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Burnout Without Borders: Exploring Burnout and the Validity of the Maslach Burnout Inventory Among Medical Students Across Four Countries in Africa

Le Burnout Sans Frontières: Exploration du Burnout et de la Validité du Maslach Burnout Inventory Chez les Étudiants en Médecine dans Quatre Pays d'Afrique

^{1,2}K. S. Oluwadiya, ^{3*}A. O. Adeoti, ⁴M. I. Usman,
⁵P. O. M. Maison, ⁵G. A. Rahman, ⁶A. A. Olasinde, ⁷S. Mensah

ABSTRACT

BACKGROUND: There has been little or no cross-cultural validation study of the Maslach Burnout Inventory (MBI) from sub-Saharan Africa (SSA). This study aims to test three hypotheses among medical students in four selected countries – Ghana, Nigeria, Sierra Leone and Uganda in sub-Saharan Africa (SSA).

METHOD: This research utilized a cross-sectional design and employed an online self-administered questionnaire. The measurement of burnout was conducted utilizing the Maslach Burnout Inventory General Survey for Students (MBI-GS (S)) on Google Form. The survey was distributed via WhatsApp to medical students enrolled in six medical schools across four countries. The statistical analysis was conducted using SPSS AMOS version 24 for Confirmatory Factor Analysis (CFA) with Structural Equation Modelling (SEM).

RESULT: The prevalence of burnout varied among the medical students in the four countries with Ghana (72.1%) and Nigeria (61.2%) higher than Sierra Leone (59.2%) and Uganda (47.7%). Confirmatory factor analysis showed that the 3-factor structure of the MBI-GS(S) fits both the overall sample and the samples from each of the four individual countries albeit after correlating error terms in the analysis. However, hypothesis 2, which posited structural invariance across the samples from the four countries, was only partially met as the model demonstrated configural invariance across the samples but not metric invariance.

CONCLUSION: The results of our study provide empirical evidence supporting the presence of burnout among medical students, revealing significant disparities across the participating countries. While the MBI-GS (S) proved to be a useful tool for this assessment, our findings also highlight the challenges of achieving measurement invariance in cross-cultural research, underscoring the need for culturally adaptable methodologies. **WAJM 2025; 42 (6): 443-451**

KEYWORDS: Burnout, Africa, Cross-cultural validity, Maslach, Medical undergraduates

RÉSUMÉ

CONTEXTE: Il existe peu ou pas d'études de validation transculturelle du Maslach Burnout Inventory (MBI) en Afrique subsaharienne (ASS). Cette étude vise à tester trois hypothèses auprès d'étudiants en médecine dans quatre pays sélectionnés-Ghana, Nigeria, Sierra Leone et Ouganda - en Afrique subsaharienne.

MÉTHODE: Cette recherche a adopté une conception transversale et a utilisé un questionnaire auto-administré en ligne. L'évaluation du burnout a été réalisée à l'aide du Maslach Burnout Inventory General Survey for Students (MBI-GS(S)) via Google Form. L'enquête a été diffusée par WhatsApp auprès d'étudiants en médecine inscrits dans six facultés de médecine réparties dans quatre pays. L'analyse statistique a été effectuée avec SPSS AMOS version 24, en utilisant l'analyse factorielle confirmatoire (AFC) et la modélisation par équations structurelles (SEM).

RÉSULTATS: La prévalence du burnout varie selon les pays : Ghana (72,1 %) et Nigeria (61,2 %) présentent des taux plus élevés que la Sierra Leone (59,2 %) et l'Ouganda (47,7 %). L'analyse factorielle confirmatoire a montré que la structure à trois facteurs du MBI-GS(S) convient à l'échantillon global ainsi qu'aux échantillons individuels de chaque pays, bien que cela ait nécessité la corrélation de certaines erreurs dans l'analyse. Toutefois, l'hypothèse 2, qui postulait une invariance structurelle entre les échantillons des quatre pays, n'a été que partiellement confirmée: le modèle a démontré une invariance configurationnelle mais pas une invariance métrique.

CONCLUSION: The results of our study provide empirical evidence supporting the presence of burnout among medical students, revealing significant disparities across the participating countries. While the MBI-GS (S) proved to be a useful tool for this assessment, our findings also highlight the challenges of achieving measurement invariance in cross-cultural research, underscoring the need for culturally adaptable methodologies. **WAJM 2025; 42 (6): 443-451**

MOTS-CLÉS: Burnout, Afrique, Validité transculturelle, Maslach, Étudiants en médecine

¹Department of Surgery, University of Sierra Leone Teaching Hospitals Complex, Freetown, Sierra Leone.

²Department of Surgery, Ekiti State University, Ado-Ekiti, Nigeria

³Department of Medicine, Ekiti State University, Ado-Ekiti, Nigeria

⁴Department of Surgery, Bayero University Kano, Kano, Nigeria

⁵Department of Surgery, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana

⁶Faculty of Clinical Medicine and Dentistry, Kampala International University (Western Campus), Ishaka-Bushenyi, Uganda

⁷Department of Surgery, School of Medical Sciences, Kwame Nkrumah University of Science and Technology (Knust), Kumasi, Ghana

Corresponding Author: Dr Adekunle Olatayo Adeoti, Department of Medicine, Ekiti State University, Ado-Ekiti, Nigeria. Email: Kadeoti2002@yahoo.com