Title: Examining the Relationship of Autism Spectrum Disorder and Cultural Factors on Caregiver Stress and Behavioral Feeding Intervention Outcomes

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Introduction: Feeding problems are common in childhood and reported in approximately 25-45% of the general population (Bentovim, 1970). Children with developmental delays are at increased risk for feeding problems, which, as reported in the literature, occur in 80% of children with developmental disabilities (Manikam & Perman, 2000) and 89% of children with Autism Spectrum Disorder (ASD; Ledford & Gast, 2006). Feeding difficulties in children are characterized by food selectivity, food refusal, and disruptive mealtime behaviors and are strongly related to increased caregiver stress (Garro, Thurman, Kerwin, & Ducette, 2005). Social and environmental factors often contribute to the maintenance of maladaptive mealtime behavior in children. Therefore, treatment of feeding disorders often includes behavioral intervention focused on manipulating antecedent and environmental contingencies through parent training. However, little work has examined the relationship of how cultural factors influence parenting stress and maladaptive feeding behavior in children with developmental disabilities and ASD.

Methods: Participants consisted of 29 children between the ages of 2-9 years that were categorized into four groups: children diagnosed with ASD (N = 20), children without a diagnosis of ASD (NonASD; N = 9), children of families with English as a second language (ESL; N = 10), and children of families where English is the primary language spoken in the home (NonESL; N = 19). Participants included children referred for a brief intensive outpatient feeding treatment program by a clinical provider. Treatment consisted of a four-week feeding therapy program that involved behavioral feeding intervention and parent training components. Three 30-minute sessions were completed per week. Pre and post-treatment data on maladaptive feeding behaviors and parent stress were measured via the Brief Assessment of Mealtime Behavior in Children (BAMBIC; Hendy, Seiverling, et al., 2013) and the Parenting Stress Index, Fourth Edition Short Form (PSI-4; Abidin, 2012), respectively. Sessions were conducted by a team of psychologists and psychology trainees trained in implementation of behavioral procedures and data collection.

Results: Descriptive data indicates differences of parenting stress across groups. The ESL group reported the most parenting stress prior to intensive feeding therapy, as measured by the total t-score on the PSI-4 (M = 62.6). The nonASD group (M = 57.3) reported more parenting stress than the ASD group (M = 55.7). The nonESL group (M = 54.1) reported the least amount of parenting stress prior to intensive feeding therapy. To date, the ESL group displayed the largest decrease in parenting stress following behavioral feeding therapy (M=58.8). Total maladaptive mealtime behaviors were reported to be highest in the nonASD group (M=35.7) followed by the ESL (M = 34.0), nonESL (M = 33.8), and ASD (M = 33.1) groups prior to treatment. Overall, results from this study indicate specific patterns of parenting stress and maladaptive mealtime behavior across groups before and after intensive feeding therapy.

Discussion: Feeding problems in childhood are strongly related to caregiver stress, which can negatively influence child development and response to treatment. Results from the current study suggest increased caregiver stress in families with English as a second language prior to beginning feeding therapy, although all groups were reporting above-average parent stress levels. Increased stress in the ESL group may be related to cultural differences and communication barriers and should be considered in treatment delivery. Furthermore, results suggest that parents of children with ASD were less likely to report maladaptive mealtime behaviors compared to parents of children without ASD. Parents of children with ASD may attribute disruptive behaviors to be more related to ASD symptomology (e.g., behavioral rigidity, food selectivity) than maladaptive mealtime behaviors. Additionally, parents of children with ASD may experience more behavioral difficulties in general which may desensitize their perception of disruptive behavior during mealtime compared to families without a child with ASD. It is critical to gain a better understanding of how cultural characteristics of families, as well as clinical symptomology of the child, are related to parenting stress and treatment outcomes in order to deliver family-centered services and enhance future outcomes.

Key References:

