Using Relational Frame Theory to increase cognitive skills in children

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Introduction

Autistic individuals often experience difficulties with higher order language patterns, such as metaphors or deceptions. According to RFT, such complex human behaviors can be conceptualized as responding to derived relations. Metaphors are a form of figurative speech and their comprehension is fundamental for social functioning. Using and understanding metaphorical language require the complex ability to understand one term in comparison to another one. From an RFT perspective, that ability is based on three relational frames: coordination, hierarchy and distinction. To understand a metaphor, it is necessary to relate an item to its properties (hierarchy) and then identify properties that are similar (coordination) and dissimilar (distinction). Following Persicke et al. (2012) protocol we developed 46 short stories, 10 in baseline and 36 for training: each story (in baseline and in training as well) included three features relevant to metaphors. A visual cue with two columns in which participants had to list the features of each target and identify the shared ones, was used in order to facilitate transfer of function to target. Each session included 4 stories (12 metaphors per session), 2 new and 2 from the previous sessions.

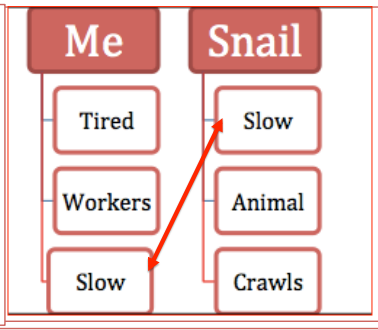
Example of a story and visual prompt

"A very bad day for me yesterday. It was very hot at the office, I had headache and so I spent a lot of time to complete my work"

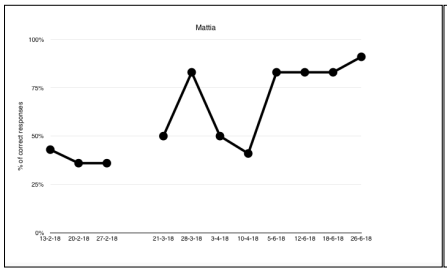
Metaphors:
1. The office is a stove
2. My had is an hammer
3. I was a snail

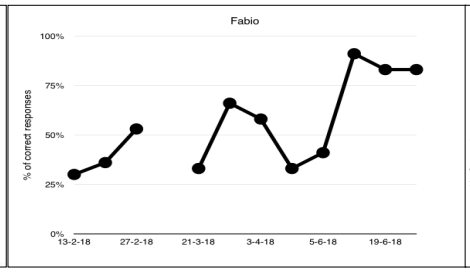
Question: "If I say I am a snail, what do I mean?"

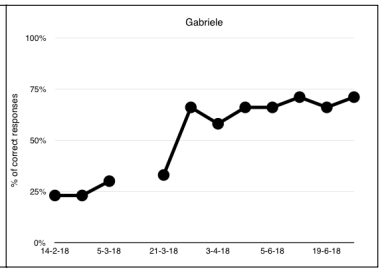
Visual prompt

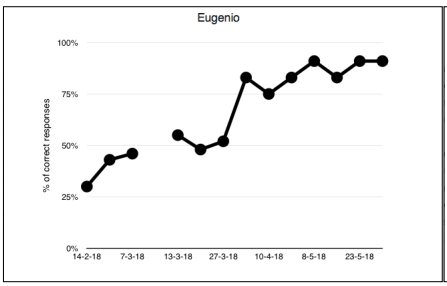


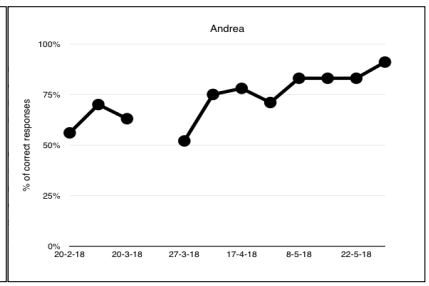
Results











Conclusions

The study included 5 children and graphs show results for each of them. Every child, except one, meet che criterion and show improvement of the ability to understand metaphorical language during training; all children, furthemore, show generalization to everyday language begin to create their own metaphors. Will be necessary to test untrained metaphors like those from baseline in order to test generalization.

References

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