## African Journal of Psychological Assessment

ISSN: (Online) 2617-2798, (Print) 2707-1618

Page 1 of 2

Book Review

# Cross-cultural cognitive assessment: Data from Africa

### **Book Title:**

Cross-cultural cognitive test norms: An advanced collation from Africa

#### Book Cover:



Authors: Shuttleworth-Edwards, A.B. & Truter, S. (2022)

ISBN: 978-0-620-98214-6

#### Publisher:

Inter-ed Publishers, Paardevlei, South Africa R1855.00\* \*Book price at time of review

Review Title: Cross-cultural cognitive assessment: Data from Africa

Reviewer: Kate Cockcroft<sup>1</sup>

#### Affiliation:

<sup>1</sup>Department of Psychology, Faculty of Humanities, University of the Witwatersrand, Johannesburg, South Africa

**Corresponding author:** Kate Cockcroft, kate.cockcroft@wits.ac.za

How to cite this article: Cockcroft, K. (2023). Cross-cultural cognitive assessment: Data from Africa. *African Journal of Psychological Assessment*, 5(0), a139. https://doi. org/10.4102/ajopa.v5i0.139

#### Read online:



Scan this QR code with your smart phone or mobile device to read online. Shuttleworth-Edwards' and Truter's publication is an African version of the compendia of normative data in the tradition of Mitrushina et al. (2005) and Strauss et al. (2006). As the interpretation of cognitive test scores profoundly affects the quality and utility of psychological assessment, reports and research, such a collation containing most of the available normative data for commonly used cognitive tests is invaluable. Before this book became available, only those with resources (time, staff, journal access) to conduct exhaustive library searches were able to uncover normative reports for a specific test. Some of this information exists only as grey literature, so locating it is no small endeavour. This book carefully collates these dispersed norms for 83 cognitive tests from 16 African countries and provides an invaluable guide for the busy clinician, researcher, lecturer, and graduate student.

It does more than this too: it offers a critical reflection of the challenges in cross-cultural cognitive assessment. There has been a growing realisation that many of the assumptions underlying neuropsychological testing are not culturally universal (Cockcroft, 2022). In addition, problems with intentional and unintentional racial, ethnic, linguistic and socioeconomic discrimination caused by cognitive tests and their users are well documented (Cockcroft, 2020; Laher & Cockcroft, 2013). Access to normative data from people with similar demographic backgrounds to the person you intend to assess is crucial in mitigating such discrimination. Shuttleworth-Edwards and Truter highlight that many practitioners, especially those in training, are unaware of the importance of, and/or where to locate, demographically appropriate test choices and norms, especially in cases of socioeconomic, language and educational diversity. Their book addresses this concern as the authors included only those studies, which provided all of the core demographic variables, namely language, age, level of education, as well as some indication of socioeconomic status (SES) and/or quality of education.

The book has a clear aim to alert practitioners and researchers about these demographic features, which are deemed vital for optimal normative data. Some of these, such as quality of education, are not always included in normative data. This unjust feature of the South African educational landscape means that the type of education received ranges from extremely well-resourced and on par with advantaged socioeconomic conditions elsewhere in the world to egregiously underresourced resulting in low levels of technological sophistication and inadequate literacy. It is therefore important to consider this factor in the assessment of cognitive functioning particularly because there is considerable evidence that quality of education is a much more useful variable than either level of education or race group (Shuttleworth-Edwards, 2016).

In addition to a failure to consider the role of quality of education in evaluating cognitive performance, Shuttleworth-Edwards and Truter also point out another common error made by practitioners, which is ignoring a client's timed versus untimed performance on tests. Slow processing speed may conceal an otherwise intact function when the client is assessed under time constraints. Bearing this in mind, the book has been structured so that visuospatial and executive functions are divided into separate chapters based on whether the tests tapping these functions are timed or not. Other functional domains could not be as clearly divided, and instead include constant reminders to the practitioner to consider the role of processing speed when interpreting the reason for suboptimal performance on a timed task.

