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PHYSICAL AND MENTAL CHARACTERISTICS IN FREEZERS AND NON-FREEZERS IN PARKINSON’S DISEASE.

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Background
Freezing is an interruption of motor activity which is highly sensitive to environmental triggers, suggesting a mental component to its origins. The aim of this study was to explore differences in disease severity, balance, falling, cognition, depression and fatigue in freezers (FRs) and non-freezers (N-FRs) with Parkinson’s disease.

Methods
FRs and N-FRs were selected from 153 participants into an effect study of physiotherapeutic cueing, the RESCUE-project. The distinction between FRs and N-FRs was made: 1) by the treating physiotherapist on the basis of clinical experience with the patient; and 2) when at least weekly freezing was reported on item 3 of the FOG-questionnaire at trial entry.

Results
Sixty three patients (41%) were identified as FRs, 52 (34%) as N-FRs and 38 (25%) were excluded from analysis, as they met only one criterion. Although, freezers had significantly longer disease severity (P=0.04), UPDRS (III) motor scores did not differ between groups. Significantly more FRs (51%) reported falling in the past 3 months than N-FRs (29%, P=0.04). Outcome of timed tests during tandem and single leg stance and TTUG was similar in both groups, as was fear of falling (FES). FRs had equal levels of depression (HADS), cognitive function (UPDRS I, MMSE) and fatigue (MFI). However, executive dysfunction (Brixton) was almost significantly reduced in FRs (P=0.06).

Conclusions
Freezers and N-FRs had remarkably similar physical and mental profiles, underscoring the independence of falling and its relationship to freezing. Executive dysfunction may be a possible contributing factor, warranting further investigation.