



When placed in a context adapted to their particularities, autistic children express as many positive emotions as their typical peers.

Does the emotional expression of young autistic children differ from neurotypical children?

The importance of context!

By KATARINA SOTELO

What does the scientific literature tell us?

The scientific literature on emotional expression in individuals with autism tends to point to a deficit or atypicality in this area. For example, in the Diagnostic Manual of Mental Disorders 3rd edition (DSM-3), autistic individuals were described as expressing "odd" or "abnormal" emotions and were described as having a fixed gaze or an inability to smile. The most recent version of this manual (DSM-5) also highlights the lack of

facial expressions in autism. Scientific articles mention an incongruence between the emotion expressed by the autistic child and the context in which he or she finds himself or herself. This incongruence could explain why non-autistic people perceive autistic emotional expressions as bizarre, abnormal, ambiguous, mechanical, disorganized, or irregular.

Second, many studies report more negative emotions and fewer positive emotions in autistic children than in

typical children, beginning in the early stages of development. What these studies have in common is that the context for observing emotional expressions is not adapted to the characteristics of autistic children. For example, these studies document children's emotions in structured situations involving imitation tasks, objects of interest to typical children, or in social situations.

What influence does context have on emotional expression in autistic children?

In a study recently published in the journal *Autism*, Dr. Claudine Jacques and her colleagues have shown that, when placed in a context adapted to their particularities, autistic children express as many positive emotions as their typical peers. Using an innovative method, it has been possible to observe a range of emotions in autistic children.

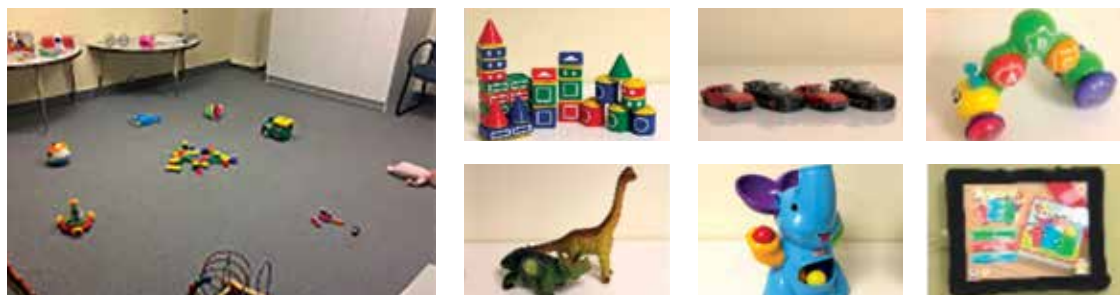
Using an autism-specific method to observe the emotional expressions of young autistic children: The Montreal Stimulation Situation-MSS

Dr. Jacques' team has developed an observation situation involving toys and objects that autistic children are often interested in. For more details on the development of the MSS, we invite you to read the article: *Repetitive behaviors and object exploration in young autistic children*,

published in the 7th issue of *Sur le Spectre*. Using this stimulating play situation tailored to the interests of children with autism, researchers were able to document the emotional expressions of 37 young autistic children and compare them to 39 typical young children between 27 and 56 months of age.

Situation-blind coders, i.e., with no information about the purpose of the study or the status of the group (autistic or typical), coded the valence of the emotional expressions observed during the MSS using a grid that categorized the expressions into 5 categories: positive, negative, neutral, unknown, and undeterminable (e.g., if the child's face was hidden). The "unknown" category corresponded to the expression of atypical and difficult to interpret emotions, often identified in the literature as bizarre or abnormal. In this study, the researchers wanted to use a name that better reflects the current state of knowledge; they are not recognized, so they are unknown!

Three variables were used to document the emotions: their frequency (how often the child expresses this emotion), their duration (how many seconds the emotion lasts) and finally the proportion of children having expressed this emotion.



The results

In the context of the MSS, the positive, negative, and neutral emotional expressions of autistic children and typical children did not differ! Their duration, frequency, and the proportion of children who expressed these emotions in the MSS were similar in both groups.

In contrast, "unknown" facial expressions were more frequent, of longer duration, and found in greater proportion in autistic children. In fact, unknown facial expressions were observed in 43% of the autistic children, whereas they were not observed in any of the typical children.

What we can learn from these results...

This research sheds new light on the emotional expressions of young autistic children. Indeed, the results did not support the fact that negative emotions are more present at the expense of positive emotions in autistic children. On the contrary, both autistic and typical children showed more positive than negative emotions during the MSS, and negative emotions were found with very low frequency in both groups. As for the "unknown" emotions, these were expressed only by autistic children. In this sense, to better understand the nature of these emotions, it is essential to clarify and better define them in future studies. 🌱

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Original article:

Jacques, C., Courchesne, V., Mineau, S., Dawson, M., & Mottron, L. (2022). Positive, negative, neutral—or unknown? The perceived valence of emotions expressed by young autistic children in a novel context suited to autism. *Autism*, 13623613211068221.