of the MBI-C at baseline and follow-up using Multidimensional Scaling (MDS) and two, to determine how self and proxy ratings and the choice of rating type impact in the results of the MBI-C.

Methods: To analyze MBI-C structure, 200 Subjective Cognitive Decline and Mild Cognitive Impairment patients from the CompAS longitudinal study completed baseline and follow-up assessments. Two-step bidimensional weighted dichotomous MDS were performed. All items were included in the first step. Items closely associated with each dimension (1 SD above or below the mean) were selected in a second step to obtain the final models solution.
We will also present a review of the literature on the importance of self and proxy MBI-C ratings. We will also present new empirical evidence based on data from over 10,000 cognitively normal.

Results: Results from baseline and follow-up showed two dimensions: Dimension I (right-left) differentiate high and low emotional activation and Dimension II (top-down) high and low behavioral activation. The combination of both generates 4 quadrants: resistance, restlessness, flattening and desolation. The final models were built considering the most relevant items, with little differences between baseline and follow-up. The good fit of the models, type of two-dimensional solution and group weights were similar in baseline and follow-up.
Regarding our second objective, the results suggest that self and proxy ratings may not capture comparable samples and that the choice of rating type can indeed impact the conclusions drawn from analysis.

Conclusions: The 4 quadrants identified could be the most useful NPS to determine risk factors for predementia patients. Also, the findings suggest that the way of applying the MBI-C has relevant implications.

References

Ismail Z et al. *J. Alzheimers Dis.* 2017; 56(3),929-938

Mild behavioral impairment in prodromal Alzheimer´s disease and its association with *APOE* and *BDNF* risk genetic polymorphisms

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Objective: We aimed to examine the profile and severity of mild behavioral impairment (MBI) in a sample of β-amyloid positive individuals with amnestic mild cognitive impairment (aMCI)compared to cognitively normal older adults (CN). Within aMCI, we further examined the potential influence of APOE and BDN Frisk genetic polymorphisms on MBI severity.

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Methods: We included 64 β-amyloid positive aMCI participants and 50 CN older adults from the Czech Brain Aging Study. The participants underwent neurological, comprehensive neuropsychological examination, APOE and BDNF genotyping, and magnetic resonance imaging.MBI was diagnosed with the Mild behavioral impairment checklist (MBI-C) developed for MBI case detection, and the diagnosis was based on the MBI-C total score ≥7. Additionally, self-report instruments for anxiety (the Beck Anxiety Inventory) and depressive symptoms (the Geriatric Depression Scale-15) were administered. The participants were stratified based on the presence of at least one risk allele in genes for APOE (i.e., e4 carriers and non-carriers) and BDNF (i.e., Met carriers and non-carriers). We used linear regressions to examine the between-group differences.

Results: MBI symptoms (MBI-C total score ≥1) were present in 28% CN and 83% aMCI. Almost half (48.4%) of the aMCI individuals met the criteria for the MBI syndrome. Compared to the CN, the aMCI group displayed more affective, apathy, and impulse dyscontrol symptoms ($p<0.001$) but not social inappropriateness or psychotic symptoms. Furthermore, aMCI participants reported more depressive ($p<0.01$) but similar anxiety symptoms to CN on self-report measures. Within the aMCI group, APOE e4 and BDNF Met carriers did not differ from non-carriers in the severity of NPS in either instrument. However, the results suggested that an interaction between these polymorphisms influenced self-reported anxiety ($p=0.034$), with Met carriers/e4 non-carriers reporting the highest anxiety levels.

Conclusion: MBI is frequent in prodromal Alzheimer´s disease and characterized by affective, apathy, and impulse dyscontrol symptoms. APOE and BDNF risk genetic polymorphisms did not influence the NPS severity when considered separately; however, their interaction might influence anxiety, which warrants further investigation.

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Mild Behavioral impairment (MBI) and late-life psychiatric disorders: Differential clinical features and outcomes.

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Mild Behavioral Impairment (MBI) refers to a late-onset neurobehavioral syndrome in which neuropsychiatric symptoms (NPS) represent early markers of dementia. Though being a promising diagnostic category for neurobiological research, in daily clinical practice, the boundaries and relationships between MBI and late-life psychiatric disorders are yet to be established. Particularly, no studies have been conducted so far on the prognostic implications of an MBI diagnosis in the psychogeriatric context.

For these reasons, since June 2020, we are conducting a prospective longitudinal study on MBI in psychogeriatric patients. On June 2022, 144 elderly patients (≥50 years) referred to the outpatient clinic of the 2nd Psychiatric Unit of the University of Pisa had been recruited. Patients had been diagnosed with a primary psychiatric disorder (N=73, 50.6%), MBI (N=40, 27.8%) or dementia (N=31, 21.5%). Patients with MBI showed a significantly higher age at onset of psychiatric disorders and depressive episodes than patients diagnosed with primary psychiatric disorders. MCI and vascular leukoencephalopathy were also more common in patients with MBI. Moreover, compared to primary

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