P02-147 - **CHANGING FEELINGS: HOW THE SEROTONIN TRANSPORTER GENOTYPE MODULATES EMOTION REGULATION**

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Major depression (MD) is one of the most common disease burdens throughout the world. Understanding the pathophysiology of MD is therefore a major challenge in psychology and psychiatry. One major risk factor for MD is stress. However, the risk of depression after stressful life events is much greater in individuals with possession of the short variant (S) compared to the long variant (L) of the serotonin transporter polymorphic region (5-HTTLPR). But why?

One intriguing possibility is that 5-HTTLPR-S carriers show reduced cognitive downregulation of negative emotional information, through which negative emotional information is easily interpreted as stressful thereby increasing the risk of depression. In support of this hypothesis, a hyperresponsiveness (i.e. in 5-HTTLPR-S carriers compared to 5-HTTLPR-L carriers) of the amygdala in response to emotionally negative information has been found. Further, amygdala reactivity is negatively correlated with cognitive down regulation (cognitive reappraisal) of emotionally negative information.

To explore the effect of cognitive reappraisal on neural and behavioral emotional responses, instructed emotion regulation (i.e. instructing participants to down-regulate or up-regulate the impact of negative emotional stimuli by reinterpreting the meaning of an emotional event) can be applied.

Therefore, the main aim of the current study is to investigate whether the effects of cognitive reappraisal of negative emotional information (by instructed reappraisal) on neural and behavioral emotional responses is modulated by 5-HTTLPR genotype using functional magnetic resonance imaging (fMRI).

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