

2022

## The Knights of the Round Table: The Mediating Role of Parental Self-efficacy and Parental Stress in Explaining Family Mealtime Predicting Child Behavior in MTurk Families

Dea Zgjani  
University of North Florida, zgjanid@gmail.com

Follow this and additional works at: <https://digitalcommons.unf.edu/etd>



Part of the [Child Psychology Commons](#), [Developmental Psychology Commons](#), and the [Health Psychology Commons](#)

---

### Suggested Citation

Zgjani, Dea, "The Knights of the Round Table: The Mediating Role of Parental Self-efficacy and Parental Stress in Explaining Family Mealtime Predicting Child Behavior in MTurk Families" (2022). *UNF Graduate Theses and Dissertations*. 1117.

<https://digitalcommons.unf.edu/etd/1117>

This Master's Thesis is brought to you for free and open access by the Student Scholarship at UNF Digital Commons. It has been accepted for inclusion in UNF Graduate Theses and Dissertations by an authorized administrator of UNF Digital Commons. For more information, please contact [Digital Projects](#).

© 2022 All Rights Reserved

**The Knights of the Round Table: The Mediating Role of Parental Self-efficacy and  
Parental Stress in Explaining Family Mealtime Predicting Child Behavior in MTurk  
Families**

by

Dea Zgjani

A master's thesis submitted to the Department of Psychology  
in partial fulfillment of the requirements for the degree of  
Master of Science in Psychological Sciences

UNIVERSITY OF NORTH FLORIDA

COLLEGE OF ARTS AND SCIENCES

Spring 2022

### Dedications

*First and foremost, I would like to express my greatest appreciation and dedicate this thesis to my parents. The love and support you have given me is inspiring. Second, I would like to thank my advisor, Dr. Jody Nicholson, who reassured me time and time again that I could in fact write a thesis. I am also grateful to my second reader, Dr. Dawn Witherspoon, for showing patience throughout my thesis journey. Thank you to my cohort friends and the ones back home who keep me grounded. Finally, to my grandmother who is no longer with us. The many meals you cooked and the love you gave will never be forgotten.*

## Table of Contents

Dedications .....	2
List of Tables .....	4
Abstract .....	5
Introduction.....	6
Current Study .....	14
Methodology .....	14
Results.....	23
Discussion .....	27
Limitations and Future Directions .....	30
Conclusion .....	32
References .....	34
Tables and Figures .....	59

## List of Tables

Table 1. Descriptive Statistics and Correlations of Continuous Variables .....	59
Table 2. Descriptive Statistics and Categorical Variables ANOVA.....	60
Table 3. Regression Coefficients, Standard Errors, and Model Summary Information for the Parallel Multiple Mediator Model Depicted in Figure 2 .....	61
Figure 1 .....	62
Figure 2 .....	63

## Abstract

The current study examined how shared family meals influence low negative behavior in children via parental perceived stress and parental self-efficacy in children between the age three and six. Using a parallel mediation analysis, multiple regression analyses were conducted for 204 participants. Results indicated parental perceived stress to be a mediator in the relationship of the structure of shared family mealtimes and negative child affectivity, in contrast parental self-efficacy was not. Additionally, interesting results were conveyed from exploratory Hypothesis 1. First, there were a total of 94 mothers and 102 fathers who completed the study. Significant correlations were depicted between participant age and the structure of shared family mealtimes, the total number of adults aged 18 and older in the household and problematic child behaviors, parental concern about child's diet and how much of a problem it is for parents when children display problematic child behaviors, target child age and how much of a problem it is for parents when children display problematic child behaviors. In addition, two significant negative correlations were found between target child age and spousal stress related to child's mealtime behaviors along with total number of children less than 6 years old and the use of food as a reward. Applying a developmental lens on research surrounding shared family mealtimes provides important implications as to how routines and parent-child interaction influence child behavior.

**The Knights of the Round Table: The Mediating Role of Parental Self-efficacy and Parental Stress in Explaining Family Mealtime Predicting Child Behavior in MTurk Families**

Routines provide a predictable structure that is important in early childhood (Hancock & Carter, 2016). Family routines are effective because they positively influence communication, routine commitment, and continuity, which aid in more effective parenting and better child functioning (Fiese et al., 2016). One such routine, shared family mealtimes, supports higher levels of family functioning and optimal child development through these three aspects (Fiese et al., 2006). Routine communication through family mealtime includes inside jokes, the use of nicknames and storytelling which reinforce individuals' role in the group, thus making shared family mealtime rituals effective and can improve parent-child communications and relations (Fiese et al. 2006; Fiese & Jones, 2012). Mealtimes include certain elements that support a commitment to a routine and creates a healthy family environment through elements such as planning, predictability, and set communication strategies (Neumark-Sztainer et al., 2008). Continuity of family meals is better illustrated by the frequency with meals are implemented. Families who eat meals together three to four times a week have children that are less likely to engage in risky behavior and have fewer mental health problems (Eisenberg., et al 2004). Due to these influences on communication, routine commitment, and continuity, family mealtime act as a protective factor for health-related problems, academic performance, learning and self-regulation via mealtime interactions (Hammons et al., 2011; Fiese et al., 2008). The current study will explore parenting characteristics, such as perceived parental stress and parental self-efficacy as mechanisms by which family mealtime serve as a protective family routines and lead to more positive child outcomes.

**Shared Family Mealtimes**

US families have on average, 5.1 shared meals per week (Fiese & Spagnolia, 2007). Children's eating patterns are often shaped by family influences. Food consumption habits in childhood may lead to lifelong food consumption patterns (Nicklaus & Remy, 2013). There is a significant relationship between food involvement in the family and a healthy dietary consumption of fruits and veggies. Early engagement with food predicts later food relations and attitudes (Fiese & Metcalfe, 2018). There are multiple suggestions for routine elements that should be present in family mealtime to optimize this protective family routine's effectiveness.

***Seat and Role Assignment***

To start eating a meal, every member of the family needs to know where to sit. A sense of autonomy is created when individuals in the family knows their place at the table. By knowing one's place at the table, confusion is avoided when additional people may join in on a mealtime (Fiese, 2006). Division of labor is also present during family mealtimes. Every member of the family knows their role and what part to play to execute a family related goal. Even with a diverse demographic and structure across different families, mealtime behavior attracts family members in a supportive and predictable way (Fiese, 2006; Jarret et al., 2016; Hamilton et al., 2009; Lawrence & Plisco, 2017).

***Manners***

During family mealtimes an expectation of appropriate manners display is required. Giving the child direct and specific instructions on how to eat and what to say while at the dining table may serve as cultural mores of expected behavior and expand the child's vocabulary (Fiese, 2006). Conflict resolving and speaking up can also be evident components while dining with family (Fiese, 2006).



***Turn-taking***

Family mealtimes are opportunities for family members to engage in conversational turn-taking and to strengthen vocabulary development. This may lead to better academic performance in children (Videon & Manning, 2003). Socialization benefits are also evident while engaging in family mealtimes. Everyone may share how their day went and their short goals and worries, thus forming a stronger bond between members (Fiese, 2006). When having guests over, this experience may be used to strengthen family traditions by sharing family tales and fables (Fiese, 2006).

***Fathers and Shared Family Mealtimes***

Research has identified a role for parental beliefs, attitudes, and self-efficacy as they contribute to parent affect and behavior at mealtimes (Blisset et al., 2005). However, such findings are mostly based only on maternal report (Snethen et al., 2008). Maternal-focused research cannot be generalized to fathers (Harris et al., 2020), since fathers spend a considerably more time in child related activities than they did 60 years ago and most fathers eat meals with their children daily (Livingston and Parker, 2019; Jones & Mosher, 2013).

There has been increasing recognition of the influence of fathering on children's social, emotional and behavioral outcomes (Lundahl et al., 2008; Sanders et al., 2010). There have been some inconsistencies when it comes to findings on differences between mother and father parenting practices, including shared family meals, with some studies finding differences between mother and fathers and some not (Adamson & Blight, 2014; Blisset et al., 2006; Brann & Skinner, 2005; Frankel & Kuno, 2019; Gevers et al., 2015; Hendy et al., 2009; Jansen et al., 2018; Loth et al., 2013; Orrell-Valente et al., 2007; Pratt et al., 2019; Powell et al., 2017; Pulley et al., 2014; Tschann et al., 2015; Zhang & McIntosh, 2011). Differences reported with fathers

are fussier and controlling feeding behavior in their toddlers than mothers and more forceful in their approach (Hold-Denola et al., 2005; Hendy et al., 2009). Research in paternal cognition shows that fathers feel less responsible than mothers for feeding (Owen et al., 2010). We also must take into consideration that the child might respond to the same practice in a different way simply depending on who implements it. Father's mealtime interaction with their children is influenced by family structure, context, and the developmental stage of the children (Harris et al., 2020). Both mothers and fathers make contributions to child rearing and feeding (Haller-Haalboom et al., 2016; Khandpur et al., 2016), therefore fathers need to be represented in research when it comes to shared family meals and positive child outcomes.

### **Supporting Early Child Development through Family Mealtimes**

Early childhood is a period of continuous and substantial growth in physical, cognitive, and psychosocial development and, therefore, a critical period for adopting family routines to optimize child outcomes. Family meals are an opportunity to promote the healthy development of children in each developmental domain (Larson et al., 2006).

#### ***Physical Development and Family Mealtimes***

Family mealtimes are commonly linked to more nutritional diets in children, because children are known to eat foods with better nutritional quality when eating with adults (Hammons & Fiese, 2011; Skafida, 2013). Family mealtimes are associated with positive health outcomes for youth including increased consumption of more nutritious foods, less consumption of calorie dense foods and less risk for childhood obesity (Neumark-Sztainer et al, 2008; Videon & Manning, 2003; Gable et al., 2007). Children who were considered healthy weight were part of families who spent more time together during the meal and engaged in positive forms of

interpersonal communication. Family mealtimes also present the opportunity to model healthy food choices and eating practices (Videon & Manning, 2003).

### ***Cognitive Development and Family Mealtimes***

The early years of children's lives are critical for the development of cognitive skills (Liu et al. 2020). Shared family mealtimes can help enhance language development; more specifically certain talk during mealtimes can help build reading scores and vocabulary later in life (Snow & Beals, 2006). Some features of family mealtimes present the opportunity for children to engage in fantasy play with others, reading books together and discussing them at the table, or even having simple conversational interactions – these can all contribute to child language outcomes (Dickinson & Tabors, 2001). Family mealtimes may be presented as an opportunity of growth through frequent and positive interactions with family members in which children can learn from the family environment.

### ***Socioemotional Development and Family Mealtimes***

The display of emotional control is a powerful mediator of interpersonal relationships and socioemotional adjustment across the life span (Eisenberg, 2003). Developments that occur during the toddler years in terms of emotion display, are pivotal and may vary from child to child. Prosocial behavior used in self-regulation, like empathy and sympathy increase during the ages of three and five (Kuther, 2017). Time spent in family meals has been associated with fewer negative behaviors in families with younger children (Hofferth & Sandberg, 2001). As children talk about their feelings and express themselves eloquently, they can better regulate themselves (Kuther, 2017). Focusing on the ages two to six for implementing shared family mealtimes may lead to less negative behavior in children via frequent parent-child mealtime conversations.

### **Parental Variables in Influencing Child Behavior**

*Perceived Stress*

Stress is associated with numerous physical and mental health outcomes (Gehring et al., 2001). Parental stress may cause obesity in both adults and children (Baskind et al. 2019). Parents with a high level of stress may engage or experience indirect factors that can lead to a less healthy diet and less supervision of their children. Children of parents that experienced a high level of stress were also more likely to consume fast food at least once a week. High maternal stress is also associated with low child physical activity (O'Connor et al., 2017).

