1 Introduction to *Methods and Assessment in Culture and Psychology*

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1.1 Introduction

While developments in research on culture in psychology have come a long way in the last decades, they have only slowly found their way into the mainstream areas of psychology and have not yet been comprehensively adopted. Increasingly, incoming editors of peer-reviewed journals call for culturally informed samples and research questions (e.g., see the editorials of JPSP by Cooper, 2016; Kawakami, 2015; Kitayama, 2017, as prominent examples). The continuing absence of culture is often due to the (tacit) general belief that psychological processes transcend cultural populations and that the inclusion of culture would "muddy the waters." However, looking back at psychological research, there are numerous examples where hostile, erroneous, yet far-reaching generalizations were made about differences between cultural groups. For instance, Western conceptualizations of intelligence are focused on academic, scholastic intelligence. In contrast, non-Western understandings of intelligence are much broader and focused on social aspects (see van de Vijver & Tanzer, 2004). It has become apparent that many conclusions have been based on psychometrically inappropriate assessments, with measures blindly transferred from one context to another. More rigorous methods have become available, which require a priori adaptation and translation of measures to make them more culturally suitable, and post hoc analyses to ensure the presence of equivalence and absence of bias. This has become increasingly more important as there has been a growth in studies dealing with, or being affected by, culturally relevant issues. Culture is more and more included in mainstream psychology, as evidenced by the representation of cultural references in introductory psychology textbooks (Lonner, 2016; Scott & Safdar, 2016).

There is a clear need for psychological research to emphasize cultural content further, as this will provide evidence for the effects of essential

contextual aspects, such as economic, political, and social structures, on general psychological processes. However, the content must be included in a methodologically competent manner. In short, there is a pressing imperative to ensure that empirical investigations are guided by state-of-the-art qualitative, quantitative, and mixed methods. This need is further exacerbated by the vast majority of studies still being conducted mainly in Western, educated, industrialized, rich, and democratic (WEIRD; Henrich Heine, & Norenzayan, 2010) contexts, such as North America and Western Europe. Ninety-six percent of all psychological studies have been carried out on only 12 percent of the world's population (Arnett, 2000; Henrich et al., 2010; Nielsen, Haun, Kärtner, & Legare, 2017; Thalmayer, Toscanelli, & Arnett, 2020). What is more, psychological instruments are also predominantly developed in Western contexts. When blindly applied in contexts different from their context of origin, these measures are highly vulnerable to bias. Using such measures may, therefore, miss or misrepresent essential aspects of psychological constructs that may not (or only in a different manner) be present in contexts where the measure originated, thus rendering comparisons invalid and interpretations and implications for policy advice erroneous and even dangerous.

This textbook joins eminent researchers in the field (van de Vijver & Leung, 1997) to show that studying culture is inherently a methodological enterprise. Only by considering the adequacy of our methods can we ensure appropriate theory building and the quality of potential generalizations across cultural groups. The chapters in this book highlight the need for evaluating, developing, and measuring theoretical assumptions both within and across cultures, countries, and contexts – and provide state-of-the-art practices and insights from both leading and next-generation researchers on methods and culture.

1.2 Paradigms in Studying Culture

In psychology, there are two differing yet complementary paradigmatic views for studying cultures. These paradigms are known as the relativist (emic, culture-specific) approach and the universalist (etic, cross-cultural) approach (Church, 2009; van de Vijver & Leung, 1997; Zimbardo, 2004). A third paradigm, which is only briefly dealt with in this book (see Chapters 9 and 10 on personality in this volume), deals with indigenous (relativist or extreme relativist) perspectives in psychology. The first approach (relativist) views cultures as unique and often argues against generalizations and assuming psychological commonalities. The second approach (universality)

focuses primarily on understanding both commonalities between cultures in a pursuit to establish a psychology for all people. This book provides chapters predominantly in line with the second approach but informed by emic perspectives. While cultural specificity is vital for examining what psychological phenomena are unique within a culture, a moderately universal approach (considering both commonalities and differences; Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2013) allows for a more systematic evaluation of how different psychological phenomena present themselves across cultures.

