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## New neuropsychological variables proposed to establish the severity of eating disorders



A research team from the UAB and IDIBELL warns that the DSM-5 severity classification may not adequately reflect the severity of eating disorders from a neurocognitive perspective. Based on a study of 161 patients, the researchers propose incorporating other criteria, such as duration and, above all, cognitive flexibility, to assess anorexia nervosa, bulimia nervosa, and binge eating disorders.

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Currently, when talking about eating disorders (EDs), we find a classification proposed by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which categorizes them into levels of "mild", "moderate", "severe" and "extreme". For anorexia nervosa (AN), body mass index (BMI) is used as a measure of severity, with the lowest being considered the most severe form. For bulimia nervosa (BN), classification is based on the weekly frequency of episodes of inappropriate compensatory behaviors, and for binge eating disorder (BED), the number of weekly binge eating episodes is assessed.

However, various investigations have pointed out limitations in these criteria for classifying the severity of EDs, defining them as controversial and lacking sufficient empirical support. Alternative transdiagnostic criteria (present in different disorders) diagnostics have been proposed to classify the severity of each type of ED. Among them, the duration of the disease and cognitive flexibility stand out; being the latter a neuropsychological variable that represents the ability to adjust the individual's beliefs and behaviors in the face of new

situations. Cognitive flexibility is considered to play a crucial role in the self-regulation of behavior, being a relevant factor in the appearance, development, and maintenance of eating disorders. Thus, the proposal to incorporate the duration of the disease and cognitive flexibility as criteria to establish the severity of EDs is based on the important role they play in the appearance, development, and maintenance of these disorders.

This research, led by Dr. Roser Granero (Department of Psychobiology and Methodology, UAB) together with doctors Fernando Fernández-Aranda and Susana Jiménez-Murcia (Clinical Psychology Unit of the Bellvitge University Hospital, IDIBELL), explores for the first time whether the severity levels of eating disorders defined in the DSM-5 are linked to deficits in cognitive flexibility. Furthermore, researchers evaluated whether illness duration could be a valid alternative measure, capable of discriminating difficulties in cognitive flexibility.

A total of 161 adults (130 women and 31 men) who met DSM-5 criteria for an ED participated in the study (100 with AN, 34 with BN, and 27 with BED). Our results indicated that patients with AN classified in the most severe groups according to DSM-5 had a higher risk of impairment in cognitive flexibility compared to the moderate severity group. In contrast, among patients with BN and BED, no association was observed between cognitive flexibility and the different DSM-5 severity groups. Surprisingly, the groups with the lowest severity according to the DSM-5 showed a greater deterioration in cognitive flexibility in the case of patients with the presence of binge eating.

A key finding of our study was the connection between disorder duration and cognitive flexibility performance across ED subtypes, supporting its validity as an alternative classification criterion. Consequently, we conclude that the DSM-5 severity classification may not adequately reflect the severity of EDs from a neurocognitive perspective.

For patients with AN, DSM-5 classification is based solely on body mass index (BMI), which does not correspond to cognitive flexibility deficits. Given the relationship of poor cognitive flexibility with persistently maladaptive cognitive schemas and behaviors associated with this disorder, the inclusion of these neuropsychological variables could increase the likelihood of key clinical symptoms for AN, such as repetitive thoughts about weight control, loss of weight, and other aspects related to body image. Regarding the BN and APD groups, difficulties in cognitive flexibility were linked to problems diverting attention from eating-related stimuli and the inability to control compulsive overeating, crucial characteristics of these diagnostic subtypes.

The results suggest that the duration of the illness could be a more effective criterion than that proposed by the DSM-5 to identify impairments in cognitive flexibility in patients with ED. Previous research already pointed out the association between difficulties in cognitive flexibility, rigidity in thinking, and a strict eating style based on idiosyncratic rules, which presents resistance to modification in therapies. Therefore, lack of cognitive flexibility, being a trait that opposes change, stands as a crucial component that predicts a worse prognosis and greater resistance to treatments among those seeking help for EDs.

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## References

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