

Empowering Parents to Change the Mealtime Behaviors of Their Children with ASD

Deirdre Muldoon, CCC-SLP, BCBA, ABD & Joanna Cosbey, PhD, OT
University of New Mexico

Introduction

Up to 80% of children with developmental difficulties (Volkert & Piazza, 2012) and up to 60-90% of children with ASD (Bruns, 2011; Kerwin, 2005) They have significantly greater feeding problems and eat a narrower range of foods than their peers (Kozlowski, 2011; Schreck, 2004)

This study focused on:

- **Complexity of mealtimes**
- **Intervention needs to be effective & sustainable using parent based interventions**
- **Individual children and their families**
 - Physical abilities
 - Sensory processing skills
 - Cognitive skills
 - Communication skills
 - Personal preferences
 - History
- **Social Environment of the children and their families**
 - People
 - Relationships
 - History of interactions
- **Physical Elements of the mealtime**
 - Family size
 - Meal locations
 - Food presented
- **Sociocultural Factors of the children and their families**

Purpose: to determine the **efficacy** and **social validity** of a family-centered, multicomponent intervention package on the food acceptance of young children with ASD.

- What are the parents' perceptions of the treatment acceptability?
- Does parents' prior knowledge of intervention strategies influence treatment acceptability and procedural fidelity?

Method

The plan for the child was generated with the parent and consisted of options from the four main areas below (food, communication, physical environment, and social environment).

The plan was monitored once or twice weekly by the researchers; both parent and child behaviors were subject to data collection.

Procedural fidelity was kept using the data collection sheet that was a reflection of the plan that was generated by the researchers and the parent.

Target Area	Definition	Example
Food	Altering or deliberately targeting foods	Texture/color; size of bolus; amount of food; types of food
Communication	Supporting child's expressive and/or receptive communication	Visual menu; visual hierarchy; use of commands; "first-then"
Physical Environment	Physical changes to meal environment	Location; seating; lighting; proximity to others; distractors
Social Environment	Changes to parent/child interactions	Praise; prompting; play; peer modeling; focus on consumption of food

Child: 003 (B) Intervention phase
Reliability: ___ Yes ___ No
Generalization: ___ Yes ___ No
if yes, describe: _____
Date: _____
Observer: DM JC _____

	Yes	Needs work	Not applicable	Comments
Foods				
You offered B. foods from three out of four food groups.				
You selected foods that B. is likely to learn to eat (e.g., paying attention to color, temperature, shape/length, texture, etc.).				
You presented 1-3 foods that B. likes and one that he doesn't like as much.				

	Yes	Needs work	Not applicable	Comments
Communication				
You used a picture menu or verbal choices to allow B. to pick the foods that he wanted to eat.				
You were using strategies to help B. communicate during mealtimes (e.g., foods, utensils, rooms, etc.).				
You used visual supports (pictures) and/or words to help B. understand and remember the idea of "First-then."			Only N/A if general idea of First/Then wasn't used.	
Whenever you told B. "First this, then that," you followed through.			Only N/A if general idea of First/Then wasn't used.	
You used more commands/statements (e.g., "It's time to eat") than yes/no questions (e.g., "Do you want to eat?") to encourage B. to eat less preferred foods .			Only N/A if no less preferred foods were offered.	
You appropriately used a visual support to help B. understand the steps on the food acceptance hierarchy.			Only N/A if no less preferred foods were offered.	
You helped B. appropriately communicate ideas like "I don't want that." (negative reinforcement)			Only N/A if the child never had a need to communicate rejection.	

	Yes	Needs work	Not applicable	Comments
Physical Environment				
You had B. sit at the kitchen table during his meal/snack using the seating that helps him stay stable in the chair and at the table.				
You stayed at the table with B. for the entire meal.				
You ensured that an adult and/or older sibling were seated in close proximity to B. to help him stay at the table.				
You removed distractions from the environment e.g., trampoline from the living room.				
You set clear expectations for extending the length of time B. stays at the table (e.g., timer).				

	Yes	Needs work	Not applicable	Comments
Social Environment				
You maintained a generally positive tone to the meal/snack.				
You appropriately used positive reinforcement throughout the meal to encourage acceptance of less preferred food.			Only N/A if no less preferred foods were offered.	
You encouraged B. to explore food he was less familiar with.			Only N/A if no less preferred foods were offered.	
When you needed to, you prompted him by telling him two times to "Take a bite (or drink)," and then, if necessary, using the target prompt to meet his target on the hierarchy			Only N/A if no less preferred foods were offered.	
When you and B. interacted with food, you stayed focused on the long-term goal of consumption of food.				
You used B.'s siblings appropriately as peer models for appropriate mealtime behavior.				

	Yes	Needs work	Not applicable	Comments
Overall you implemented and reinforced the mealtime plan.				

Parent Feedback Form

Results

On a food frequency questionnaire all of the children had increased acceptance of foods

1. From 56 to 76 foods
2. From 30 to 46 foods
3. From 45 to 72 foods
4. From 17 to 23 foods

All of the parents reported a decrease in child problem behaviors (BPFAS) All parents reported knowing more about the reasons for the challenging mealtime behavior and how to manage it using evidence based practices based in applied behavior analysis.

