Emotion regulation is a multifaceted process at the core of general well-being and most mental disorders (). Especially the tendency and ability to cognitively reappraise negative contexts has been shown to blabla and is the basis of many psychotherapeutic treatments and other interventions.

Hundreds of studies have shed light on the neural correlates of cognitive reappraisal, implicating a network of mainly fronto-parietal brain regions which exhibits increased activity (). Many studies use individual differences in the activation of these networks to infer emotion regulation deficits on a neural basis. Still, these fronto-parietal networks only pertain to the *state* of employing cognitive reappraisal versus a control condition. Therefore, they are not necessarily informative on *individual differences* in emotion regulation capabilities or tendencies, which are usually the target of studies on well-being and mental health. For example, comparing the brain maps of two meta-analyses, one on cognitive reappraisal and one on clinical differences therein, exhibits only limited overlap (figure X).

There are several potential reasons why such generalization from neurobiological states to individual differences should not be taken for granted. First, most studies confront participants with negative stimuli which either have to be cognitively reappraised or just passively viewed, the latter serving as a control condition. Between regulating and simply viewing, many complex cognitive processes are involved. During emotion regulation conditions, participants are less familiar with the explicit task demands, need to remember more pre-experimental instructions, be goal-oriented, reflect on potential options, use their imagination, and have a generally higher cognitive load. It is unclear whether all of these processes, or only a subset, relate to actual emotion regulation success on a phenomenological level, or whether some are just byproducts of shortcomings in the choice of control conditions, as it is almost impossible to surgically manipulate only one complex process in an experiment. Second, generalization from within- to between-person associations necessitates that the statistical assumption of ergodicity holds to avoid so-called ecological fallacies (). For a simple example, while people who experience on average more stress than others also feel on average more exhausted, a person who is more stressed in a given state is not necessarily more exhausted during that state (figure SX). This also occurs if within- and between-person associations have different confounders. For example, people differ in their neurovascularity, which only impedes comparisons of BOLD responses between but not within people. Last, even if all fronto-parietal activations observed during experiments are relevant to emotion regulation and ergodicity holds, it is still questionable whether the relevance of these networks is ecologically valid and generalizes to situations outside the lab.

Next paragraph: Base on Carmen’s new study

Next paragraph: Explain goal of the study

Next paragraph: Explain the three covariates of emotion regulation success

**Discussion**

*Limitations*

-Self-reports have their own biases. EMA might be helpful.