

A Comparative Study of Language Skills in Young Men With and Without Traumatic Brain Injury

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Traumatic brain injury (TBI) impacts among other skills on attention, orientation, cognition, communication and higher executive functions such as problem solving (ASHA, n.d.). The primary aim of the study was to explore the effects of focal brain injury on Sinhala soldiers. Ten soldiers following shrapnel head injuries (experimental groups-five right-hemisphere and five left-hemisphere) and their carers and five young men without head injuries (control group), all within the age of 20 to 35 years were included in the study. Language data were collected via a picture description task consisting of three target pictures from participants of both groups and data was gathered from a conversational task between the participants of the experimental groups and a caregiver using a question guide. The language data was analyzed qualitatively to document its syntactic structure and analyzed quantitatively on the syntactic category words produced by the two groups via one-way ANOVAs. In the control group, there was a trend towards higher mean scores on all five syntactic category variables and use of more complex syntax in comparison to the experimental groups. The one-way ANOVAs performed indicated a highly significant difference between the three groups of participants on the number of utterances ($F(2, 14) = 13.65, p < 0.005$), the range of syntactic structures ($F(2, 14) = 23.63, p < 0.001$) and syntactic complexity ($F(2, 14) = 21.56, p < 0.001$). While reduced syntactic category words and structural differences were indicated in the picture description task for the experimental groups, the features perceived by the carers as hindering communication were non-linguistic such as articulation, memory and psychosocial difficulties. Reduced syntactic complexity and range and paucity of utterance were noted for the two experimental groups in comparison to the control group, in-line with literature on English. However, in contrast, the left-hemisphere group did not omit or produce fewer main verbs compared to the control group and the right-hemisphere head injury group indicated a paucity of nouns, main verbs, adjectives and adverbs. Scrambled word order and subject/object deletion were not perceived as disrupting communication by the carers.

Key Words: Traumatic Brain Injury, Language Skills, Young Men