All of the parents agreed that the plan was a good fit for their families based on an Adapted Goodness of Fit questionnaire (Albin et al., 1996).

Acknowledgements and Contact Information

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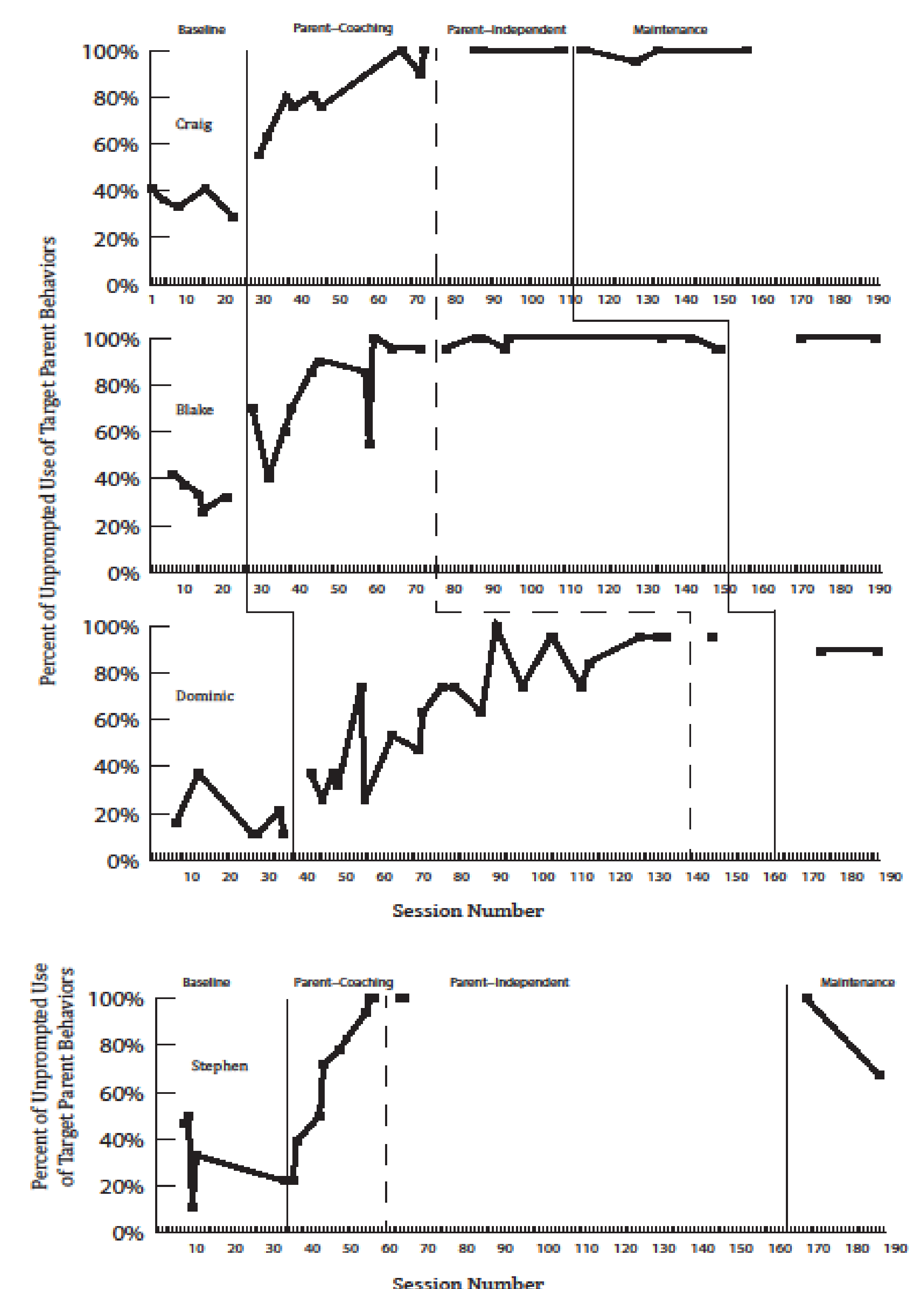
Julia Brunson,
MOTS, and
Jennifer Hill,
MOTS
Assistant Professor
Division of Occupational Therapy
School of Medicine
University of New Mexico
jcosbey@salud.unm.edu

Deirdre Muldoon, CCC-SLP, BCBA

Speech & Language Pathologist,
Manager SAFE Clinic
Center for Development & Disability
University of New Mexico
dmuldoon@salud.unm.edu

The purpose of this poster is to stimulate discussion about parent implemented mealtime interventions for children with ASD and challenging behavior.

Results: Parent Behaviors



Method

- Mixed methods research design
- Four parent-child dyads
- Children ages 5-8 years with ASD
- Significant mealtime difficulties based on parent report & standardized questionnaires
- Baseline Phase: 5 in-home sessions; natural interactions
- Assessment/Intervention Planning completed with the parent and plan was generated based on a "menu" of possible intervention options
- Intervention: 1-2 times per week; home or clinic; researcher coached parent on strategies, then faded support
- Procedural fidelity of the parents' behavior was recorded at each observation/mealtime
- Maintenance: intermittent probes after intervention