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**Metaphorical priming in a lexical decision task and in high functioning autism.**

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**Abstract:**

Individuals with High functioning autism (ASD) are distinguished by relative preservation of linguistic and cognitive skills. However, problems with pragmatic language skills have been consistently reported across the autistic spectrum, even when structural language is intact. Many studies have established failure to understand metaphors, idioms and other forms of figurative language (Gold & Faust, 2010; Vulchanova, Talcott, Vulchanov & Stankova, 2012).

In the current study, we test responses to metaphorical expressions and whether metaphors solicit priming for literal or rather the appropriate figurative interpretation in high-functioning children and adolescents with autism.

Priming is fast and automatic, and, thus, differs from direct retrieval. Priming effects are found between lexical items, which share a semantic component or a semantic association. For example, *angel* is recognized quicker, if it is followed by *wings* than, say, *table*. Here we exploit priming to reveal whether metaphorical expressions are associated with figurative or rather literal interpretations in high-functioning autism. We are also interested in whether the presentation modality of the stimuli (auditory vs. written) has an effect on their processing, as already established in on-going research (Chahboun, Vulchanova, Vulchanov, Saldaña & Eshuis, in preparation).

Individuals with ASD (N=48) and a control group of typically developing individuals (N=39), all native speakers of Spanish, were tested individually in a single session.

Participants either saw the prime expression on a computer screen or heard it via loudspeakers. The timing of the specific stimulus events on each trial was as follows: (1) The prime is presented as visual text on the screen or auditorily via the loudspeakers (depending on the experimental block); (2) a fixation point is presented followed by a delay of 400 ms as a latency; (3) a target is presented as word or non-word; (4) Finally, participants have to decide whether the target is a word or not in Spanish.

The preliminary results of this study confirm that the auditory modality is more demanding for the ASD group. Surprisingly, the ASD group was less accurate than the control group on the conventional metaphor category only. We offer a tentative account in terms of the difference between conventional and novel metaphors.

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**References:**

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