

Tilburg University

Cross-cultural research methods

van de Vijver, F.J.R.; Tanaka-Matsumi, J.

Published in:

Handbook of research methods in abnormal and clinical psychology

Publication date:

2008

Document Version

Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

van de Vijver, F. J. R., & Tanaka-Matsumi, J. (2008). Cross-cultural research methods. In D. McKay (Ed.), *Handbook of research methods in abnormal and clinical psychology* (pp. 463-481). Sage.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

29

MULTICULTURAL RESEARCH METHODS

FONS J. R. VAN DE VIJVER

JUNKO TANAKA-MATSUMI

The interest in cross-cultural studies has been steadily growing in the past 25 years. The number of studies in PsycInfo (an electronic database with a broad coverage of the psychological literature) that deal with cross-cultural differences, ethnic differences, and acculturation has increased from (roughly) 600 in 1980 to 1,800 in 2004 (van de Vijver, in press). The relative proportion has increased from about 1.5% to 2.2%. The impetus for this development comes not only from internal dynamics of psychology; important societal developments of the past decades have undoubtedly contributed to the development. The first development is globalization and the increased frequency of international encounters by improved tools for telecommunication. The second is migration. It is now widely appreciated in many countries that the multicultural nature of the population is a permanent feature and that policies and practices of policymakers and professionals should be culture informed. The development and implementation of these policies and practices are not easy and straightforward. A telling example comes from South Africa, where in 1998 the Employment Equity Act was passed, which requires psychology to restrict the usage of psychological tests to those

that are not biased against any cultural group (Meiring, van de Vijver, Rothmann, & Barrick, 2005). This is a daunting task, because the country has 11 official languages and not a single test has been validated in each language.

Abnormal and clinical psychology faces at least two challenges in dealing with cross-cultural variation. The first is the need to adapt research and theories so as to accommodate this variation. The central underlying question is the relationship between cultural factors and psychopathology. What are the cross-cultural differences and similarities in clinical syndromes? Cross-cultural comparisons are essential in identifying the "cultural factor in psychopathology." The second challenge concerns the adaptation of assessment procedures and therapies to be used in an immigrant population. Studies of multicultural populations cannot assume that instruments that are reliable and valid for mainstreamers will retain these properties when applied to a culturally heterogeneous sample. Instruments, administration procedures, and therapies should be scrutinized for their cross-cultural applicability. We should not take this applicability for granted but address it empirically.

The first section of the chapter gives an overview of what is often taken to be the major

question of cross-cultural abnormal and clinical psychology: the universality and cultural specificity of clinical syndromes, often restricted to the issue of culture-bound syndromes (Tanaka-Matsumi, 2001; Tanaka-Matsumi & Draguns, 1997). The second section describes a framework that can be used to classify problems of cross-cultural comparisons and ways to avoid these problems. The third section discusses the issue of acculturation. Fourth-generation Americanized European immigrants will probably feel and act like American mainstreamers; American tests and norms can be employed for assessing them. However, recent immigrants who have a strong orientation toward their heritage culture, show a poor mastery of English, and do not know the American culture may feel at a loss when answering items of a standard instrument. Their test scores are influenced by their knowledge of the mainstream language and culture. Generally, acculturation is important to take into account in working with multicultural populations (Arends-Tóth & van de Vijver (in press); van de Vijver & Phaet, 2004). The fourth section describes cross-cultural psychotherapy. Implications are described in the last section of the chapter.

UNIVERSALITY AND CULTURAL SPECIFICITY: CULTURE-BOUND SYNDROMES AND BEYOND

It is well established that anorexia nervosa and bulimia nervosa do not show the same prevalence across cultures. The syndromes are most found among female adolescents and young adults (Mumford, 1993), notably white women in certain countries (Wildes, Emery, & Simons, 2001). The question of whether the two disorders can be found in all cultures has a long history in cross-cultural psychology. In former days this question was known as the "emic-etic debate." An *etic* conceptualization views psychopathology as universal and as constituted by completely or largely identical sets of symptoms. From an *etic* viewpoint, one may want to argue that starvation by medieval men and women as part of religious practices was comparable to modern forms of extreme fasting such as found in anorexia nervosa.

Proponents of an *emic* view deny the existence of a culturally invariant core; they argue that the expression of clinical syndromes is so

enrained in their cultural context that it is futile to look for cross-cultural commonalities. In their view, psychopathology can only be interpreted in its context of occurrence.

In the past decade, the opposition between the two views has given way to a more pragmatic and less dichotomized view. It is now widely acknowledged that a more productive way of conceptualizing the problem of cross-cultural variations in clinical syndromes is to treat the *emic* and *etic* viewpoints as endpoints of a continuum. The cross-cultural study of depression can adequately illustrate that the *emic/etic* distinction is not very fruitful. Kleinman (1977) argues that depression is a universal psychopathology, but its expression shows cross-cultural variation. When reporting depressive mood, Nigerians report fewer feelings of guilt, while Chinese more commonly express somatic complaints. Particularly in cultural contexts in which depression is viewed by the public as an incurable condition, therapists may prefer to use labels of somatic diseases that are curable (Neary, 2000). Somatization is important in the issue of universality and cultural specificity. There are strong indications that cultures differ in allowing their members to express complaints using either psychological or somatic symptoms (Yen, Robbins, & Lin, 2000). Westernization of a country has been associated with higher reported levels of depression (Tanaka-Matsumi & Draguns, 1997). It is not at all clear whether these norms extend beyond the mere expression and also affect the experience of depression. The received view that some cultures use more somatization and that other cultures use more psychological symptoms to describe essentially the same underlying problems has met with some criticism (Kirmayer, 2001). Studies of Dutch immigrants indicated that these patients often first report somatic symptoms, but that upon closer examination they often indicate that the underlying problems are not somatic; these patients just find it easier to express somatic complaints (Arrindell & Albersnagel, 1999; Knipscheer, 2000). It is almost paradoxical that on the one hand Western societies are more tolerant toward the expression of depressive feelings, while on the other hand, more affluent countries (in many cases the Western countries) report on average the lowest level of depression (Van Hemert, Van de Vijver, & Poortinga, 2002). It appears, in summary, that the relationship

between culture and depression is complex and that a focus on whether the syndrome is emic or etic distracts the attention from more interesting questions, such as the role of somatization.

Psychopathologies like depression and schizophrenia are universal, although cultural factors will influence their expression, such as the contents of delusions. Cultures also differ in their conceptualization of depressive symptoms as social-emotional problems or a disease. These variations may be due to variations in cultural conceptualizations of depression. Karasz (2005), for example, interviewed South Asian (SA) immigrants and European Americans (EA) using a vignette describing depressive symptoms and asked, among others, about identity of illness and causes and consequences of the illness. The SA group reported more social-interpersonal factors and the EAs generated more biopsychiatric explanations.

At the other side of the spectrum are "culture-bound syndromes." These refer to clinical syndromes that occur in one or a few cultures (see Table 29.1). A good example is *Amok*, which occurs in Asian countries, such as Indonesia and Malaysia. It is characterized by a brief period of violent aggressive behavior among men (Azhar & Varma, 2000). The period is often preceded by an insult, and the patient shows persecutory ideas and automatic behaviors.

After the period, the patient is usually exhausted and has no recollection of the event. It is interesting to note that culture-bound syndromes may persist after emigration. A good example is *Ataque de Nervios*, which refers to symptoms of distress following a stressful family event, especially the death of a relative. Symptoms include uncontrollable shouting, attacks of crying, trembling, heat in the chest rising to the head, and verbal or physical aggression. The disease is reported in various countries of Central and South America, but similar symptoms are reported by Hispanics in the United States (Interian et al., 2005). *Ataques de Nervios* is a cultural idiom of distress and its presence is strongly associated with elevated conditional risk for anxiety disorders and depressive disorders with suicidal ideations among older Puerto Rican patients in primary care (Tolin, Robison, Gaztambide, Horowitz, & Blank, in press).

Some culture-bound syndromes are characterized by intermittent periods of prevalence. *Koro* is a good example. The syndrome has been reported in various Asian countries and refers to a sudden, intense fear among men that the penis will withdraw in the body. *Koro* often occurs in short periods with high intensity (epidemic). This pattern of a sudden onset, followed by a period of high prevalence and a sudden offset is similar to epidemic (or mass) hysteria (Boss, 1997). The pattern points to the importance of local trigger factors.

