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Assessment in Multicultural Groups: The Role of Acculturation

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On analyse le rôle de l’acculturation dans l’évaluation des groupes multiculturels. Des procédures standardisées doivent être développées pour prendre en compte la composition multiculturelle des sociétés contemporaines où les individus, relevantes de références culturelles multiples, ne disposent pas de l’aisance culturelle et langagière que les procédures d’évaluation présupposent lors de la passation des tests psychologie et d’éducation. La première partie de l’article présente un bref survol des modèles d’acculturation et souligne la pertinence de l’acculturation dans le testing multiculturel. La seconde partie aborde des questions conceptuelles et méthodologiques dans l’évaluation de l’acculturation. S’ensuit une discussion sur la façon dont l’acculturation peut être prise en compte dans l’évaluation des groupes multiculturels, par exemple en établissant différentes normes pour des groupes culturels différents, en ajoutant une correction pour le statut d’acculturation, ou en évaluant l’acculturation et en utilisant ce score en covariation ou comme valeur seuil, ce qui décidera si oui ou non un résultat à un test peut être interprété valablement.

The role of acculturation in assessment in multicultural groups is discussed. It is argued that standard procedures are to be developed to deal with the multicultural composition of today’s societies, in which clients come from various cultural backgrounds and do not have the familiarity with the language and culture of the psychological and educational tests that is implicitly assumed in the assessment procedure. The first part presents a brief overview of acculturation models and points out the relevance of acculturation in multicultural testing. The second part of the paper discusses conceptual and methodological issues in the assessment of acculturation. This is followed by a discussion of ways in which acculturation can be taken into account in assessing multicultural groups, such as establishing different norms for different cultural groups,

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adding a “correction” for acculturation status, or assessing acculturation, and using this score either as a covariate or as a threshold value that determines whether or not a score on a target instrument can be interpreted adequately. Implications are discussed.

INTRODUCTION

Many societies have become multicultural. Immigration has become a prominent and presumably permanent feature of many countries. Let us present just a few, arbitrarily chosen examples. In public schools in Chicago over 200 languages are spoken (Bracken & McCallum, 2001, p. 408). According to Sue (1991), in 2010 more than half of the population of the USA will be composed of ethnic groups. Ireland has always been an emigration country, but undoubtedly fueled by the rapid economic growth of the last decade, the migration stream has reversed and many migrants have sought permanent residence. The most popular boy’s first name in Amsterdam is Mohammed (popular among the city’s Turkish and Moroccan inhabitants). For all Western countries such telling figures could be presented, demonstrating the changed population composition. These changes have, or at least should have, an impact on psychology. In the present article we will focus on a topic that is relevant though often overlooked: the role of acculturation in assessment.

The first scientists to study acculturation were sociologists and anthropologists, interested in group-level changes following migration. The first definition of acculturation was proffered 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 notion of continuous first-hand intercultural contacts has become important in the literature (Berry & Sam, 1997; Cuéllar, 2000a; Suzuki, Ponterotto, & Meller, 2001; Ward, Bochner, & Furnham, 2001). The definition implicitly seems to refer to a contact of groups with equal resources. This aspect of the definition is less suitable in the context of this article. In immigration into Western societies there is not an encounter of two equally powerful groups; the mainstream population in the country of settlement is almost always more powerful than the migrating groups.

Two influential types of acculturation models have been proposed in the literature, depending on whether acculturation is seen as a unidimensional or a bidimensional process. The best-known unidimensional model has been proposed by Gordon (1964). It assumes that acculturation is a process of
change in the direction of the mainstream culture. Migrants may differ in the speed of the process, but the outcome invariably is adaptation to the mainstream culture. In recent decades unidimensional models of change have come under critical scrutiny. Increasingly, migrants prefer other options than pursuing complete adjustment, either by developing a bicultural identity or by retaining the original culture without extensively adjusting to the society of settlement. This global trend is probably fueled by two factors. The first is the sheer magnitude of migration. For example, the Hispanic population in the USA has gained sufficient momentum to develop and sustain its own culturally vital institutions such as education, health care, and religion. Second, the Zeitgeist of the assimilationist doctrine among mainstreamers has gradually given way to a climate in which more cultural maintenance of migrants is accepted.