Van de Vijver and Leung (1997), in their methodological consideration of the study of (cross-)cultural psychology, show that within both paradigms, quantitative and qualitative methodologies are useful. First, quantitative methods provide psychologists with a *numerical account* of psychological phenomena as participants generally complete items, which are taken as manifestations of latent psychological variables. Researchers that conduct (cross-)cultural quantitative research must have a good idea about how to measure psychological constructs effectively across different cultural contexts. Second, qualitative methods provide researchers with an opportunity to use observations or interviews to gather data about the *meanings* of psychological constructs in local settings. Researchers that conduct (cross-)cultural qualitative research use it either as a means to gain insight into (a) culture-specific psychological phenomena or (b) factors underlying observed differences on certain psychological constructs that are often found using quantitative methods. The latter provides a basic example of how these methodologies can be combined in a mixed-methods approach (van de Vijver & Chasiotis, 2010).

Van de Vijver and his colleagues have argued that any approach in (cross-)cultural psychology that separates these methodologies would be restricted in its insights (van de Vijver & Leung, 1997). Researchers can successfully use both methodological approaches across the two paradigms, depending on the specific research question (Leung & van de Vijver, 2008). Generally, in (cross-)cultural psychology, the combination of these methods is argued to provide the best insight into both similarities and differences in psychological processes across cultures. One of the objectives of this textbook is to present an overview of subjects from many different psychological domains and a variety of methods. While a mixed-methods approach is not presented in all chapters, we advocate that the use of combined approaches allows us to reach more robust, substantive conclusions. These conclusions would not necessarily have been reached if only a single approach were considered.

1.3 Parts Overview

The topics in this book are organized into three parts: (1) acculturation and identity, (2) individual differences across cultures, and (3) the role of assessment for our understanding of culture. While the first two parts cover diverse topics and come from various fields of psychology (emotion, acculturation, etc.), the last part includes perspectives on future challenges at the intersection of culture and methods.

Part 1: Acculturation and Identity

In this part, the contributors cover aspects associated with acculturation and identity, which both describe the negotiation process of belonging in a culturally complex world. The more group-focused approach (acculturation), as well as the more individualized (identity) approach, are increasingly more relevant fields in which research is consistently growing and receive far spread attention also in other disciplines outside of psychology and public discourses.

Research on acculturation, in particular, has substantially increased, as indicated in Chapter 2 by Sam and Ward, from around 8,000 publications in the mid-1980s to close to 46,000 publications currently. Sam and Ward provide an overview of the different stages of advancement over the years. They focus on three specific generations of acculturation theory and research. During the first phase, influential *models* were formulated, which lead to a second phase, in which *measurements and methods* were refined and tested. The third and current phase focuses predominantly on investigating *mechanisms* of the acculturation process. Acculturation is the most expansive area of research at the intersection of culture and psychology. The extensive changes our societies are experiencing are an important driver of this development, and Sam and Ward argue that our models and measurements will need to be reflective of such changes for research on acculturation to be meaningful. They highlight that we need more research not only on minorities or non-dominant groups in the acculturative process but that a closer inspection of "mainstream" society members is needed to understand the interactive dynamics of acculturation. For that purpose, it appears relevant to think about extending or adapting existing models (e.g., from two dimensions to multiple dimensions or from first-hand to remote or globalized acculturation), while still retaining a pragmatic, empirically grounded approach.

In Chapter 3, Güngör and Phalet focus on an area in acculturation that has attracted particular attention: the interplay between religiosity and acculturation. Based on the framework by Arends-Tóth and van de Vijver

(2006), they illustrate (1) the processes related to religious transmission in immigrant families and communities as an acculturation condition, (2) the role of religiosity for maintaining the heritage and adopting mainstream culture as acculturation orientations, and (3) the conditions under which religiosity serves as a cultural boundary maker in an intercultural context. Güngör and Phalet find that young Muslims experience their religious commitment as an integral part of heritage culture. Perceived discrimination and marginalization further increase religious identification practices. It is important to build more insights on the populations under investigation. European Muslims are by no means a homogenous group. They are different from Muslim immigrants in other Western countries, prompting us to understand group-specific pathways that are embedded in different acculturation contexts (e.g., more or less secular mainstream contexts). They recommend that research at the intersection of religiosity and acculturation needs to clearly define the domain and dimensions of the assessed religiosity construct and identify these in relation to acculturation conditions, orientations, or outcomes.

