

P01-16 - **SIMILARITY OF THE NEURAL CORRELATES OF NEUROTICISM AND AFFECTIVE MEASURES, BUT NOT WITH EXTRAVERSION**

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Objectives: Extraversion and neuroticism are differentially correlated with affective disorders: Neuroticism is strongly correlated with depression and anxiety disorders, whereas extraversion is rather negatively correlated with anxiety disorders. Theories have implicated a common biological basis of neuroticism and affective disorders.

Methods: This study examined neural correlates of neuroticism and extraversion as well as of affective measures with functional magnetic resonance imaging using a task addressing pessimistic emotion processing during the cued anticipation of emotional stimuli in 14 healthy subjects. The measures of personality and affectivity were used as primary covariates for the correlation with brain activity during the anticipation of emotional versus neutral stimuli to identify brain regions in which individual brain activity was strongly correlated with psychometric measures.

Results: Neuroticism, depression and anxiety were correlated with brain activity in parieto-temporo-occipital regions, functionally involved in visual-perceptual processing and attentional modulation, and also in caudate regions. Extraversion was correlated with brain activity particularly in prefrontal regions.

Conclusions: Our results point to possible common neural correlates of neuroticism and the affective measures, whereas extraversion seems to have a differential neurobiological basis. Particularly, the correlation with caudate regions, involved in implicit patterns of reaction, points to possible “automatized” biases in neuroticism and depression.