

STRONG CHILDREN'S RESEARCH CENTER

Summer Research Scholar

Name: Mahadevan Subramanian

School: Brown University

Mentor: Stephen Cook MD, MPH and Anne-Marie Conn PhD, MEd

ABSTRACT

Title: CHAOS of the Home Environment in Kids Seeking Obesity Treatment

Background: Existing research relates the impact of a chaotic home environment on eating behaviors in children as well as other weight-related outcomes. Fulkerson et al. (2019) found an association between increased household chaos and decreased meal frequency. Relatedly, Buchanan et al. (2021) found children in families with higher chaos and parental stress scores had higher BMIs than children not of this family profile. However, research is limited on the effects of a chaotic home environment on eating disorders in children, especially amongst youth with obesity, with some studies, such as Parks et al. (2016), specifically excluding those with eating disorder pathology. Thus, this study aims to fill this gap in the literature by looking at how chaos in the home environment and parental anxiety is associated with behaviors and other socio-demographic factors.

Objective: We examined levels of chaos in the home environment, parental stress (anxiety) and its association with eating behaviors and other socio-demographic in 227 6-16-year olds seeking treatment for obesity enrolling in the Rochester, New York site of the TEAM-UP Study.. Environmental chaos in the home environment was measured using the CHAOS (Confusion, Hubub, and Order) scale, a 15-item validated questionnaire directed to parents. Similarly, parent anxiety was measured using the GAD-7 (Generalized Anxiety Disorder-7), a 7-item measure of generalized anxiety disorder.

Results: The initial hypothesis was not supported as most weight-related outcomes were not significantly associated with CHAOS or parental anxiety. Those that were significant were mostly related to the association between CHAOS and parental factors – among the socio-demographic factors these were parent gender, household size, and highest education of mother. In addition, there was a borderline significant relationship between CHAOS with child restriction and a significant relationship between CHAOS and parent stress.

Buchanan et al. (2019) saw increased BMI in a condition of high CHAOS *and* parental stress, and did not have families with high CHAOS and low parental stress or vice-versa. This suggests that it may have been the interaction of these two factors contributing to weight, given this analysis found neither CHAOS or parental anxiety alone does. However, this study did enroll a limited sample size, and there is the potential for differing results with a larger, more diverse one.

Conclusion: Future research should be conducted to examine if combined parental factors and CHAOS lead to weight-related outcomes in children, given those that were significant on the bivariate level. These results help provide context for the various factors that affect child weight outcomes.