In line with these societal developments, bidimensional models have replaced the unidimensional models of acculturation. Currently the most popular model has been proposed by Berry (Berry & Sam, 1997). A migrant is supposed to have to deal with two questions. First, do I want to establish good relationships with the host culture (adaptation dimension)? The second question involves cultural maintenance: Do I want to maintain good relations with my native culture (the word native is used here as a generic term for the country of origin and does not refer to the original inhabitants of a country, as in “Native Americans”)? For simplicity of presentation the answers to the two questions are taken to be dichotomous, thereby creating the scheme of Table 1. The first strategy, integration, amounts to biculturalism, the combination of both cultures. Empirical studies consistently show a preference for this strategy. For example, studies in Belgium and the Netherlands invariably find that migrants want to combine their native culture with the mainstream culture (e.g. Phalet & Hagendoorn, 1996; Phalet, Van Lotringen, & Entzinger, 2000; Van de Vijver, Helms-Lorenz, & Feltzer, 1999). The second strategy, called separation (in sociology and demography also labeled segregation), implies that the original culture is maintained and that relationships with the host culture are not considered important. The opposite of this strategy is assimilation, which aims at complete absorption into the host culture and implies the loss of the original culture. In Gordon’s (1964) linear assimilation model is the only existing and viable acculturation strategy. The last and most infrequently observed strategy is marginalisation. It involves the loss of the original culture without establishing ties with the new culture. In some countries youth, often second or third generation, show marginalisation; they do not feel related to the parental culture and they do not want or are not allowed to establish strong ties with the host culture (e.g. because of societal discrimination or exclusion). Although the psychological literature on acculturation shows a strong social-psychological inclination, it is clear that acculturation is multifaceted and affects not only attitudes
and norms, but also has important cognitive ramifications (e.g. learning a new language). In particular when the actual or perceived cultural distance between original and host culture is large, there is indeed no psychological area that remains unaffected by migration.

Why is acculturation so important for assessment in plural groups? In the context of the present article the culture maintenance dimension is usually less relevant than the adjustment dimension. From an assessment perspective, the position of a person on the latter dimension (from now on treated as a continuum rather than as a dichotomy) provides an answer to two related questions: First, can this person be considered to belong to the population for which the test or scale has been developed? Second, is this instrument suitable for this particular person to measure the intended construct? Assessment outcomes have to be interpreted with the answers to these questions in mind (Dana, 1998). Simply assuming that all tests available can be used in minority groups or that no test is valid for minority groups challenges the quality of service delivery; acculturation is better seen as an important moderator of test performance in plural groups (Cuéllar, 2000b).

It is regrettable that assessment of acculturation is not an integral part of assessment in multicultural groups (or ethnic groups in general) when mainstream instruments are used among migrants. Because in cross-cultural psychology various measures of acculturation have been developed, which do not seem to be widely known let alone applied, the first part of the paper presents various assessment tools. The second part of the paper considers the question how we can deal with acculturation in multicultural assessment. The final section is devoted to future topics in multicultural assessment.

**ASSESSMENT OF ACCULTURATION**

Multicultural assessment can build on a long tradition of bias analysis in cross-cultural psychology (Van de Vijver & Tanzer, 1997). In examining cultural differences, cross-cultural psychologists have mostly relied on...
cross-national designs to compare individuals with either a Western or a non-Western cultural background. Individuals are typically approached as members of a single cultural unit. Different cultures are conceived as largely shared, unchanging, and internalised sets of beliefs, values, and practices, which are transmitted across generations, and which direct or constrain human behavior-in-context (Schönpflug, 2001). As contemporary societies have become increasingly multicultural, a growing number of people have access to dual (or multiple) cultures and identities. They are coping with the hassles of cross-cultural transition (Berry, Kim, Minde, & Mok, 1987) and the burden of immigrant or minority status (Moghaddam, 1988). They are learning more than one culture (Church, 1982) and engaging in “cultural frame switching” (Lafromboise, Coleman, & Gerton, 1993). More often than not, they have to overcome formidable barriers of social disadvantage and ethnic discrimination to improve their status in the host society (Kagitçibasi, 1997).

Accordingly, cross-cultural psychologists have developed an interest in the psychological processes associated with acculturation and minority status. The psychological adaptation of migrants and minorities has been related to a range of exogenous variables, such as length of residence, generational status, education, language mastery, social disadvantage, and cultural distance (Aycan & Berry, 1996; Ward & Searle, 1991). But individual differences in cognitive, emotional, and motivational determinants of acculturation are less well researched. Across cultures, however, there is ample evidence that individuals differ in their level and strategy of acculturation (Church, 1982; Phalet & Hagendoorn, 1996). To take into account these individual differences, psychological assessment has to go beyond group comparisons of “more or less acculturated” minority groups. Individual differences in psychological acculturation are to be measured using standard psychological and educational assessment.

