Spring 5-5-2022

COMPARISON OF SEMANTIC ASSOCIATIVE NETWORK USING WORD GENERATION TASK IN HEALTHY LITERATE ADULTS AND ELDERLY POPULATION

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Currently, in aging literate individuals, there is limited literature on the word generative task using the semantic network model. The present study attempted to determine the semantic associative networking in literate healthy adults and elderly population. A total of 60 participants took part in the study, which comprised of two groups (healthy adults and elderly population). The developed stimulus was validated by experts which comprised of four abstract and four concrete words. The participants were given one minute to produce as many related words as possible for the target word. Both quantitative and qualitative analysis were carried out. For the quantitative analysis, the total number of correct words (TNCW) generated was obtained and compared between the groups. Comparison between groups were done using independent t test analysis. It was observed that TNCW for all 8 words was higher in the adults compared to the older group. The difference between abstract and concrete word generation was compared using repeated measures ANOVA and it was discovered that there was a difference between both the words in adults, but not in the elderly group. The common words generated, and errors were also identified. Error patterns showed that perseverative errors were more in number than other errors and these were more in the elderly population compared to the adults. The study attempted to assess the semantic associative networking of abstract and concrete words using the spreading activation model and it was found to be correlating with the theories of networking models.

Key words Semantic Memory, Normal Cognition, Semantic Association, Semantic Networking, Generative Naming, Elderly Population, Healthy Adults.