Table 29.1 Examples of Culture-Bound Syndromes

Name of Syndrome	Where Found	Symptoms
<i>Amok</i>	Some Asian countries such as Indonesia and Malaysia	Short though violent aggressive behavior among men (attempted murders have been reported), sometimes after an insult
<i>Koro</i>	Malaysia (a related syndrome can be found in China and Thailand)	Sudden, intense fear among men that the penis will withdraw in the body
Anorexia nervosa	North America, Western Europe, and cultural elites in other countries	Deliberate food deprivation to become extremely thin
<i>Pibloktoq</i> or Arctic hysteria	Traditional inhabitants of Greenland, Alaska, and Canada	Dissociative period followed by short period of extreme arousal and an uncontrollable tendency to display dangerous or irrational behavior
<i>Taijin Kyofusho</i>	Japan	Intense fear that one's body is discomfoting or insulting for others by its appearance, smell, or movements

NOTE: An extensive overview can be found at http://weber.ucsd.edu/~thall/cbs_glos.html.

The discussion on culture-bound syndromes has an interesting mixture of conceptual and methodological issues and is still far from resolved. The current version of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM; American Psychiatric Association, 2000) describes 25 culture-bound syndromes in an appendix; however, the issue to what extent these syndromes can be described in terms of general syndromes is not settled (Paniagua, 2000). The case of the Japanese *Taijin Kyofusho* is an interesting example (Suzuki, Takei, Kawai, Minabe, & Mori, 2003; Tanaka-Matsumi & Draguns, 1997). *Taijin Kyofusho* is characterized by an intense fear that one's body is discomforting or insulting for others by its appearance, smell, or movements. The description of symptoms suggests a strong form of a social phobia (a universal) that finds culturally unique expressions in a country in which conformity is a widely shared norm. Suzuki et al. (2003) argue that most symptoms of *Taijin Kyofusho* can be readily classified as social phobia and the culture-bound nature of the syndrome can be questioned.

The high level of detail of the descriptions of the DSM criteria reduces its suitability for cross-cultural research. Clarity of criteria and cross-cultural applicability can easily become incompatible. For example, in order to be called "depressed" according to DSM criteria, a person should display at least five of the following symptoms within a period of two weeks: feeling a depressed mood almost daily, loss of interest and joy in doing any activity almost daily, change in weight or appetite, sleeping problems, decrease in physical activity, fatigue and lack of energy, feeling of worthlessness or extreme guilt, poor concentration and suicide ideation. From a cross-cultural perspective, various problems arise in the application of these criteria. For example, somatization may lead to underreporting psychological problems; the prevalence of guilt feelings or worthlessness is low among Nigerians (Kleinman, 1977), which reduces the suitability of the criterion.

BIAS AND EQUIVALENCE

Bias refers to the presence of nuisance factors that challenge the comparability of scores across cultural groups. If scores are biased, their psychological meaning is culture or group dependent, and group differences in assessment

outcome are to be accounted for, at least to some extent, by auxiliary psychological constructs or measurement artifacts. In more practical terms, if the Beck Depression Inventory, which contains both psychological and somatic symptoms, is used to compare cultural groups in which there are differential norms for expressing psychological symptoms, the inventory cannot be used to compare depression of the cultures (Okazaki & Tanaka-Matsumi, in press). Comparability of scores is captured in the concept of equivalence. The taxonomy of equivalence presented following is an overview of the level at which scores can be compared across cultural groups (see Johnson, 1998, for an overview of many definitions proposed in the literature). Bias usually challenges the direct comparability of scores across cultures. It may be noted that bias and equivalence are characteristics of a cross-cultural comparison. An instrument is not inherently biased or unbiased but is always biased or unbiased in a specific application. A measure of suicide ideation may work well in a comparison of, say, African Americans and European Americans but may be biased in a comparison of African Americans and Japanese. Bias is more likely if the groups that are compared have more dissimilar cultures.

Construct Bias

Construct bias occurs when the construct measured is not identical across groups. Construct bias precludes the cross-cultural measurement of a construct with an identical measure. Proponents of culture-bound syndromes would argue that the cross-cultural comparison of culture-bound syndromes is doomed to fail, as there is no corresponding syndrome in the other culture. So, a researcher can ask to what extent patients report specific symptoms, but these symptoms are not expected to co-occur in cultures in which the culture-bound syndrome is not present. We would be comparing apples and oranges. An empirical example can be found in Ho's (1996) work on filial piety (defined as a psychological characteristic associated with being "a good son or daughter"). The Chinese conception, according to which adults are expected to assume the role of caretaker of their parents, is broader than the Western concept that focuses more on showing respect and love. An inventory of filial piety based on the Chinese conceptualization covers aspects unrelated to the concept among Western subjects,

whereas a Western-based inventory will leave important Chinese aspects uncovered.

Method Bias

A second type of bias, called *method bias*, can result from such factors as sample incomparability, instrument differences, tester and interviewer effects, and the mode of administration. Method bias is used here as a label for all sources of bias emanating from factors often described in the methods section of empirical papers or study documentations. They range from differential stimulus familiarity in mental testing to differential social desirability in personality and survey research. Identification of methods bias requires detailed and explicit documentation of all the procedural steps in a study. *Sample bias* amounts to incomparability of samples in terms of relevant background characteristics. In some cases these differences may reflect sampling particulars (such as a difference in gender ration in two samples), while in other cases these differences are more intrusive and require scrutiny (such as differences in education). For example, individuals with more schooling tend to show less social desirability.

Administration method bias can be caused by differences in the procedures or mode used to administer an instrument. For example, when interviews are held in respondents' homes, physical conditions (for example, ambient noise and presence of significant others) are difficult to control. Respondents are more prepared to answer sensitive questions in self-completion contexts than in the shared discourse of an interview. Other sources of administration that can lead to method bias are ambiguity in the questionnaire instructions and guidelines or a differential application of these instructions (for example, which answers to open questions are considered to be ambiguous and require follow-up questions). A translation back translation procedure will not eliminate these ambiguities. The person of the test administrator may also influence test scores. Deference to the interviewer has been reported; subjects were more likely to display positive attitudes to a particular cultural group when they are interviewed by someone from that group. A final source of administration bias is constituted by communication problems between the respondent and the tester or interviewer. These problems may be hard to avoid when working with a translator.

Illustrations of miscommunications between native and nonnative speakers can be found in Gass and Varonis (1991).

Instrument bias is a common source of bias in cognitive tests. An interesting example comes from Piswanger (1975). He administered a Raven-like figural inductive reasoning test to high school students in Austria, Nigeria, and Togo (educated in Arabic). The most striking findings were cross-cultural differences in item difficulties related to identifying and applying rules in a horizontal direction (that is, left to right). This was interpreted as bias in terms of the different directions in writing Latin as opposed to Arabic.

Item Bias

The third type of bias distinguished here refers to anomalies at item level and is called *item bias* or *differential item functioning*. According to a definition that is widely used in education and psychology, an item is biased if respondents with the same standing on the underlying construct (for example, they are equally intelligent) but who come from different cultures do not have the same mean score on the item. The score on the construct is usually derived from the total test score. Of all bias types, item bias has been the most extensively studied; various psychometric techniques are available to identify item bias (for example, Camilli & Shepard, 1994; Van de Vijver & Leung, 1997). Even translations that are linguistically correct can produce problems. A good example is the test item "Where is a bird with swimming feet most likely to live?" which was part of a large international study of educational achievement (compare Hambleton, 1994). Compared to the overall pattern, the item turned out to be unexpectedly easy in Sweden. An inspection of the translation showed that the Swedish translation of the English was "bird with swimming feet," which gives a strong clue to the solution that is not present in the English original.

The three types of bias and their sources are summarized in Table 29.2.

