157)

“I can assure the skeptical that [projective] tests work cross-culturally regardless of what one hears to the contrary.” (De Vos, 1994, p. 17)

Historically, projective techniques have been associated most closely with psychoanalytic perspectives, as researchers and clinicians sought to reveal the deeper psychodynamics of personality (De Vos & Boyer, 1989; Lindzey, 1961). Anthropologists associated with early culture-and-personality studies saw considerable potential in projective techniques as a method to investigate national character or modal personality (Lindzey, 1961; Spain, 1972). Critics of these studies noted (a) the uncritical readiness of researchers to offer interpretations based on standard (Western) Rorschach postulates and psychoanalytic theory; (b) the unhealthy or pathological cast of modal personality portraits based on projective techniques; and (c) the limited attention paid to within-group heterogeneity and sources of bias (Holtzman, 1980; Lindzey, 1961; Spain, 1972). In a more recent critique of Rorschach use with American minority groups, Howes and DeBlasie (1989) noted similar criticisms, indicating that concerns about the use of projective tests across cultures have not abated.

Inkblot Techniques

George A. De Vos has made a sustained contribution to the cross-cultural Rorschach literature, in part, through the development of his Affective Inferences Scoring System (AISS), in which responses are classified into seven main content categories (hostility, anxiety, bodily preoccupation, dependency, positive feelings, miscellaneous, neutral). De Vos and Boyer

(1989) summarized a number of their studies, which rely heavily on standard Western interpretations of Rorschach structural scores and the psychoanalytic symbolism of various contents.

Exner's (1993) Rorschach Comprehensive System has been applied increasingly across cultures. Interestingly, when scores of European and South American samples have been compared with Exner's U.S. norms, a number of cultural differences have been fairly consistent. These include high scores or percentages for the Lambda index, ambivalent coping style, shading, texture-less records, and for the Depression, Schizophrenia, and Coping Deficit indexes, plus low scores or percentages for populars, form quality, the Form-color and Affective Ratios, human movement and content, cooperative movement responses, and Experience Actual (Andronikof-Sanglade, 2000; Ephraim, 2000a; Pires, 2000; Vinet, 2000). Uncritical interpretation of such differences would lead one to infer that persons in these cultures were characterized, on average, by greater constriction, stress, and depression, and less conventional perception, consistent and effective means of coping, affective responsiveness, and interpersonal concern and skill, as compared to U.S. norms. Some authors have attempted to explain or reinterpret these differences in terms of cultural factors (e.g., Andronikof-Sanglade, 2000; Vinet, 2000). At a minimum, such differences indicate the need for culture-specific norms (Ephraim, 2000a).

Holtzman (1980, 1988) developed the Holtzman Inkblot Technique (HIT) to address limitations of the Rorschach. Advantages of the HIT include (a) the uniform number of responses for each respondent; (b) good scorer and test-retest reliability; (c) the existence of parallel forms; (d) the independence of responses, making scores more amenable to statistical treatment; (e) the larger number of cards and more diverse content, as compared to the Rorschach; (f) the feasibility of group administration; and (g) the availability of norms for many countries (Holtzman, 1980). Holtzman (1980, 1988, 2000) has reviewed HIT studies in a number of cultures, most of which have dealt with psychodiagnostic issues or with differentiating cultures using HIT scores and multiple discriminant analysis.

Thematic Apperception Techniques

The full range of imposed-etic and emic approaches have been used with thematic apperception or picture-story techniques (Dana, 1999). Some

researchers have used the original TAT card set with little if any modification (e.g., Avila-Espada, 2000; De Vos, 1997; Ephraim, Sochting, & Marcia, 1997; Suarez-Orozco, 1989), sometimes with local norms (e.g., Avila-Espada, 2000); some have largely retained the original picture scenarios, but modified the characters to better resemble persons in the target group (Misra, Sahoo, & Puhan, 1997); and some have used a more fully indigenous approach, in which new pictures depicting contexts or issues of particular salience for various cultural groups have been created. For example, Dana (1993) reviewed tribe-specific TAT card sets for Native Americans, although culture-relevant scoring systems have not been developed. A prominent indigenous example is the TEMAS, which was developed originally for use with urban minority children and is characterized by (a) cultural-relevant figures and contexts; (b) parallel minority and nonminority forms; (c) acceptable normative data and psychometric properties; and (d) an objective scoring system covering cognitive, personality, and affective functions (Costantino & Malgady, 2000). A common assumption made by developers of indigenous card sets is that respondents will be able to identify more with same-culture characters and contexts and thus provide more valuable projective material. This assumption has been supported in research with the TEMAS.