Perceived parental stress is found to be an indicator of maternal stress that has demonstrated significance on child development (Zhu et al., 2014). Mothers who perceive anxiety or stress may be responsible for a less stimulating environment for their children. Household chaos and unmanaged parental perceived stress are inversely and independently associated with shared family mealtime frequency (Fulkerson et al., 2019). However, parental stress is an area of parental characteristics that has not been examined extensively in terms of frequent shared family meals. In addition, to the author's knowledge, although parental stress may have been examined in relation to shared family mealtimes, it has not been examined as a mediator between shared family mealtimes predicting lower negative behaviors in children.

A plethora of evidence links stress experiences related to parenting to reports of child behavioral problems and externalizing problems in the early childhood period (Conger et al., 1984; Deater-Deckard & Scarr, 1996; Kliwer & Kung, 1998). A study done by Yunying Le in 2015 examined parenting stress as a mediator between negative affect (i.e., neuroticism) and harsh parenting for first time parents with a child transitioning from late toddlerhood to early preschool years. Part of the results conveyed that one's parenting stress accounts for the association between one's neuroticism and one's harsh parenting, linking negative affect to the

influence of parental stress (Le, 2015). In another study, parental stress was explored as a mediator between toddler temperament and parent's use of autonomy supportive practices. The results showed that toddler negative affectivity was indirectly related to parent's use of autonomy support (Andreadakis et al., 2020).

### ***Parental-Self Efficacy***

Parents influence the development of empathy and prosocial behavior through their interactions (Kuther, 2017). Bandura (1977) defined self-efficacy as one's belief in their capability to perform tasks successfully. Parental self-efficacy, which includes the parents' beliefs in their ability to positively influence their child, has been related to a better adjustment in children of all ages (Ardelt & Eccles, 2001; Jones & Prinz, 2005). Self-efficacy is a strong originator of successful behavior change (Noar & Zimmerman, 2005; Marvicsin & Danford, 2013). A high level of parental self-efficacy is essential in managing healthy eating and healthy home activities (Marvicsin & Danford, 2013). Furthermore, the relevance of parental self-efficacy to parent's and children's health and well-being has been identified (Albanese et al., 2018).

Parental self-efficacy is related to negative affect. A study done by Rajan et al. (2019) explored maternal self-efficacy as a protective factor for child BMI among children with negative temperament. The study showed that negative child temperament (measured with the Negative Affectivity subscale from the CBQ VSF) was associated with higher BMI in children whose mothers had low parenting self-efficacy. Thus, we hypothesize that making shared family mealtimes a frequent household routine may result in higher parental self-efficacy through communication, monitoring, bonding, and an overall positive home ambiance. Moreover, a high parental-self efficacy may enhance positive child outcomes.

### **Implications**

Routines provide organization and structure to a family and family activities (Fiese et al., 2006). Building stronger relationships within families has shown to strengthen family resilience and promote a healthy childhood development (Mckelvey, et al., 2015). Family involvement during the pre-school and kindergarten age is important not only regarding food preparation and engagement, but for the whole healthy developmental outcome of the child (Fiese et al., 2007). The study of family routines allows researchers to examine how the family aids in regulating behavior in response to the individuals.

The child often relies on the parent for guidance and modeling that include eating behaviors. Parents with a low level of parental self-efficacy may find it challenging to parent effectively in difficult child situations (Jones & Prinz, 2005). A higher level of parental self-efficacy may be correlated with better shared family mealtime quality and frequent and quality family mealtimes may result in higher self-efficacy in parents. Thus, family meals along with the associated family characteristics and a high level of parental self-efficacy are hypothesized to present an opportunity space to promote the healthy emotional regulation of children. Two hypotheses were made for the purpose of this paper:

Hypothesis 1: The first hypothesis is an exploratory hypothesis. My interest lied in the structures of family mealtimes, use of food as a reward, problematic child mealtime behaviors, parental concern about child's diet, spousal stress related to mealtime behaviors, influence of child's food preference on what other family members eat and finally who are the families that are using these different structures.

Hypothesis 2: The second hypothesis is predictive. Parenting characteristics such as parental perceived stress and self-efficacy mediate the relationship between shared family mealtimes and negative behavior in children between the ages 3-6 due to the influences that all 4 variables have

on each other (i.e., structure of shared family mealtimes on parental perceived stress, parental perceived stress on negative affect, structure of shared family mealtimes on parental self-efficacy and parental self-efficacy on negative affect) (see Figure 2).

### **Current Study**

Family mealtimes may have the potential to promote healthy child development (Fiese et al., 2011). Research concerning shared family mealtimes explore the health and wellbeing of the child, but not how the structure of shared family mealtimes may benefit the parent by reducing stress and increasing self-efficacy. The current study brings additional research regarding shared family mealtimes and negative affect in early childhood (ages 3-6). In addition, parental self-efficacy and parental perceived stress have not been explored as mediators between shared family mealtimes in families and positive outcomes in early childhood. This paper aims to fill the gaps by examining shared family mealtimes across US families. while exploring the influences that parental practices such as parental self-efficacy and parental perceived stress have on child outcomes and how the structure of shared family mealtimes influences parental perceived stress and parental self-efficacy.

## **Methodology**

### **Participants**

Data were collected from Amazon Mechanical Turk (MTurk) participants. MTurk is a crowdsourcing marketplace that was created to help individuals to outsource their processes to a workforce who can complete tasks virtually. Tasks completed via MTurk include anything from research to simple survey participation. Participants included caregivers that had children aged 2-6 years old residing in their households and who shared family mealtimes at least 3 times a

week. Data were collected in a single survey form containing four different measures. For sufficient power to detect an indirect effect utilizing Hayes' PROCESS macro, the study needed to recruit at least 140 parents (Fritz & MacKinnon, 2007). However, the author collected a total of 200 Mturk participants to complete the survey. MTurk participants were all US residents who speak English, implemented shared family mealtimes and had at least one child between the ages 2-6 years old. A total of 204 participants took the official survey via Qualtrics (which was linked to MTurk). A total number of 46 participants that had the following criteria were excluded from the survey - participants who completed the survey in less than 400 seconds (n=27), participants who did not consent (n=2), participants who were not paying attention to attention check (n=5), participants who answered question about target child who was older than 6 (n=6), participants who were not mothers or fathers (n=6). The average time to complete the survey was approximately 25 minutes.

