

Reliability and Validity of the English-, Chinese- and Malay-Language Versions of the World Health Organization Quality of Life (WHOQOL-BREF) Questionnaire in Singapore

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Abstract

Introduction: The World Health Organization Quality of Life (WHOQOL-BREF) questionnaire is a 26-item questionnaire that evaluates 4 domains of quality of life (QoL), namely Physical, Psychological, Social Relationships and Environment. This study aimed to evaluate the validity and reliability of the WHOQOL-BREF among Singapore residents aged 21 and above. **Materials and Methods:** We recruited participants from the general population by using multistage cluster sampling and participants from 2 hospitals by using convenience sampling. Participants completed either English, Chinese or Malay versions of the WHOQOL-BREF and the EuroQoL 5 Dimension 5 Levels (EQ-5D-5L) questionnaires. Confirmatory factor analysis, known-group validity, internal consistency (Cronbach's alpha) and test-retest reliability using the intraclass correlation coefficient (ICC) were performed. **Results:** Data from 1316 participants were analysed (Chinese: 46.9%, Malay: 41.0% and Indian: 11.7%; 57.5% men, mean standard deviation [SD, range] age: 51.9 [15.68, 24 to 90] years); 154 participants took part in the retest in various languages (English: 60, Chinese: 49 and Malay: 45). Tucker-Lewis Index (TLI) was 0.919, 0.913 and 0.909 for the English, Chinese and Malay versions, respectively. Standardised root mean square residual (SRMR) was 0.067, 0.074 and 0.094, respectively. Cronbach's alpha exceeded 0.7 and ICC exceeded 0.4 for all domains in all language versions. **Conclusion:** The WHOQOL-BREF is valid and reliable for assessing QoL in Singapore. Model fit is reasonable with room for improvement.

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