Identifying and Dealing With Bias

Various ways of dealing with bias have been proposed in the literature. The first example of dealing with *construct bias* is cultural decentering (Werner & Campbell, 1970), which attempts

Table 29.2 Sources of Bias in Cross-Cultural Assessment

Type of Bias	Source of Bias
Construct bias	<ul style="list-style-type: none"> • Only partial overlap in the definitions of the construct across cultures • Differential appropriateness of the behaviors associated with the construct (for example, skills do not belong to the repertoire of one of the cultural groups) • Poor sampling of all relevant behaviors (for example, short instruments) • Incomplete coverage of all relevant aspects/facets of the construct (for example, not all relevant domains are sampled)
Method bias	<ul style="list-style-type: none"> • Incomparability of samples (for example, caused by differences in education, motivation)^a • Differences in environmental administration conditions, physical (for example, recording devices) or social (for example, class size)^a • Ambiguous instructions for respondents and/or guidelines for administrators^a • Differential expertise of administrators^b • Tester/interviewer/observer effects (for example, halo effects)^b • Communication problems between respondent and interviewer (in the widest sense)^b • Differential familiarity with stimulus material • Differential familiarity with response procedures^c • Differential response styles (for example, social desirability, extremity scoring, acquiescence)^c
Item bias	<ul style="list-style-type: none"> • Poor translation and/or ambiguous items • Nuisance factors (for example, item may invoke additional traits or abilities) • Cultural specifics (for example, incidental differences in connotative meaning and/or appropriateness of the item content)

NOTE: ^a= sample bias; ^b= administration bias; ^c= instrument bias.

to remove cultural particulars and to restrict the instrument to aspects that are common across cultures. In the so-called convergence approach, versions are independently developed in different cultures and all instruments are then administered to subjects in all these cultures (Campbell, 1986). Some common methods of dealing with bias, such as the use of informants with expertise in the local language and culture and the nonstandard administration of an inventory to individuals in the target culture, address both construct and method bias. Cross-cultural differences in nomological networks also point to the presence of construct bias. Tanzer and Sim (1991) found that good students in Singapore worry more about their performance during tests than do weak students, whereas the contrary was found in most other test anxiety research. For the other components of test anxiety (that is, tension, low confidence, and cognitive interference), no cross-cultural differences were found. The authors attributed the inverted worry-achievement relationship to

characteristics of the educational system, especially the *kiasu* syndrome (fear of losing out), which is deeply entrenched in the Singaporean society, rather than to construct bias in the internal structure of test anxiety.

Various procedures have been developed that mainly address method bias. A first proposal involves the extensive training of administrators and interviewers. Such training and instructions are required in order to ensure that interviews are administered in the same way across cultural groups. A related approach amounts to the development of a detailed manual and administration protocol. The manual should ideally specify the test or interview administration and describe contingency plans on how to intervene in common interview problems (for example, specifying when and how follow-up questions should be asked in open questions).

An important issue in survey research is the prevalence of response effects and styles, notably social desirability, acquiescence, and extremity scoring. Questionnaires are available for the

assessment of social desirability; for example, the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) has a social desirability subscale that has been applied in many countries. When response styles are suspected of differentially influencing responses as obtained in different cultural groups, the administration of a questionnaire to assess the response style can provide a valuable tool to interpret cross-cultural score differences. There is empirical evidence indicating that countries differ in their usage of response scales. Hui and Triandis (1989) found that Hispanics tended to choose extremes on a five-point rating scale more often than European Americans, but that this difference disappeared when a 10-point scale was used.

There are two kinds of procedures to assess item bias: judgmental procedures, either linguistic or psychological, and psychometric procedures. An example of a linguistic procedure can be found in Grill and Bartel (1977). They examined the Grammatic Closure subtest of the Illinois Test of Psycholinguistic Abilities for bias against speakers of nonstandard forms of

English. In the first stage, potentially biased items were identified. Error responses of African American and African Black children indicated that more than half of the so-called errors were appropriate in nonstandard forms of English. There are many examples of item bias studies in the educational domain; for example, the *Journal of Educational Measurement* contains numerous examples. It is regrettable that few applications can be found in abnormal and clinical psychology. These techniques provide statistically sound tools to deal with the question of cultural specificity of symptoms, as they compare the scores on items of persons from different cultures who have equal test scores and hence are assumed to be equally depressive, happy, or whatever is measured. (See Table 29.3 for a summary of strategies for dealing with bias.)

Equivalence

Four types of equivalence are proposed here (compare van de Vijver & Leung, 1997). The four constitute a hierarchy; they refer to

Table 29.3 Strategies for Identifying and Dealing With Bias

<i>Type of Bias</i>	<i>Strategies</i>
Construct bias	<ul style="list-style-type: none"> • Decentering (that is, simultaneously developing the same instrument in several cultures) • Convergence approach (that is, independent within-culture development of instruments and subsequent cross-cultural administration of all instruments)
Construct bias and/or method bias	<ul style="list-style-type: none"> • Use of informants with expertise in local culture and language • Use of samples of bilingual subjects • Use of local pilots (for example, content analyses of free-response questions) • Nonstandard instrument administration (for example, "thinking aloud") • Cross-cultural comparison of nomological networks (for example, convergent/discriminant validity studies, monotrait-multimethod studies) • Connotation of key phrases (for example, examination of similarity of meaning of frequently employed terms such as "somewhat agree")
Method bias	<ul style="list-style-type: none"> • Extensive training of interviewers • Detailed manual/protocol for administration, scoring, and interpretation • Detailed instructions (for example, with sufficient number of examples and/or exercises) • Use of subject and context variables (for example, educational background) • Use of collateral information (for example, test-taking behavior or test attitudes) • Assessment of response styles • Use of test-retest, training and/or intervention studies
Item bias	<ul style="list-style-type: none"> • Judgmental methods of item bias detection (for example, linguistic and psychological analysis) • Psychometric methods of item bias detection (for example, Differential Item Functioning analysis)

increasing levels of comparability. *Construct inequivalence* is said to be present when there is construct bias (“comparing apples and oranges”). If constructs are inequivalent, comparisons lack a shared attribute, which precludes any comparison. *Structural* or *functional equivalence* is the second and often most important kind of equivalence. An instrument shows structural equivalence in a cross-cultural study if it measures the same construct(s) in each cultural group studied. Structural equivalence is supported if identical factor structures are found in different cultural groups. Cross-cultural studies of cognitive tests (Jensen, 1980; van de Vijver, 1997), Eysenck’s Personality Questionnaire (Barrett, Petrides, Eysenck, & Eysenck, 1998), and the so-called five-factor model of personality (McCrae & Allik, 2002) have provided impressive evidence for the universality of constructs. However, this should not be interpreted as indicating that structural equivalence is always supported. Georgas, Berry, van de Vijver, Kagitçibasi, and Poortinga (2006) administered a widely used measure of independence-interdependence (Singelis, 1994) to students in 27 countries. They found that the expected two factors showed up only in a minority of the countries, which means that the instrument could not be used for comparing countries vis-à-vis independence-interdependence. The third type of equivalence is called *measurement unit equivalence* (or *metric equivalence*). Instruments show this if their measurement scales have the same units of measurement, but a different origin (such as the Celsius and Kelvin scales in temperature measurement). This type of equivalence assumes interval- or ratio-level scores (with the same measurement units in each culture). Measurement unit equivalence applies when the same instrument has been administered in different cultures and a source of bias with a fairly uniform influence on the items of an instrument affects test scores in the different cultural groups in a differential way; for example, social desirability and stimulus familiarity influence scores more in some cultures than in others. The interpretation of group comparisons of mean scores remains ambiguous when the relative contribution of both bias sources cannot be estimated. The highest level of equivalence is called *scalar* (or *full score*)

equivalence; this is the only type of equivalence that allows for the conclusion that average scores obtained in two cultures are different or equal. Scalar equivalence assumes the identical interval or ratio scales across cultural groups. It is often difficult to decide whether equivalence in a given case is scalar equivalence or measurement equivalence.

ACCULTURATION AND MENTAL HEALTH

One of the most profound demographic changes of the past decades in Western countries is their increased cultural heterogeneity. The influx of immigrants creates several challenges for abnormal and clinical psychology. The first is the quality of service delivery to immigrant groups. Therapies, assessment procedures, and various other aspects of the clinical process need to be adapted or at least examined for suitability in a multicultural context. The second involves new phenomena that come within the realm of abnormal and clinical psychology has to deal with: acculturation and adverse consequences of acculturative stress. We describe issues in acculturation first and cross-cultural issue in therapies in the next section.

The first definition of *acculturation* has been proposed by Redfield, Linton, and Herskovits (1936): “Acculturation comprehends those phenomena, which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups” (p. 149).