De Vos (1973) developed an influential content approach to TAT interpretation, in which content themes in respondents' stories are categorized into presumed universal categories of interpersonal behavior, both instrumental (achievement, competence or adequacy, responsibility, control, mutuality) and expressive (harmony-discord, affiliation-separation, nurturance-deprivation, appreciation, pleasure-pain). A number of researchers have used the De Vos categories to tally the frequency of various content themes across cultures to identify motivational themes, social attitudes, or interpersonal concerns that are salient in various cultural groups (De Vos, 1973, 1997; Ephraim, 2000b; Ephraim et al., 1997; Suarez-Orozco, 1989). Minimal emphasis has been placed on the assessment of individual personalities or the identification of "basic personality structure."

Other projective techniques have been used cross-culturally. Neither Holtzman (1980) nor Dana (1993) expressed optimism about the cross-cultural validity of typical sign approaches in the interpretation of human figure drawings. Carlson and Westenberg (1998) reviewed cross-cultural applications of Loewinger's sentence completion measure of ego development (WUSCT) and noted the need to modify the coding of some

responses in different cultures. Puhan (1995) described a projective-inventory (PI) approach to test construction that has been used in India and that aims to combine the best features of projective and objective measures.

In summary, projective techniques continue to be used widely across cultures, despite having been controversial for at least half a century. The most basic concerns are the uncertain cross-cultural validity of the scoring and interpretative systems and the lack of available indigenous systems. Cross-cultural users of the Rorschach Comprehensive System, for example, have shown more interest in developing local norms for existing scoring categories than in validating the associated interpretative postulates. Content-based interpretations of thematic apperception techniques have greater face validity, but considerable cultural familiarity would still seem necessary to enable culturally sensitive interpretation. For example, simple cross-cultural comparisons of content theme percentages might miss cultural differences in the meaning or context of the responses. Dana (1993, 1999) has delineated criteria that should be met when applying projective techniques cross-culturally and that address both the cultural relevance of the stimuli, scoring system, and interpretive basis for the instruments and the need to apply local norms and culturally relevant personality theory.

Cultural Psychology and Constructivist Perspectives

“The data gathered from . . . personality inventories lends illusory support to the mistaken belief that individual differences can be described in a language consisting of context-free global traits, factors, or dimensions.” (Shweder, 1991, pp. 275–276)

“Universal [personality] structure does not by itself imply that ‘personality’ as understood within a European-American framework is a universal aspect of human behavior . . . nor does it imply that the variability that appears as an obvious feature of human life is a function of an internal package of attributes called a ‘personality.’” (Markus & Kitayama, 1998, p. 67)

Rather than treat culture as an independent variable distinct from personality, as cross-cultural trait theorists tend to do, cultural psychologists view culture and personality as interdependent or mutually

constitutive (Miller, 1997b; Shweder & Sullivan, 1993). Indeed, the very concept of the person or self is seen as socially constructed and variable across cultures. In more extreme views, the idea of the person as a separate psychological entity with a distinct sense of self and internal psychological dispositions and processes is rejected and depicted as an arbitrary Western construction. If true, this would seem to make the measurement of personality with non-Western individuals impossible (for a critique of this position, see Church, 2000; Spiro, 1993). More moderate views—which propose that cultures differ in their construals of self as independent or autonomous versus interdependent with others (Markus & Kitayama, 1991, 1998)—also have significant implications for traits and their assessment, however. The contributions of cultural psychology to personality measurement include (a) a critique of the Western concept of personality and trait-based assessments; (b) a focus on the assessment of aspects of self rather than traits; and (c) advocacy of more qualitative and constructivist assessment approaches.

