

Impact of Parkinson's on Use of Meaningful Speech Automatism

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Meaningful speech automatism, like filled pauses, are nonpropositional contextual responses. When language formulations difficulties halt propositional speech, filled pauses “mark” speakers’ pauses signaling they are thinking and planning to continue. Some studies have shown that individuals with Parkinson’s disease (PD), which negatively effects the production of internally cued, automatic behaviors, use fewer filled pauses and more frequent and/or longer silent pauses. Typical speakers’ use of filled and silent pauses are correlated. By looking at the interaction between filled and silent pauses, we may be able to examine how meaningful speech automatism are impacted in PD, extending our understanding of the role of the basal ganglia in internally cued, automatic speech behaviors. Speech samples were collected from 15 individuals with PD and 18 age-matched controls. Despite producing a similar number of silent pauses, individuals with PD produced fewer marked silent pauses and were less likely to mark long silent pauses than controls. These results suggest that automatic responses to propositional speech and/or communication are impaired by PD. This interpretation fits with other literature where non-speech automatic processes have been demonstrated to be impaired in PD.