# Enhancing Cross-Linguistic Recovery through Transcranial Direct Current Stimulation for Bilingual Aphasia -A Case Report

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INTRODUCTION

1/4th of Indians are bilinguals (Census, 2011)

Bi/Multilingual aphasia – rehabilitation

tDCS- enhances functional recovery (Husna et a., 2025)

NEED FOR THE STUDY

Most RCTs – monolingual aphasia (Elsner et al., 2020)

Only Cerebellar tDCS studies – bilingual aphasia

tDCS studies – less evidence - QOL and cross-language

AIM

To evaluate the effects of tDCS combined with SLT in a bilingual PWA.

METHOD

Design: SSD; double blinded

60y/m; Kannada-Telugu bilingual

tDCS+SLT: 15 days 1-hour sessions; Treated L - Kannada

Screening; WAB; BNT; CETI in both languages; QoL measures

1mA; 20 mins; Anode: Left IFG; Cathode: CSOR

RESULTS & DISCUSSION

Tests	T0	T1	T2
SAQOL	4.64	4.74	4.79
LISAT-9	6	6	6

WAB scores across languages

Kannada: 46.1, 67.9, 65.4
Telugu: 39, 54.7, 59

BNT scores across languages

Kannada: 28, 75, 74
Telugu: 18, 54, 55

CETI scores across languages

Kannada: 52.5, 73.75, 74.37
Telugu: 38.5, 61.6, 64.5
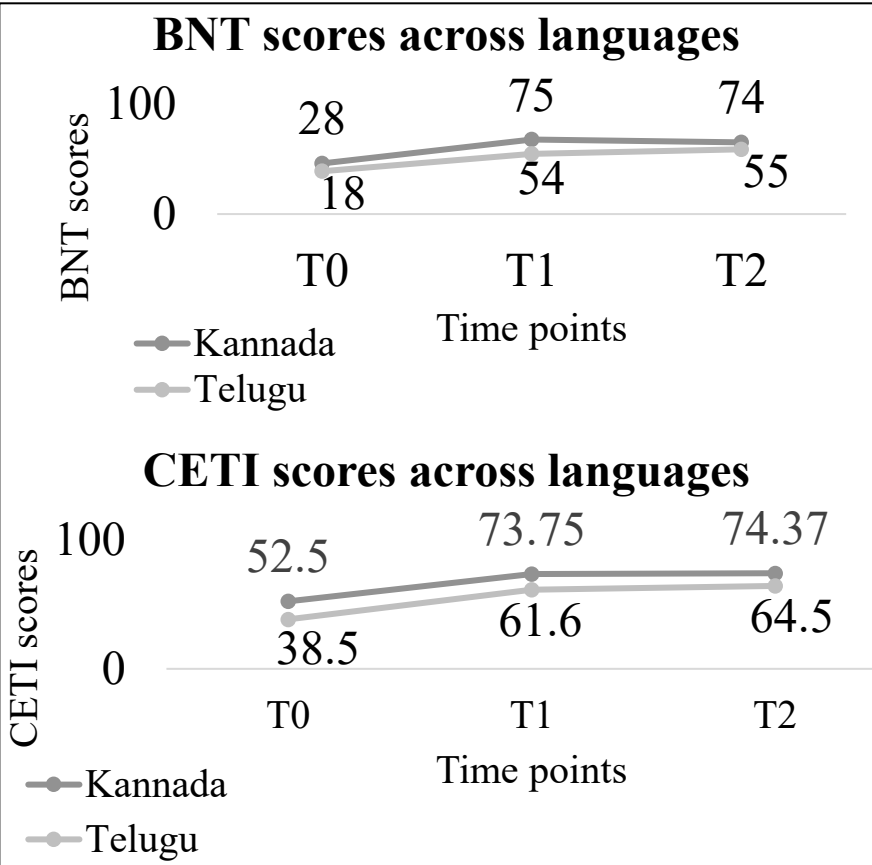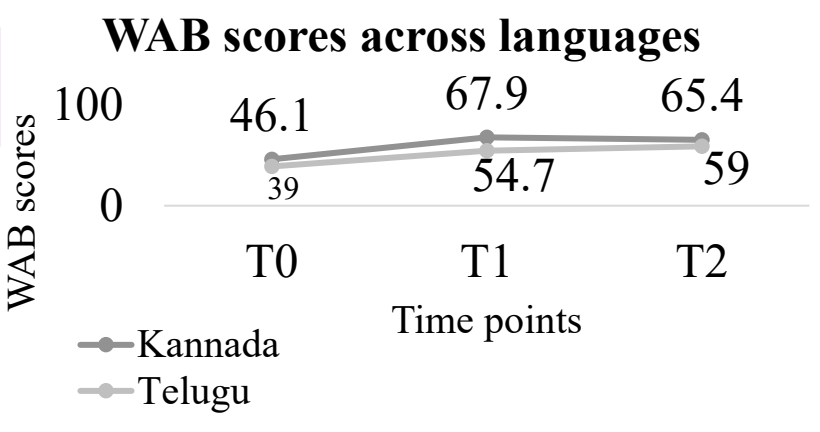
CONCLUSION

Preliminary evidence on the effectiveness of using tDCS on bilingual PWA in India.

REFERENCES