MTurk produces higher quality data than the average student samples. In addition, MTurkers tend to be younger and more diverse in income, education, and employment status (Bernisky et al., 2012). A study done by CloudResearch, analyzed approximately 5 million tasks on Mechanical Turk within an 18-month period. The study found that the workers were 12,312 women and 9,959 male and participants who identified as women earned 10.5% less than participants who identified as men per hour (Litman et al., 2020). Moreover, women selected tasks that were advertised to pay 5% lower than those selected by men. Litman et al., 2020 hypothesized that women may take tasks that pay less on MTurk due to the discrimination that occurs in more traditional work settings, leading women to undervalue their labor. In the current study, there were a larger number of male participants. Seeing that the average MTurk participant earns on average \$2, but the participants for the current study were compensated with



\$4, we can hypothesize that fewer women chose to take the survey for the current research due to embedded discrimination regarding the gender wage gap.

### **Procedure**

Parents were asked to fill out information regarding their personal demographics such as marital status, relationship to child, ethnicity, child age and sex of target child, level of education, zip code total number of adults per household, and total number of children less than 6 years old per household, because self-regulation develops rapidly during early childhood years (Bernier & Carlson, 2010). Four pre-screening short surveys were initially created to assess which participants were qualified to take the original survey. Participants who took the pre-screens were awarded with \$0.25. A total of 309 participants took the pre-screens. Participants who already took one pre-screen batch were excluded from taking the next ones. For participants to be qualified to take the original survey they had to be approved from the pre-screens, the caregiver/parent had to have at least one child between the ages 2-6 years old and the family had to have shared family mealtimes weekly. Parents were asked to answer questions regarding family mealtime experiences, their thoughts on their self-efficacy and their views on their children's ability to self-regulate. MTurk participants were compensated with \$4.

### **Measurements**

#### ***Parental Self-Efficacy for Dietary Behaviors (Nicholson & Barton, 2020).***

The current measure is an adapted one from Bohman et al., 2016 so it only focuses on nutrition, excluding physical activity questions. The adapted version of the PSEPAD includes 18 questions, 3 more than the original measure. Each response consists of an 11-point Likert scale from (0 = "not at all confident" to 10 = "completely confident"). There were three subscales created based on parental self-efficacy of their children's diet. Two of the subscales, the

Promoting Healthy Intake (i.e., How well do you think you can find healthy food to buy if it's not convenient to get to?) and Maintaining Behavior in Context (i.e. How confident are you that you can get your child to eat healthy foods and drink healthy beverages when you are tired, stressed, upset or busy?) resembled the original PSEPAD measure, but the third subscale, the Limit Setting of Unhealthy Intake (i.e. How confident are you that you can limit visits at fast-food restaurants to maximally 1-2 times per month?) was created as supplemental for the adapted measure.

An average score of parental self-efficacy was determined to be used as one of the mediators by averaging the scores on the 18 items, with a high total score indicating high levels of parental self-efficacy (Nicholson & Barton, 2020). The average score of parental self-efficacy showed good reliability  $\alpha = .93$ . In addition, all three subscales showed good reliability as well: promoting (8 items)  $\alpha = .92$ ; limit setting (5 items)  $\alpha = .78$ ; maintaining behavior in context (5 items)  $\alpha = .83$ .

***A Global Measure of Perceived Stress (Cohen et al. 1983).***

The original PSS measure was designed for community sample use for individuals with a minimum level of a junior high school level reading ability (Cohen et al. 1983). The items are straightforward and clear, so the questionnaire may be used with any sub population group (Cohen et al. 1983). The questionnaire includes 14 questions that measure the degree to which situations appear as stressful in one's life. The responses are a 4-point Likert scale from (0 = "never" to 4= "very often"). The scores are measured by reversing the score of 7 positive items (i.e. How often have you dealt successfully with irritating life hassles?) and then summing across all 14 items (Cohen et a., 1983).

The validation data for the PSS were collected in three samples – two from college students and one of a more heterogeneous group who were enrolled in a smoking-cessation program. An adequate internal and test-retest reliability was shown for the PSS. The PSS showed high reliability, validity and was correlated with scores from life events (Cohen et al. 1983). The reliability from the data collected for this study was  $\alpha = .84$ .

***The Meals in Our Household (Anderson et al., 2012).***

The Meals in our Household (Anderson et al., 2012) was developed across six domains – structure (10 questions), problematic child mealtime behaviors (10 items), the use of food as a reward (6 questions), parental concern about the child's diet (17 items), spousal stress (4 items) and the influence of child's food preferences (3 items); to assess mealtime behaviors and environments. There were four questions that required reverse coding from the structure subscale (i.e., Meals in our household are rushed). No other questions required reverse coding from the measurement. The scale is written at a 5<sup>th</sup> grade level and was designed for families with children from ages three to eleven. Meals in our Household is designed as a self-report questionnaire and is to be completed by the parent/guardian of the child (Anderson et al., 2012).

Subscales were created with the dataset collected for this paper showing the following reliability for each scale, except for the influence of child's food preference scale. Structure of family mealtimes (My child eats meals with myself or other family members)  $\alpha = .75$ , problematic child behavior (My child refuses to come when it's time to eat)  $\alpha = .94$ , use of food as a reward (I give my child food to reward him/her for good behavior)  $\alpha = .84$ , parental concern (Child is not eating enough)  $\alpha = .97$ , spousal stress (My child's behavior at meals bothers my spouse/partner)  $\alpha = .87$ .

While the other subscales were examined as correlates of parental stress and self-efficacy, the Structure of Family Meals subscale was used as the independent variable for the purpose of this research. The structure of family mealtimes subscale was used as an independent variable for this paper, because it included questions about family meals as a routine and an organized event in which the children participated in (i.e., My child eats meals with myself or other family members; Our family eats an evening meal at a regular time; We eat meals in the kitchen or dining room; We say grace or have a ritual at the start of meals). Profound social changes in family structure may affect family meals. The increase of single – parent households throughout the years, time constraints and work demand and maternal employment may make family meals a challenge that not every family can address (Story et al., 2005).

In addition, to the author being interested only in how the structure of shared family meals may be beneficial in overall child behavior, exploring the structure of shared family mealtimes may be beneficial in understanding child behavior outcomes further (Skeer et al., 2018; Skafida, 2018;).

### ***Child Behavior Questionnaire Very Short Form (Putnam & Rothbart, 2006)***

The Child Behavior Questionnaire (CBQ) was developed to help provide a response to the search between individual differences in children's temperament and other social-emotional variables such as empathy, attachment, conscientiousness, and problems in social adjustment (e.g., Lengua et al., 2000). The CBQ was developed for children between the ages of 3-8. The CBQ domains include positive and negative emotion, motivation, activity level and attention. There have been numerous validations for the CBQ over the years and it has been used to study genetic and environmental influences on temperament, consistency and change in temperament and cross-cultural similarities and differences in temperament (Goldsmith et al., 1997; Murphy et

al., 1999; Ahadi et al., 1993). In addition to temperament the CBQ select scales have been used in relation to a variety of topics such as perceived competence, temperamental types, ability estimation, *problem behaviors*, mental development, prosocial behavior, social competence, and physiological stress responses (as cited in Putnam & Rothbart, 2006).

For this paper, the only subscale explored and examined as a variable was Negative Affectivity. The Negative Affectivity subscale is similar to the Big Five's Neuroticism scale because it is defined by high feelings of Sadness, Fear, Anger/Frustration, Discomfort and finally Falling Reactivity/Soothability as well (Putnam & Rothbart, 2006). As mentioned above the CBQ is not only used to measure and examine temperament but problem behaviors as well (as cited in Putnam & Rothbart, 2006). Previous literature has found that the Negative Affectivity domain, which includes fearful, angry/frustrated, and sad *behaviors* – is a predictor of emotional functioning later in life (Karevold et al., 2012; Nigg, 2006; Rothbart et al., 2011). In one study that explored child temperament, their feeding experience and parent emotions the results showed that the relationship between Negative Affectivity and problems in feeding was partially mediated by parent's negative emotions (Hughes & Shewchuk, 2012). In addition, negative affectivity has been explored as an outcome variable in children and maternal perinatal depression (Rouse & Goodman, 2014), maternal behavior and toddler negative affectivity (Diaz et al. 2019), affect regulation and negative affectivity in children with autism (Konstantareas & Stewart, 2006) and finally in childhood inhibitory control and adolescent impulsivity where impulsivity predicted relational aggression and were measured from mothers completing the Children's Behavior Questionnaire (Sarkisan et al. 2017). In this manner, while temperament is often used as a predictor variable, the bidirectional nature between parenting and CBQ has been

established and the current study employed the CBQ as an outcome variable to represent problem behaviors.

The very short form (VFS) of the CBQ was constructed for researchers who are restricted to participant resources seeing as it allows efficient measurement of three empirically derived and theoretically informative aspects of temperament (Putnam & Rothbart, 2006). The original CBQ questionnaire has a total of 195 questions divided into 15 scales, whereas the VSF CBQ has only 36 questions divided into 3 scales. The VSF was constructed in reference to the factor pattern characteristic of the standard form. Factor analysis of the CBQ has resulted in 3 broad factors (Ahadi et al., 1993; Goldsmith et al., 1997) reminiscent of 3 of the Big Five (Digman, 1990; Goldberg, 1990).

Initially 8 questions require reverse coding (i.e., Prefers quiet activities to active games). The first factor is Surgency/Extraversion (i.e., Seems always in a big hurry to get from one place to another), characterized by high positive loadings on the Impulsivity, High Intensity Pleasure and Activity level scales and negative loadings on the Shyness scales. The second factor is Negative Affectivity (i.e., Gets quite frustrated when prevented from doing something s/he wants to do) which is similar to Neuroticism and is defined by high positive loadings for Sadness, Fear, Anger/Frustration, and Discomfort and negative loadings for Soothability. The third factor is Effortful Control (i.e., When drawing or coloring in a book shows strong concentration) which has been compared to Conscientiousness and contains high positive loadings for Inhibitory Control, Attentional Control, Low Intensity Pleasure, and Perceptual Sensitivity scales. Positive Anticipation and Smiling and Laughter are often load highly in more than one scale. The CBQ – VSF was created for researchers interested in obtaining scores for only the 3 factors mentioned above (Surgency, Effortful Control & Negative Affectivity). Scores were created for each of the

three factors by averaging standard scale scores corresponding to the factor (e.g. an Effortful Control score was created by averaging scale scores for Attention Control, Inhibitory Control, Perceptual Sensitivity, and Low intensity Pleasure) (Putnam & Rothbart, 2006).

In the construction of the CBQ -VSF the authors sought to maximize the reliability and validity. Because of the “attenuation paradox” that often happens when questionnaire items are chosen for inclusion in a short form, the decisions regarding inclusions of items were based on examination of the content of individual items and within-scale factor analysis of the original scales (Putnam & Rothbart, 2006). The reliability of the data acquired for this study across each subscale were such surgency (12 items)  $\alpha = .5$ , negative affectivity (12 items)  $\alpha = .8$ , effortful control (12 items)  $\alpha = .82$ . The negative affectivity subscale was used as a variable.

### ***Data Analysis***

Analysis was conducted using SPSS software (version 25) (IBM, 2017). First subscales, average scores and sum scores were created accordingly for each measure by following instructions provided by the authors of each measure. A correlation matrix and ANOVA were conducted to assess how subscales for aspects of family mealtime (structure, reward, problem, stress, concern, behavior) differed based on demographics characteristics (see Table 1).

