

## Item hierarchy of the cerebral palsy quality of life for children (CP QOL-Child)

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The Cerebral Palsy Quality of Life for Children (CP QOL-Child) is one of the first instruments developed to measure quality of life of children with cerebral palsy; the Chinese version has been validated preliminarily used Class Test Theory.

**Objective:** This study attempted to further examine the psychometric properties of the Chinese version using Item Response Theory Models.

**Methods:** 145 primary caregivers of children with cerebral palsy aged 4-12 were recruited from rehabilitation clinics and special schools in Southern Taiwan to complete the questionnaire. Most of them (77.2%) were mother (mean age 39.2 years). Data were analyzed using Rasch analysis.

**Results:** The item distribution generally demonstrated an appropriate depth and width of difficulty for measuring the ability of persons in the target population. The Rasch item difficulty estimates demonstrated an overall item hierarchy. The results also showed that after dropping eight items in the dimension pain and impact of disability in the original 65-item scale, the revised 57-item scale adequately exhibits the features of unidimensionality (separation index=4.43,  $r=0.95$ ).

**Conclusions:** From the hierarchical structure identified, clinician and therapists can expect a pattern of performance by a child with CP that is based on the established order of item difficulty.

### Biography

Sing Kai Lo obtained his PhD from the University of California, Berkeley. He has been a faculty member in a various universities in Australia, Hong Kong, Taiwan, and the United State; and is currently Dean of Graduate School at the Hong Kong Institute of Education. He has published more than 200 articles in international referred journals.

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