1. Introduction and design

Autism is associated with changes in social interaction, yet the underlying causes remain unclear. We conducted four studies (three online, and one lab) to explore the link between autistic traits and self-referential processing, vital for social interaction.

Self-bias: more accurate cognitive processing for self-relevant information.

Self-other m in g e r ( S O M ) : The extent of shared representation between oneself and others in a social scenario.

2. Study scheme and expected associations between autistic traits and empathy

Four studies were designed similarly but with differing percentages of group decisions. Each study involved a set of questionnaires, such as Adult Autism Spectrum Quotient (AQ), Questionnaire of Cognitive and Affective Empathy (QCAE), and others.

Cognitive empathy (dark color) negatively correlates with autistic traits, while affective empathy (light color) does not.

3. Identify self-bias and self-other m in g e r e n t i s 0 n c y across four studies

Self-bias = more accurate cognitive processing for self-relevant information.

Self-other m in g e r ( S O M ) : The extent of shared representation between oneself and others in a social scenario.

4. No correlations between autistic traits and self-referential processing

Evidence supporting the null hypothesis

4.1 Autistic traits do not correlate with self-bias

4.2 Autistic traits do not correlate with self-other m in g e r e n t i s 0 n

4.3. No significant effect between autistic traits and self or partner decisions across four studies.

4.4. No correlations between autistic traits and self-referential processing, after controlling for potential confounds

Potential confounds:
- Age, gender, IQ
- Psychopathy score
- Harshness index
- Self-esteem score
- Depression score
- Generalized Anxiety score

5. Conclusion

- Autistic traits do not relate to self-referential processing, including self-bias and self-other m in g e r e n t i s 0 n e f f e c t s.
- These findings highlight the necessity of refining our comprehension regarding cognitive- emotional differences in individuals with autistic traits.
- A need for replication and large sample sizes in the field of computational psychiatry.