A mediation analysis is a statistical method which evaluates evidence from different studies on how some antecedent variable X transmits its effect on another variable Y (Hayes, 2018). When one pathway leads directly from the independent variable (X) to the dependent variable (Y), this is called a direct effect of X on Y (Hayes, 2018). Another possible pathway from X to Y is via an indirect effect (Hayes, 2018). In a mediation model, M is often called a mediator variable. This requires that the effect passes from X to a consequent M (the mediator) and then from antecedent M to consequent Y (Hayes, 2018). Although a simple mediation model

is often used by researchers, since it is only based on a single mediator model, it doesn't allow researchers to model multiple variables simultaneously in one model – this is where multiple mediators come in handy (Hayes, 2018). For this research, the parallel multiple mediator model was used to address the second hypothesis that shared family mealtimes lead to better child outcomes through parental perceived stress and parental self-efficacy (Figure 2).

Hayes' Process Macro for a Parallel Mediation Analysis (model 4) was conducted to explore the indirect effect between the two hypothesized mediators – parental perceived stress and parental self-efficacy (see Figure 1). In a parallel multiple mediator model, the variable X is modeled influencing the dependent variable Y through a direct and indirect effect, through two or more mediators. However, the condition is that the two or more mediators do not causally influence one another (Hayes, 2018).

## **Results**

A total of 204 participants completed the survey for this study. The participants were required to have children aged 2-6 years old or be the caregivers of children aged 2-6 years old. There were 95 reported mothers and 102 (50%) reported fathers. Only 2 participants were grandmothers and 4 identified themselves as others. The participants ages ranged from 22 to 63 with the most frequent being 29 years old. The educational background values presented from grade school to college degree. A total of 125 participants had a college degree. Only 1% reported to have only completed grade school. The predominant race was white (66.7%) and 80.9% reported that they were living with a partner. Demographic data was collected for the children in the household as well such as the target child age, the number of adults 18 and older in the household, the total number of children less than 6 years old in the household and the total



number of children between 6 and 18 in the household. The target child age variable ranged from 1 to 28 where 5 years old was the highest percentage (34.3%). The most frequent number of adults 18 years and older in the household was 2 (71.1%) and the least frequent was 5 (1.5%). The total number of children less than 6 in the household ranged from 1-5 and the most frequent reported number was 1. 91.2% of the participants had only one child in the household less than 6 years old. Only one participant reported to have 5 children less than 6 years old in the household. Finally, the total number of children between 6 and 18 years old that resided in the household was also requested and the values ranged from 0-5. The most frequent value reported was 1 at 39.2%, meaning that most participants had only one child between 6-18 years old in the household.

Demographic analysis was taken farther by examining an additional variable of interest (Answer.sit) from the four pre-survey batches on MTurk. The author examined the frequency of family mealtimes, The exploratory results showed that the participants from the four-pre-screen responded with sitting down together for a meal from 1 to 28, meaning that the participants had from 1 to 28 meals together as a family per week. The most frequent number of shared family mealtimes per week was 7.

Failing to check for assumptions of linear regressions may bias estimated coefficients and standard errors. Often, in linear regressions assumptions are based mostly on predicted values and residuals (Bruin, 2006). In order to avoid potential sources of bias that may affect the interpretation of our data six different assumptions tests were performed for one independent variable “Structure of Family Mealtimes” – the structure of Shared Family Mealtimes and three dependent variables Negative Affectivity – the subscale of negative affectivity from the Child Behavior Questionnaire Very Short Form, the average score of the Parental Self Efficacy

measure and finally the average score of the Perceived Parental Stress measure. Six assumptions were tested linearity, multicollinearity, independent residual values (Durbin – Watson), homoscedasticity, normally distributed residual values (P-Plot) and no influential cases biasing the model (Cook's Distance).

To examine the assumptions of normality and linearity the variables are assessed by either graphs or statistical models. The main components of linearity are skewness and kurtosis. Skewness implies there is a symmetry in the distribution and kurtosis has to do with the peakedness of the distribution. If a distribution is normal, both the skewness and kurtosis have a value of 0 (Tabachnick & Fidell, 2012). The three scatterplots of the dependent variables showed that the relationship between the independent variable and all three dependent variables were linear, hence the assumption of normality and linearity were met for all 3 assumptions ran.

Multicollinearity is a problem within the correlation matrix that occurs when variables are too highly correlated (Tabachnick & Fidell, 2012). When a bivariate correlation is high it shows up in a correlation matrix as above .90. Multicollinearity can cause logical and statistical problems due to inflating the size of error terms and thus weaken the analysis (Tabachnick & Fidell, 2012). When VIF values are below 10, they indicate multicollinearity (Tabachnick & Fidell, 2012). To rule out multicollinearity the VIF values are required to be below 10, and tolerance scores above 0.2. Analysis of collinearity statistics show that this assumption has been met for all three dependent variables (statistics = 1.000 and 1.000 respectively). Assumption three requires that the values of the residuals are independent. This is acquired by performing the Durbin-Watson test. The Negative Affectivity value was close to 2 (Durbin-Watson = 1.954). The Parental Perceived Stress Average value was close to 2 (Durbin-Watson = 1.58). The Parental Self Efficacy Average was close to 2 (Durbin – Watson = 2.007).

Homoscedasticity is that the variability in scores for one continuous variable is equivalent to all values of another continuous variable and for grouped data this is the same as homogeneity of variance. The failure of homoscedasticity is caused either by nonnormality or because one variable was transformed due to transformation of another. All three plots pertaining to the dependent variables showed no obvious signs of funneling, suggesting that the assumption of homoscedasticity has been met.

Assumption 5 requires the values of the residuals to be normally distributed, this requires the data to be graphed on P-Plots. Three P-Plots were created for the three dependent variables and for all three graphs the dots lie close or on the diagonal line, meaning the residuals are normally distributed.

Cook's Distance was the last assumption that was ran for the current model. By performing Cook's distance, we can see if there are influential cases biasing our model. Three separate values were created and none of those variables had values over 1, meaning there were no outliers that may place undue influence on our model. Thus, assumption 6 has been met.