The classic definition of acculturation (here termed proximal acculturation) involved "continuous first-hand contact" between groups of individuals and subsequent psychological changes that accompany these changes (Redfield, Linton, & Herskovits, 1936, p. 149). However, travel or migration, which result in the first-hand contact, is no longer needed to affect how we negotiate our cultural belonging and identification. In Chapter 4, Adams, Giray, and Ferguson examine the relation between remote acculturation (the process of acculturation at a distance; Ferguson et al., 2012) and the tridimensional model of identity (personal, relational, social identities; Adams & van de Vijver, 2015). They find that much of the research on acculturation, including remote acculturation, focuses on predominantly social, group-based aspects of identification. Adams and colleagues argue that we need to attend to other aspects of identity, such as personal and relational aspects, to explain how individuals may adopt and internalize the norms and values of remote cultures. They recommend (1) a tridimensional (or multidimensional) view on identity in the acculturative process, (2) that we need to focus not only on the person but also on the specific variable (e.g., the assessment of relational identity across situations) to understand how the variable itself differs between domains of acculturation (above and beyond individual variation), and (3) that we need to disentangle the fluctuation and causal direction of identity and belonging in acculturative domains over time.

In Chapter 5, Jackson, Adams, and Bender apply acculturation theory and research to the work context with the Dual Process Model of Diversity (DPMD) as a means for managing diversity. The model

combines an acculturation framework (Berry, 1997) with a dual-process model of occupational health (Bakker & Demerouti, 2007) and highlights positive and negative factors influencing the pathways between diversity conditions and outcomes. They draw attention to differences in diversity constellations: in WEIRD contexts diversity in organizations is often globalization- or immigration-based. In contrast, in non-WEIRD contexts, such as South Africa, diversity in organizations is related to labor legislation (removing barriers for previously disadvantaged ethnic groups). In South Africa, organizations, therefore, are both legally and societally called upon to actively engage in diversity management. Within the DPMD, diversity is managed either through facilitating positive pathways toward subjective experiences of productivity and work success *or* setting acculturation demands and other restraining intergroup features, which lead to negative employee attitudes and ill health. Employees' orientations are critical mediators of these pathways: integration is as critical for the positive pathway as separation is for the negative pathway. Jackson and colleagues conclude that organizational interventions can address hindering demands (e.g., discrimination) and foster diversity-conducive acculturation conditions (e.g., support for diversity).

Part 2: Individual Differences across Cultures

In the second part, the book focuses on assessing individual differences across a variety of domains and how our insights can benefit from a methodologically rigorous approach of conducting research across cultures. This part sets out by clarifying the notions of equivalence and bias – addressing one of the most relevant topics for research at the intersection of culture and psychology – with examples from educational assessment and multicultural classrooms. Subsequent chapters then move on to emotion, motivation, and personality as hallmark domains of individual differences and how constructs that originated in the West with an etic perspective need to be supplemented with an emic perspective and adapted to non-Western contexts.

In Chapter 6, He, Benítez, and Yagmur provide a summary of the importance of methodological rigor in cross-cultural educational assessment. For that, they draw on the taxonomy of bias and equivalence, separating construct, method, and item bias, and on distinctions between levels of equivalence discussed in van de Vijver and Leung (1997). They provide insight into how to improve research practices in educational assessment across cultures, and to ensure that these measures tap into the same construct, they use a comparable method that is free of differential item functioning. He and colleagues summarize three exemplary

perspectives: (1) applying quantitative methodological rigor to address bias, (2) using qualitative and mixed methods to understand sources of bias, and (3) examining the effect of language in learning and assessments of minority students' achievement.

