

Contextual and visual cues in the interpretation of idioms in high functioning autism

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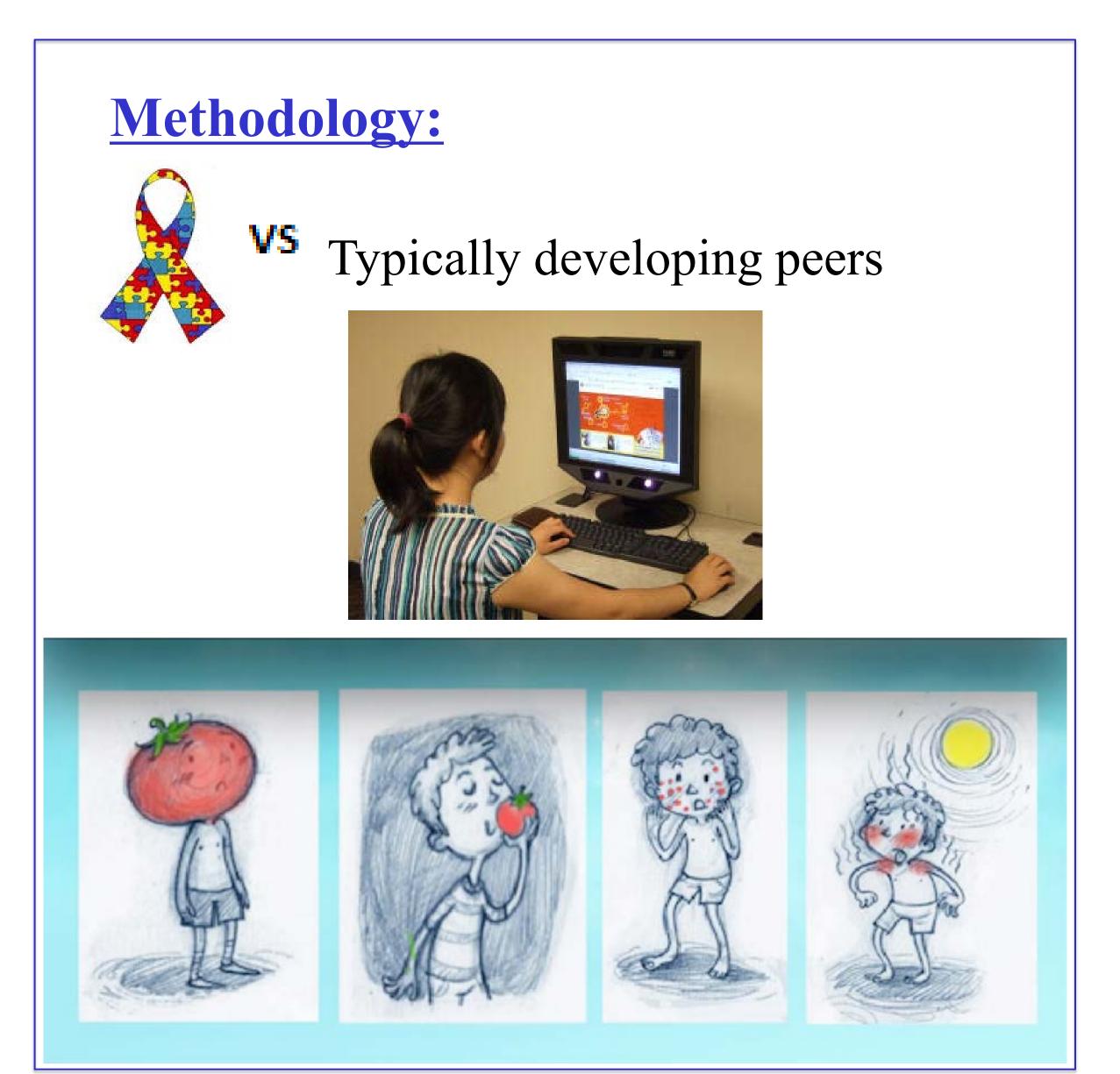
Introduction:

Individuals with high functioning autism usually display a level of intelligence which is normal or even above average, and quite often have specific talents in certain areas. However, problems with pragmatic language have been consistently reported across the autistic spectrum, even when structural language is intact (Landa, 2000, Volden, Coolican, Garon, White and Bryson 2009, Vulchanova, Talcott, Vulchanov, Stankova & Eshuis, 2012). In addition, some studies have found evidence of weaknesses in the figurative and idiomatic language domains, contrasting with clear strengths in areas of grammar (Vulchanova, et al 2012).