In some instances, the normative data in this book reassuringly highlight some well-established influences on cognitive test performance, such as those of age and level of education across all tests and all domains (Mitrushina et al., 2005; Strauss et al., 2006). This reminds us that these variables should never be neglected in the interpretation of cognitive functioning. Shuttleworth-Edwards and Truter also observe that there is a need for more refined stratification of norms within these variables (age and level of education), for example, the separation of older and oldest-old adults, children versus adolescents, pre-primary versus primary school children. These

Copyright: © 2023. The Authors. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

provide further indications of the kind of research that is needed in the field. Another well-established finding was the general lack of influence of sex on normative data (Mitrushina et al., 2005; Strauss et al., 2006).

Consideration is also given to an extremely important issue for multilingual settings such as South Africa, namely the language of test administration for individuals whose first language is not English. The authors show how language of test administration interacts with age so that home language is not always the best language for assessment. They give a detailed discussion of the nuances in deciding on the appropriate language of assessment.

Shuttleworth-Edwards' and Truter's text provides all this information in a carefully organised, accessible and userfriendly manner. Make sure to read the book's preface, which provides a detailed rationale for undertaking this enormous project, as well as the clinical and demographic scope of the book. Part 1 gives a detailed introduction of cross-cultural test norm challenges and some proposed solutions, as well as the theoretical and conceptual underpinnings of the book. Part 2 covers the step-by-step process of applying and interpreting test norms, and Part 3 provides the collated normative test data for core functional modalities. I like this organisation, which corresponds with the functional domains of a brainbehaviour model of cognitive assessment. This is preferable to a text-oriented approach, as it allows for more a 'clinically contextualised' neuropsychological approach to the assessment of cognitive strengths and weaknesses. In organising the book in this manner, the authors acknowledge that the multifunctional nature of cognitive tests makes their separation into distinct functional modalities artificial but is necessary in order to impose organisational structure on the vast information. They also caution that practitioners should refrain from conceptualising tests too narrowly as belonging solely to a single functional category and that it is important to acknowledge that, in addition to the core functions tapped

by a test, other functions would also be drawn on by a particular test.

This book addresses the long-standing need for demographically focused African norms with more refined levels of stratification than is usually available from test standardisation data. This is important because this continent has an enormous population with very varying levels of technological skill, educational backgrounds, socioeconomic conditions, literacy, and test-wiseness. While the compendium is a comprehensive and accessible practitioner resource, it also has considerable value for postgraduate professional training and research. It highlights many areas where additional research could fill existing norming gaps. One of these gaps is the lack of an in-depth critical comparison of norms derived for the various African countries, across all the tests and functional domains included in the book.

*Cross-cultural Cognitive Test Norms: An Advanced Collation from Africa* is much more than a collection of normative studies. It includes a thoughtful and critical engagement, which draws attention to each study's strengths and limitations, while stressing administration, scoring and interpretation issues relevant to sound neuropsychological practice. This book fills what has been an enduring gap in standardising the presentation of norms on commonly used tests of cognitive functioning in an African context.

## References

- Cockcroft, K. (2020). Ignorance is not an excuse Irresponsible neurocognitive test use highlights the need for appropriate training. *African Journal of Psychological Assessment*, 2(0), 1–2. https://doi.org/10.4102/ajopa.v2i0.28
- Cockcroft, K. (2022). Are working memory models WEIRD? Testing working memory models in a non-WEIRD sample. *Neuropsychology*, 36(5), 456–467. https://doi. org/10.1037/neu0000811
- Laher, S., & Cockcroft, K. (Eds.). (2013). Psychological assessment in South Africa: Research and applications. Wits University Press.
- Mitrushina, M., Boone, K.B., Razani, J., & D'Elia, L.F. (2005). Handbook of normative data for neuropsychological assessment (2nd ed.). Oxford University Press.
- Shuttleworth-Edwards, A. B. (2016). Generally representative is representative of none: Commentary on the pitfalls of IQ test standardization in multicultural settings. *Clinical Neuropsychologist*, 30(7), 975–998. https://doi.org/10.1080/138 54046.2016.1204011
- Strauss, E.S., Sherman, E.M., & Spreen, O. (2006). A compendium of neuropsychological tests: Administration, norms, and commentary. Oxford University Press.