



Centre for health Systems Research & Development

<https://www.ufs.ac.za/humanities/departments-and-divisions/centre-for-health-systems-research-development-home>

Wording effects and the factor structure of the Hospital Anxiety & Depression Scale in HIV/AIDS patients on antiretroviral treatment in South Africa

CITATION

Wouters E, Booysen FIR, Ponnet K & Van Loon F. 2012. Wording effects and the factor structure of the Hospital Anxiety & Depression Scale in HIV/AIDS patients on antiretroviral treatment in South Africa. *PLoS ONE*, 7(4): e34881. DOI: 10.1371/journal.pone.0034881

ABSTRACT

Background: Given the immense burden of HIV/AIDS on health systems in sub-Saharan Africa and the intricate link between HIV/AIDS and mental health problems, health care providers need a valid and reliable instrument to assess mental health rapidly. The Hospital Anxiety and Depression Scale (HADS) may constitute such an instrument. The aims of this study were to: (1) examine the factor structure of the HADS in a population of South African HIV/AIDS patients on antiretroviral treatment (ART); and (2) identify and control the disturbing influence of systematic wording effects in vulnerable respondent groups.

Methodology/ Principal Findings: The translated scale was administered to 716 HIV/AIDS patients enrolled in the public sector ART program in South Africa. A combined confirmatory factor analysis and correlated-traits-correlated-methods framework was used to determine the preferred factor structure of the HADS, while controlling for the disturbing influence of systematic wording effects. When assessing the structure without a negative wording factor, all three factor structures displayed an acceptable fit to the data. The three-factor solution best fitted the data. Addition of a method factor significantly improved the fit of all three factor solutions. Using χ^2 difference testing, Razavi's one-factor solution displayed a superior fit compared to the other two factor solutions.

Conclusions: The study outcomes support the use of the HADS as a valid and reliable means to screen for mental health problems in HIV/AIDS patients enrolled in a public-sector ART program in a resource-limited context. The results demonstrate the importance of evaluating and correcting for wording effects when examining the factor structure of the screening instrument in vulnerable patient groups. In light of the inter-relationships between HIV/AIDS and mental health problems and the scarcity of adequate screening tools, additional studies on this topic are required.