Our main goal is to investigate how ASD individuals process idioms and specifically how they integrate information from multiple sources (e.g. visual modality and language) in this process.

Hypothesis:

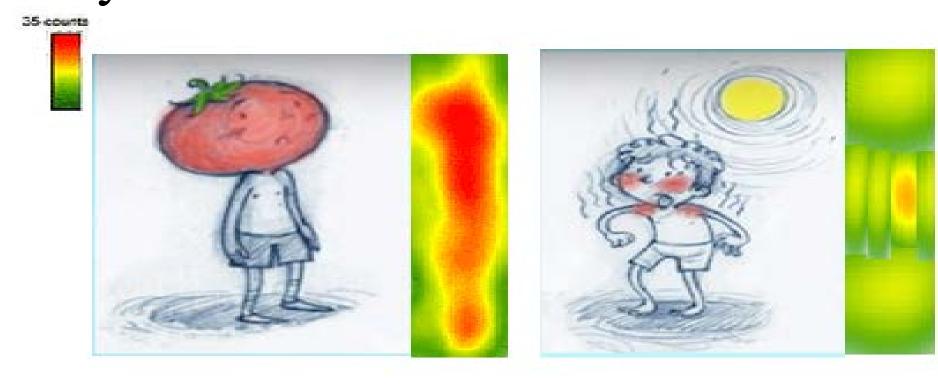
Figurative language is still demanding for ASD individuals even when other components of language are intact. Specifically, we aim to find higher reaction times (RTs) and errors means in the ASD groups compared to their typically developing peers. In addition, we also expect to find higher errors and RTs in the auditory modality in the ASD and the opposite effect in our control group. While different modalities may assist typically developing participants, they may create inferences for the ASD and make the processing more difficult and demanding.



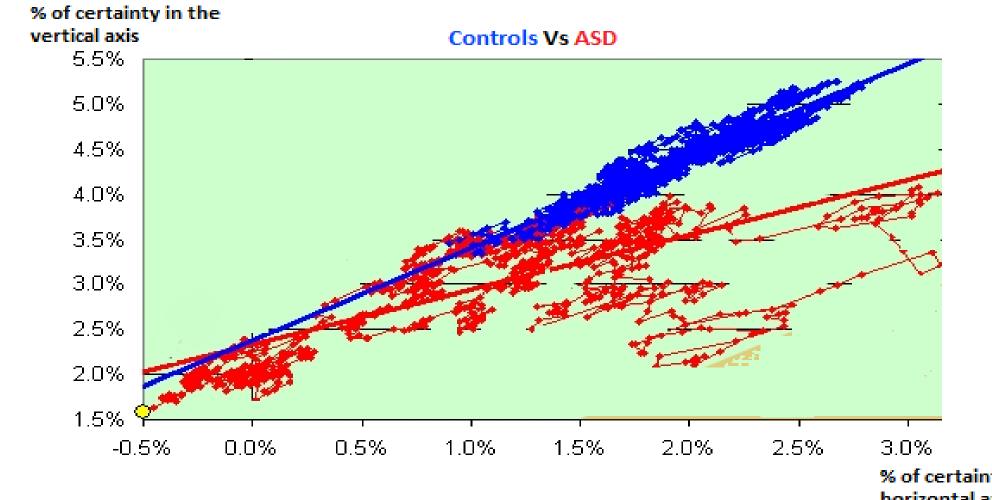
Predictions:

1-more eye gaze in the images showing literal meaning.

