1. BACKGROUND

- Transcranial direct current stimulation (tDCS), a non-invasive brain stimulation technique, has been shown to modulate cognitive processes involved in executive functions, especially working memory and attention [1, 2].
- Negative cognitive styles, like ruminative thinking, also influence cognitive outcomes in healthy subjects [3].
- Other psychological traits, namely self-criticism, perfectionism, anxiety sensitivity, and stress reactivity, have been shown to negatively influence executive functioning, and to be associated with rumination [4].

2. OBJECTIVES

Investigate whether differences in trait rumination, while controlling for other psychological traits such as perfectionism, anxiety sensitivity, stress reactivity and self-criticism can influence the cognitive outcomes of tDCS, namely positive effects on working memory and attention.

4. IMPACT

The E-Brain project will significantly impact the current knowledge about the potential of tDCS as a biological cognitive enhancer, offering empirical evidence about the tDCS effect on specific cognitive processes in specific populations.

5. REFERENCES