

Metaphorical priming in a lexical decision task in high functioning autism

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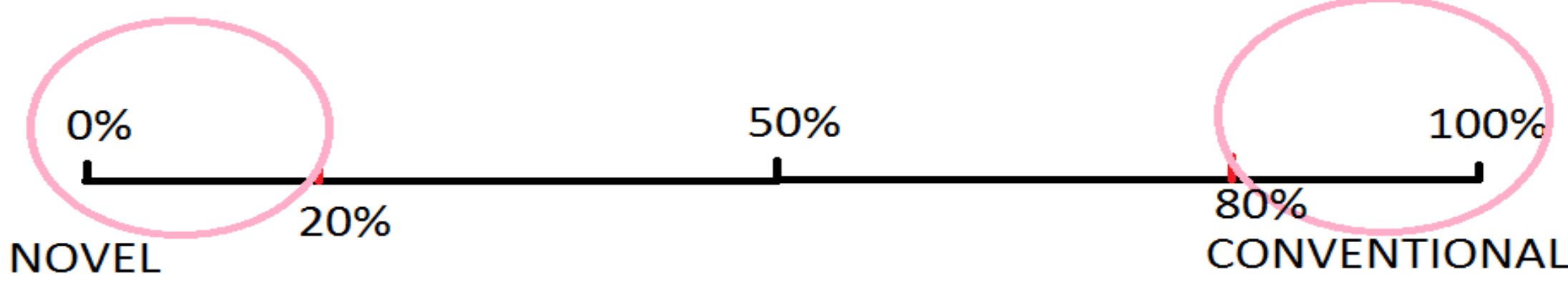
Introduction

- ❖ **High functioning individuals with autism (ASD)** are characterized by:
 - Relatively spared linguistic and cognitive skills.
 - Display special talents and skills in specific areas.
 - ***Problems with pragmatic aspects of language*** even when structural language is intact (Landa, 2000;Vulchanova, Talcott, Vulchanov and Stankova, 2012; Vulchanova, Talcott, Vulchanov, Stankova and Eshuis, 2012; Vulchanova, Saldaña, Chahboun and Vulchanov, 2015).
 - ***Weaknesses in figurative*** domains, contrasting with clear strengths in areas of grammar (Vulchanova, et al., 2012a; Vulchanova, et al., 2012b).

MAIN GOAL➔ To test responses to metaphorical expressions and whether or not metaphors solicit priming for literal or rather the appropriate figurative interpretation in high-functioning children and young adults with ASD.

Metaphor status pilot (novel/ conventional)

