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Validation of a Cantonese Version of the Amsterdam-Nijmegen Everyday Language Test (CANELT): A Preliminary Report

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Introduction

Ecologically valid measures of daily communicative function are important in people with aphasia (PWA) in terms of diagnosis and treatment planning. The Research Outcome Measurement in Aphasia (ROMA; Wallace et al., 2018) has also included the assessment of communication as one essential domain in aphasia treatment research development. Two functional communication tools, namely the Cantonese Main Concept Analysis (MCA; Kong, 2009) and the Cantonese translated version of the American Speech-Language-Hearing Association Functional Assessment of Communication Skills for Adults (ASHA-FACS; Frattali et al., 1995) by Lau (2001), have been available. MCA is elicited on the presentation of sequenced pictures while the Cantonese version of ASHA-FACS requires qualitative judgments from the clinicians upon prolonged observations beyond clinical settings. In sight of the lack of objective and clinically viable tools for assessing functional communication during a conversation, Law and Lo (2017) attempted to translate the Amsterdam-Nijmegen Everyday Language Test (ANELT; Blomert et al., 1994) with cultural adaptions. While ANELT is a rating-based measure for verbal informativeness and efficiency, the Cantonese version of ANELT (CANELT; Law & Lo, 2017) adopted a quantitative scoring system based on a list of informative words produced by neurologically healthy normal speakers. The current study extended their work, which aimed to validate CANELT by modifying the scoring system and including age-stratified normative data and a larger sample of PWA.

Methods

CANELT, which consists of 20 items illustrating daily scenarios, was initially translated by Law and Lo (2017) with cultural adaptations. The scenarios were presented verbally by speech therapists/trained speech therapy students. PWA's responses were audio-taped and orthographically transcribed. Two components, namely 'Opening' and 'New information', were defined based on the pragmatic functions identified in each scenario. Scoring was based on the presence and completeness of the main concepts in each component. Normative performance was established upon 100 neurologically healthy Cantonese speakers aged between 30 and 79 years. CANELT was also administered to 46 Cantonese-speaking PWA. Measures of validity (including face, known-group, concurrent, and convergent validity) and reliability (internal consistency, test-retest,

inter/intra-rater reliability) were conducted. Sensitivity and specificity were also considered.

Results

PWA performed significantly different from healthy normal in both pragmatic components of CANELT. Satisfactory results in terms of validity and reliability were yielded. A sensitivity and specificity of 91% and 85.7% were obtained in the 'Opening' score while a sensitivity of 95% and specificity of 91% were attained in the 'New Information' score. In addition, two comparable sub-sets, with each consisting of 10 items, have been developed. Besides, an age effect was found in normative performance.

Conclusions

It is suggested that CANELT can be used as an ecologically valid measure for functional communication in research and clinical perspectives. Possible reasons accounting for the age differences are discussed.

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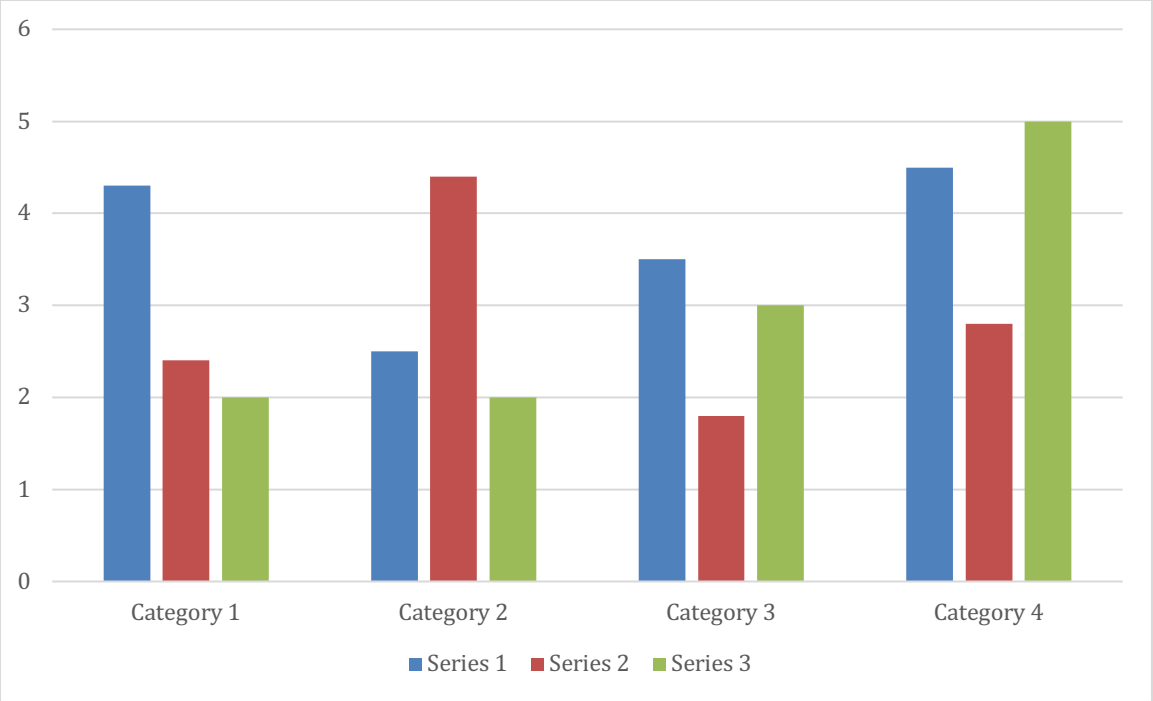

Figure 1. Example figure body text

Table 1. Example table body text

College	New students	Graduating students
	Undergraduate	
Cedar University	110	103
Elm College	223	214
Maple Academy	197	120
Pine College	134	121
	Graduate	
Cedar University	24	20
Elm College	43	53
Maple Academy	3	11
Pine College	9	4
Total	**745**	**646**