

Personality architecture through healthy and pathological ageing

Friday, September 12, 2025 11:30 AM (15 minutes)

Traditional personality theories propose a universal structure based on a limited set of traits (e.g., Big Five, HEXACO). However, factors such as aging and Alzheimer's Disease (AD) may alter this structure. Prior research suggests that healthy aging reorganizes rather than simplifies personality. In contrast, AD appears to affect both cognition and personality, with caregivers frequently reporting notable changes. While some studies have explored dimensional personality changes in AD using Big Five models, none have done so within the HEXACO framework, nor questioned the underlying structure. This study addresses that gap by analyzing caregiver-reported personality in AD patients (N = 193) using the HEXACO Adjective Scale. Data were analyzed with Exploratory Graph Analysis (EGA), a network psychometrics method that estimates regularized partial correlations among items and detects latent dimensions as clusters of interconnected traits. Unlike traditional factor analysis, EGA allows for a more flexible, data-driven assessment of personality structure, especially in pathological contexts where trait organization may deviate from normative patterns. Results reveal a simplified personality structure in AD, diverging from the reorganized complexity observed in healthy aging. These findings suggest that cognitive decline may lead to structural personality alterations, not merely dimensional shifts. By leveraging network analysis, this study offers novel insights into how AD reshapes personality architecture, underscoring the value of psychometric network approaches in capturing nuanced changes. Ultimately, it highlights the need for a tighter integration between personality theory and cognitive research in the context of neurodegenerative disorders.

If you're submitting a symposium talk, what's the symposium title?

Mapping the Mind: investigating the relationships across Psychometric and Neural variables through Network Science

If you're submitting a symposium, or a talk that is part of a symposium, is this a junior symposium?

Primary authors: ROMANO, Daniele (Università degli Studi di Milano-Bicocca); Ms TRAPATTONI, Elena (University of Milan-Bicocca); GOBBO, Silvia (University of Milan-Bicocca)

Presenter: GOBBO, Silvia (University of Milan-Bicocca)

Session Classification: Mapping the Mind: Investigating the Relationships across Psychometric and Neural Variables through Network Science

Track Classification: Methodology