150 ADULTS (NATIVE SPEAKERS OF SPANISH)
68 METAPHORS -----> 24 SELECTED FOR THE STUDY

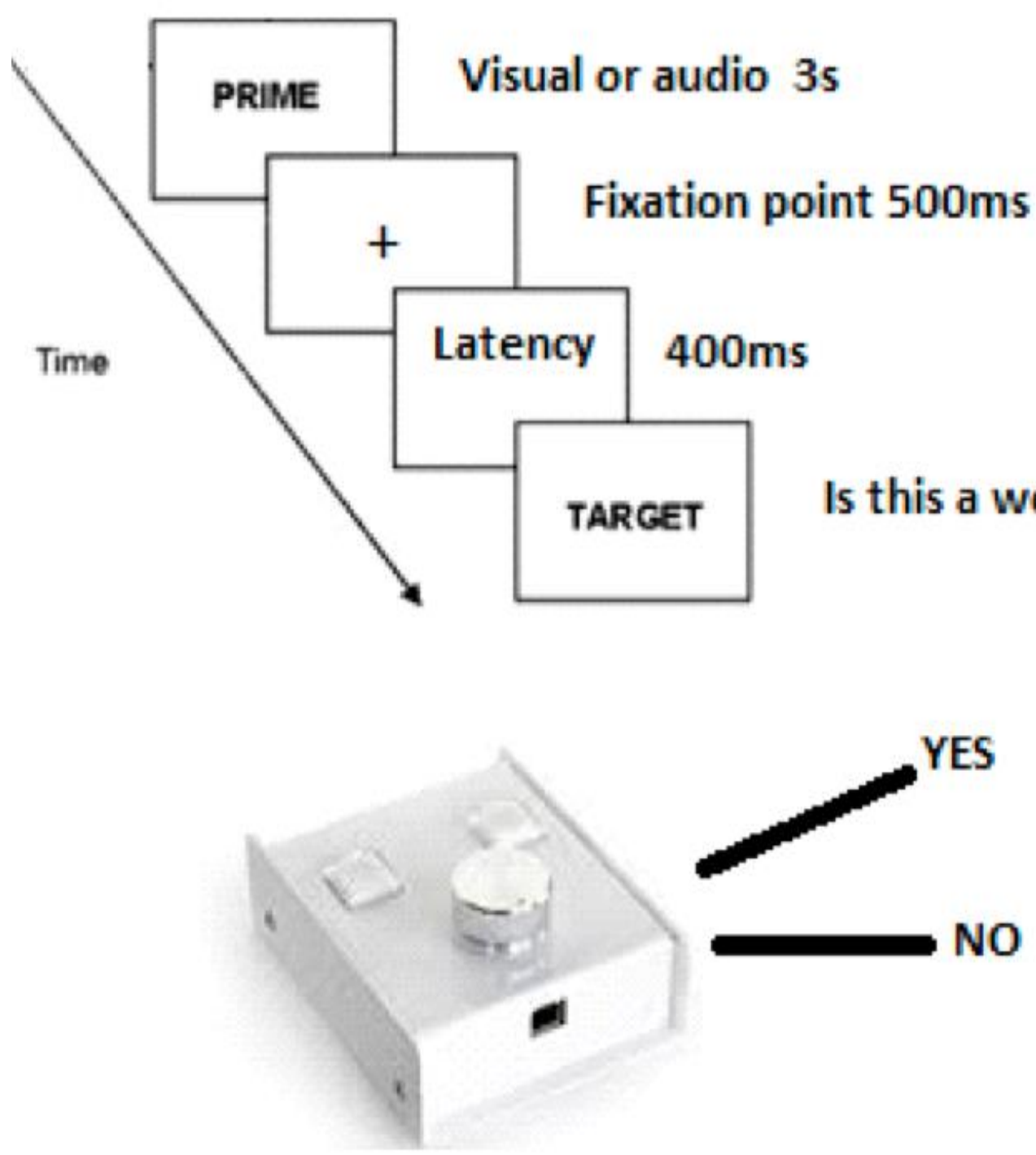


PARTICIPANTS

	Young adults	Children
ASD (ADOS and AQ)	N=20	N=22
