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Trait anxiety is a stable a facet of personality, which has been associated with (1) reduced <u>autonomic flexibility</u> and (2) increased <u>interoception</u>. Indeed anxious individuals show a predominance of sympathetic activation and increased attention to their body sensations, this vigilance towards the body is likely reinforcing their anxiety.

To clarify how these two biomarkers, the autonomous system and interoception, influence one another, an experimental group of anxious participants benefit from a weeklong breathing program, meant to enhance heart rate regulation. Therefore respiratory rate is paced at each individual's resonance frequency. To help them synchronize their breathing, the mobile app Respirelax+ was used. Participants were granted daily supervision and matched with control groups. The latter were asked to reflect on solutions to moral dilemmas and submit their answers in writing.

To assess interceptive features prior and post intervention, participants completed the interoceptive accuracy (IAS) and attention scales (IATS) and performed the heartbeat counting task. Cardiac parameters were monitored with Polar H10 chest belt.

We hypothized that resonance breathing fosters a state of calm, eventually resulting in a decrease in interoceptive components, with therefore a positive impact on the inflated attention towards body sensations. Statistical analyses are currently in progress and results will be presented at the conference.

In addition to a further understanding of how interoception and heart rate variability are linked, our results would also allow to determine if a brief implementation of this breathing technique could not only serve anxiety and cardiovascular outcomes, but also improve dysfunctional interoceptive patterns.

(250 words)