

## Introduction

- Reference frames are used for perspective taking in both spatial and social contexts.
- Are reference frames general/shared mechanisms for both spatial and social cognition (mentalizing)?

## Hypotheses

- People better at taking spatial perspectives are better at mentalizing
- Individual differences factors involved in spatial perspective taking are also involved in mentalizing.

## Methods

- Online Qualtrics Study
- N = 250 (F = 124, M = 103)
- Mean age = 19
- Tasks:
  - Spatial perspective taking task (Self & Other)
  - Mentalizing task (Self & Other)
  - Individual differences questionnaires administered between and after tasks
- Individual difference factors explored:
  - Big 5 Personality
  - Vividness of visualization
  - Spatial Anxiety
  - Anxiety Symptoms

## References

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# Reference frames for spatial and social thinking: Individual differences in strategy use

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People who are better at taking people’s spatial perspectives are not necessarily better at taking people’s mental perspectives.

Very limited evidence for a general or shared mechanism for reference frames between spatial and social cognition.



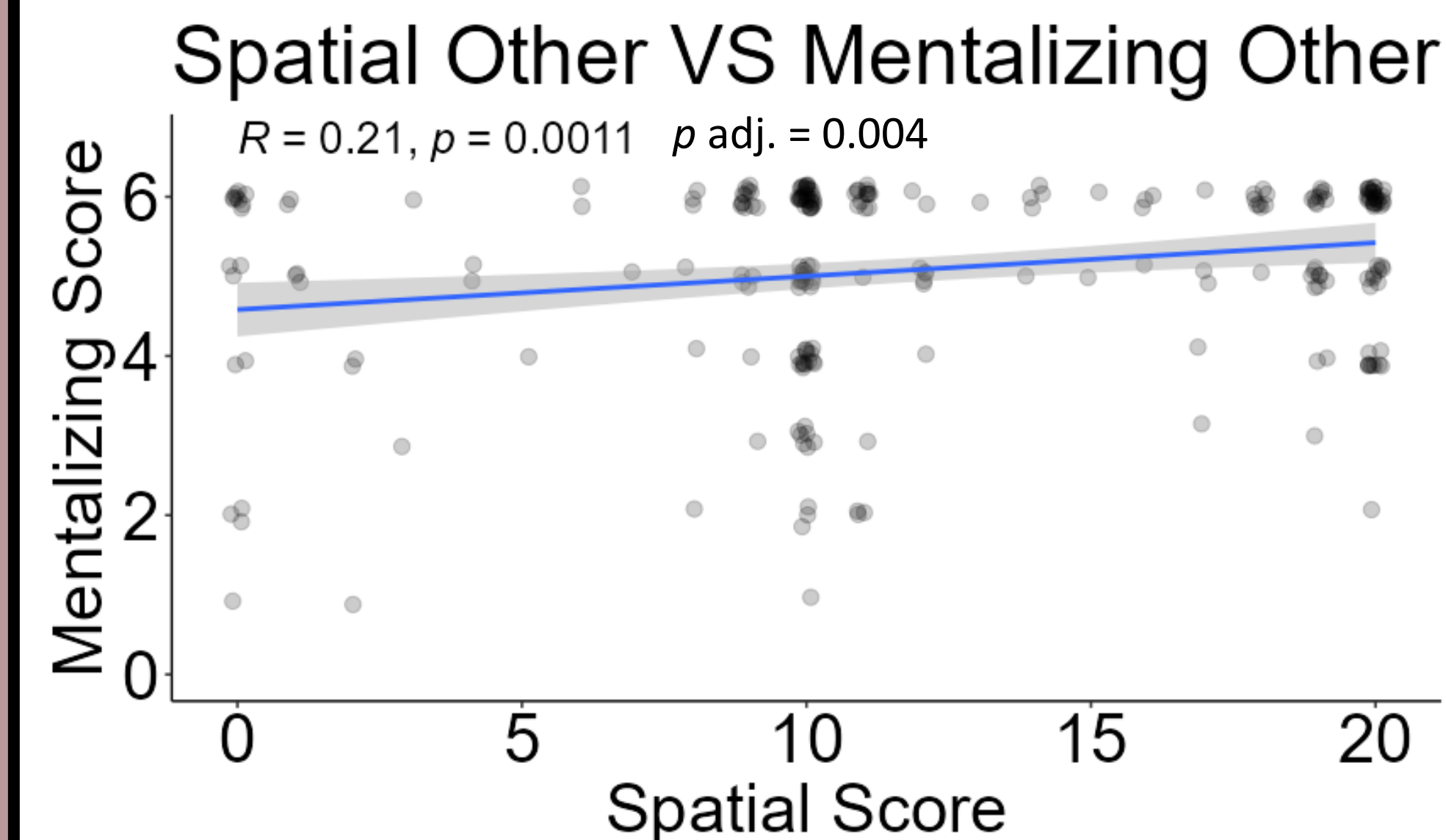
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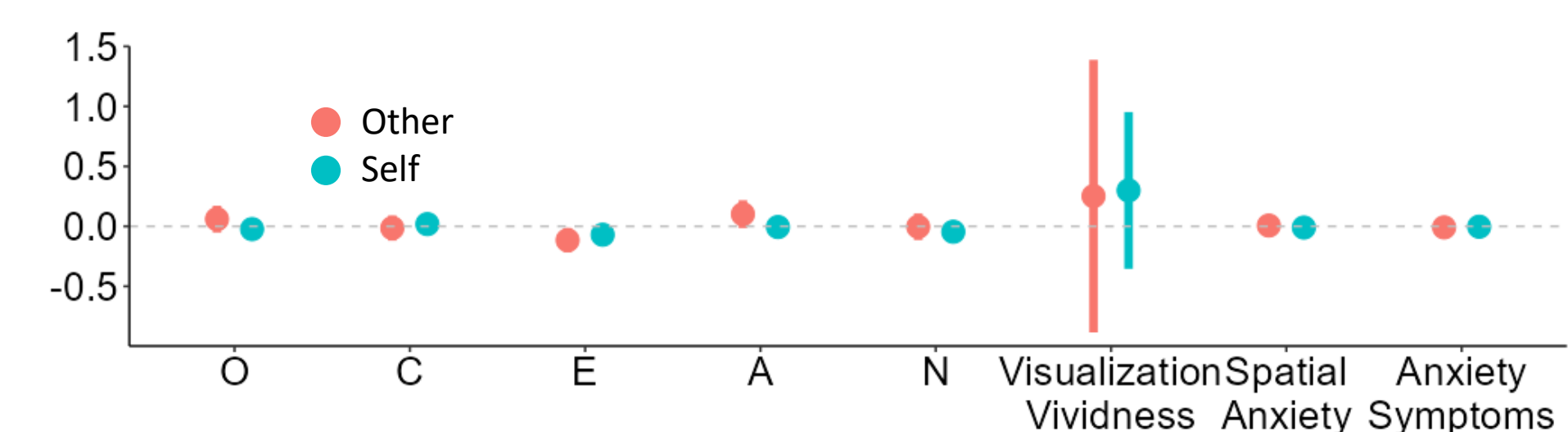
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## Results

- People who scored better while taking someone else’s perspective during the spatial task, scored better when having to mentalize during the social task.



- Multiple regression models for individual difference factors for both spatial perspective taking and mentalizing showed no evidence that they shared anything in common.
- Spatial:
  - Other:  $F(241) = 1.60, p > 0.5, R^2 = 0.04$
  - Self:  $F(241) = 1.29, p > 0.5, R^2 = 0.05$



- Mentalizing:
  - Other:  $F(241) = 2.06, p = 0.04, R^2 = 0.06$
  - Self:  $F(241) = 1.52, p > 0.1, R^2 = 0.05$