Cultural Psychology Critique of Trait Assessments

Cultural psychologists have raised questions about (a) the nature of personality description provided by trait assessments; (b) the accuracy and criterion validity of trait assessments; and (c) the limited contextuality of the test items themselves. Trait assessments provide a descriptive, nomothetic, and molar description of personality, whereas many cultural psychologists prefer the “thick,” holistic, and contextualized descriptions provided by more qualitative assessment methods (Marsella, Dubanoski, Hamada, & Morse, 2000; Miller, 1997b). Nomothetic measures, which assess dimensions assumed to be relevant for all individuals, may facilitate comparisons of individuals and cultures (on dimensions selected by the researcher), but idiographic methods may lead to a richer understanding of individual lives and personality dynamics.

In the view of some cultural psychologists, trait measures may be less reliable or accurate in collectivistic cultures, as compared to individualistic cultures, because (a) introspecting and reporting on one’s characteristics is a less natural task in collectivistic cultures (Markus & Kitayama, 1998); (b) clarity of self-concept is less in collectivistic cultures (Campbell et al., 1996); and (c) trait self-ratings may be distorted by self-enhancement tendencies in individualistic cultures, in which internal attributes are more central to one’s identity (Kitayama, Markus,

Matsumoto, & Norasakkunit, 1997). Trait assessments, it is argued, will also be less useful in predicting behavior in collectivistic cultures, where behavior is more a function of social roles and norms than internal dispositions (Markus & Kitayama, 1998; Triandis, 1995).

Finally, it is noted that items in personality inventories are often general, with minimal specification of situational context. Shweder (1979) noted that general items may transfer better across cultures, but are also less representative, contextual, and lifelike, reducing content validity. Also, general items require an intuitive aggregation of one's behavior across situational contexts that respondents in collectivistic cultures may find more difficult if behavior is indeed more context-specific in these cultures (Marsella et al., 2000). This raises the question of whether it will be more important to incorporate situational context in test items in collectivistic cultures than in individualistic cultures, and, if so, whether this will result in more complex factor structures.

Focus on Assessment of Self

Cultural psychologists prefer to focus on the study of "culture and self" rather than "culture and personality," perhaps because of the tarnished image of classical culture-and-personality studies and skepticism about the concept of traits. Accordingly, they have tended to focus on measuring aspects of the self across cultures.

In the anthropological literature, assessments of self-conceptions have been derived using largely ethnographic methods (e.g., Marsella, De Vos, & Hsu, 1985; Rosenberger, 1994). To assess self-concept in culture-comparative studies, psychologists have most often used the Twenty Statements Test, in which respondents complete the statement "Who am I?" up to 20 times. Cultural psychologists have expected to find larger proportions of idiocentric responses (e.g., traits, aspirations, preferences) in individualistic cultures and larger proportions of allocentric responses (e.g., social roles, relationships) in collectivistic cultures. The mixed results of these studies (see Church, 2000, for a review) may be due, in part, to limitations of the TST method, including the subjective coding process, the diverse coding systems used, uncertain test-retest reliability, and unresolved questions about the optimal number and weighting of responses (Watkins, Yau, Dahlin, & Wondimu, 1997).

Many objective, nomothetic instruments have been developed to measure independent versus interdependent self-construals and individualism-

collectivism as individual-differences variables (e.g., Hui & Yee, 1994; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997; Singelis, 1994; Triandis & Gelfand, 1998). The recent trend has been to assess these constructs as distinct dimensions (e.g., with separate individualism and collectivism scales) rather than as bipolar contrasts. The measures have shown sensible relationships with measures of personality and values within cultures (Church & Lonner, 1998), but between-culture mean differences have often not conformed to expectations (Matsumoto, 1999; Takano & Osaka, 1999), reducing the potential value of these measures in “unpackaging” the variable of culture in culture-comparative studies. Researchers have rarely investigated the scalar equivalence of these instruments across cultures, so item bias might contribute to these unexpected findings.

Church (2000) argued that self-monitoring, which is hypothesized to underlie individual differences in trait versus situational determination of behavior (Snyder, 1974), may be a central construct to assess in testing cultural psychology formulations regarding personality. Other relevant measures include a measure of self-concept clarity (Campbell et al., 1996), the Self-Consciousness Scale (e.g., see Realo & Allik, 1998), and an implicit theory measure assessing beliefs in the stability versus malleability of traits or attributes (Chiu, Hong, & Dweck, 1997).

