

# **Master's Thesis**

The effects of a modified "Constraint Induced Language Therapy (CILT)" protocol with and without Continuous Theta Burst Stimulation (cTBS) on language skills in Chronic Mild Anomic **Aphasia** 

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# CYPRUS UNIVERSITY OF TECHNOLOGY FACULTY OF HEALTH SCIENCES DEPARTMENT OF REHABILITATION SCIENCES

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# **Approval Form**

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#### **ABSTRACT**

The present study describes the findings of a 10-day consecutive aphasia treatment protocol (i.e., modified Constraint Induced Language Therapy (CILT)) with and without neuronavigated continuous theta burst stimulation (cTBS) treatment over the right pars triangularis in two individuals with chronic mild anomic aphasia post-stroke. Language measurements were collected three times before therapy, four and a half months after treatment, and again at the 24-month follow-up. Quality of life data were collected one time pre-treatment, and again at the 24-month follow-up. No side effects were reported during and after treatment. Results showed no improvement in cognition, in expressive language, in spoken comprehension and in reading performance. Regarding Quality-of-Life (QoL) measurements, there is no post treatment data for the first participant as the participant did not give us the questionnaire at our last session. The second participant showed improvement, as his performance increased in the overall, physical, communication, and psychosocial domains. The findings of the present study do not support the beneficial effects of CILT with or without TMS on language deficits in mild anomic aphasia post-stroke. Future randomized controlled studies with larger samples are needed to clarify the efficacy of this type of intervention.

**Keywords:** Aphasia, Constraint-Induced Language Therapy (CILT), Continuous Theta Burst Stimulation (cTBS), Stroke