In this section, new trends and current issues in the conceptualisation and measurement of acculturation are briefly reviewed. In particular, four recent developments and discussions in acculturation research are discussed: (a) maintenance and adaptation dimensions and measures; (b) contact, change, and identity aspects of adaptation; (c) domain specificity; (d) psychological and sociocultural types of cross-cultural adaptation. The review is limited to culture-general acculturation models and measures and leaves out the rich and extensive literature on group-specific measures of acculturation, for instance among blacks, Hispanics, or Asians in the USA (Cuéllar, 2000b).

**Maintenance and Adaptation Dimensions**

A first trend concerns the replacement of a one-dimensional approach by a two-dimensional model of acculturation, which is now generally accepted as more appropriate (Ryder, Alden, & Paulhus, 2000). Across cultures, a
majority of migrants and minority groups combine positive attitudes towards heritage and host cultures in an “integration” strategy of acculturation. Compared to alternative assimilation, separation, or marginalisation strategies, the integration strategy is most often associated with successful personal adjustment (Berry et al., 1987).

In line with the two-dimensional model, acculturation measures typically allow for different combinations of positive or negative attitudes towards adaptation and maintenance. To this end, three distinct question formats have been used, consisting of one, two, or four questions (Van de Vijver, 2001). A one-question format typically requires a forced choice between either valuing the ethnic culture, or the host culture, or both cultures, or neither (e.g. the Cultural Integration-Separation (CIS) index; Ward & Kennedy, 1992). A two-question format asks for separate importance ratings for maintaining the ethnic culture and for adapting to the host culture (e.g. the Acculturation in Context Measure (ACM); Phalet & Swyngedouw, 2003). A four-question format requests agreement ratings with four statements, representing integration, assimilation, separation, and marginalisation strategies (e.g. the Acculturation Attitudes Scale (AAS) by Berry, Kim, Power, Young, & Buyaki, 1989; the adapted AAS for children by Van de Vijver et al., 1999). Although multi-method studies of acculturation are still to be developed, two- and four-question formats effectively discriminate between a most adaptive integration strategy and other, generally less adaptive, strategies (Arends-Tóth & Van de Vijver, 2003; Van den Reek, 1998).

In assessing acculturation attitudes, acculturation studies have commonly relied on single-indicator measures of maintenance and adaptation dimensions. For example, the ACM measure asks two questions: “Do you think that [Turks in the Netherlands] should maintain the [Turkish] culture (4) completely, (3) mostly, (2) only in part, or (1) not at all?” and “Do you think that [Turks in the Netherlands] should adapt to the [Dutch] culture (4) completely, (3) mostly, (2) only in part, or (1) not at all?” In support of the external validity of the two-question format, distinct adaptation and maintenance attitudes showed the expected functional relations with length of residence, education, individualism–collectivism values, family integrity, achievement motivation, and mobility strategies in two parallel minority samples and host countries (Phalet & Swyngedouw, 2003).

In parallel, acculturation researchers have developed and validated composite indices of acculturation strategies, which include a whole set of cultural preferences as indicators. Typically, composite measures sample various behavioral domains in both heritage and host cultures. First, the most ambitious cross-cultural study is the International Comparative Study of Ethnic Youth (ICSEY, 2001), which set out to replicate Berry et al.’s (1989) 20-item AAS among minority youth of diverse ethnic origins in North America, Western and Northern European host countries as well as
Australia and New Zealand. The AAS uses a four-question format to assess integration, separation, assimilation, and marginalisation strategies in each of five domains: marriage, cultural traditions, language, social activities, and friends. Some studies retrieved the full four-factor structure, yielding reliable subscales for the four strategies (e.g. Jasinska-Lahti, 2000). Other studies found one most adaptive integration factor across domains, which could be discriminated from other attitudes. Second, Van de Vijver et al. (1999) validated an adapted form of the AAS for minority children aged 7 to 12. The scale consists of 40 items, measuring the four strategies in ten domains (i.e. cultural traditions, friends, food, games, books, language mastery and use, learning, culture of teacher, housing, and work). A consistent integration factor emerged across the ten domains, which successfully predicted school performance.

