Title: Investigating the Relationship of Autism Severity and Symptomology on Parenting Stress and Behavioral Feeding Treatment Outcomes

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Introduction: It has been established that children with Autism Spectrum Disorder (ASD) exhibit a variety of feeding difficulties. (Ahearn et al., 2001; Archer & Szatmari, 1991; DeMyer, Ward, & Lintzenich, 1968; Kanner, 1943). In addition to food selectivity and disruptive mealtime behaviors, children with ASD experience other behavioral feeding concerns such as pica and rumination. Feeding problems adversely impact children’s nutrition and are correlated with high rates of parental stress (Curtin et al., 2015). Despite the high prevalence of feeding problems in children with ASD, effective interventions that work well with other populations may not generalize for these children. Children with ASD, in particular, benefit from more intensive treatment programs because these children often rely on the structure and consistent application of behavioral principles in treatment and require more practice when learning new skills (Laud et. al., 2009). This study serves as an examination of the impact of specific ASD symptoms on maladaptive feeding behaviors and parenting stress during a brief intensive feeding intervention program.

Methods: Participants include 17 children (ages 2-9) diagnosed with Autism Spectrum Disorder referred for brief intensive feeding treatment by a clinical provider. In this four-week program, participants are seen for 30 minutes of behavioral feeding intervention 3 days per week. In addition to behavioral feeding intervention and parent training, pre- and post-treatment data on maladaptive feeding behaviors and parental stress was collected 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. Prior to treatment, each participant received a developmental evaluation that assessed autism symptomology and severity through the Autism Spectrum Rating Scale (ASRS; Goldstein & Naglieri, 2013), Childhood Autism Rating Scale (CARS-2; Schopler et al., 2010), and Autism Diagnostic Observation Schedule (ADOS-2; Lord et al., 2012).

Results: Correlational analyses suggest a positive relationship between clinician-reported autism symptomology via the total CARS-2 raw score and PSI-4 Parental Distress subscale (r = .73). The PSI-4 Difficult Child subscale was positively related to parent report of the ASRS: total symptoms (r = .63), Unusual Behaviors (r = .76), and Behavioral Rigidity subscales (r = .71). Results indicate specific patterns of parent and clinician-reported symptoms of autism and caregiver distress.

Discussion: Behavioral feeding concerns, such as food selectivity and disruptive mealtime behaviors are prevalent concerns for children with Autism Spectrum Disorder. Our findings suggest that parents of children with high levels of autism symptoms report greater levels of parental distress prior to behavioral feeding intervention. In particular, parent-reported concerns of behavioral rigidity were positively correlated with parental stress in our sample. In our experience, many children with ASD exhibit rigidity with their food preferences, and it is not surprising that children referred to this brief intensive feeding program would present with these concerns. With this information in mind, the feeding protocol used in this study is unique in its ability to tailor feeding treatment to each child based on feeding goals, cognitive ability, and severity of autism symptoms. In light of this information, more careful consideration of post-intervention care is essential for long term treatment outcomes.

References: