

P273

The relation between people living with dementia's verbal output and cognitive outcomes in virtual Cognitive Stimulation Therapy: An initial investigation

Miss Meihua Su¹, Dr Winsy Wing Sze Wong¹, Prof Gloria Wong², Dr Jacky Choy³

¹Department of Language Science and Technology, Hong Kong Polytechnic University, Hong Kong, China. ²School of Psychology and Clinical Language Sciences, University of Reading, Reading, United Kingdom. ³Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong, China

Topic

Dementia diagnosis, treatment, care and support: Dementia therapies (Music, dance, art etc.)

Abstract

Aims: To investigate the relationship between verbal output of people living with dementia (PLwD) in virtual cognitive stimulation therapy (VCST) measured at different time points and their cognitive functions before/after therapy.

Method: The current study was based on a secondary analysis of pre-recorded videos of VCST sessions. Twenty-nine Cantonese-speaking PLwD were involved (8 male, Mage = 81.14, SD = 7.23). In each VCST session, a 10-minute recording was orthographically transcribed while the number of syllables produced by each participant was counted. The Montreal Cognitive Assessment 5-Minute Protocol Hong Kong Version (MoCA-5) measured before/after therapy served as cognitive outcome. Pearson correlation analyses were conducted between: the total number of syllables produced in the first three therapy sessions and 1) pre and 2) post MOCA-5 scores; the total number of syllables produced in the last three therapy sessions and 3) pre and 4) post MOCA-5 scores; total number of syllables produced in all sessions and 5) pre and 6) post MOCA-5 scores.

Results: Table 1 illustrates participants' verbal output measured at different time points in VCST and their cognitive outcomes pre-/post-therapy. Significant correlations were observed between variables, as shown in Table 2.

Conclusions: PLwD's verbal outputs were more closely connected with their time-matched MOCA-5 scores as compared to the cross-lagged correlations, indicating that a PLwD's level of verbal engagement during sessions closely reflects their concurrent cognitive ability. This finding aligns with previous findings on the associations between speech and dementia symptoms (1). It may facilitate the simultaneous observation of PLwD's cognitive functions in therapeutic settings and contribute to nuanced adjustments accordingly in dementia care.

Reference 1. Klimova B, Kuca K. Speech and language impairments in dementia. *Journal of Applied Biomedicine*. 2016; 14(2):97–103.