TD	N=18	N=22

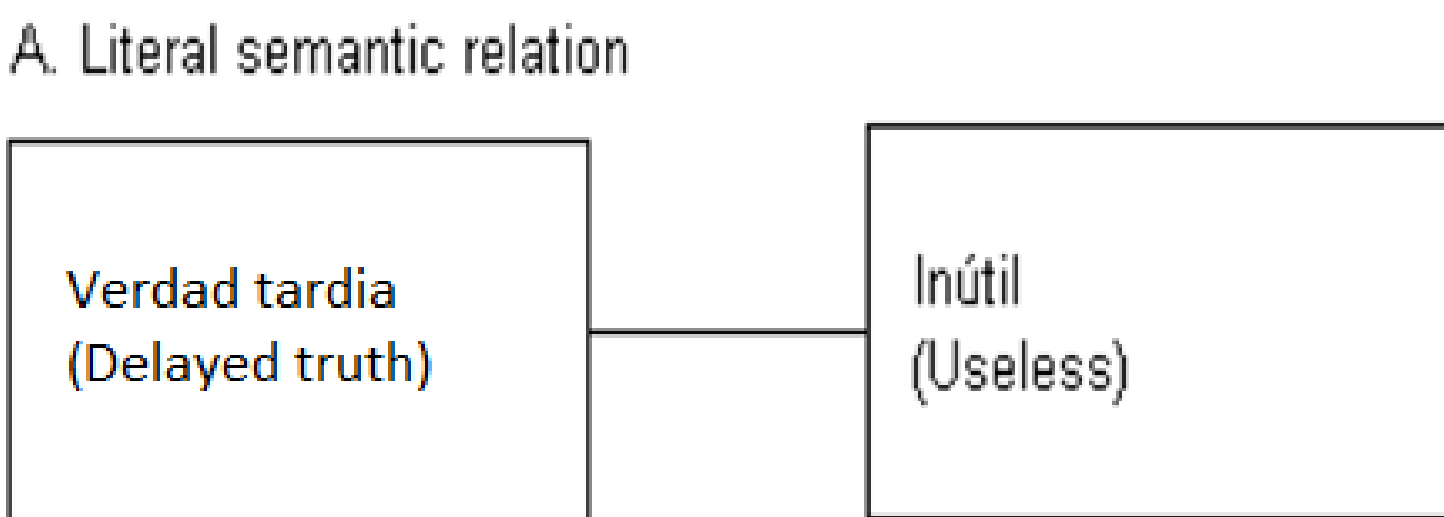
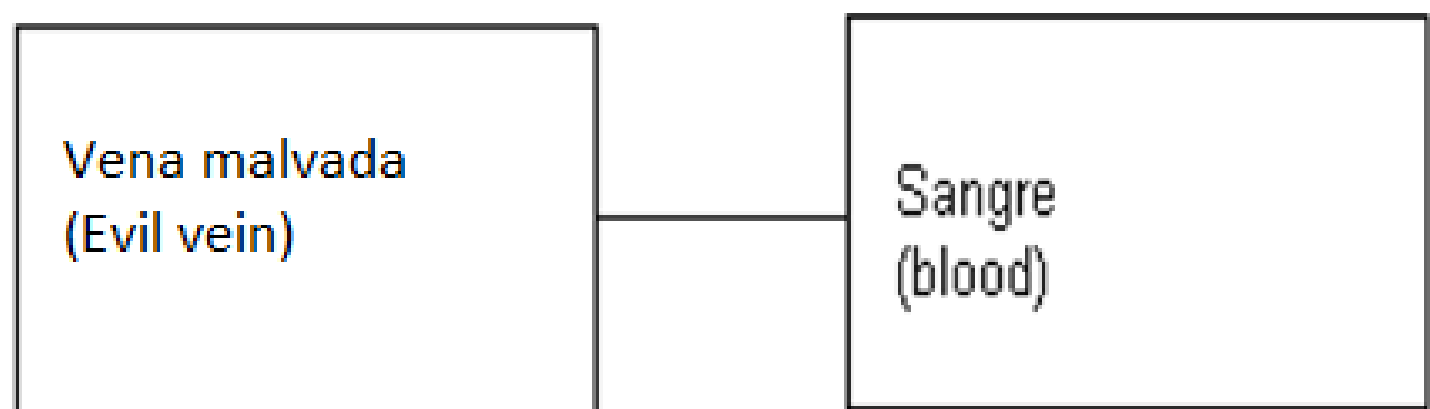
- Matched on:
- Age
 - Gender
 - Verbal comprehension (Weschler scale)