The most salient features of the definition are the presence of continuous, firsthand cross-cultural encounters and the ensuing changes in cultural patterns in either or both groups. The definition involves a wide variety of phenomena possibly affected by acculturation, such as the structure of a society, laws, and food patterns. The concept of acculturation has a more focused meaning in the current chapter, which is common in cross-cultural psychology (for example, Berry & Sam, 1997; Ward, Bochner, & Furnham, 2001). Within the context of Western societies, the most cross-cultural encounters take place between a typically large majority population, often designated as the mainstream, and a much

smaller group of immigrants (generic term for permanent settlers, sojourners, and refugees), often designated as the ethnic group. It may be noted that the latter term is somewhat misleading in that the mainstream culture also constitutes an ethnic group.

Figure 29.1 presents a framework of acculturation (based on Arends-Tóth and van de Vijver, in press) that is in line with current thinking in which acculturation involves antecedent, intervening, and outcome variables (Ward et al., 2001). *Acculturation conditions* refer to the background setting that is relevant in the assessment of psychological acculturation. These conditions define the limits and demands of the acculturation process involving group and individual characteristics. At the group level, variables involve characteristics of the receiving society, of the society of origin, of the immigrant group,

and perceived intergroup relations. Individual factors such as personality and intelligence also influence the acculturation process. *Acculturation orientations* structure the acculturation process by relating acculturation conditions to outcomes. According to Berry and Sam (1997), they refer to two fundamental issues facing immigrants. The first involves the decision to maintain one's culture of origin and the second to the extent to which the immigrant wishes to have contacts with and participation in the mainstream culture. Bourhis, Moïse, Perreault, and Senécal (1997) proposed a refinement by changing the nature of the second aspect, making it cultural instead of social. These authors state that the two underlying fundamental issues refer then to *maintaining* key aspects of the ethnic culture and *adopting* key aspects of the majority group.

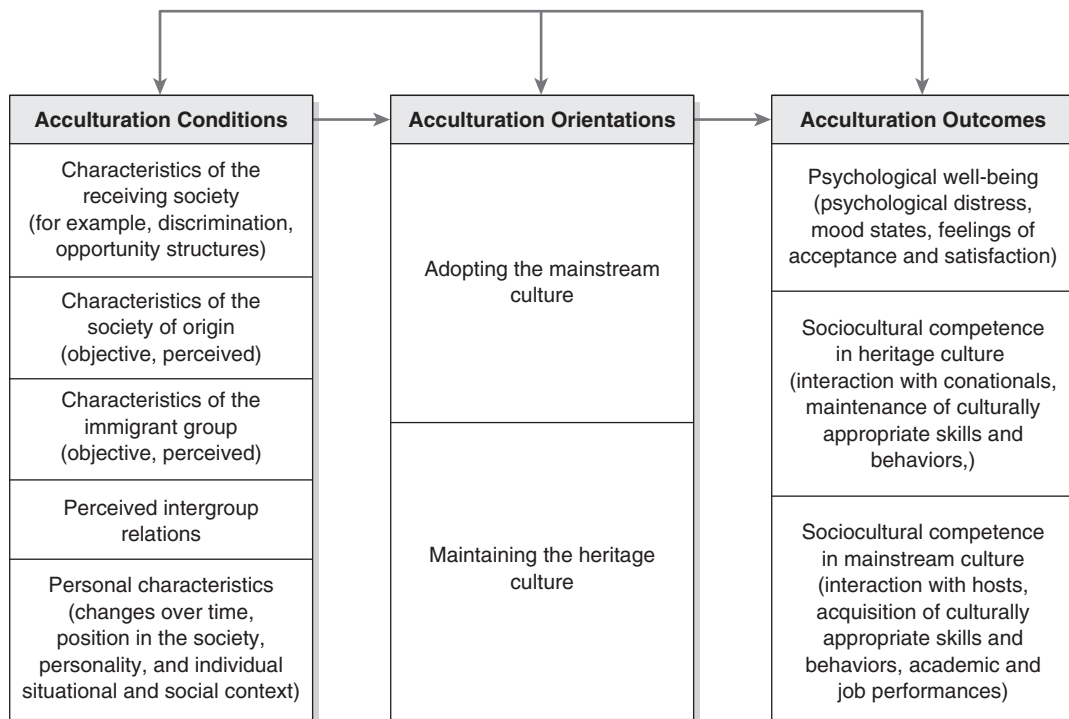


Figure 29.1 Framework of Acculturation Variables

SOURCE: Adapted from Arends-Tóth and van de Vijver (in press)

Three different models have been proposed in the literature about how the two cultures can be combined: the unidimensional model (for example, Gordon, 1964), the bidimensional model (for example, Berry & Sam, 1997), and the fusion model (for example, Hermans & Kempen, 1998). Gordon's (1964) *unidimensional* model assumes that immigrants gradually adjust to the new culture and lose their original culture. Groups emigrating from Europe to the United States exemplify this model. In Berry's *bidimensional* model of acculturation (for example, Berry & Sam, 1997), an immigrant has to deal with two questions: (1) Do I want to establish good relationships with the mainstream society? (2) Do I want to maintain good relationships with my ethnic culture? If we assume that both questions can be answered in a positive or a negative way, four types of acculturation can be defined: integration, separation, assimilation, and marginalization. *Integration* combines positive relationships with both the mainstream and ethnic culture. It is the most frequently observed acculturation style, as it enables the immigrant to establish positive contacts with the mainstream culture without losing the positive relationships with the ethnic culture. *Separation* is the acculturation strategy in which immigrants maintain good relationships with their co-ethnics without attempting to establish good relationships with the host nationals. In particular when the society of settlement has a large community of the same ethnicity as the immigrant (for example, "Chinatowns" and other large ethnic neighborhoods in American cities), separation can become an attractive option, because it does not imply a tedious learning process of mastering the new culture. *Assimilation* is the opposite of separation; it involves the complete absorption of the mainstream culture with simultaneous loss of the original language and culture. Assimilation is not popular among immigrant groups in Western Europe, except for some refugee groups who cannot or do not want to maintain relationships with their original culture. The literature supports the immigrants' dislike of assimilation in that assimilation is associated with poor psychological health (though good socio-cultural adjustment). Finally, *marginalization* is the acculturation strategy in which the immigrant does not establish positive links with the host and ethnic culture. The argument that

acculturation strategies are not a choice but a consequence of various external pressures and personal likes or dislikes holds a fortiori for marginalization. Marginalization is never the preferred choice of a whole group, but it can be the choice of cornered individuals or subgroups. For example, some second-generation Moroccan adolescents in the Netherlands have grown up in Western Europe and do not feel related to the culture of their parents; however, they are not easily accepted by the new culture. As a consequence, they may develop feelings of alienation and marginalization.

Acculturation outcomes refer to the degree of success of the acculturation process (in the broadest sense). Three kinds of outcomes can be distinguished. The first is called "psychological adjustment"; it involves the psychological condition induced by acculturation and is usually associated with well-being and mental health. The second is called "sociocultural competence in the host domain" and involves knowledge of the language and culture of the host domain. Finally, from a theoretical point of view it is also important to address the level of sociocultural competence in the ethnic culture (for example, maintenance of the linguistic skills in the heritage culture) and changes in this competence as an outcome variable.

Acculturative stress refers to the stress induced by acculturation. It is frequently studied. Although a full-fledged treatment of the topic is far beyond the scope of the present chapter, a tentative summary of the main findings may suffice to highlight the main findings. Both background variables and acculturation orientations have been found to be associated with acculturative stress. Cultural distance is probably the single best predictor of acculturative stress. It is a generic term for the size of cultural differences between the cultures of the country of origin and settlement. For example, Galchencko and van de Vijver (2007) studied stress among exchange students in Moscow from two former Soviet countries (Armenia and Georgia), Korea, China, and various sub-Saharan countries. It was found that students from the former Soviet countries experienced much less stress than students from the other countries. The perceived cultural distance between the cultures of the country of origin and settlement was an important predictor of experienced stress. Ethnic vitality, which refers

to the presence of institutions from the ethnic culture (for example, shops, schools, and places of worship) is another important background condition. High vitality tends to attenuate acculturative stress (Ait Ouarasse & van de Vijver, 2004; Bourhis et al., 1997). Important personal characteristics that are associated with more acculturative stress are neuroticism, high self-esteem, and trust in others (Bakker, Van Oudenhoven, & Van der Zee, 2004). Acculturation orientations are also relevant for experienced stress. Integration is negatively associated with stress. Marginalization is often associated with high levels of stress. The stress levels associated with assimilation and separation depend on the cultural context. Assimilation can lead to more stress when conationals do not accept assimilation by its members, but it can lead to less stress among refugees for whom cultural maintenance is not a viable option. A preference for separation can be associated with low levels of acculturative stress in an ethnically vital community, but it can lead to more stress when the ethnic vitality is low and there are few conationals.