Contact, Change, and Identity Aspects

Hutnik (1991) made a distinction between cultural change, or acculturation proper, and self-categorisation. Building on her research with Indian youth in the UK, she proposed a two-dimensional identity model of acculturation, combining two dimensions of identification with the ethnic minority and with the majority group. In parallel with Berry’s four acculturation strategies, the model outlines four identity strategies, labeled acculturative (a hyphenated identity), assimilative (a predominant majority identity), dissociative (an embedded minority identity), and marginal (the individual is indifferent to minority as well as majority identities). Various identity measures of acculturation have been tested across cultural groups. First, the Twenty Statements Test (TST) asks for a spontaneously generated self-description in response to the open-ended question: “Who am I?” (e.g. Verkuyten & Kwa, 1994). Second, a pick-and-order Self-Categorisation Task (SCT) asks respondents to choose one or more identities from a list: “To which of the following groups do you consider yourself to belong in the first place, and in the second place?” (e.g. Phalet et al., 2000). Third, respondents may be asked to rate “How do you feel deep inside?”, using a one-question Ethnic Identification Scale (EIS) with four response categories, one for each identity strategy: “both ethnic and host nationality”, “mostly ethnic” or “mostly host nationality”, or “neither” (e.g. Verkuyten & Kwa, 1994). Lastly, Phinney (1992) has designed a widely used Multigroup Ethnic Identity (MEI) measure to examine the bicultural content of ethnic identity across minority groups. The items cover an individual’s sense of belonging to, his or her attitudes towards, and his or her evaluation of both the minority and the majority groups. Across cultures, these identity components cluster together in two common factors, representing the two dimensions of ethnic minority and dominant group identification (e.g. Jasinska-Lahti, 2000).
Under the general heading of acculturation, researchers have variously used either social contact, or cultural shift, or identity-type measures of adaptation. This arbitrary practice is often confusing, as distinct measures elicit different rates of endorsement. Overall, resistance to acculturation appears to be most persistent with regard to identity aspects, and least so with regard to contact aspects of acculturation. Thus, minority youngsters may cherish a strong ethnic identity, and at the same time engage in close social relationships with members of the host culture (e.g. Van Oudenhoven & Eisses, 1998). Attitudes towards cultural change are often in the middle of this continuum; resistance to change increases when cultural distance is large (Feather, 1975) and when ethnic customs and norms are more central to the cultural identity of the minority group (Triandis, Kashima, Shimoda, & Villareal, 1986). In a cross-generational comparison of Muslim minorities, for instance, family values regulating intergenerational obligations were most resistant to acculturative change, whereas gender roles were somewhat more open, and academic achievement values much more open to change (Phalet & Swyngedouw, 2003).

Domain Specificity

Berry’s model assumes that acculturation strategies have trait characteristics; for example, a migrant who prefers integration is supposed to prefer this strategy in all domains of life. The validity of the assumption of cross-domain stability has been questioned. In particular, a key distinction between private and public domains was introduced (Arends-Tóth & Van de Vijver, 2003; Phalet & Swyngedouw, 2003). In a contextual acculturation model, acculturation orientations are simultaneously influenced by (often competing) pressure by migrant’s ethnic community and the host society. In the public domain, for instance in multi-ethnic classrooms or the workplace, the norms of the dominant group are most salient and influential. Conversely, as family and community contexts are predominantly co-ethnic, ethnic in-group norms are most salient and most easily enforced in private contexts.

To test the contextual model, the ACM measure extends the basic two-question format, asking the same questions in home and family situations and in school and work situations. In support of the contextual model, the results of a Dutch pilot study showed the expected pattern of group and context effects. While Turkish and Moroccan minorities attributed greater overall importance to culture maintenance than their hosts across contexts, minority and host communities alike attached more importance to maintenance in private than in public contexts, and vice versa for adaptation (Phalet & Swyngedouw, 2003). In particular, most migrants adopted a separation strategy in the private domain along with an integration strategy in
the public domain. Given the context-dependence of acculturation strategies, the alternation of ethnic culture maintenance in the private domain with cross-cultural adaptation in the public domain may well be a most adaptive pattern. In support of the latter hypothesis, the acculturation profile of successful minority students, after controlling for family background and school composition, appeared to alternate between separation in the family context and integration in the school context (Phalet & Andriessen, 2003). The same pattern of more support for cultural maintenance in the private domain and for adaptation in the public domain has been found in a group of Turkish adults in the Netherlands (Arends-Tóth & Van de Vijver, 2003).

What are the implications of the contextual model for assessment in acculturating groups? First of all, when multiple indicators are used to assess “modal” acculturation strategies across contexts, as in the ICSEY survey (2001), the indicators should ideally be a balanced sample of behaviors and attitudes on both sides of the public–private divide. Second, if one is interested in acculturation strategies within a specific context, e.g. in assessing school performance, work satisfaction, or marital problems, it seems most appropriate to measure acculturation attitudes, in particular attitudes towards adaptation, within the context of interest.