PROCEDURE

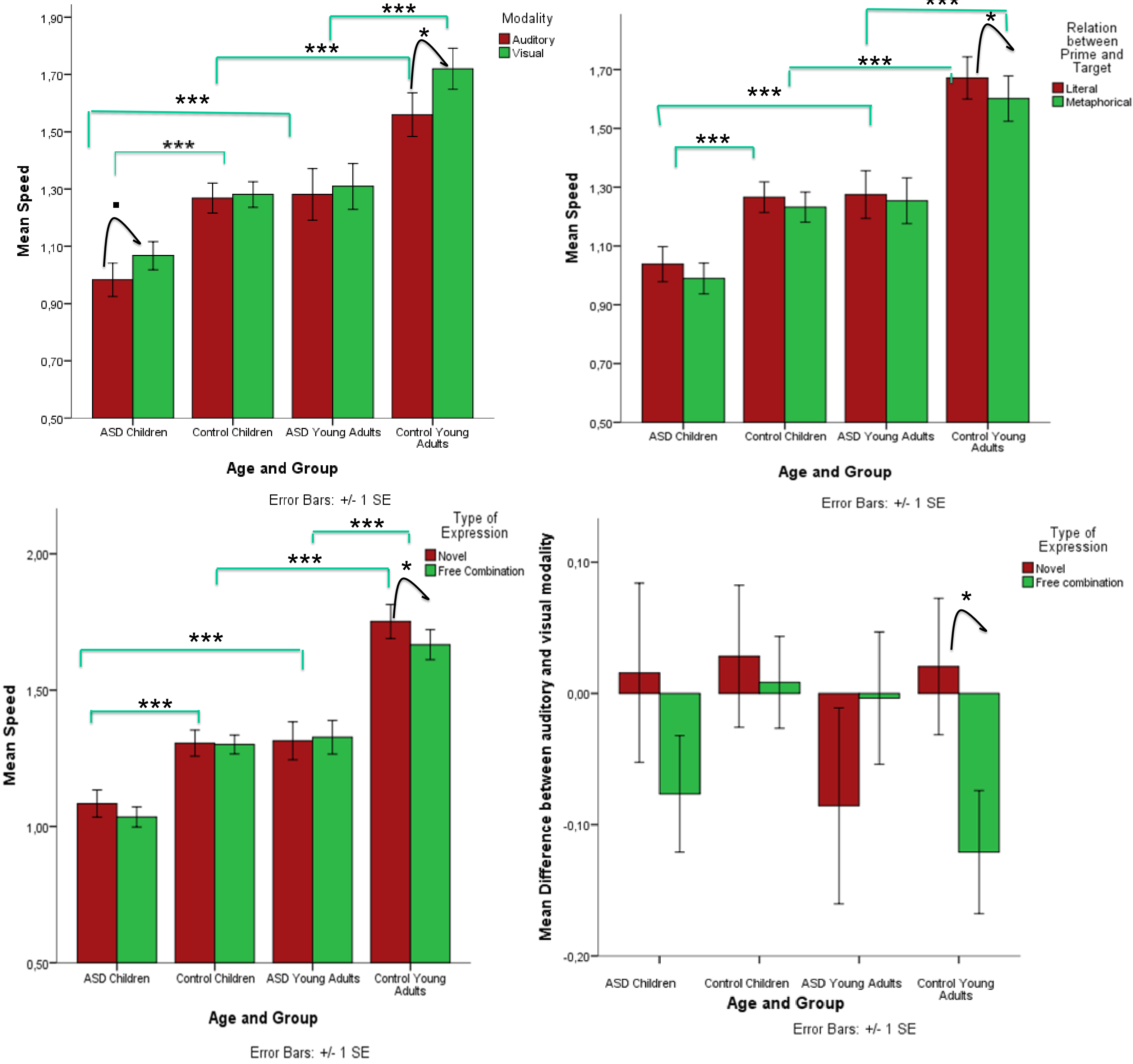


Relation Prime-Target

- **Conventional**➔ **Metaphorical /Literal**
- **Novel** ➔ **Metaphorical /Literal**
- **Free combination**➔ **Literal**



RESULTS (Linear mixed model analysis with R)



Conclusions:

- Slower processing times by individuals with ASD
- Improvement with age in both groups but poorer performance for ASDs where the young adult perform in a similar way as the TD children
- Conventional metaphors are the most difficult expressions
- Metaphors are more “**primable**”? TD young adults processed faster novel metaphors
- Effect of modality – More complex: the visual modality is easier for the young ASD group because they are good at processing orthographic stimuli, and in the case of the old controls the advantage might due to the literacy and training effect

References

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- I.E.S Martinez Montañes, Seville-Spain

Hypotheses

- **Slower responses are expected for individuals with ASD**
- **Increased difficulty in the processing of the auditory modality in the individuals with ASD**
- **Decreased metaphorical priming for the ASD group**

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