The relevance of the concept of acculturation for psychology in multicultural societies is obvious. We need to know an immigrant's level of adaptation to the host culture for interpreting test scores in order to evaluate to what extent norms established for the mainstream group are applicable. Unfortunately, there are serious problems with acculturation as a variable in our studies. The first and most important is that we pay insufficient attention to acculturation in our studies; acculturation is still the neglected stepchild. It is regrettable that acculturation is a largely neglected variable in various domains of psychological research (van de Vijver & Phalet, 2004). The second involves the use of inadequate assessment procedures. Two kinds of variables are used to measure acculturation: "hard" and "soft" measures. The former refer to generation status (first versus second generation) or number of years spent in the host country, while the latter refer to acculturation orientations, usually measured with inventories. Both types of measures show problems. The exclusive reliance on generation status ignores important individual differences in acculturation outcomes within a generation. A problem in the assessment of acculturation orientations is the emphasis on knowledge of the language of the host country. Sociocultural adaptation involves more than

knowledge of the language (such as knowledge of the culture, school success, and job success). An adequate assessment of acculturation assumes that both hard and comprehensive soft measures are combined (Arends-Tóth & van de Vijver, in press).

CULTURAL ACCOMMODATION IN ASSESSMENT AND PSYCHOTHERAPY: RESEARCH AGENDA

When the individual fails in coping with distressful experiences, as in the acculturation process or adaptation to his or her environment, culture has historically developed systems of psychological help for the individual and/or the community (Prince, 1980). Increased globalization and technological development facilitate international mobility. Hall and Lunt (2005) have investigated the global mobility of professional psychologists and anticipated an increase in training of culturally competent psychologists who can function effectively with diverse clients and provide culturally informed and empirically supported assessment and therapy both within and across national borders. However, cross-cultural researchers report large ethnic and cultural disparities in access to mental health care (Snowden & Yamada, 2005). In the United States, for example, the Surgeon General's Report indicated that African Americans, Latinos, Asian Americans, and Native Americans have less access to, and availability of, mental health services than Euro-Americans (U.S. Department of Health and Human Services, 2001). There are many possible reasons for the disparities. Cultural differences in expectations for therapeutic help is considered as one of the basic reasons. Pfeiffer (1996) described five generic kinds of clashes of expectations between the therapist and the client. These include discrepant client expectations with regard to (1) direct versus indirect therapy style, (2) individual-based versus multilevel therapy involving significant others and community, (3) hierarchical versus egalitarian power base in therapy, (4) intrapsychic versus functional approach to the presenting problem, and (5) attention to somatic versus psychological expressions of distress. In this section, we focus on research agenda for establishing cultural accommodation for empirically supported psychotherapies and review the empirical status of

culturally distinctive therapies and alternative treatments.

In the age of evidence-based medicine and information technology, we note two major trends in research that are also relevant to cross-cultural psychotherapy. The first is the development and validation of empirically supported psychotherapies with a universal perspective for specific disorders defined by standardized criteria such as the *DSM* system. Worldwide, organizations such as the Agency for Health Care Research and Quality (AHRQ) or the Cochrane Library regularly release, on the Internet, database of effective treatments for all types of medical illnesses. Psychiatric disorders are included in both the AHRQ and Cochrane Library resources. Research is based on a scientific definition of therapeutic effectiveness, and accumulated data from controlled studies have been subject to meta-analysis in order to derive an effect size of a treatment for a particular disorder.

The second trend is research on culturally sensitive therapies. Culturally sensitive therapies are frequently equated with culturally distinctive therapies developed specific to the cultural context. Research includes narrative studies of indigenous healing practices and alternative psychological treatments that have been developed within a particular cultural context (see Gielen, Fish, & Draguns, 2005; Moodley & West, 2005; Nathan, 1994). As Prince (1980) included spirituality and altered states of consciousness as sources of healing, the literature demonstrates the wide existence of alternative therapies beyond what is routinely practiced in professional office settings in the West. These alternative therapies supported in research by narrative methods are now being introduced to comparative psychotherapy researchers and to clinical scientists (Draguns, 2004; Sollod, 2005).

Both lines of universal and culture-specific psychotherapy research have flourished in the past two decades with important implications for the helping profession in multicultural societies. Pedersen (1997) advocates that all psychotherapies are culture centered and multiculturalism is generic to all therapeutic relationships. Since cultural bases of psychotherapies are different, expectations for and receptivity of specific therapies would naturally differ across client cultural groups. In fact, Hall (2001a) has noted the discrepancies between culturally sensitive therapies and empirically supported therapies. He argues

that many culturally sensitive therapies as yet lack sound empirical support, as they have not been subject to scientific assessment. For example, *Naikan* therapy developed in Japan is considered sensitive to Japanese culture, emphasizing specific interpersonal themes by way of concentrated self-reflection, but this therapy has not been subject to randomized controlled trials to establish scientific efficacy (Tanaka-Matsumi, 2004). Empirically supported psychological interventions have only recently begun incorporating assessment of diversity issues (Miranda et al., 2005; Okazaki & Tanaka-Matsumi, in press). In a comprehensive review and evaluation of empirically supported psychotherapies, Ross and Fonagy (2005) noted that psychotherapy outcome research restricted sampling of clients from largely Caucasian groups from North American or European cultural backgrounds. Cultural accommodation of empirically supported therapies is therefore a major research agenda in psychotherapy research across cultures of both clients and therapists (Hays & Iwamasa, in press).

Cultural Accommodation

The goal of cultural accommodation in cross-cultural psychotherapy is the integration of the cultural context with the design of clinical services. The cultural accommodation criteria include (1) culture-relevant definitions of abnormal behavior; (2) culturally accepted norms of role behavior; (3) expectations of social influence techniques; and (4) approved helping service providers (Tanaka-Matsumi, Higginbotham, & Chang, 2002). Psychological service systems that fail to meet these criteria increase the cultural distance between the therapist and the client. Further, as reviewed by Sue (1998) and Draguns (2002), cross-cultural therapy shares five features: (1) cultural adaptation of techniques; (2) reduction of cultural distance between the therapist and the client; (3) knowledge of culture specific modes of self-presentation; (4) recognition of cross-cultural differences in the communication of distress; and (5) recognition of cross-cultural variations in normative stress coping styles. Based on the current knowledge of assessment of psychopathology across and within cultures (Draguns & Tanaka-Matsumi, 2003), we examine the extent to which empirically supported therapies meet these cultural accommodation criteria.

Empirically Supported Therapies and Cultural Diversity

Currently, there are two criteria for evaluating effectiveness of empirically supported psychotherapy outcome. Distinctions are drawn between the scientific *efficacy* of a therapy in the setting of an experimental research study and the clinical *effectiveness* in the naturalistic setting in routine practice (Chambless & Ollendick, 2001). The tension between controlled measures of treatment efficacy and assessment of clinical effectiveness has direct bearing on cross-cultural applicability of empirically supported therapies. Empirically supported therapies are scientifically efficacious and internally valid. However, their external-ecological validity is not guaranteed (Borkovec, Ragusea, & Ruiz, 2001). Establishing a link between treatment efficacy and clinical effectiveness with culturally diverse client groups is an urgent research goal (Hall, 2001a).