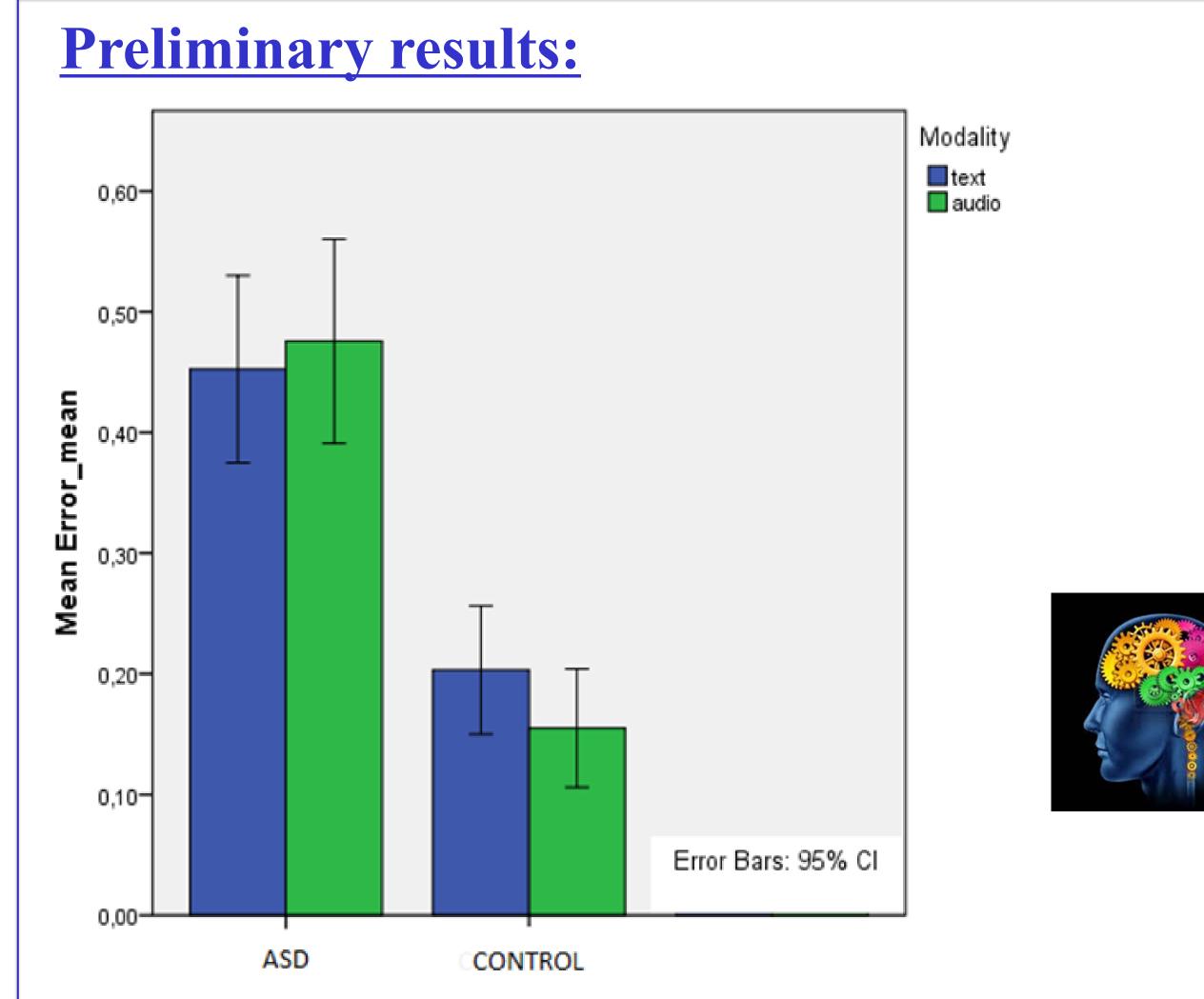
2-more uncertainty in the auditory modality.



