

## **P-917 - FUNCTIONAL BRAIN RESTING STATE ACTIVATION PATTERNS OF THE BIG FIVE PERSONALITY TRAITS**

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**Introduction:** Personality traits are associated with the vulnerability for developing psychopathology namely depression and anxiety disorders. How personality traits are reflected in the brain's structural and functional architecture is the main focus of personality neuroscience (DeYoung & Gray, 2009). Dimensions of human personality described by the Big Five personality trait taxonomy were already associated with specific neuroanatomic and neurofunctional correlates. However identifying brain correlates of a situation-independent personality structure would require evidence of a stable default mode of brain functioning associated with the different personality dimensions.

**Aims:** In this study, we investigated the neural correlates of the Big Five personality dimensions (Extraversion, Neuroticism, Openness/Intellect, Agreeableness and Conscientiousness) in what is probably the main brain resting state network - the default mode network (DMN).

**Method:** Forty-nine healthy adults completed the NEO-Five Factor Inventory (NEO-FFI) and were scanned during a task-free fMRI acquisition.

**Results:** Personality dimensions of Openness/Intellect, Agreeableness and Extraversion were positively correlated with the DMN and negatively correlated with the dorsolateral attention network. Neuroticism was found to be positively correlated with the right middle cingulate gyrus, while Conscientiousness did not correlate significantly with any of the typical DMN regions.

**Conclusion:** This study confirms previous data on the neuroanatomical correlates of the Big Five personality dimensions, and expands our understanding of this relationship by showing that different personality dimensions are associated with specific patterns of activation while the brain is in a default mode.