Empirically supported treatments are defined according to several criteria. Efficacy studies are based on randomized controlled trials to demonstrate internal validity of a particular treatment. The Task Force on Promotion and Dissemination of Psychological Procedures of Division 12 (Clinical Psychology) of the American Psychological Association issued three reports on empirically validated treatments (Task Force on Promotion and Dissemination of Psychological Procedures, 1995; see also Chambless & Ollendick, 2001). In addition to randomized controlled trials, as criteria for scientifically efficacious treatment, the task force required the development of a therapist manual, detailed descriptions of psychotherapy research participants, and at least two independent scientific studies with significant results. Treatments that have met these efficacy criteria are classified as "well-established" empirically supported treatments. Many of these treatments use cognitive behavior therapy and are specific to disorders typically based on the *DSM* system. A total of 108 treatments for adults and 37 for children have been recognized as well-established treatments for various psychological disorders by the Division 12 Task Force of the American Psychological Association (Chambless & Ollendick, 2001). Ross and Fonagy (2005) have also reached similar conclusions in Great Britain. Examples of disorders for which efficacious psychological treatment exist include

major depression, panic disorder, social phobia, bulimia, post-traumatic stress disorder, as well as psychophysical problems such as tension headaches and rheumatoid arthritis. Miranda et al. (2005) have recently addressed the ethnocultural relevance of these treatments in their review of "the state of the science of psychosocial interventions for ethnic minorities" in the United States. They note that some evidence demonstrates that culturally sensitive applications of cognitive behavior therapy can be successful with youths from diverse cultural backgrounds. In Puerto Rico, for example, clinical researchers have culturally adapted cognitive behavior therapy and interpersonal psychotherapy to include such factors as *familism* and *respeto* within the interventions (Bernal, Bonilla, & Bellido, 1995). Miranda et al. (2005) have also identified that evidence-based cognitive behavior therapy improves outcome for African Americans and Latinos in the United States with equivalent or better results than for White Americans. Miranda et al. concluded their review: "A particularly important yet unanswered question is the extent to which interventions need to be culturally adapted to be effective for minority populations. The efficacy literature provides little insight into this area" (p. 134).

Multicultural Assessment Protocols

To meet cultural accommodation criteria, several assessment protocols are already available. Table 29.4 summarizes the main content of six models of culturally informed assessment as reviewed in Okazaki & Tanaka-Matsumi (in press). To different degrees, these interview-based protocols have in common assessment of the client's cultural identity, use of local language and idioms of distress, client's perceived causes of problems, and client's social network. These assessments are designed to increase the cultural relevance of a case formulation by generating detailed, culturally relevant information regarding the client's presenting problem.

Using guidelines adapted from the Culturally Informed Functional Assessment (CIFA) Interview (Tanaka-Matsumi, Seiden, & Lam, 1996), Seiden (1999) evaluated the adequacy of cross-cultural behavior therapy case formulations of four immigrant Chinese clients in New York who met criteria for the Chinese syndrome of neurasthenia (*shenjing shuaiuro*) and had

Table 29.4 Models of Cross-Cultural Assessment for Case Formulation

<i>Assessment Model</i>	<i>Author(s)</i>	<i>Assessment Content</i>
The Explanatory Model Interview Catalogue (EMIC)	Weiss et al. (1992)	<ul style="list-style-type: none"> • Patterns of distress using local idioms of distress • Perceived causes of problem • Help seeking behavior and treatment • General illness beliefs • Specific queries concerning the problem
The <i>DSM-IV-TR</i> Outline for Cultural Case Formulation	American Psychiatric Association (2000)	<ul style="list-style-type: none"> • Cultural identity of the individual • Cultural explanations of the individual's illness (for example, cultural idioms of distress) • Cultural factors related to psychosocial environment and levels of functioning • Cultural elements of the relationship between the individual and the clinician • Overall cultural assessment necessary for diagnosis and care
The Culturally Informed Functional Assessment (CIFA) Interview	Tanaka-Matsumi, Seiden, & Lam (1996)	<ul style="list-style-type: none"> • Client's cultural identity and acculturation • Presenting problems • Client's causal-explanatory model of the problem • Functional assessment • Comparison and negotiation of causal explanatory model • Treatment variables: goals, target behaviors, change agent's techniques • Data collection method • Discussion of treatment duration, course, and expected outcome
The Multicultural Assessment Procedure (MAP)	Ridley, Li, & Hill (1998)	<ul style="list-style-type: none"> • Identifying cultural data • Interpreting cultural data • Incorporating cultural data • Arriving at a sound assessment decision
Bicultural Evaluation	Evans & Paewai (1999)	<ul style="list-style-type: none"> • Client's cultural identity • Client's own idioms of distress • Family support/reinforcement of problem behavior • Challenged family • Triggers for behavior • Cultural context of triggers • Automatic thoughts preceding the target behavior • Culturally accepted alternative behavior • Conflict with values and expectations of client's current social group • Implications of changing the client's social group • Access to culturally relevant social support • Conflicting demand assessment • Metaphors of health and well-being in the client's primary cultural group • Ancestral heritage, history, background, and developmental context • Client's motivation for change motivation for change in terms of victimization, recognition of interdependence on others

<i>Assessment Model</i>	<i>Author(s)</i>	<i>Assessment Content</i>
The ADDRESSING Framework	Hays (2001)	<ul style="list-style-type: none"> • Age • Developmental and acquired disabilities • Religion and spirituality • Ethnicity • Socioeconomic status • Sexual orientation • Indigenous heritage • National origin • Gender

multiple somatic problems. In this study, 18 Chinese American and 31 European American behavior therapists individually watched an English-subtitled videotape of a functional assessment interview with Chinese clients. The results supported the utility of the CIFA for gathering reliable culture-relevant functional assessment data during the interview and to develop culturally informed case formulation. The results also revealed cross-cultural differences in the way clinicians attend to what they judge to be salient content of cross-culturally valid categories in functional assessment. Multicultural Assessment Procedure (MAP; Ridley, Li, & Hill, 1998) takes a hypothesis testing approach and provides step-by-step recommendations for culturally sensitive case formulation with people of diverse cultures. Knowledge of indigenous views and explanatory models of illness is fundamental to understanding the cultural context of presenting problems. The culturally relevant, descriptive information gathered via the EMIC (Weiss et al., 1994) can be useful in clinical assessment, as it provides therapists with information regarding the client's local language and cultural idioms of distress. Guarnaccia, Rivera, Franco, and Neighbors (1996) applied the EMIC to investigate and describe the social context and subjective experiences of *Ataques de Nervios* in Puerto Rico. They found that it was the second most prevalent psychiatric disorder in Puerto Rico after generalized anxiety disorder. Originally designed for culture-sensitive assessment of Maoris in New Zealand, Evans and Paewai's (1999) comprehensive bicultural assessment provides a model for using multiple sources of data and for evaluating the reliability and validity of culture-relevant

data. The generic steps can readily be applied to other cross-cultural situations.

In summary, the therapist's knowledge of the client's cultural definitions of problem behavior and cultural norms regarding behavior, change strategies, and the culturally approved change agents will enhance the degree of cultural accommodation (Tanaka-Matsumi, 2004). Assessment will then be more accurate and useful. The cross-cultural and multicultural application of empirically supported psychotherapies depends on the demonstration of cultural accommodation of specific treatments and measurement of clinical effectiveness in the naturalistic practice setting.

International Collaboration of Psychotherapists in Research

Orlinsky and Rønnestad (2005) have published a book on an ongoing project "International Study of the Development of Psychotherapists (IDSP)" and established a multinational database of 3,795 psychotherapists from countries using a 392-item scale, the Development of Psychotherapists Common Core Questionnaire (DPCCOQ) that covers many areas, including psychotherapist's personal background, training, current theoretical orientation and approach to therapy (Orlinsky et al., 1999). The DPCCOQ has been translated into 16 languages. The authors have identified three factors as core concepts in understanding the personal and professional development of psychotherapists at various points in their careers. These are healing involvement, stressful involvement, and controlling involvement. This largest international database ever developed on practicing

psychotherapists may reveal cross-cultural variations in types of therapist-client relationships (for example, supportive versus directive) psychotherapists prefer building in accordance with the self-orientation in cultural context (Hall, 2001b). In this connection, Division 29 Task Force of the American Psychological Association on Empirically Supported Therapy Relationships (Ackerman et al., 2001; Norcross, 2001) has concluded that adapting or tailoring the therapy relationship to specific client needs enhances the effectiveness of treatment. These two major psychotherapy projects underscore the importance of recognizing psychological interventions as a social influence process within a particular cultural context.

CONCLUSION

The chapter has reviewed issues in cross-cultural research methods in abnormal and clinical psychology. The first part of the chapter described a general framework, borrowed from cross-cultural psychology, in which bias and equivalence are key concepts. The second part described several sets of criteria that have been developed to evaluate the cultural accommodation of clinical interventions. Various creative and presumably relevant models for cross-cultural assessment and therapy have been formulated in the literature. However, there is a paucity of studies in which rigorous methodological standards are applied to evaluate the efficacy and effectiveness of culture-informed assessment and psychotherapy. The need for culture-specific clinical services will increase in the near future. Furthermore, psychology will be increasingly challenged to demonstrate that its services are evidence based. It can be expected, therefore, that there will be an increased need for systematic studies of assessment and psychotherapy in which cultural factors have been accommodated. The core elements of these studies are available; there is an expanding database on culture-informed assessment and psychotherapy, and the methodological tools needed for their evaluation are available. We hope that the current chapter may help invigorate this field.

