



# CHILD FACTORS AND PARENT STRESS

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## BACKGROUND

- Parents raising children with autism have been shown to experience parenting stress (Davis & Carter, 2008)
- Kirby et al. (2015) found higher levels of caregiver strain as compared to parents of children with developmental disabilities
- Heightened levels of strain was suggested to be attributed to hyper-responsiveness, e.g., negative over-reaction (Kirby, White, & Baranek, 2015)
- Child factors such as verbal and general IQ has been shown to predict parent stress (Pastor-Cerezuela, Fernández-Andrés, Tárraga-Mínguez, & Navarro-Peña, 2016)
- Stress experienced by parents can impact caregiving abilities and their quality of life (Hsiao, 2016).

## RESEARCH PURPOSE

- To understand stress experienced by parents of children with autism.
- To examine how child characteristics are related to various domains of parent stress.

## RESEARCH QUESTIONS

- Question 1: Does parent stress differ between parents of children with autism and parents of children with other developmental disabilities?
- Question 2: How does participation within a communication-focused intervention program impact parent stress?
- Question 3: How do various child characteristics such as daily living skills, socialization skills, motor skills, and receptive and expressive language relate to specific domains of parent stress, as measure by the Parent Stress Index (Abidin, 1995): Parental Distress (PD), Parent-Child Dysfunctional Interaction (PCDI), Difficult Child, and total parent stress.

## METHODS

### Participants

- Parent and child dyads were recruited from Atlanta through referrals from the community
- 13 children later identified as having autism
- 87 children with other developmental disabilities (e.g., Down Syndrome)

### Procedure

Participants were randomly assigned to a language intervention (Ronski et al., 2010; Ronski et al., in prep)

- 24 language intervention sessions
  - 18 sessions took place at the university
  - Final 6 sessions took place at the homes of the families
- 30 minute sessions composed of 10 minutes each of Play, Book, and Snack activities
- Intervention types:
  - Spoken Communication: Parent(P)/ Interventionist (I) and Child (C) used speech to communicate
  - Augmented Communication Input (ACI): P/I used Speech Generating Device (SGD) to communicate with C; P modeled the use of SGD
  - Augmented Communication Output (ACO): P/I used SGD to communicate with C; P uses hand-over-hand prompts to aid C's production of speech
  - Augmented Communication Input & Output (ACIO): A hybrid between ACI and ACO. P/I modeled and provided hand-over-hand prompts using SGD to communicate with C.

### Measures

- Vineland Adaptive Behavior Scales (VABS; Sparrow, Cicchetti, & Balla, 2005)
  - Daily living, Socialization, and Motor skills
- Sequenced Inventory of Communication Development - Revised (SICD-R; Hedrick, Prather, & Tobin, 2000)
  - Receptive and Expressive language skills
- Parent Stress Index - Short Form (PSI-SF; Abidin, 1995)
  - Total parent stress, Parental Distress, Parent-Child Dysfunctional Interaction, and Difficult Child.

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## RESULTS

### Question 1:

A *t*-test analysis showed that parent stress did not differ between parents of children with autism and parents of children with other forms of developmental disabilities,  $t(98) = -1.67, p = n.s.$

### Question 2:

Results of a *t*-test analysis revealed that parent stress was not impacted by participation in an invention program,  $t(12) = -.39, p = n.s.$

### Question 3:

	1	2	3	4	5	6	7	8	9
1. Daily Living Skills	1.00	----	----	----	----	----	----	----	----
2. Socialization Skills	.92**	1.00	----	----	----	----	----	----	----
3. Motor Skills	.95**	.94**	1.00	----	----	----	----	----	----
4. Receptive	.31**	.34**	.23*	1.00	----	----	----	----	----
5. Expressive	.08	.04	-.01	.48**	1.00	----	----	----	----
6. Total Parent Stress	-.18	-.20	-.14	-.23*	-.22*	1.00	----	----	----
7. Parental Distress	-.23*	-.26*	-.22*	-.21*	-.21*	.86**	1.00	----	----
8. PCDI	-.29**	-.29**	-.22*	-.30**	-.22*	.86**	.65**	1.00	----
9. Difficult Child	-.09	-.11	-.05	-.16	-.20*	.90**	.66**	.75**	1.00

Note: \*  $p < .05$ , \*\*  $p < .001$ . Receptive = Receptive language skills, Expressive = Expressive language skills, PCDI = Parent-Child Dysfunctional Interaction.

A correlation matrix showed that:

- Domains of parent stress were highly positively correlated with each other, and to total parent stress;
- Receptive and expressive language skills were negatively correlated with total parent stress;
- Parental distress and PCDI were negatively associated with all of the children's characteristics.

## DISCUSSION

- The findings of this study suggest that for parents of children with autism, all domains of parent stress play a significant role in the experience of total parent stress.
- The results also suggest that better receptive and expressive language skills in children are associated with lower parent stress.
- This study also showed a negative association between children's daily living, socialization, motor, and communication skills and the experience of parental distress and parent-child dysfunctional interaction.

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