

Introduction

- **The Allostatic Interoceptive Network (AIN)** is a large-scale intrinsic brain network supporting the representation and regulation of the body (Zhang et al, 2023, Kleckner, 2017).
- Adolescence is a time when connectivity between key subnetworks of the AIN increases, emotions become more turbulent, and the prevalence of psychiatric illness increases (Fan, 2021; Paus, 2008).
- Prior work in our lab has shown that greater network integration of the AIN in adolescence predicts depressive symptoms 1 year later (Frye et al., in prep)
- We extend this work by examining whether the link between AIN network integration and depression is significantly moderated by individual differences in **emotional clarity and emotional attention** during adolescence.

Methods

- Adolescents (N=117) aged 12-14 from 3 public schools in the southeast USA completed 3 waves of data collection (Figure 1).
- At wave 1 and 2, participants completed an 8-min **resting state fMRI scan** (rsfMRI) and self-reported on their **emotional attention** and **emotional clarity** using the Trait Meta Mood Scale (TMMS).
- At wave 3, participants self-reported symptoms of **depression** using the Short Mood and Feelings Questionnaire (SMFQ)
- rsfMRI data from waves 1-2 was used to compute **global efficiency** as a measure of AIN network integration (Figure 2).
- Multiple regression analyses controlling for age and sex assigned at birth were conducted to assess whether emotional attention or clarity moderated the effect of AIN GE on depression.

AIN integration predicts prospective depression, especially for adolescents who pay more attention to their emotions

