### 1. Research project objective:

In today's increasingly bilingual world, understanding how gender stereotypes and social norms shape the processing of morally charged language in both native (L1) and foreign (L2) languages is essential. While prior research has shown that moral and gender-related norms are automatically accessed in L1, it remains unclear whether individuals exhibit similar sensitivity to morally and socially salient content in L2. This project seeks to advance our knowledge of how proficient bilinguals process gender-stereotyped and morally charged language, shedding light on the ways in which the language of use may influence communication across social, political, and educational contexts.

### 2. Research goal:

This project aims to deepen our understanding of how bilinguals process morally and gender-stereotyped language in Polish (L1) and English (L2). By examining neural responses to sentences that either conform to or violate moral and social norms, we will explore the influence of morality and gender stereotypes on language processing. Two experiments will be conducted: Experiment 1 will focus on written sentences, while Experiment 2 will employ auditory stimuli. Both experiments will investigate how moral violations and gender role congruence affect language processing in both L1 and L2, as additionally modulated by the task at hand (i.e., a semantic decision task vs. a morality decision task), providing insights into the automaticity of moral and gender norm activation across languages.

## 3. Methodology employed in the research project:

The project will use electroencephalography (EEG) and event-related potential (ERP) analysis to explore cognitive mechanisms in the processing of morally and stereotypically charged content by bilinguals. We will measure key language-related ERP components, such as the N400, marking lexical-semantic processing, and Late Positive Complex (LPC), which indexes meaning integration and reanalysis. The project will involve both text-based and auditory stimuli that reflect moral principles and gender stereotypes, allowing us to compare brain responses to moral and stereotype-related violations in L1 versus L2.

#### 4. Expected results:

We expect to observe a reduced electrophysiological response to moral and stereotypical violations in L2 compared to L1, as indicated by smaller N400 and LPC amplitudes. This diminished response suggests that bilinguals may experience emotional distancing when processing norm violations in their foreign language, consistent with the Foreign Language Effect. Specifically, the reduced sensitivity to moral and gender stereotypes in L2 would indicate that bilinguals are less affected by norm violations, particularly in morally deviant or gender-incongruent contexts.

# 5. Significance of the project:

This research will contribute to psycholinguistics, sociolinguistics, and social psychology by providing neurophysiological insights into how bilinguals process moral norms and gender stereotypes. By examining these processes in both native (L1) and foreign (L2) languages, the study will improve understanding of how language influences moral decision-making, particularly in multicultural, multilingual environments. The project also expands on the Foreign Language Effect, offering novel evidence on how moral violations and gender stereotypes are perceived differently in L1 and L2. The findings will have real-world applications in education, workplaces, and politics, where understanding the impact of language on moral judgments and stereotypes can improve communication strategies and reduce biases.