Interference in processing of affective conflicts in a pictorial task-design.

A huge number of studies investigated behavioral performance and the respective neuronal correlates in experimental tasks comprising emotional inteference conditions and their impact on cognitive (attentional, memory) demands - mostly conducted in "emotional versions" that emerged from the classical Stroop-paradigm (for review see MacLeod and MacDonald, 2000), but also in emotional dot probe tasks (see MacLeod et al., 1986) for the original procedure) or in "emotional versions" of the lexical decision task (LDT) (i.e. Kuchinke et al. (in press)). The majority of studies focus on patients with different emotional disorders. The majority of experimental studies, on the other hand, mostly utilize lexical or semantic decision task which resulted in emotional interference being transported via processing of these stimuli (exceptions from this are purely pictorial versions of the emotional Stroop paradigm). On this basis of existing paradigms of emotional interference it might be interesting to investigate emotional interference processing in experimental conditions comprising the processing of emotional stimuli with conflictive emotional valence - so to induce real affective conflicts. The aim of this diploma-thesis is, therefore, to construct an experimental task-design which induces an affective emotional interference condition without using semantic or lexical conditions (since there is also evidence for not semantic content at all but more basically wordness (La Heij et al., 1990) or emotional connotation of words (Richards and Blanchette, 2004) will induce interference). Using emotional face stimuli with different emotional valence (positve, negative, neutral) on the one hand and to simultaneous use this emotional stimuli to classically condition other aspects of the same face-stimuli stimuli (such as background colours), one can consequently combine different emotional valences with different colours. Thus, in a second experimental stage it might be possible to introduce emotional interference states by presenting the same emotion faces (i.e. a fearful face) but combined with colours who have - due to the first experimental stage - an contrary emotional valence in contrast to the presented emotional faces (i.e. positive valence).

The hypothesis of this study is that emotional interference states induced as described above may have the same impact on behavioral performance as seen in several other studies on interference processing.

Finally, functional temporal (ERP) and/or spatial correlates (fMRI) will be analysed in a later stage of this project.

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