



The influence of diversity on the measurement of functional impairment: An international validation of the Amsterdam IADL Questionnaire in eight countries

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Introduction: To understand the potential influence of diversity on the measurement of functional impairment in dementia, we aimed to investigate possible bias caused by age, gender, education, and cultural differences.

Methods: A total of 3571 individuals (67.1 ± 9.5 years old, 44.7% female) from The Netherlands, Spain, France, United States, United Kingdom, Greece, Serbia, and Finland were included. Functional impairment was measured using the Amsterdam Instrumental Activities of Daily Living (IADL) Questionnaire. Item bias was assessed using differential item functioning (DIF) analysis.

Results: There were some differences in activity endorsement. A few items showed statistically significant DIF. However, there was no evidence of meaningful item bias: Effect sizes were low (ΔR^2 range 0-0.03). Impact on total scores was minimal.

Discussion: The results imply a limited bias for age, gender, education, and culture in the measurement of functional impairment. This study provides an important step in recognizing the potential influence of diversity on primary outcomes in dementia research.

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