Constructivist Assessments

Constructivist assessment methods are consistent with the cultural psychology emphasis on the construction of meaning by individuals and cultures—the individual’s dimensions or narratives of self and others are generated in their own terms, not those of the researcher (Greenfield, 1997; Westermeyer, 1996). Neimeyer (1993, p. 72) characterized the Repertory Grid Technique as “the Rorschach or MMPI of constructivist assessment.” The respondent is presented with triads of elements (e.g., different persons he or she knows) and, for each triad, is asked to identify a characteristic that two of the elements share and a bipolar contrast that characterizes the third element. The method has been used sparingly in culture-comparative research (e.g., Salili, 1994), but it can be used to generate idiographic (and indigenous) dimensions that respondents use in construing self and others, which could be compared cross-culturally.

Free descriptions of other's personalities can also be used to reveal cultural universals and differences in constructs used to describe personality (Kohnstamm, Halverson, Mervielde, & Havill, 1998). Free descriptions have a number of advantages: (a) They are based on the active, salient vocabulary of respondents; (b) they provide indigenous information about a person that is embedded in the ecocultural context; and (c) the task may be familiar to all populations, including nonliterate ones. The main disadvantage is possible bias or selectivity in the descriptors generated.

Personal narratives or life stories have been used in a variety of cultures (Josselson & Lieblich, 1993), but rarely for culture-comparative purposes. Personal narratives are particularly suited for assessing personal identity, so that cross-cultural studies could reveal prevalent forms of identity within different cultures (Howard, 1991).

Evolutionary Perspectives

“Individual differences that are closely linked with components of natural selection, sexual selection, and life-history reproductive strategies are crucial using an evolutionary rationale for designating importance.” (Buss, 1997, p. 330)

Evolutionary psychologists view the mind as comprised of psychological mechanisms, many of which evolved to solve adaptive problems linked with group living (e.g., problems in selecting mates or negotiating status hierarchies), and which led to increased survival or reproduction in ancestral environments. Some evolutionary theories in the personality domain have attempted to explain trait models such as the interpersonal circumplex (Wiggins & Trapnell, 1996) and the Five-Factor Model (e.g., Buss, 1996; MacDonald, 1998). Thus, proponents of an evolutionary perspective would view the assessment of traits as an appropriate approach in the study of personality cross-culturally and would expect to find evidence of universal traits.

Indeed, Buss (1997) argued that one of the most important contributions of evolutionary theory to personality assessment may be in providing a criterion of importance in selecting additional traits to measure (e.g., sociosexuality). For example, Simpson and Gangestad (1991) developed the Sociosexual Orientation Inventory to assess individual differences in the willingness to engage in uncommitted sexual relations. Buss (1996)

argued that many traits that signify differences in sexual strategy have been ignored in lexical studies because sex-linked terms (e.g., coy, chaste, sexy, and seductive) have been excluded. Indeed, when such terms are included, additional dimensions can be identified. For example, Schmitt and Buss (2000) used a lexical approach in developing a measure of seven sexual dimensions (Sexual Attractiveness, Relationship Exclusivity, Gender Orientation, Sexual Restraint, Erotophilic Disposition, Emotional Investment, and Sexual Orientation) and suggested that these dimensions reflect “a reapportionment of Big Five variation along more evolution-relevant, sexual dimensions of personality description” (p. 168). If evolutionary psychologists are correct—that a large number of psychological mechanisms have evolved to solve the many adaptive problems of humans—additional assessment foci may emerge from evolutionary perspectives.

Toward an Integrated Measurement Approach

There are a number of ways in which one might attempt to compare and integrate these alternative measurement perspectives. To some extent, they might be viewed as measuring distinct but complementary levels or aspects of personality. Thus, trait measures assess manifest regularities in behavior, as viewed by self and others, which may reflect, in part, inherited dispositions; projective techniques have been used to assess the deeper, perhaps unconscious, psychodynamics of personality, at least in some interpretive approaches; and cultural psychology and constructivist measures may assess processes and construals of personality and self that are more socioculturally based. Indeed, in McCrae and Costa’s (1996) Five-Factor Theory, the Big-Five traits are viewed as inherited basic tendencies, while self-construals and personal narratives are viewed as “characteristic adaptations,” which are hypothesized to be influenced by both inherited traits and the sociocultural environment. Cultural psychologists also view construals of self and personality, and individualism-collectivism, as having a sociocultural basis—rooted in cultural institutions, practices, scripts, ideas, and values (e.g., Markus & Kitayama, 1998; Triandis, 1995).