### **Correlation Matrix and ANOVA**

A correlation matrix is reported in Table 1, where results indicate a significant, low positive correlation across number of adults 18 or older in the household and how much of a problem it is for parents when a child displays problematic child mealtime behaviors ( $r(164) = .202, p = .01$ ). In addition a moderate positive correlation was indicated between the number of adults 18 or older in the household and parental concern about child's diet ( $r(164) = .195, p = .012$ ). A low positive correlation was depicted between participant age and structure of family mealtime ( $r(164) = .160, p = .041$ ). Lastly a low negative correlation was found between the total number of children less than 6 years old and use of food as a reward ( $r(164) = .176, p = .024$ ).

### Parallel Mediation

Multiple regression analyses were conducted to assess both mediators (parental perceived stress and parental self-efficacy) of the proposed parallel mediation model. First, results reported that the structure of shared family mealtimes is a significant negative predictor of parental perceived stress ( $b = -.49$ ,  $t(177) = 14.36$ ,  $p < .001$ ). It was also conveyed that parental perceived stress is also a significant positive predictor of negative affectivity in children ( $b = .7211$ ,  $t(175) = 0.134$ ,  $p < .001$ ).

For the mediation analysis for the second mediator (parental self-efficacy), indicated that the structure of shared family mealtimes was a significant positive predictor of parental self-efficacy ( $b = 11.12$ ,  $t(177) = 6.76$ ,  $p < .001$ ). However, parental self-efficacy was not a significant predictor of negative affectivity in children ( $b = -.001$ ,  $t(175) = -0.29$ ,  $p = .77$ ). Finally, the effect of structure had a meaningful effect on negative affectivity ( $b = -.25$ ,  $t(175) = -1.97$ ,  $p = .05$ ). Results of the mediation analysis confirmed the mediating role of parental perceived stress in the relation between structure of shared meals as negative affectivity ( $b = -.35$ ;  $CI = -.53$  to  $-.19$ ) and disconfirmed the mediating role of parental self-efficacy between the structure of shared family mealtimes and negative affectivity in children ( $b = -.01$ ;  $CI = -.13$  to  $.09$ ). In conclusion, the results show that the second hypothesis of this paper is only true about the first mediator, but not the second. Parental perceived stress is a mediator between the structure of shared family mealtimes and negative affectivity in children, but parental self-efficacy isn't.

### Discussion

The mediation analysis of parental perceived stress explaining the pathway between family mealtime structure and negative child affect showed that the structure of shared family

mealtimes is a significant negative predictor of parental perceived stress. Higher perceived stress also predicted higher report of child negative affect. The influence of parental stress on creating stimulating environments and engaging in shared family mealtimes has been well established, but how family mealtime structures influence parental stress has been explored less (see Fulkerson et al., 2019). Specifically, previous research has examined how different types of stress such as parenting stress, maternal psychological stress and economical/financial stress can influence parent's feeding strategies that include the implementation of shared family mealtimes (Gouveia et al., 2019; Gross et al., 2012; Huang, 2014; Jensen et al., 2021; Mitchell et al., 2009; Swyden et al., 2017). The finding from the current study may fill a gap in literature by providing evidence to support that a structured mealtime is beneficial to children's outcomes through reduced perceived stress in parents.

On the other hand, the mediation analysis of parental self-efficacy explaining the influence of structure of family mealtime on child negative affect was not supported. Parental self-efficacy, which includes the parents' beliefs in their ability to positively influence their child, has been related to a better adjustment in children of all ages and is also strong originator of successful behavior change (Ardelt & Eccles, 2001; Jones & Prinz, 2005; Noar & Zimmerman, 2005; Marvicsin & Danford, 2013). The mediation model in the current study conveyed that the structure of family mealtimes was positively related to parental self-efficacy, but parental self-efficacy was not related to child negative affect. The manuscript of the adapted US version of the PSEPAD scale used to measure parental self-efficacy for this study, is in preparation, such that the measure used has been validated on an American sample, but not published (Nicholson & Barton, in preparation). In addition, parents of adolescents have been shown to feel less efficacious than parents with younger children (Ballenski & Cook, 1982), thus

participants with younger children in the household, may have reported less levels of parental self-efficacy. In another study that examined the link between parental self-efficacy and parenting using children's behaviors as potential moderators found that the link between parental self-efficacy and parenting did not differ depending on the target child's behavior (Glatz et al., 2017). Finally self-efficacy has not functioned as a mediator for fathers (Hastings & Brown, 2002), and this study had a larger number of fathers participate.

Descriptive analyses were conducted for exploratory hypothesis 1, between the demographics of this study (number of adults in the household, number of children in the household, parent age, child age) and the six domains explored from The Meals in our Household measure (structure of family meals, use of food as a reward, problematic child mealtime behaviors, parental concern about child's diet, spousal stress related to child's mealtime behavior, influence of child's food preference on what other family members eat) (Anderson et al., 2012). There was a positive correlation across the number of adults 18 or older in the household and how much of a problem it is for parents when a child displays problematic child mealtime behaviors. Increased chaos in the household, or activity that is not organized, noisy and unpredictable is correlated with the increasing number of individuals in the household (Evans et al., 2010; Whitesell et al., 2015). Another positive correlation was witnessed between participant age and structure of shared family mealtime. Mothers who were older reported less household chaos, however mothers who had children with older fathers reported more maternal health chaos (Dush et al., 2013). Lastly, there was a negative correlation between the total number of children less than 6 years old and use of food as a reward meaning that the more children in the household less than 6 years old, the less use of reward from parents was thought to be implemented and vice versa. In a longitudinal study of parental discipline up to 5 years one

of the findings showed that greater household chaos was associated with more negative discipline rather than positive strategies (Lawrence et al., 2018).

Although it was observed from the results that a total of 94 mothers and 104 fathers completed the survey there were no significant differences found between structure of family mealtimes and self-identified gender of parents.

Generally, children's eating behaviors are formed at a young age and parenting practices are related to children's eating behaviors (Ashcroft et al., 2008). In addition, there is substantial evidence for parenting practices to be related to children's eating behaviors, leading to a bidirectional relation (Ventura & Birch, 2008). Harris et al., (2016) and Jansen et al., (2017) indicated that feeding practices often emerge in response to the child's individual characteristics (i.e., pickiness). In other words, children respond to their parent's feeding practices and parent's respond to their children's eating behaviors. Although not the focus of this paper, there were interesting correlations between some of the demographic variables in this study and the domains of family mealtimes, specifically the negative correlation of the children below 6 years of age and use of food as a reward.

