

## EDITORIAL

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# **Methodological Challenges and Solutions in Cross-Cultural Psychology: Opportunities for Romanian I/O Psychology. Introduction to the Special Issue**

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There is increasing interest in cross-cultural psychology in Romania. This is not surprising, as the relevance of cross-cultural psychology can hardly be underrated. Diversity is relevant from two perspectives. First, Romania has been and will undoubtedly continue to be a multicultural society. The professionalization of services rendered by psychologists in organizations, education, and therapy requires that we deal with this diversity in a manner that is informed by scientific research and is in line with ethical standards of the profession (e.g., Evers et al., 2012; Francis, 2010). Research into this diversity and recommendations following this research are much needed steps. Second, Romania is part of the process of globalization (Scholte, 1998). Within the work sphere, this development means that Romanian expatriates will (continue to) migrate to other countries for shorter or longer work assignments and that expatriates from other countries will (continue to) work in Romania (Peterson, 2003).

This special issue does not take a practical perspective on cross-cultural psychology in Romania, but takes one step back by describing problems and solutions of cross-cultural research (Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011; Van de Vijver & Leung, 1997). The aim of the special

issue is to highlight current thinking about methodological challenges and to stimulate cross-cultural research into the diversity of Romania or dealing with multiple countries, including Romania. Four out of the five papers in this special issue describe empirical studies, which implies that the methodological challenges that are described are embedded within a specific empirical context. The fifth and final paper describes methodological challenges of Romanian I/O psychology from a broad perspective.

The first two papers deal with the question of how we can establish whether an instrument, administered in two or more cultures, measures one and the same thing across these cultures. Both papers use structural equation modeling, confirmatory factor analysis in particular, to resolve this question (Byrne, 2001). Confirmatory factor analysis is nowadays the most frequently employed procedure to examine the appropriateness of an instrument in multiple cultural contexts (Davidov, Schmidt, & Billiet, 2011). Within this procedure, the researcher establishes to what extent the parameters of a confirmatory factor analytic model are identical across cultures. More specifically, identity of factor loadings that link the latent factor to observed items and

identity of intercepts of the same latent are scrutinized. The question of whether an instrument measures the same and whether scores can be compared across cultures boils down to testing whether intercepts and slopes of the lines that link the latent factor to the observed item score are identical across cultures. In the first article, Dimitrova, Buzea, Abubakar, and Stefenel establish to what extent the Satisfaction with Life Scale is invariant among Roma minority and Romanian majority adolescents in Romania. The study is one of the first to apply confirmatory factor analysis on an entirely Romanian data set. The procedure to test invariance is described in a pedagogical manner so that the reader can follow and repeat the analysis conducted. The authors found a very high level of comparability across the two samples. In the second article, Adams, Buzea, Cazan, Sekaja, Stefenel, Gotea, and Meyers applied the same statistical procedure in an international, comparative context. The authors administered the Tilburg Work Identity Scale for Commitment and Reconsideration of Commitment (TWIS-CRC) in Romania, England, the Netherlands, and South Africa. After a careful and detailed analysis, the authors found that factor loadings were identical across these countries, but intercepts were not. It was concluded that scores cannot be directly compared across countries, although the measure is a good rendering of work identity in all countries.

The incomplete convergence of the results of the two studies should not be taken as a sign of poor quality, but quite on the contrary, as pointing to the need to examine invariance in all cross-cultural studies. There is much cross-cultural work in which invariance is not studied and in which comparisons of mean scores are made across different cultural groups without any concern for the question of the comparability of the scores. Therefore, the lack of convergence of the results of the two studies suggests that invariance cannot be taken for granted and should be empirically addressed, which is an important take-home message of these articles. It is a major strength of both studies that they address measurement issues, using state-of-the-art psychometric procedures (Matsumoto & Van de Vijver, 2011). Both studies employ the same

statistical software to test invariance, namely AMOS (Arbuckle, 2009). Several statistical programs are available nowadays to test invariance, including Stata and SAS as examples of general-purpose statistical packages, and Mplus and Lavaan as examples of dedicated statistical packages. It may be noted that the latter procedure, Lavaan, is part of the free R package, which greatly facilitates its availability.

