

The project is focused on the physiological reactions during Word Association Test (WAT). The author tests the hypothesis originally proposed by Slechta (2002b) about separable cognitive and emotional workload, where the cognitive workloads manifests in reaction times (RT) and emotional workload in physiological reactions (e.g. electrodermal activity). The hypotheses were tested on the sample of young healthy adults (N=80), with protocol consisting of 40 Czech nouns. The stimuli varied in their level of concreteness and their emotional valence. During the experiment RTs, electrodermal activity (EDA) and pupillary responses (PR) were measured.

Data support the original findings that RTs and EDA reactions reflect in WAT different situation requirements: cognitive workload and emotional workload, respectively. The effect of cognitive workload is larger and manifests also in EDA reactions, while EDA demonstrated the best sensitivity to emotional valence condition from all employed methods (RTs, EDA, pupillary reactions). The effects are unfortunately too small to allow a reliable classification of responses.

The effects of other factors (subjective valence, corpus frequency of responses, semantic proximity measured with Semantic Selection Test) were investigated, but even when significant correlations were found, it didn't help to reduce the variance in physiological data