REFERENCES

- Ackerman, S. J., Benjamin, L. S., Beutler, L. E., Gelso, C. J., Goldfried, M. R., Hill, C., Lambert, M. J., Norcross, J. C., & Rainer, J. (2001). Empirically supported therapy relationships: Conclusions and recommendations of the Division 29 Task Force. *Psychotherapy*, 38, 495–497.
- Ait Ouarrasse, O., & van de Vijver, F. J. R. (2004). Structure and function of the perceived acculturation context of young Moroccans in the Netherlands. *International Journal of Psychology*, 39, 190–204.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders IV-TR* (4th ed., text rev.) Washington, DC: Author.
- Arends-Tóth, J., & van de Vijver, F. J. R. (in press). Assessment of psychological acculturation: Choices in designing an instrument. In D. L. Sam & J. W. Berry (Eds.), *Handbook of acculturation psychology*. Cambridge, UK: Cambridge University Press.
- Arrindell, W. A., & Albersnagel, F. A. (1999). Alloctonen en de geestelijke gezondheidszorg [Immigrant groups and mental health care]. *Handboek klinische psychologie* (pp. 3–28). Houten, Netherlands: Bohn, Stafleu, Van Loghum.
- Azhar, M. Z., & Varma, S. L. (2000). Mental illness and its treatment in Malaysia. In I. Al-Issa (Ed.), *Al-Junun: Mental illness in the Islamic world* (pp. 163–186). Madison, CT: International Universities Press.
- Bakker, W., Van Oudenhoven, J. P., & Van der Zee, K. I. (2004). Attachment styles, personality, and Dutch emigrants' intercultural adjustment. *European Journal of Personality*, 18, 387–404.
- 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.
- Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcomes research: Issues for cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, 23, 67–82.
- Berry, J. W., & Sam, D. L. (1997). Acculturation and adaptation. In J. W. Berry, M. H. Segall, & C. Kagitçibasi (Eds.), *Handbook of cross-cultural psychology: Social behavior and applications* (2nd ed.; Vol. 3; pp. 291–326). Boston: Allyn & Bacon.
- Borkovec, T. D., Ragusea, S. A., & Ruiz, M. (2001). The Pennsylvania Practice Research Network and future possibilities for clinically meaningful and scientifically rigorous psychotherapy effectiveness research. *Clinical Psychology: Science and Practice*, 8, 155–167.
- Boss, L. P. (1997). Epidemic hysteria: A review of the published literature. *Epidemiologic Reviews*, 19, 233–243.

- Bourhis, R. Y., Moïse, L. C., Perreault, S., & Sénécal, S. (1997). Towards an interactive acculturative model: A social psychological approach. *International Journal of Psychology, 3*, 369–386.
- Camilli, G., & Shepard, L. A. (1994). *Methods for identifying biased test items*. Thousand Oaks, CA: Sage.
- Campbell, D. T. (1986). Science's social system of validity-enhancing collective believe change and the problems of the social sciences. In D. W. Fiske & R. A. Shweder (Eds.), *Metatheory in social science* (pp. 108–135). Chicago: University of Chicago Press.
- Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology, 52*, 685–716.
- Draguns, J. G. (2002). Universal and cultural aspects of counseling and psychotherapy. In P. B. Pedersen, W. J. Lonner, J. G. Draguns, & J. E. Trimble (Eds.), *Counseling across cultures* (5th ed.; pp. 29–50). Thousand Oaks, CA: Sage.
- Draguns, J. G. (2004). From speculation through description toward investigation: A prospective glimpse at cultural research in psychotherapy. In U. P. Gielen, J. M. Fish, & J. G. Draguns (Eds.), *Handbook of culture, therapy, and healing* (pp. 369–387). Mahwah, NJ: Lawrence Erlbaum.
- Draguns, J. G., & Tanaka-Matsumi, J. (2003). Assessment of psychopathology across and within cultures: Issues and findings. *Behaviour Research and Therapy, 41*, 755–794.
- Evans, I. M., & Paewai, K. (1999). Functional analysis in a bicultural context. *Behaviour Change, 16*, 20–36.
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire*. London: Hodder & Stoughton.
- Galchencko, I., & van de Vijver, F. J. R. (2007). The role of perceived cultural distance in the acculturation of exchange students in Russia. *International Journal of Intercultural Relations, 31*(2), 181–197.
- Gass, S. M., & Varonis, E. M. (1991). Miscommunication in nonnative speaker discourse. In N. Coupland, H. Giles, & J. M. Wiemann (Eds.), *Miscommunication and problematic talk* (pp. 121–145). Newbury Park, CA: Sage.
- Georgas, J., Berry, J. W., van de Vijver, F. J. R., Poortinga, Y. H., & Kagitçibasi, C. (Eds.) (2006). *Psychological variations in family structure and function across cultures*. New York: Cambridge University Press.
- Gielen, U. P., Fish, J. M., & Draguns, J. G. (Eds.) (2005). *Handbook of culture, therapy, and healing*. Mahwah, NJ: Lawrence Erlbaum.
- Gordon, M. M. (1964). *Assimilation in American life: The role of race, religion, and national origins*. New York: Oxford University Press.
- Grill, J. J., & Bartel, N. R. (1977). Language bias in tests: ITPA grammatic closure. *Journal of Learning Disabilities, 10*, 229–235.
- Guarnaccia, P. J., Rivera, M., Franco, F., & Neighbors, C. (1996). The experiences of *ataques de nervios*: Towards an anthropology of emotions in Puerto Rico. *Culture, Medicine and Psychiatry, 10*, 343–367.
- Hall, G. C. N. (2001a). Psychotherapy research with ethnic minorities: Empirical, ethical, and conceptual issues. *Journal of Consulting and Clinical Psychology, 69*, 502–510.
- Hall, G. C. N. (2001b). The self in context: Implications for psychopathology and psychotherapy. *Journal of Psychotherapy Integration, 13*, 66–82.
- Hall, J. E., & Lunt, I. (2005). Global mobility for psychologists: The role of psychology organizations in the United States, Canada, Europe, and other regions. *American Psychologists, 60*, 712–726.
- Hambleton, R. K. (1994). Guidelines for adapting educational and psychological tests are in: A progress report. *European Journal of Psychological Assessment, 10*, 229–244.
- Hays, P., & Iwamasa, G. Y. (Eds.). (in press). *Cognitive behavior therapy with culturally diverse populations*. Washington, DC: American Psychological Association.
- Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist, 53*, 1111–1120.
- 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.
- Hui, C. H., & Triandis, H. C. (1989). Effects of culture and response format on extreme response style. *Journal of Cross-Cultural Psychology, 20*, 296–309.
- Interian, A., Guarnaccia, P. J., Vega, W. A., Gara, M. A., Like, R. C., Escobar, J. I., & Diaz-Martinez, A. M. (2005). The relationship between *Ataque de Nervios* and unexplained neurological symptoms: A preliminary analysis. *Journal of Nervous and Mental Disease, 193*, 32–39.
- Jensen, A. R. (1980). *Bias in mental testing*. New York: Free Press.
- Johnson, T. P. (1998). Approaches to equivalence in cross-cultural and cross-national survey research. *ZUMA Nachrichten, 3*, 1–40.
- Karasz, A. (2005). Cultural differences in conceptual models of depression. *Social Science and Medicine, 60*, 1625–1635.
- Kirmayer, L. J. (2001). Cultural variations in the clinical presentation of depression and anxiety: Implications for diagnosis and treatment. *Journal of Clinical Psychiatry, 62*, 22–28.