Figure 1. Design

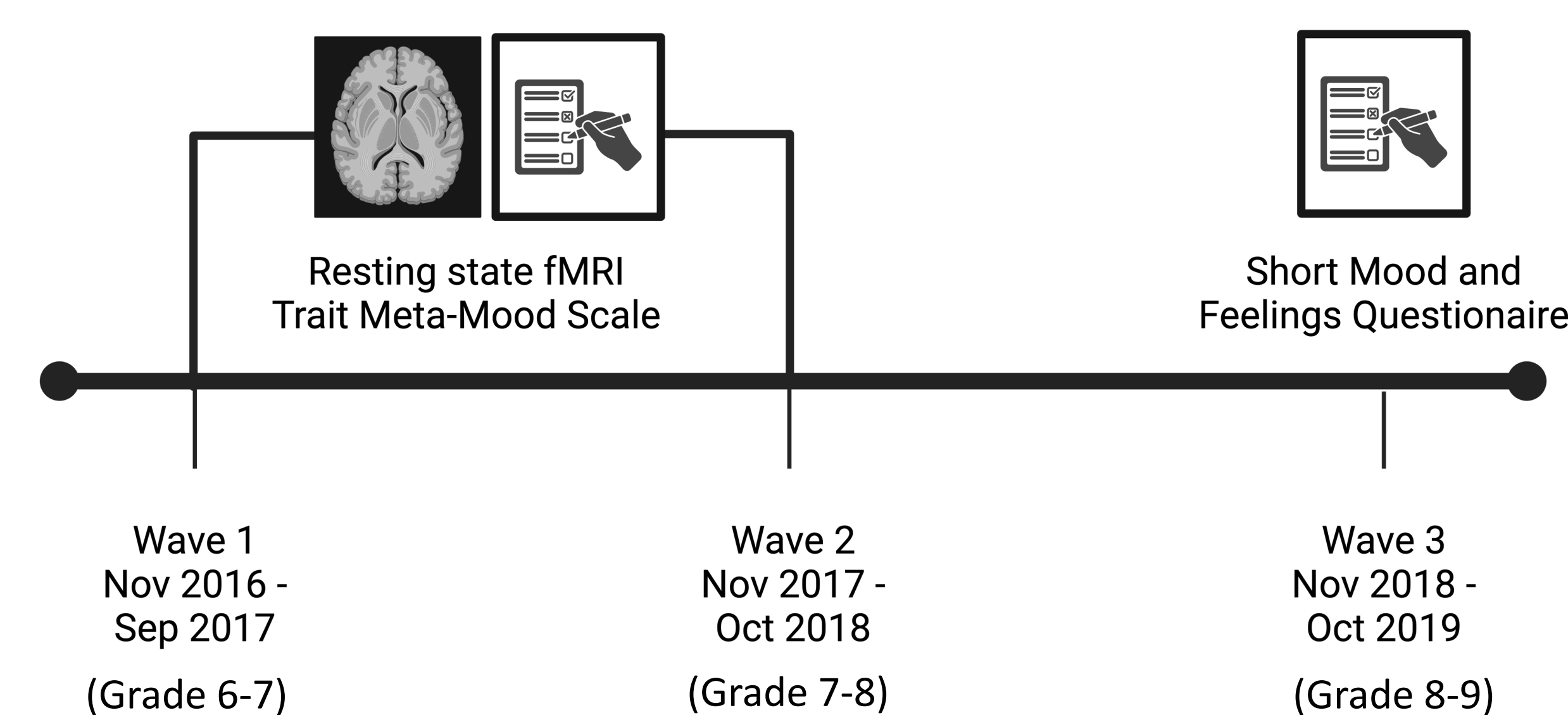
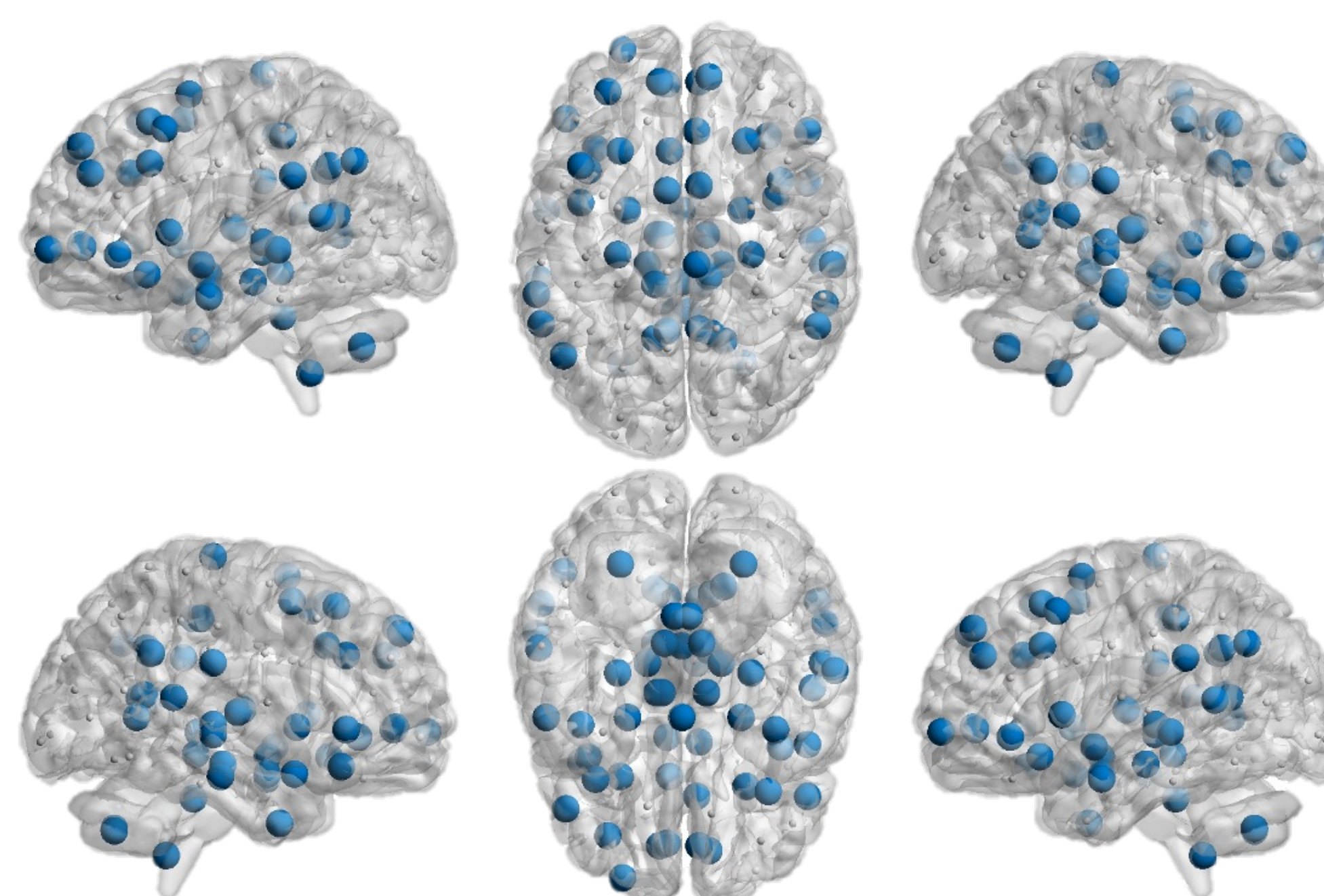
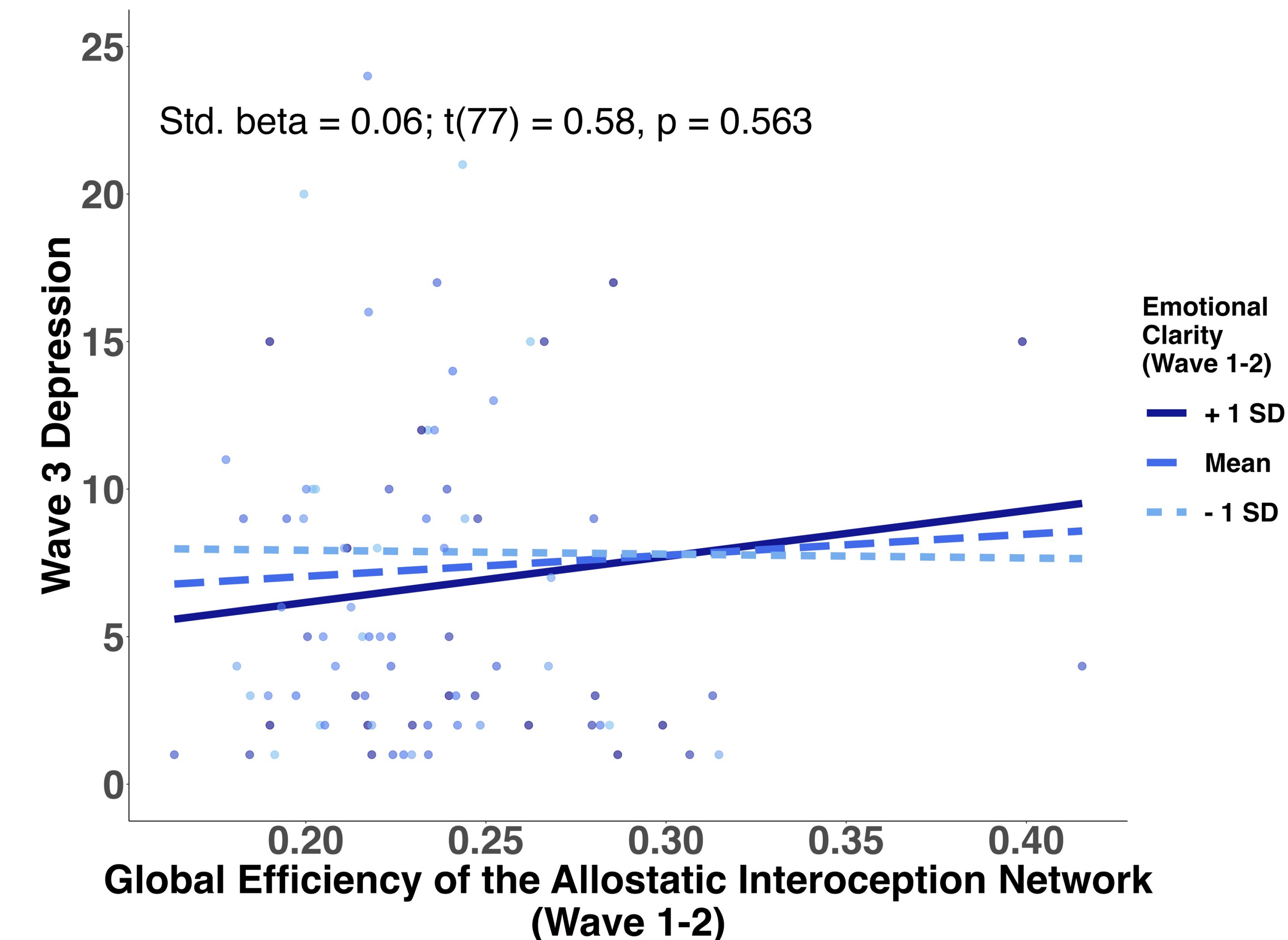