Psychological and Sociocultural Outcomes

Acculturation strategies or orientations have been examined on the basis of attitudinal measures. Levels and forms of adaptation, as measured above, indicate how positive migrant attitudes towards the host culture are, and how well they combine with positive attitudes towards the ethnic culture. While attitudinal measures are most commonly used in acculturation studies, a different type of adaptation measure focuses on the psychological outcomes of acculturation processes. The key question here is: How well do migrants actually succeed in their efforts to feel well and perform well in the host society (Andriessen & Phalet, 2002)? On the outcome side, acculturation studies have been divided between two distinct types of outcomes, commonly labeled psychological adjustment (“feeling well”) and sociocultural adaptation (“performing well”). Psychological adjustment includes subjective well-being, satisfaction self-esteem, and psychological health. It is associated mainly with a stress-and-coping approach of acculturation (Berry et al., 1987). In contrast, sociocultural adaptation is related to learning processes and involves the acquisition of effective behaviors, social skills, language mastery, and cultural knowledge (Ward et al., 2001). The distinction between both types of psychological outcomes is highly informative and has ramifications for assessment. If we are primarily interested in assessing competence-related behaviors in an academic or professional
setting, our measurement of acculturation should focus on attitudes towards adaptation—along with length of residence, cultural distance, language mastery, extraversion, achievement motivation, and social contacts and skills. Conversely, if we are to assess psychological disturbances in a clinical setting for instance, positive attitudes towards culture maintenance may be a source of psychological security and self-worth, along with social support and continuity in family and community life, collectivism values, and/or an internal locus of control.

In a series of seminal sojourner studies, Ward and associates brought together both types of adaptation and demonstrated that they are predicted by distinct sets of conditions, dispositions, and attitudes (Searle & Ward, 1990; Ward & Kennedy, 1993). Across cultural groups, robust predictors of psychological adjustment were high levels of social support, low incidence of life changes, and an internal locus of control. Alternatively, successful sociocultural adaptation was consistently associated with a longer period of residence, a smaller cultural distance at the group level, more frequent interactions with host nationals, more favorable attitudes toward cross-cultural adaptation, more emotional stability, and extraversion (Ward & Kennedy, 1993).

What do the above findings on acculturation outcomes imply for psychological assessment in acculturating groups? There are many established measures of psychological adjustment and social adaptation outcomes that have been successfully validated in acculturating samples (measures of cultural knowledge and language mastery, which are culture-specific by their nature, are not discussed here). Some adjustment measures that have been used to assess acculturative stress are, among other things, a shortened form of the Cornell Medical Index (CMI; Berry, Trimble, & Olmedo, 1986), the Profile of Mood States (POMS; Ward & Searle, 1991), the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larssen, & Griffin, 1985), and Rosenberg’s (1986) Self-Esteem Inventory (SEI). A commonly used measure of social adaptation is the Social Situations Questionnaire (SSQ; Furnham & Bochner, 1982).

ACCULTURATION IN MULTICULTURAL ASSESSMENT

Bias in Multicultural Assessment

Psychological adjustment to the main culture is best seen as a continuum, along which individuals can occupy an infinite number of positions in-between the two end-points, no adjustment at all and complete adjustment. In these extreme cases it is quite obvious how assessment should proceed; the instruments for the mainstreamers are inapplicable in the case of no adjustment at all (in some cases the testee may not even have sufficient
mastery of the testing language), while for completely adjusted persons the instruments are appropriate. In practice, however, it is more common to find testees with rates of adjustment in-between these extremes. It is the daunting task of the psychologist to deal with this immense variety of degrees of acculturation.

In cross-cultural psychology, frameworks have been developed to determine possible bias in an instrument (e.g. Van de Vijver & Leung, 1997; Van de Vijver & Tanzer, 1997). An item or instrument is biased if it does not have the same meaning across the groups studied. Different types of bias may emerge in the assessment of multicultural groups. The first, called construct bias, refers to an incomplete identity of a construct across groups or incomplete overlap of behaviors associated with the construct. An empirical example can be found in Ho's (1996) work on filial piety (psychological characteristics associated with being a good son or daughter). The Western conceptualisation is more restricted than the Chinese, according to which children are supposed to assume the role of caretaker of their parents when the latter grow old. Similarly, measures of locus of control often show different factor structures across cultures (Dyal, 1984), strongly suggesting that either the Western concept of control is inappropriate in a cross-cultural context or that the behaviors associated with the concept differ across cultures. Construct bias precludes the cross-cultural measurement of a construct with the same measure.

An important type of bias, called method bias, can result from sample incomparability, instrument characteristics, tester and interviewer effects, and the method (mode) of administration. In general, method bias is a label for all sources of bias emanating from aspects that are described in the method section of empirical papers. Examples are differential stimulus familiarity (in mental testing) and differential social desirability (in personality and survey research).

