

## Bilingualism Contributes to Cognitive Reserve in Parkinson's Disease

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**Abstract :** Background: Bilingualism has been shown to enhance cognitive reserve and potentially delay the onset of dementia symptoms. This study investigates the impact of bilingualism on cognitive reserve and the age of diagnosis in Parkinson's Disease (PD). Methodology: The study involves 16 non-demented monolingual PD patients and 12 non-demented bilingual PD patients, matched for age, sex, and years of education. All participants are native Spanish speakers, with Spanish as their first language (L1). Cognitive performance is assessed through a neuropsychological examination covering all cognitive domains. Cognitive reserve is measured using the Cognitive Reserve Index Questionnaire (CRIQ), while language proficiency is evaluated using the Bilingual Language Profile (BLP). The age at diagnosis is recorded for both monolingual and bilingual patients. Results: Bilingual PD patients demonstrate higher scores on the CRIQ compared to monolingual PD patients, with significant differences between the groups. Furthermore, there is a positive correlation between cognitive reserve (CRIQ) and the utilization of the second language (L2) as indicated by the BLP. Bilingual PD patients are diagnosed, on average, three years later than monolingual PD patients. Conclusion: Bilingual PD patients exhibit higher levels of cognitive reserve compared to monolingual PD patients, as indicated by the CRIQ scores. The utilization of the second language (L2) is positively correlated with cognitive reserve. Bilingual PD patients are diagnosed with PD, on average, three years later than monolingual PD patients. These findings suggest that bilingualism may contribute to cognitive reserve and potentially delay the onset of clinical symptoms associated with PD. This study adds to the existing literature supporting the relationship between bilingualism and cognitive reserve. Further research in this area could provide valuable insights into the potential protective effects of bilingualism in neurodegenerative disorders.

**Keywords :** bilingualism, cognitive reserve, diagnosis, parkinson's disease

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