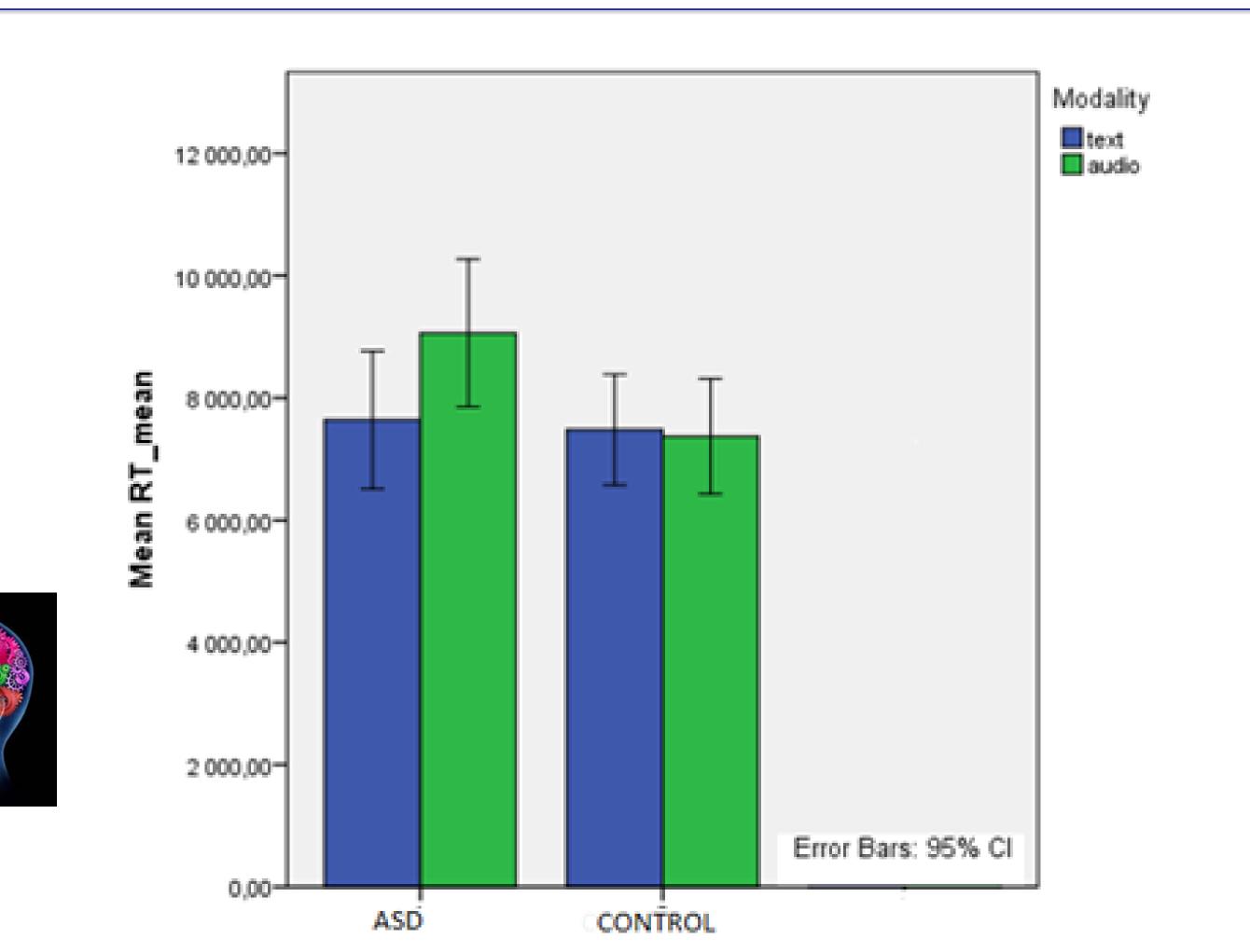
Eye gaze in the ASD group.



Mouse certainty expected in ASD vs Controls







RTs in visual and auditory modality in ASD vs Controls.

Conclusion:

•Most of these data are still preliminary some others are predictions and we still need to collect more information so that it is reliable. However, from this sample, we can clearly see how idiomatic expressions are demanding for the ASD group.

Acknowledgments:

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References:

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