Finally, the last type of bias refers to anomalies at item level; it is called item bias or differential item functioning. An item is biased if migrants and hosts with the same standing on the underlying construct (e.g. they are equally intelligent) do not have the same average score on the item. The score on the construct is usually derived from the total test score. In a geography test administered to a migrant group in the USA, containing some Polish migrants, the question “What is the capital of Poland?” can be expected to show higher scores for these migrants, even when participants with the same total test score would be compared. The item is biased because it favors one cultural group across all test score levels.

Standard remedies have been developed for each type of bias (see Van de Vijver & Tanzer, 1997). The identification of construct bias usually requires a thorough knowledge of the society of origin, accompanied by in-depth interviews and field observations. The application of a Western instrument...
of filial piety is unlikely to provide clues about the poor representation of the concept in the instrument for Chinese migrants. Item bias is often easier to deal with. Ways to reduce the influence of method bias include, among other things, the extensive training of administrators, providing a detailed manual/protocol for administration, scoring, and interpretation, detailed instructions (e.g. with a sufficient number of examples and/or exercises). Finally, various psychometric techniques have been developed to identify item bias (e.g. Camilli & Shepard, 1994; Hambleton, Merenda, & Spielberger, in press; Hambleton, Swaminathan, & Rogers, 1991; Rogers & Swaminathan, 1993; Van der Linden & Hambleton, 1997).

Why Should We Employ Measures of Acculturation in Multicultural Assessment?

After a review of models and measures of acculturation, the question should be addressed to what extent the assessment of acculturation gives value for money (Van de Vijver, 2002). What can multicultural assessment in increasingly diverse classrooms, clinics, and industrial organisations contribute to current assessment practices? In our view, evidence from acculturation studies points to three valid and equally important reasons to include measures of acculturation in multicultural assessment.

The first reason is an interest in the assessment of acculturation as a valuable tool in identifying problems in acculturation processes. In multi-ethnic classrooms, multicultural team building, or multinational business organisations, monitoring personal adjustment to cross-cultural contact may be the primary purpose of psychological assessment. An example is the measurement of adjustment problems in minority youth with a view to identifying and remedying detrimental psychological effects of racial harassment (Verkuyten, 1998). Another example is the selection and training of professionals who can function well in multicultural settings, which requires, among other things, good intercultural communication skills (Furnham & Bochner, 1982; Church, 1982).

A second reason to measure acculturation is its pervasive influence on behavior. Acculturative changes have been documented in various behavioral domains, including psychological health and well-being (Berry et al., 1987), motivation and value orientations (Feather, 1975; Phalet & Claeys, 1993), and competence and skills (Furnham & Bochner, 1982). More generally, the susceptibility of psychological functions to transitory acculturative stress or more lasting acculturative shift should be greater when they depend more heavily on cultural transmission (Poortinga, 1990). In practice, however, the impact of acculturation on psychological problems or changes in sojourners, migrants, or minorities is often ignored or used indiscriminately as a post-hoc explanation (Schönpflug, 1997). Only if acculturation strategies...
have been measured are we able to evaluate their impact in a more precise way.

The third reason to measure acculturation is the detection of acculturation-based biases in psychological tests. In the psychological assessment of acculturating groups, different types of bias can threaten the validity of assessment results. First, when an instrument is used in an acculturating group, so-called construct bias may result from subtle shifts in the meaning of concepts or measures as a consequence of acculturation (for remedies see below). For example, in a study of psychological health using the CMI and the SWLS in Turkish migrant and non-migrant samples, non-migrant youth with a similar low-SES rural background scored much higher on psychosomatic complaints than migrant youth, given the same levels of life satisfaction (Phalet, 1992). Psychosomatic complaints were related in different ways to subjective well-being in the migrant group. In line with ethno- graphic studies, more acculturated Turkish youth were more reluctant to express somatic complaints.

Second, problems of method bias in acculturating groups are documented by repeated findings of acculturative shift in response tendencies, including acquiescence, extremity, and social-desirability bias. For example, Marin, Gamba, and Marin (1992) found that Hispanics with a high level of acculturation were lower on acquiescence tendency (i.e. selective use of the positive end of the scale), while extremity tendency declined with increasing levels of education. With regard to social desirability, it is important to keep in mind that bicultural persons may be sensitive to dual (or multiple) sets of social norms. Hence, social-desirability bias may be in the direction of in-group norms in the minority culture (i.e. “ethnic affirmation”) or alternatively, in the direction of dominant-group norms in the host culture (i.e. “social correction”; Triandis et al., 1986). The degree and direction of social desirability depend not only on the acculturation orientation of the testee, but also on cultural cues in so-called “demand characteristics” of the test situation (Georgas & Kalantzi-Azizi, 1992).

