

BEHAVIORAL RESPONSE TO DISTRESS IN CHILDREN WITH AUTISM

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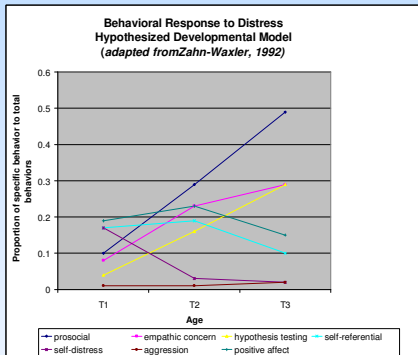
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BACKGROUND

Children with autism spectrum disorders (ASDs) are less likely to express empathic concern as compared to developmentally delayed or typically developing peers. By two years of age, typically developing children begin to exhibit a wide range of behaviors in response to distress in others. At this age there appears to be a developmental shift from lower level behaviors such as self-distress and positive affect, to higher level behaviors including prosocial behavior and empathic concern. Research has been conducted that shows the deficit of empathic concern in children with ASDs. However, there has been little research that has specifically examined individual differences in the behavioral responses to others' distress seen in this population. While it is possible that individuals with ASDs are generally deficient in responding to the distress of others, an alternative hypothesis is that children with ASDs may exhibit a cognitive delay and may demonstrate age inappropriate or lower level behaviors instead.



AIMS

- To describe the range of behavioral responses displayed by children with autism in response to feigned distress.
- To test whether children with ASDs demonstrate a pervasive deficit in responses to distress versus a less mature response.

HYPOTHESES

Children with ASD will exhibit a deficit of age appropriate behaviors (such as empathic concern and prosocial behaviors) as compared to controls.

In lieu of age appropriate behaviors, children with ASD will exhibit less mature responses, such as distress, self-referential behaviors, positive affect, etc.

METHODS, continued

PARTICIPANTS

Data was coded for 46 children:

- Autism/PDD: n=26
- Developmental Delays: n=9

Diagnoses: clinical diagnosis confirmed by ADOS. Cognitive abilities were tested with the Differential Ability Scales.

		ASD	DD
	n	26	9
CA	Mean	57.94	47.89
	Range	30-108	36-82
MA	Mean	66.71	65.67
	Range	30-108	58-75
Gender	Male	22	9
	Female	4	0
Ethnicity	Black	0	2
	White	25	7
	Hispanic	1	0

TASK

- 3 distress displays, administered by a female examiner
 1. Hitting finger with hammer
 2. Banging knee on table
 3. Dropping something on toy
- Each display is 1 minute in duration; the first 30 seconds are more intense and the second 30 seconds are less intense.
- Parent remains in the testing room with the child, while the child sits at a table with the examiner.

CODED BEHAVIORS

Prosocial Behavior: Children's spontaneous behaviors that attempt to intervene on behalf of the examiner in distress, to change the situation, or to alleviate the distress.

Empathic Concern: Emotional arousal that appears to reflect sympathetic concern for the examiner in distress.

Verbal Hypothesis Testing: Attempts to label or understand the problem, ranging from simple or complex verbal statements or questions to nonverbal visual search patterns.

Non-verbal Hypothesis Testing: Nonverbal indicators such as visual search patterns (i.e. repeated looks from the examiner's injury to the toy that hurt it)

Social Referencing: Spontaneous seeking of emotional information from another's face (examiner or parent) when faced with a situation of uncertain valence.

Self-referential Behaviors: Imitations or enactments of the examiner's distress or the distress causing event.

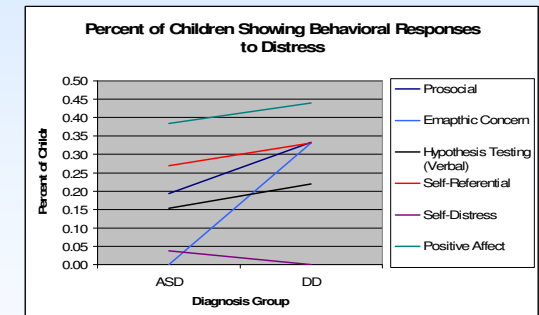
Self-Distress: Emotions evoked by the examiner's distress that were more intense, negative, and reflective of personal distress.

Positive Affect: Expression of positive emotions during the emotional display in response to the event.

RESULTS

- ASD and DD groups were equally likely to show low level responses to the distress of others.
- Groups differed in the overall likelihood of high level behaviors ($p = .06$).
- Follow-up analyses:
 - When high level behaviors were examined individually, the ASD group demonstrated less empathic concern than the DD group.
 - Groups did not differ in proportion of prosocial and hypothesis testing behaviors

	ASD	DD	p
Low Level Responses (Total)	0.5	0.67	ns
* Self-Referential	0.27	0.33	ns
* Self-Distress	0.04	0	ns
* Positive Affect	0.38	0.44	ns
High Level Responses	0.31	0.67	0.06
* Prosocial Behaviors	0.19	0.33	ns
* Empathic Concern	0	0.33	< .01
* Hypothesis Testing (Verbal)	0.15	0.22	ns
* Hypothesis Testing (Verbal + Nonverbal)	0.92	0.78	ns



SUMMARY & CONCLUSIONS

The lower proportion of children with ASD who showed empathic concern is congruent with past research. However, the finding that a proportion of the ASD group demonstrated prosocial responses to distress was unexpected. This finding is noteworthy because it indicates that children with autism will demonstrate individual differences in behavioral responses to emotional events. However, it is also important because it suggests a possible dissociation between social cognitive understanding of and behavioral response to the distress of others in ASD.