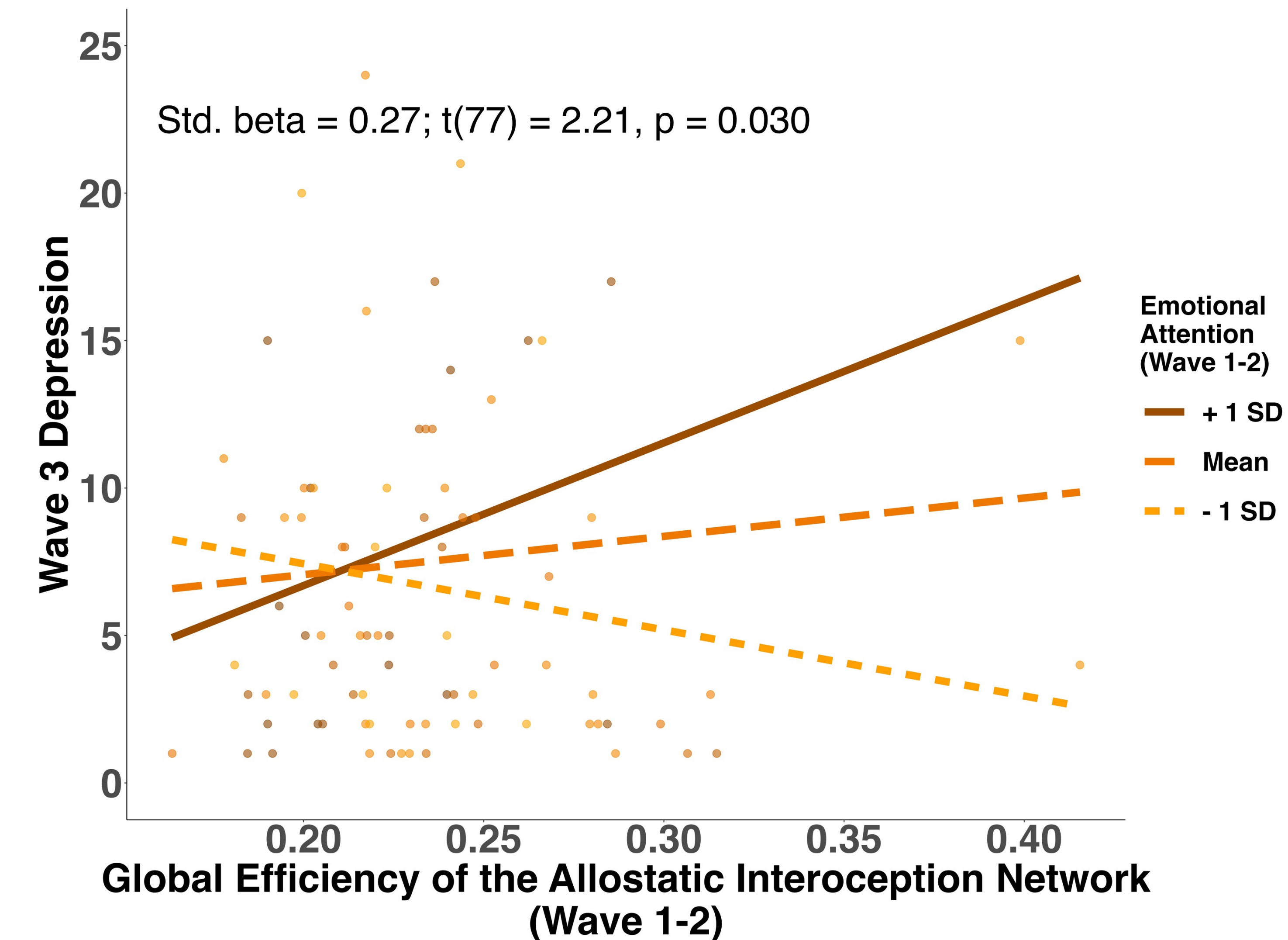


Figure 2. AIN Nodes



Results



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References

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5. Poster presentation funded by OUR at UNC-Chapel Hill