Third, item bias may play a role when cultural groups have developed their own small variations on the language of the dominant group (“ethnolncs”). The usage of English by European and African Americans is an example in the Black Intelligence Test of Cultural Homogeneity (the BITCH; e.g. Matarazzo & Wiens, 1977) test. An example from the Dutch language is the usage of the word “jokken” (to fib) and “liegen” (to lie) by Surinamese and mainstreamers (Van der Maesen de Sombreff & Abell, 2001, p. 171). The distinction between these words is a matter of degree for the Surinamese group, with “liegen” being the word that has a much stronger, negative connotation. For native Dutch, however, the difference is more a matter of the actor’s age. The word “jokken” mainly refers to innocent lies by children. For mainstreamers the latter word sounds childish when applied to adults.
How Can We Deal with Acculturation in Multicultural Assessment?

A problem in the assessment of multicultural groups is the possible dependence of the outcomes on the level of adjustment. It may well be that a Western instrument of filial piety does not work well among recent immigrants, but becomes more appropriate with the level of adjustment of the migrants. As a consequence, the standard approaches of cultural bias may break down and a more tailored approach may be needed. The question then becomes how acculturation can be taken into account in assessment. Without claiming exhaustiveness, we argue that the following seven approaches have been proposed or can be envisaged, in addition to the standard approaches of examining bias in a cross-cultural context (we do not discuss the most common approach which consists of simply ignoring the influence of acculturation).

The first one uses cut-off scores on an acculturation instrument. Values below (or above) a critical threshold indicate that the scores on the target instrument cannot be interpreted in the standard way. It follows a practice that is often employed in personality assessment, such as the Lie Scale (measuring social desirability) of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975). This measure gives a score above which outcomes on the other questionnaire scales (extraversion, neuroticism, psychoticism) are no longer interpreted because they might yield a picture distorted by social desirability. To our knowledge, measures of acculturation have never been applied this way. Empirical data would be needed to determine the threshold level. If these norm data are available, the procedure is simple. It is a disadvantage of the procedure that the continuous concept of adjustment to the host culture is split up in two dichotomous areas.

The second way uses “hard” acculturation data, such as length of stay in the host country, to establish differential norms. As an example of the latter, Mercer (1979) designed a system for “correcting” test scores of a migrant child (such as scores on the WISC) based on information of the socioeconomic and ethnic background; the corrections factor is based on norm data in which observed differences in mean scores of cultural groups are eliminated. Scores of European-American children are typically shifted downward, while scores of Mexican-American children and (even more so) African-American children get an upward “correction”. A problem with Mercer’s approach is its treatment of ethnicity as a nominal variable, thereby insufficiently paying attention to the dynamics of acculturation and the individual differences in acculturation level and strategy. The approach has also been criticised for its poor performance in a context in which test scores are used to predict future performance in schools or jobs. Thus,
according to Cronbach (1984, p. 211), the corrected scores are not accompanied by corresponding educational achievement scores in line with the corrected scores. In the USA, civil rights legislation has made these corrections unlawful (Padilla, 2001).

A third approach uses acculturation scores as a covariate or moderator. The most elaborate approach is due to Cuéllar (2000b). Acculturation is measured by means of a questionnaire of cultural orientation (“soft” acculturation data are used here). Like Mercer’s approach, a correction factor is determined, but the aim is different: the author attempts to “determine via acculturation how deviant a testee is from the standardization sample” (p. 124) in order to address the following question: “If the testee were culturally similar to the standardization sample, how would the testee have scored?” (p. 124). The scores on the acculturation instrument are correlated with the scores on the target instrument. A regression approach is then used to “correct” the score on the target instrument for acculturation. If the approach also includes an external criterion, such as school or job success, this approach provides an interesting view on the issue of fairness by using a non-categorical correction for acculturation.

A fourth way of dealing with multiculturalism is the application of some form of standardisation or centering (i.e. taking the deviation scores from the individual or group mean). The main purpose is to eliminate group differences due to response styles. For instance, it has been documented that Mexican-Americans tend to choose extremes at five-point scales more often than European-Americans do, while this difference disappears when ten-point scales are used (e.g. Hui & Triandis, 1989). The strength of the approach is its computational simplicity. The major issue (and potential problem) to consider is the validity of the score correction. In the study by Hui and Triandis a standardisation of the data obtained with the five-point scale so as to match the variances of the two groups would have been adequate, as demonstrated by the data obtained with the ten-point scale. In practice such reference data are often absent and it is more difficult and arbitrary to decide to standardise data. In case of doubt it may be instructive to carry out data analyses both for raw and standardised data in order to evaluate the influence of the data transformation.

