

## **Research project objectives.**

This project aims to investigate the psychophysiological and behavioural correlates of affective language processing in bilingual individuals who differ in the degree of immersion in L2 culture, by means of electroencephalography (EEG) and event-related potentials (ERPs). A series of two experiments will be proposed, which, through a modification and extension of the research methods used until now, will bring to the fore the importance of the so far neglected role of sentence context in the research on the affective language processing in the first and second language. Previous studies investigating this phenomenon will be evaluated, pointing to inconsistencies in the applied research methodologies, which to a significant extent limits comprehensive understanding of the phenomenon. Therefore, the main premise of this project is to introduce sentence context as an experimental variable to get a more complex and faithful picture of affective language processing in bilingual individuals. The additional inter-group difference in the degree of L2 immersion will enable us to see if this factor might influence the participants' psychophysiological and behavioural responses to the presented experimental stimuli.

## **Research project methodology.**

The experiments will be conducted among 2 participant groups consisting of Polish-English bilingual individuals, differing in the degree of L2 immersion. The stimuli in the study will constitute carefully selected and normed affective words that will be presented in 2 experimental conditions: (1) out of context (experiment 1), and (2) embedded in a neutral or affective sentence context (experiment 2). Depending on the experimental condition, the participants' task will be to respond as fast and as accurately as possible to the presented verbal stimuli ignoring control stimuli (pseudo-words; experiment 1), or reading for comprehension the target stimuli embedded in a sentence context (experiment 2) to decide whether the sentences make sense or not. During the experiments we will record and collect electrophysiological (EEG) and behavioural data so that we could run a complex analysis of the dynamic interaction between semantic and affective meaning integration that unfold while bilinguals read affective language in their L1 and L2.

## **Expected impact of the research project on the development of science, civilization and society.**

The results of this project will shed a new light on the previously reported findings in the studies on affective language processing in bilingualism. Furthermore, the interdisciplinary nature of the here proposed EEG experiments will lead to a more comprehensive understanding of the phenomenon, which in turn will result in a more holistic approach to the problem of the affect-language interface in future studies in the field of bilingualism. The result of the experiments proposed in the current project will constitute a collection of empirical data pointing to the vital role of sentence context in the processing of affective stimuli in the first and second language, as well as the potential role of other factors in the phenomenon (e.g. the degree of immersion in L2 culture). Finally, the results of this project might have important implications for bilingual therapy and education.