The third article, by Fortin Morales, Van de Vijver, and Poortinga, addresses invariance from a different perspective. The context is again a multicultural country, in this case Nicaragua. The country has many (Maya) indigenous groups, with their own languages. The medium of instruction is Spanish, which is spoken as a first language only by a very small minority of the population. Notably in the first years of education, individual differences in Spanish proficiency are tremendous. The authors were interested in the relationships between socioeconomic status, exposure to Spanish, and educational achievement in different ethnic groups and areas of the residence (rural versus urban). The question was addressed whether these relationships were invariant across ethnic groups and areas of residence. The relationships were stable across both ethnicity and area of residence. However, Spanish language proficiency was more salient in the third grade than in the sixth grade. The authors argue that by the time pupils reach sixth grade, individual differences in Spanish proficiency may have subsided; however, dropout of pupils with low levels of Spanish proficiency could also influence the results. The study illustrates the importance of examining relevant context variables to explain study achievement. It is clear that a thorough knowledge of the local context is needed to appreciate which factors could explain individual differences in performance. Understanding the local context and its bearing on psychological outcomes is of great importance in cross-cultural studies. Without a detailed knowledge of the local context, cross-cultural studies will remain superficial (Berry et al., 2011).

The fourth article, by He and Van de Vijver, deals with a perennial challenge in studies using self-reports: response styles. The

study of these styles goes back more than 60 years (e.g., Cronbach, 1950). The interest was sparked by a concern that participants may not give honest answers when they are asked to report about themselves (Paulhus, 1991). Many different response styles have been studied, including acquiescence, midpoint responding, extremity, and social desirability. What they have in common is that they influence the response process and make it less likely that participants reflect their true status on some target construct. Cross-cultural studies in response styles have revealed consistent, often rather large differences. For example, samples from less affluent, more collectivistic countries tend to show more response styles than samples from more affluent, more individualistic countries (Harzing, 2006). There is extensive literature on score corrections, based on response styles. However, there is surprisingly little literature which shows that the validity of scores increases after corrections for response styles. The theoretical understanding of response styles is poor. Diametrical views of response styles can be found in the literature. On the one hand, there is the dominant view that response styles should be eradicated and that instruments should be designed in such a manner that the role of response styles is minimized or that response styles, such as social desirability, are measured explicitly so that it is easy to correct for response styles (Eysenck & Eysenck, 1994). For instance, this could be done by excluding participants with high scores on response styles. On the other hand, there is the view that response styles are part and parcel of psychological functioning and that the way in which we express ourselves is influenced by our personality (McCrae & Costa, 1983) as well as by cultural norms (Smith, 2004). In the latter view, attempts to remove the influence of response styles from test results cannot be expected to increase the validity of the test, which is what has been found (Ones, Viswesvaran, & Reiss, 1996).

Building on their earlier work (e.g., He & Van de Vijver, 2013), the authors describe a model in which different response styles are integrated in a so-called General Response Style, that combines acquiescent, extreme, and

midpoint responding, as well as features of impression management. They combine traditional indirect measures of response styles with direct measures in which participants indicate whether they tend to prefer moderate or extreme responses. Questionnaires to measure these styles were administered to mainstream Dutch as well as Western and non-Western Dutch immigrants. The authors confirmed that a single confirmatory model fitted the data in all groups. However, often observed cultural differences in response styles were not found, presumably because the non-Western immigrants who were supposed to show the most response styles, were well adjusted to the Dutch context.

The final paper of this special issue, by Van de Vijver, discusses challenges of cross-cultural psychology in Romania, with an emphasis on methodological issues. A general framework is described in which these challenges can be interpreted, using bias and equivalence as central concepts. Many of the methodological issues, discussed in the previous articles, are presented here in a more generic and integrated manner than in the previous articles. Finally, based on personal experience, a number of questions are discussed that are relevant when setting up a cross-cultural study, such as choosing adequate instruments and the model of cooperation with colleagues in the same study. Many methodological challenges can be identified prior to the data collection of a study. As a consequence, it is often relatively easy to anticipate on these challenges and to take appropriate action before the first interview is conducted or the first participant has been tested.

Hopefully, the special issue will illustrate the huge potential and relevance of cross-cultural psychology for Romania. Globalization and related initiatives such as the European unification are by no means simple, progressing developments. Still, the often faltering steps of these developments have to be interpreted against the backdrop of a seemingly endless increase of intercultural encounters. Cross-cultural psychology will continue to be important for a while, presumably quite a while.

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