

ABSTRACT

Cross Cultural Adaptation of the Developmental Coordination Disorder Questionnaire 2007 (DCDQ'07) in Indonesian Children : Reliability and Validity

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Background: The developmental coordination disorder questionnaire 2007 (DCDQ'07) is an internationally widely used instrument for developmental coordination disorder (DCD) screening in children aged 5-15 years. The incidence of DCD is probably underestimated in Indonesia, partly due to the absence of DCD screening instruments in Indonesian language. This study aimed to carry out a cross-cultural adaptation of the DCDQ'07 into Indonesian (DCDQ_INA) and examine its reliability and validity.

Methods: The cross-cultural adaptation was done using Beaton's guidelines. Pre-testing was done in hospital and community settings with each of 10 parents. The psychometric properties of the DCDQ_INA were tested in 72 parents having children with ADHD in the hospital and 72 in the community, whose children were relatively the same age and sex as those in the hospital. Each parent completed the DCDQ_INA twice at 2-week intervals. Diagnosis of DCD for children in a hospital setting was confirmed by the DSM-5.

Results: The internal consistency was excellent (Cronbach's $\alpha = 0.921$). Test-retest reliability with Spearman correlation was 0.838 ($p < 0.001$) and Cohen's kappa was 0.725. Content validity, item validity, discriminative validity and concurrent validity were adequate for a screening measure. This study found cut-off scores for the DCDQ_INA were 51 for ages 5-7 and 55 for 8-15 years, respectively. Using the cut-off, the sensitivities of DCDQ_INA were 85% and 83.3%, and the specificities were 94.7% and 66.6%.

Conclusion: The DCDQ_INA is a reliable and valid tool for screening DCD in Indonesian children.

Keywords: developmental coordination disorder, questionnaire, Indonesian cross-cultural adaptation, reliability, validity

INTISARI

Developmental Coordination Disorder Questionnaire 2007 (DCDQ'07) versi Indonesia: Adaptasi Lintas Budaya, Reliabilitas dan Validitas

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Latar belakang: *Developmental Coordination Disorder Questionnaire 2007 (DCDQ'07)* telah digunakan secara luas di berbagai negara sebagai instrumen skrining *developmental coordination disorder (DCD)* pada anak usia 5-15 tahun. Namun, instrumen skrining DCD dalam bahasa Indonesia belum tersedia, sehingga diagnosis DCD di Indonesia sering terlewatkan. Penelitian ini bertujuan melakukan adaptasi lintas budaya DCDQ'07 ke dalam bahasa Indonesia (DCDQ_INA), dan menilai reliabilitas dan validitasnya.

Metode: Adaptasi lintas budaya dilakukan dengan mengikuti panduan Beaton (2000). *Pre-testing* dilakukan di klinik dan komunitas, masing-masing pada 10 orangtua. Uji psikometri DCDQ_INA melibatkan 72 orangtua dari anak GPPH di klinik dan 72 orangtua di komunitas yang anaknya memiliki usia dan jenis kelamin relatif sama dengan di klinik. Masing-masing partisipan mengisi DCDQ_INA 2 kali dengan interval 2 pekan. Subyek di klinik juga dilakukan konfirmasi diagnosis DCD dengan DSM-5

Hasil: Konsistensi internal DCDQ_INA memuaskan dengan Chronbach's α 0,921. *Test-retest reliability* dengan korelasi Spearman sebesar 0,838 ($p < 0,001$) and Cohen's kappa 0,725. *Content validity*, *item validity*, *discriminative validity* dan *concurrent validity* menunjukkan hasil yang adekuat untuk instrumen skrining. Skor *cut-off* yang didapatkan adalah 51 dan 55 untuk kategori usia 5-7 tahun dan 8-15 tahun. Sensitivitas dan spesifisitas DCDQ_INA untuk usia 5-7 tahun sebesar 85% dan 94,7%. Sensitivitas dan spesifisitas DCDQ_INA untuk usia 8-15 tahun sebesar 83,3% dan 66,6%.

Simpulan: DCDQ_INA adalah instrumen yang reliabel dan valid untuk skrining DCD pada anak Indonesia.

Kata kunci: *developmental coordination disorder*, kuesioner, adaptasi lintas budaya Indonesia, reliabilitas, validitas