

## Project's general public summary

The project's aim is to examine and describe the way in which the brain recognizes and encodes the meaning of emotional adjectives which belong to two categories: state (mood) adjectives (e.g. "satisfied", "sleepy", "unnerved") and trait (personality) adjectives (e.g. "honest", "stubborn", "impulsive"). To this end evoked potentials (to a given type of stimuli) of the electroencephalographic measure will be used. The planned studies will elucidate the specifics of each adjectives class' processing with the precision of a thousandth of a second. Engagement of the approximated brain structures will also be shown, as well as the role of each hemisphere in the recognition and encoding of the adjectives. Various tasks involving the functions of attention, working memory and self-reference will be employed in the experiments. The participants will be obligated to engage in attentive word reading and evaluating their content on a varying level of verbal processing (orthographic, lexical and semantic) as well as reacting according to task demands (reaction times and error rates).

Emotional adjective classes are a very important part of our knowledge about our own experiences, feelings and dispositions and these words allow us to communicate them and also gather the knowledge about the experiences and dispositions of others. Because of that there are of high importance to psycholinguistic, psychology and applied psychology. However, brain correlates and (neurolinguistic) mechanisms of their recognition and encoding (their role and position within the mental lexicon) are not well understood. The project's objective is to fill in this gap in knowledge. To pinpoint the exact stage when the brain encodes the emotional meaning of a given type of adjective and on what intricate interactions the adjectives recognition and encoding depend will also be of significance to affective neuroscience. The project will also assemble and evaluate a vast adjective list that belong to the two classes and this could benefit other research programs or psychological tools construction (tests, questionnaires), which will be able to use the words from the set as their proper material.