The last three approaches are based on advanced psychometric modeling of the data. While these cross-cultural methods are not specific to the assessment of acculturation, they can easily be extended to include acculturating persons or groups. The fifth approach employs item response theory. If the items of an instrument meet the (stringent) assumptions of item response theory both among migrants and hosts and show the same parameter values in these groups (see e.g. Hambleton et al., 1991; Van der Linden & Hambleton, 1997), one can be reasonably confident that the instrument is adequate for these groups. Moreover, comparisons on the latent-trait scale can then be
carried out, which allows for a comparison of scores across cultural groups even when not all items have been identical.

The sixth approach focuses on response tendencies. Using a monotrait-multimethod matrix (Campbell & Fiske, 1959), method factors can be estimated independently of more substantive factors. An example can be found in the work by Billiet and McClendon (2000). Using structural equation modeling of a balanced set of attitudinal items, the authors were able to independently estimate the contribution of acquiescence and a substantive factor to the overall score variation.

The final approach is based on the so-called “person–fit tradition” (e.g. Meijer & Sijtsma, 1995). On the basis of the common score patterns of mainstream participants (defined as the norm group), expectations about the score patterns of migrants can be formulated. These expectations are often based on item response theory, as this theory allows for exact and testable hypotheses about deviant response patterns. Application of this technique allows for statements about the extent to which it is fair to assume that a particular migrant psychologically belongs to the population of the norm group of hosts.

**TRENDS IN MULTICULTURAL ASSESSMENT**

It is reasonable to assume that quality of service delivery will become increasingly important for psychologists, and this trend will also hold for psychologists working with multicultural populations. The “one-size-fits-all” philosophy, in which the same tests are used for all cultural groups and in which no attention is paid to the particulars of multicultural groups, will come under critical scrutiny. Both psychology as a profession and the members of the various ethnic groups will demand higher levels of quality of service delivery.

In our view there are various important themes for future research and practice in multicultural assessment. The first and probably most important one is the need to integrate multicultural assessment into standard practice. As indicated in the previous section, there are different ways in which we can factor acculturation into our assessment procedures. Most procedures require information about our clients’ and participants’ level and strategy of acculturation. Short questionnaires of acculturation are to be employed or further developed (asking for both “hard” and “soft” data) that are administered routinely to migrants. This information is essential in determining a testee’s or client’s testability. Without such information it is difficult to know whether or to what extent norms for mainstreamers can be applied. Furthermore, an additional advantage of standard questionnaires is that the issue of applicability of norms is standardised and subject to public scrutiny. In current practice it is all too common for the judgment of the applicability of a test (say an intelligence test) to be left to the subjective
evaluation of the tester, which, however well intended, might not be shared by colleagues. Further standardisation of this practice will enhance the professional level of service delivery.

A second development is that core scales are to be examined for their suitability in the large cultural groups in a country (e.g. Mexican-Americans in the USA and Turks and Moroccans in Western Europe). An example is the RAKIT-R, a Dutch children’s intelligence test that has been applied both to a Dutch norm group as well as to the children of the largest migrant groups in the Netherlands (Resing, Bleichrodt, & Drenth, 1986). Furthermore, it is important to document in the test manual which aspects of the test administration are particularly important when the test is applied in a multicultural context. The Standards for educational and psychological testing by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (1999) provide a good example of instrument-related issues in multicultural testing (see also Hambleton et al., in press).

Finally, given the heterogeneous nature of migrant groups, it will become more important to apply flexible testing procedures. Desirable item contents (e.g. adequate item difficulties in mental testing) may differ considerably across testees. The test that can be administered may also vary across testees. Therefore, it is important that our assessment procedures in multicultural societies be flexible. Tailored, computer-assisted testing may be a valuable tool to achieve this flexibility. If tests are used for selection purposes, it will become a challenge to combine flexibility with fairness.

CONCLUSION

The labor mobility and migration of recent decades are likely to continue. Labor mobility has always been high in the USA, and due to the European legislation that allows inhabitants of any European Union member state to work in all member states mobility may also increase in Europe. Furthermore, natural or man-made disasters and the tremendous differences in affluence across the countries of the world will continue to generate an immigration stream in many countries. So, a situation in which countries have inhabitants with various degrees of adjustment to the mainstream society is likely to persist in the foreseeable future. It is important for the quality of service delivery that psychologists consider cultural heterogeneity as a given and that we attempt to deal with it in a professional way.

REFERENCES