- Kleinman, A. M. (1977). Depression, somatization and the new cross-cultural psychiatry. *Social Science and Medicine*, 11, 3–10.
- Knipscheer, J. W. (2000). *Cultural convergence and divergence in mental health care: Empirical studies on mental distress and help-seeking behaviour of Surinamese, Ghanaian, Turkish and Moroccan migrants in the Netherlands*. Veenendaal, Netherlands: Universal Press.
- McCrae, R. R., & Allik, J. (2002). (Eds.). *The five-factor model of personality across cultures*. New York: Kluwer Academic/Plenum.
- 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 Psychology*, 31, 1–8.
- Miranda, J., Bernal, G., Lau, A., Kohn, L., Hwang, W. C., & LaFromboise, T. (2005). State of the science on psychosocial interventions for ethnic minorities. *Annual Review of Clinical Psychology*, 1, 113–142.
- Moodley, R., & West, R. (2005). *Integrating traditional healing practices into counseling and psychotherapy*. Thousand Oaks, CA: Sage.
- Mumford, D. B. (1993). Eating disorders in different cultures. *International Review of Psychiatry*, 5, 109–113.
- Nathan, T. (1994). *L'influence qui quérît* [The healing influence]. Paris: Odile Jacob.
- Neary, I. (2000). Rights and psychiatric patients in East Asia. *Japan Forum*, 12, 157–168.
- Norcross, J. C. (2001). Purposes, processes, and products of the Task Force on Empirically Supported Therapy Relationships. *Psychotherapy*, 38, 345–356.
- Okazaki, S., & Tanaka-Matsumi, J. (in press). Cultural considerations in cognitive-behavioral assessment. In P. Hays & G. Y. Iwamasa (Eds.), *Cognitive behavior therapy with culturally diverse populations*. Washington, DC: American Psychological Association.
- Orlinsky, D. E., & Rønnestad, M. H. (2005). *How psychotherapists develop: A study of therapeutic work and professional growth*. Washington, DC: American Psychological Association.
- Orlinsky, D. E., Rønnestad, M. H., Ambühl, H., Willutzki, U., Botermans, J., Cierpka, M., Davis, J., & Davis, M. (1999). Psychotherapists' assessments of their development at different career levels. *Psychotherapy*, 36, 204–215.
- Paniagua, F. A. (2000). Culture-bound syndromes, cultural variations, and psychopathology. In I. Cuéllar & F. A. Paniagua (Eds.), *Handbook of multicultural mental health* (pp. 142–170). San Diego, CA: Academic Press.
- Pedersen, P. B. (1997). *Culture-centered counseling interventions: Striving for accuracy*. Thousand Oaks, CA: Sage.
- Pfeiffer, W. M. (1996). Kulturpsychiatrische Aspekte der Migration. In E. Koch, M. Özek, & W. M. Pfeiffer (Eds.), *Psychologie und Pathologie der Migration* [Cultural psychiatric aspects of migration] (pp. 17–30). Freiburg/Breisgau: Lambertus.
- Piswanger, K. (1975). *Interkulturelle Vergleiche mit dem Matrizenest von Formann* [Cross-cultural comparisons with Formann's Matrices Test]. Unpublished doctoral dissertation, University of Vienna.
- Prince, R. (1980). Variations in psychotherapeutic procedures. In H. C. Trandis & J. G. Draguns (Eds.), *Handbook of cross-cultural psychology. Psychopathology* (Vol. 6; pp. 291–350). Boston: Allyn & Bacon.
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum on the study of acculturation. *American Anthropologist*, 38, 149–152.
- Ridley, C. R., Li, L. C., & Hill, C. L. (1998). Multicultural assessment: Reexamination, reconceptualization, and practical application. *Counseling Psychologist*, 26, 827–910.
- Ross, A., & Fonagy, P. (2005). *What works for whom? A critical review of psychotherapy research* (2nd ed.). New York: Guilford.
- Seiden, D. Y. (1999). *Cross-cultural behavioral case formulation with Chinese Neurasthenic patients*. Unpublished doctoral dissertation, Hofstra University, Hempstead, NY.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580–591.
- Snowden, L. R., & Yamada, A. M. (2005). Cultural differences in access to care. *Annual Review of Clinical Psychology*, 1, 143–166.
- Sollod, R. N. (2005). Spiritual and healing approaches in psychotherapeutic practice. In R. Moodley & R. West (Eds.), *Integrating traditional healing practices into counseling and psychotherapy* (pp. 270–281). Thousand Oaks, CA: Sage.
- Sue, S. (1998). In search of cultural competence in psychotherapy and counseling. *American Psychologist*, 53, 440–448.
- Suzuki, K., Takei, N., Kawai, M., Minabe, Y., & Mori, N. (2003). Is Taijin Kyofusho a culture-bound syndrome? *American Journal of Psychiatry*, 160, 1358.
- Tanaka-Matsumi, J. (2001). Abnormal psychology and culture. In D. Matsumoto (Ed.), *The handbook of culture and psychology* (pp. 265–286). New York: Oxford University Press.
- Tanaka-Matsumi, J. (2004). Behavioral assessment and individual differences. In M. Hersen, S. Haynes, & E. M. Heiby (Eds.), *The comprehensive handbook of assessment. Vol. 3: Behavioral Assessment* (pp. 359–393). New York: Wiley.

- Tanaka-Matsumi, J., & Draguns, J. G. (1997). Culture and psychotherapy. In J. W. Berry, M. H. Segall, & C. Kagitçibasi (Eds.), *Handbook of cross-cultural psychology* (Vol. 3; pp. 449–491). Needham Heights, MA: Allyn & Bacon.
- Tanaka-Matsumi, J., Higginbotham, H. N., & Chang, R. (2002). Cognitive-behavioral approaches to counseling across cultures: A functional analytic approach for clinical applications. In P. B. Pedersen, W. J. Lonner, J. G. Draguns, & J. E. Trimble (Eds.), *Counseling across cultures* (5th ed.; pp. 337–354). Thousand Oaks, CA: Sage.
- Tanaka-Matsumi, J., Seiden, D., & Lam, K. (1996). The Culturally Informed Functional Assessment (CIFA) Interview: A strategy for cross-cultural behavioral practice. *Cognitive and Behavioral Practice*, 3, 215–233.
- Tanzer, N. K., & Sim, C. Q. E. (1991). *Test anxiety in primary school students: An empirical study in Singapore*. Research Report 1991/6. Graz, Austria: University of Graz, Department of Psychology.
- Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training in and dissemination of empirically-validated psychological treatments: Report and recommendations. *Clinical Psychologist*, 48, 3–23.
- Tolin, D. F., Robison, J. T., Gaztambide, S., Horowitz, S., & Blank, K. (in press). *Ataques de Nervios* and psychiatric disorders in older Puerto Rican primary care patients. *Journal of Cross-Cultural Psychology*.
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity. A supplement to mental health: A report of the Surgeon General*. Rockville, MD: Author.
- van de Vijver, F. J. R. (1997). Meta-analysis of cross-cultural comparisons of cognitive test performance. *Journal of Cross-Cultural Psychology*, 28, 678–709.
- van de Vijver, F. J. R. (in press). *Culture and psychology: A SWOT analysis of cross-cultural psychology*. Proceedings with invited keynotes of the IUPsyS conference, Beijing, 2004.
- van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.
- van de Vijver, F. J. R., & Phalet, K. (2004). Assessment in multicultural groups: The role of acculturation. *Applied Psychology: An International Review*, 53, 215–236.
- Van Hemert, D. A., van de Vijver, F. J. R., & Poortinga, Y. H. (2002). The Beck Depression Inventory as a measure of subjective well-being: A cross-national study. *Journal of Happiness Studies*, 3, 257–286.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. London: Routledge.
- Weiss, M. G., Doongaji, D. R., Siddhartha, S., Wypij, D., Pathare, S., Bhatawdekar, M., Bhave, A., Sheth, A., & Fernandes, R. (1992). The Explanatory Model Interview Catalogue (EMIC) contribution to cross-cultural research methods from a study of leprosy and mental health. *British Journal of Psychiatry*, 160, 819–830.
- Werner, O., & Campbell, D. T. (1970). Translating, working through interpreters, and the problem of decentering. In R. Naroll & R. Cohen (Eds.), *A handbook of cultural anthropology* (pp. 398–419). New York: American Museum of Natural History.
- Wildes, J. E., Emery, R. E., & Simons, A. D. (2001). The roles of ethnicity and culture in the development of eating disturbance and body dissatisfaction: A meta-analytic review. *Clinical Psychology Review*, 21, 521–551.
- Yen, S., Robbins, C. J., & Lin, N. (2000). A cross-cultural comparison of depressive symptom manifestation: China and the United States. *Journal of Consulting and Clinical Psychology*, 68, 993–999.