



Durham
University

Department of Psychology

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Cognition and action in Parkinson's disease and Progressive Supranuclear Palsy (PSP)

Background

Progressive Supranuclear Palsy is a rare movement disorder characterized by paralysis of eye movements, bradykinesia (slowness of movement), aphasia and executive dysfunction. People with PSP experience delayed diagnosis and treatment options are extremely limited. I have recently been exploring new ways to improve diagnosis of PSP using cognitive tests (e.g. Smith et al., 2022) and the efficacy of visual aids such as prism glasses (e.g. Smith et al., in press. This work has been funded by the Vivensa Foundation and MRC and I am very keen to extend this work with new projects that explore how PSP and Parkinson's disease affect cognitive processes (e.g. attention, working memory and visual imagery) and / or that empirically test the efficacy of rehabilitation tools such as prism glasses. I have well established collaborations with local NHS trusts and the PSPA (the UK's largest PSP charity) that gives excellent access to these rare patient populations and would welcome proposals for prospective students.

Aims and Methods

We would use approaches from cognitive psychology and cognitive neuropsychology to better understand the cognitive problems experienced by people with PSP and/or explore the efficacy of visual aids such as prism glasses.

Relevance

The project bridges interests of various psychology subdisciplines, including cognitive psychology, neuropsychology and clinical neuroscience

Training

The candidate's research activity will be based in Durham, Psychology. Besides a training in general research skills, the candidate will develop a deeper

understanding of the clinical application of cognitive psychology, the neurology of movement disorders, NHS research ethics processes and good clinical practice.

Suitable for

PhD and MSc by Research students.

References and Further Reading

[User perspectives on the usefulness of prism glasses as a visual aid for people with Progressive Supranuclear Palsy](#)

Smith, D., Cheviet, A., Atkinson, A., & Lane, A. (in press). User perspectives on the usefulness of prism glasses as a visual aid for people with Progressive Supranuclear Palsy. *Journal of Visual Impairment & Blindness*.

[Spatial Attention and Spatial Short Term Memory in PSP and Parkinson's Disease](#)

Smith, D., Casteau, S., & Archibald, N. (2021). Spatial Attention and Spatial Short Term Memory in PSP and Parkinson's Disease. *Cortex*, 137, 49-60. <https://doi.org/10.1016/j.cortex.2020.12.019>