

# The Bayer-Activities of Daily Living Scale (B-ADL): Results from a Validation Study in Three European Countries

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## Key Words

Activities of daily living, functional assessment · International validity · Dementia

## Abstract

The Bayer-Activities of Daily Living Scale (B-ADL) is a 25-item, informant-rated questionnaire which was developed as a brief and internationally applicable instrument for assessing functional disabilities. The scale's target group are elderly patients suffering from mild to moderate dementia or cognitive impairment. To investigate the reliability and validity of different language versions, the B-ADL was administered in the UK, Germany, and Spain to a total of 1,433 subjects with a wide range of cognitive decline. The results from the three country samples were very similar, with internal consistency being above 0.98 (Cronbach alpha). A factor analysis revealed that a one-factor solution accounted for most of the variance. The B-ADL total score significantly increased between adjacent Global Deterioration Scale (GDS) stages 1 to 5. A second factor analysis entering additional variables (GDS stage, Mini-Mental State Examination or MMSE subscores, age, years of education, gender, and country) revealed that all B-ADL items loaded on the same factor,

'dementia severity', and that they were not related to age, education, gender, or country. In the identification of subjects with clinically manifest dementia symptoms (GDS stages 4 and 5), the B-ADL proved to be as efficient as the MMSE in the UK and German samples and superior to the MMSE in the Spanish sample.

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## Introduction

The need for internationally applicable and validated test instruments for assessing dementia has been stressed for cross-cultural screening studies [1] as well as for multinational clinical drug trials evaluating the efficacy of anti-dementia compounds [2, 3]. Although standard procedures for developing different language versions of a psychometric tool and for proving the validity of the translations have not yet been agreed upon, a series of proposals converging on a set of core requirements have been made [4–7]. Thus, there is consensus that the translation of a test or a scale is an adaptation process comprising several steps. It starts with a sequence of forward and backward translations, for which a variety of subroutines have been described in detail. The outcome of this process is not

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