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## Impulse control disorders in Parkinson's disease vs in healthy controls: A different predictive model

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**Statement:** Impulse Control Disorders (ICDs), including compulsive gambling, buying, sexual behavior, and eating, are not only a severe disorder that can affect the general, non-clinical population, but also a serious, increasingly recognized psychiatric complication in Parkinson's disease (PD). Previous research detected some risk factors for their occurrence in PD patients and in the general population, such as impulsivity. However, impulsivity is a multidimensional construct, including reflection impulsivity and delay discounting.

Methodology and Theoretical Orientation: The present work assessed different facets of impulsivity in both PD patients and in the healthy controls (HCs) to examine whether they scored differently. Moreover, both PD and HC groups were divided in two subgroups based on the presence vs absence of ICDs (i.e., PD+ICD, PD-ICD, HC+ICD, and HC-ICD) to test whether the occurrence of ICDs in PD patients and in the HCs was predicted by different aspects of impulsivity. Differences between PD patients and healthy controls were tested using independent samples t-test. Moreover, a Decision Tree process was performed to examine whether ICDs in PD patients and in HCs were associated to different variables.

**Findings:** Results showed that ICDs in PD patients were predicted by a strong preference for immediate rewards, whereas ICDs in the HCs were predicted by a deficient reflective ability.

**Conclusion and Significance:** The present findings may help neurologists in early identifying PD patients who may develop ICDs by simply assessing their impulsivity in terms of delay discounting. Furthermore, this work contributed to identify another risk factor for ICDs in the non-clinical population.

## Biography

Viola Angela Izzo is a PhD student working with Caterina Primi on the adaptation and development of scales measuring impulsivity. Her research interests mainly regard impulsivity, examined both in Attention Deficit/Hyperactivity Disorder and in the class of Impulse Control Disorders that often affects Parkinsonian patients.

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