Although this level or aspects-of-personality distinction may be useful in differentiating the usual thrust or interpretation of these alternative measurement perspectives, it is probably not possible to cleanly differentiate trait and cultural psychology perspectives and measures in terms

of a biological versus sociocultural distinction. Although researchers may infer inherited basic tendencies from trait measures, scores on such measures are likely influenced by sociocultural factors as well (e.g., cultural values, self-presentation styles, response biases). Conversely, cultural and individual differences in self-processes and construals, and individualism-collectivism, may reflect, in part, temperamental differences. For example, individual differences in self-enhancement versus self-effacement biases might be related to antecedent traits (e.g., neuroticism) in all cultures.

In an integrated measurement framework, it may be most useful to view the constructs measured by trait and cultural psychology measures as interacting with or moderating each other. For example, aspects of self may be relevant to trait assessment in addressing the extent to which (a) one is aware of, or reflective about, one's traits; (b) traits constitute a central aspect of one's self-concept; (c) trait-related behavioral consistency is seen as important or healthy; and (d) one's traits are thought to be, or actually are, manifested or restrained in overt behavior. Such differences in self-construals could then impact the accuracy, stability, interjudge agreement, and criterion validity of trait assessments across cultures (Church, 2000). Thus, in an integrated measurement approach, trait and cultural psychology assessments would complement each other and facilitate a better understanding of results from each approach.

The alternative measurement perspectives can also complement each other by compensating for each others' weaknesses. Trait measures provide objective, nomothetic, low inference assessments, but their format may be less applicable with some (e.g., nonliterate) cultural groups. Imported trait measures, in particular, have the advantage of a strong record of cross-cultural structural equivalence and criterion validity; they will also facilitate cross-cultural comparisons of mean trait levels, assuming that sources of measurement bias can be adequately addressed. Evolutionary perspectives complement imported trait perspectives by potentially suggesting additional dimensions to assess. Indigenous trait approaches increase the likelihood of identifying culture-specific constructs, and, in combination with imported approaches, increase the likelihood that a more comprehensive personality psychology will emerge.

Projective techniques, whether imported or indigenous, can contribute a broad, holistic, and idiographic assessment and may assess a deeper, perhaps unconscious, level of personality (e.g., De Vos & Boyer, 1989).

Along with certain constructivist techniques (e.g., free descriptions), they may be more suitable than objective trait inventories for administration with nonliterate populations (Lindzey, 1961). The cross-cultural validity of projective scoring and interpretative systems remains uncertain (Dana, 1993; Lindzey, 1961); however, some argue that current assessment practice places too much emphasis on objective validation criteria at the expense of the more contextual and subjective understanding of the assessee provided by some projective and constructivist techniques (e.g., see the humanistic-normative assessment model proposed by Dana, 2000). In any case, deep immersion in the language and target culture would seem to be even more important in obtaining meaningful interpretations with projective techniques because of the greater ambiguity of the test stimuli and responses.

The characteristics of cultural psychology and constructivist assessments are more diverse and harder to summarize. Many measures of self-construals, individualism-collectivism, and self-processes (e.g., self-monitoring, self-clarity) are essentially objective inventories and would share many of the strengths and weaknesses of imported trait inventories. Constructivist measures, such as the Twenty Statements Test, Repertory Grid Test, personal narratives, and free descriptions, are potentially more qualitative and idiographic and allow respondents to answer in their own terms, but have also been used quantitatively and nomothetically. At least some advocates of constructivist methods view them as complementary to trait assessments, providing, in combination, a richer understanding of individual personality (e.g., Neimeyer & Neimeyer, 1993). Similarly, Miller (1997a) discussed the complementary nature of interpretive ethnographic and quantitative assessments.

In summary, a comprehensive and integrative assessment of personality across cultures would incorporate measurement of universal and culture-specific traits, the diverse aspects of personality captured by projective techniques, and the dimensions and narratives of self and personality obtained through cultural psychology and constructivist measures. Such an assessment would incorporate diverse aspects or levels of personality, while drawing on the complementary strengths of alternative approaches.

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