Education as a topic is continued in Chapter 7 by Schachner, Schwarzenthal, and Noack, who address diversity at the classroom level, and how school diversity is linked to educational outcomes. They elaborate on the consequences of two prototypical approaches to diversity in educational settings. These are equality and inclusion (also referred to as *color blindness*) and cultural pluralism (also referred to as *multiculturalism*). Schachner and colleagues argue that (1) measures need to be applicable in specific target populations (i.e., ethnic groups, age), (2) both individually perceived norms *and* shared perceptions of these norms need to be considered, and (3) "objective" measures of the school diversity context (e.g., school projects or policies) may help in understanding diversity outcomes. These three recommendations effectively describe multi level considerations at the individual, classroom, and school level. Considering variation by country will be relevant, too – as, for instance, a cultural pluralism perspective at the school level may be more effective in societies with more support for such policies in general.

In Chapter 8, Fontaine and Breugelmans turn to emotion, a longstanding hallmark of cross-cultural research. They combine developments in the emotion literature with developments in cross-cultural methodology and formulate four recommendations to bridge relativist (emotions are different in form and function across cultures) and universalist views (emotions are similar in form and function across cultures) on cultural variation in emotion. They provide an overview of prototypical positions held for both views, highlighting the previously polarized debate. Fontaine and Breugelmans formulate four recommendations to contribute to a standard of comparison to overcome the split in the literature: (1) specify the targeted emotions (or their facets), preferably using a multi componential approach for assessment; (2) assess equivalence across languages and cultures (e.g., with existing databases or by including measurements); (3) specify the level of comparison (i.e., ranging from descriptions of culture-specific constructs to direct comparisons of mean scores) and demonstrate the level of comparability; and (4) account for *both* similarities and differences when formulating hypotheses and interpreting data – a particularly overlooked area of simultaneous inquiry.

A productive area of cross-cultural investigation has been the study of implicit and explicit motivation, which is summarized in Chapter 9. In motivational psychology, there is a general distinction between self-

attributed, explicit motivation, which is consciously accessible via self-report, and implicit motivation, which is not consciously accessible and typically assessed via measures allowing people to express their needs unobtrusively. Chasiotis, Hofer, and Bender address three points. They argue that investigating implicit motivation is incrementally useful for our understanding of cultural similarities and differences. They summarize methodological advances in assessing implicit motivation, particularly regarding the methodologically rigorous testing of the equivalence of pictures used to elicit narratives. They also sketch current developments, including how we can use machine learning to improve the cost-benefit ratio of human coder-based assessment of narrative content. Self-report measures are subject to a variety of problems (e.g., response styles) that implicit measures are not, and it will be relevant to explore such advantages further to test their limits.

Another much-studied area in psychology and culture is personality. In Chapter 10, Meiring, Nel, Fetvadjiev, and Hill describe the development of the South African Personality Inventory (SAPI) from a predominantly emic perspective. Their concern was that etic approaches to personality assessment (like the Big Five) become inefficient when dealing with languages that are limited in lexicography. The SAPI was built with a mixed-methods approach, relying first on an extensive qualitative phase conducted across the eleven official languages of South Africa. Meiring and colleagues describe (1) lessons learned from this qualitative stage, (2) item development and reduction, and (3) empirical evidence of the SAPI factorial structure in these different languages and ethnic groups in quantitative, combined emic-etic designs (that subsequently were also replicated outside of South Africa). They situate their research explicitly within the field of tension between universalist approaches to personality and culture-specific, indigenous models to explore how both comparability across cultures and ecological validity can be retained as exemplified in the SAPI model.

The Arab Personality Inventory, in Chapter 11, takes a similar approach as the SAPI, but in a different context and against a different set of challenges. Zeinoun and Daouk-Öyry set out to highlight the limitations of a lexical approach, particularly given the lack of clarity whether cultural differences and similarities are representing psychological differences or methodological artifacts. They highlight the underrepresentation of non-WEIRD samples in classic research on personality and showcase the limitations of a psycholexical approach, and the need for a combination of a global and local approach for the Arabic language, a diglossic language. The Arabic language has two forms, Modern Standard Arabic and the spoken forms, referred to as Arabic vernaculars.

