

Lexical-Semantic Deficits in Sinhala Speaking Persons with Post Stroke Aphasia: Evidence from Single Word Auditory Comprehension Task

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Abstract : In aphasia, various levels of symbolic language processing (semantics) are affected. It is shown that Persons with Aphasia (PWA) often experience more problems comprehending some categories of words than others. The study aimed to determine lexical semantic deficits seen in Auditory Comprehension (AC) and to describe lexical-semantic deficits across six selected word categories. Thirteen (n =13) persons diagnosed with post-stroke aphasia (PSA) were recruited to perform an AC task. Foods, objects, clothes, vehicles, body parts and animals were selected as the six categories. As the test stimuli, black and white line drawings were adapted from a picture set developed for semantic studies by Snodgrass and Vanderwart. A pilot study was conducted with five (n=5) healthy nonbrain damaged Sinhala speaking adults to decide familiarity and applicability of the test material. In the main study, participants were scored based on the accuracy and number of errors shown. The results indicate similar trends of lexical semantic deficits identified in the literature confirming 'animals' to be the easiest category to comprehend. Mann-Whitney U test was performed to determine the association between the selected variables and the participants' performance on AC task. No statistical significance was found between the errors and the type of aphasia reflecting similar patterns described in aphasia literature in other languages. The current study indicates the presence of selectivity of lexical semantic deficits in AC and a hierarchy was developed based on the complexity of the categories to comprehend by Sinhala speaking PWA, which might be clinically beneficial when improving language skills of Sinhala speaking persons with post-stroke aphasia. However, further studies on aphasia should be conducted with larger samples for a longer period to study deficits in Sinhala and other Sri Lankan languages (Tamil and Malay).

Keywords : aphasia, auditory comprehension, selective lexical-semantic deficits, semantic categories

Conference Title : ICCNA 2018 : International Conference on Clinical Neurolinguistics and Aphasia

Conference Location : Paris, France

Conference Dates : March 15-16, 2018