This means that (formal) dictionaries are of limited use, as they do not reflect everyday language use, consisting mainly of expressions of describing others in the local vernacular. Zeinoun and Daouk-Öyry contrast a global (culture-comparative, universalist, etic) and a local (culture-specific, relativist, emic) approach to personality. They argue that a combination of both approaches is required to move forward a GloCal approach. Such an approach, combined with the emic-etic approach (Cheung et al., 2011), allows the researcher to (1) identify shared and unique components of the personality conceptions and structure across methods in a culture, (2) ensure that the lexicon used is relevant to the culture and comprehensive, and (3) increase the ecological validity of stimulus materials in personality inventories.

Part 3: A Pragmatic Perspective – The Role of Assessment for Our Understanding of Culture

In the final part, the book provides a broad repertoire of views about how the next phase of research at the intersection of culture, psychology, and assessment. The contributors cover essential questions about how our societies function, such as the perception of time (Chapter 12), but also how our understanding of others and ourselves is changing as our cultural reference points differ across situations and cultures become more mixed (Chapter 13). The final two chapters focus on the methodological core and describe the long journey to assessing whether our measurements are comparable across cultures and what we can expect from future advances in this area (Chapter 14 and 15). These chapters focus on the importance of theories and their quality for understanding the extent to which assessments can be free of culture (or whether that is even possible).

In Chapter 12, Kashima sets out to challenge us in that while we have made significant progress methodologically, we have focused largely on a synchronic perspective (in which cultures are studied as enduring systems). However, psychological phenomena in the twenty-first century require a diachronic perspective – a suitable account for both stability and change of culture over time. It is necessary to move toward cross-temporal research of psychological phenomena in human populations when reference points of belonging are increasingly bound by historical events and occurrences (e.g., world events such as 9/11 or pandemics). Kashima posits that our synchronic notion of equivalence covers differences in the meaning of scores across groups (i.e., measurement invariance), but this equivalence is not necessarily applicable (or easily testable) across time: Do scores mean the same psychologically when they are assessed within the same cultural group, but decades apart? Kashima

draws on research on stereotypes in the United States and how they have developed over time to illustrate how indicators and interpretations can be interpreted differently. A related issue concerns autocorrelation – that is, the extent to which proximity (e.g., between neighboring countries) – is associated with similarities in psychological phenomena (spatial autocorrelation) or the extent to which experiences in a society can have spillover effects for subsequent time periods (temporal autocorrelation). Many cross-culturally relevant phenomena have changed over time (e.g., individualism), but this topic has not been thoroughly investigated thus far. Changes (such as increases in individualism) could be due to spatial (interconnectivity between countries due to globalization) and temporal autocorrelation (spillover from changes in the history of a context).

In Chapter 13, Chiu and Shi provides an overview of multicultural psychology and the state of increased connectivity and opportunities to negotiate cultural belongingness and how new experimental methods (cultural priming, experimental simulations of cultural mixing) advance our understanding of cultural phenomena and enable psychologists to articulate societally relevant contributions beyond abstract self-reports that heavily rely on introspection. Chiu and Shi argues that individuals' relationships to cultures are partial and plural, meaning that individuals are under the partial influence of multiple, interacting cultures – which is generally referred to as *polyculturalism*. Priming research has revealed how, for instance, bicultural individuals (1) flexibly switch their cultural frames to make sense of their multicultural encounters in a globalized environment; (2) manage dual cultural identities; and (3) appropriate and combine intellectual resources from different cultures to enhance their creative problem-solving ability. Becoming increasingly aware of the fluidity of cultural reference points is an important advancement of understanding psychological phenomena in relation to culture. Chiu and Shi argues that the appropriateness of methods makes or breaks the research, as we need to assess how our tools, including experiments, are susceptible to bias across different cultural groups.

In Chapter 14, Byrne and Matsumoto provide an overview of the developments that galvanized into the relevance of (1) measurement invariance as we see it today in multi group comparisons and how research has sought to establish (2) cultural linkage – that is, the search for cultural constructs that are responsible for differences that researchers have documented, often also referred to as unpackaging cultural differences (e.g., via mediational analysis, experiments). In the period between 1990 and 2010, the field has moved away from confirmatory factor analysis, recognizing that this method of data analysis is, to some extent, impractical in its requirements, and has adopted methods focusing more