There were ethical issues taking under consideration while writing up this study. First and foremost, consent was required for each participant that completed the final survey. Second, the anonymity of every participant was protected including their MTurk worker ID's. Third, every participant was a volunteer. Fourth, this study is free of plagiarism and research misconduct. Fifth, there was no physical, social, or psychological harm associated with this study. Finally, the study was approved by the IRB in June 2021.

### **Limitations and Future Directions**

More investigation is needed in exploring parental strategies as mediators to strengthen relevant shared family mealtime interventions. Family mealtimes influence child behavior, but the mechanism behind how and why this pathway manifests is necessary. Future research may explore the mediating roles of parental strategies and practices, during meals in the relationship between frequency of family meals and emotional wellbeing by implementing a different methodology and/or measures. Future research may also investigate the finding that the more adults over the age of 18, the more parents think it is a problem for a child to display problem behaviors during mealtimes. Lastly, by using a mixed-methods approach, future studies can collect data on the frequency of family mealtimes, something that was not done in this study, to better evaluate interindividual differences in families and perhaps highlight moderating factors that differentiate how family mealtimes support child development.

While the findings provide important implications in shared family mealtimes and family wellbeing, it is important to understand the limitations of the current study. Seeing that the current study involved participants who were mostly white, had a college degree, lived with a partner, and lived in the US this study may not be generalizable to a broader population, and further research may be required to substantiate the results of the mediation model, particularly with families that reflect greater diversity in family structure, socioeconomic status, and geographic location. Studies that explore shared family mealtimes and socio-economic status have found that low-income families have competing demands that affect the schedule and structure of shared family mealtimes.

Furthermore, there are studies that report variations on the frequency of shared family mealtimes, SES, and racial/ethnicity findings (Bradley et al., 2014; Flores et al., 2005). In other words, racial/ethnic and cultural disparities occur in family mealtime implementation (Fiese et



al., 2012; Kong et al., 2013; Skala et al., 2012; Surjadi et al., 2017,) along with discrepancies in families with different SES backgrounds (Giray et al., 2018; Larson et al., 2006). Future research may benefit from including SES and ethnicity/racial variables and how they correlate to parental perceived stress and parental self-efficacy in the implementation of shared family mealtimes. Lastly, the measures used for this survey were self-administrable, meaning that the answers provided by the participants may have been biased and objective accounts of child outcomes would be important to remove parent subjective reports (Finnigan & Vazire., 2018; Newbury et al., 2018; Lelkes et al., 2012).

## **Conclusion**

The present study extends the shared family mealtime field by exploring parental protective factors such as parental perceived stress and parental self-efficacy as mediators between shared family mealtimes and negative affect in children between the ages three to six. Findings from the current study suggest that parents who provide their children with more structured family meals are more likely to report their children have less negative affect. Parental perceived stress was found to be a mediator between the structure of shared family mealtimes and negative child affectivity, however parental self-efficacy was not.

The current study highlights the importance of applying a developmental lens when examining shared family mealtimes and positive child outcomes by looking at the early childhood stage. Early childhood is a period of continuous growth (Santrock, 2004). As children talk about their feelings and express themselves eloquently, they can better regulate themselves and their behaviors (Santrock, 2004). Future research and interventions to promote shared family mealtimes should consider measuring a wide range of mediators that may enhance or diminish

the benefits of shared family mealtimes while collecting data from a more nuanced participant pool.

### References

- Adamson, M., & Blight, E. J. (2014). Bringing dads to the table: Comparing mother and father reports of child behavior and parenting at mealtimes. *Journal of Family Studies, 20*(2), 118-127.
- Ahadi, S. A., Rothbart, M. K., & Ye, R. M. (1993). Children's temperament in the U.S. and China: Similarities and differences. *European Journal of Personality, 7*, 359–377.
- Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: *A systematic review of associated outcomes. Child: care, health and development, 45*(3), 333-363.
- Anderson, S. E., Must, A., Curtin, C., & Bandini, L. G. (2012). Meals in our household: reliability and initial validation of a questionnaire to assess child mealtime behaviors and family mealtime environments. *Journal of the Academy of Nutrition and Dietetics, 112*(2), 276-284.
- Andreadakis, E., Laurin, J. C., Joussemet, M., & Mageau, G. A. (2020). Toddler temperament, parent stress, and autonomy support. *Journal of Child and Family*

*Studies*, 29(11), 3029-3043.

Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family issues*, 22(8), 944-972.

Ashcroft, J., Semmler, C., Carnell, S., Van Jaarsveld, C. H. M., & Wardle, J. (2008). Continuity and stability of eating behaviour traits in children. *European journal of clinical nutrition*, 62(8), 985-990.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.

Bandura, A., & Wood, R. E. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision-making. *Journal of Personality and Social Psychology*, 805-814.

Ballenski, C. B., & Cook, A. S. (1982). Mothers' perceptions of their competence in managing selected parenting tasks. *Family relations*, 489-494.

Bates, G. (2020). What Impact Does the Child Development Assessment Process Have on Parental Self-Efficacy? *Advances in Mental Health*, 27-38.

Baskind MJ, Taveras EM, Gerber MW, Fiechtner L, Horan C, Sharifi M. (2019). Parent-

Perceived Stress and Its Association with Children's Weight and Obesity

Related Behaviors. *Prev Chronic Dis*

Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child*

*Development*, 37(4), 887-907

Bernier, A., Carlson, S. M., & Whipple, N. (2010). From external regulation to self-regulation:

Early parenting precursors of young children's executive functioning. *Child*

*development*, 81(1), 326-339.

Birch LL, Fisher JO, Davison KK, (2003) Learning to overeat: maternal use of restrictive

Feeding practices promotes girls' eating in the absence of hunger. *Am J Clin Nutr*,

78, 215- 220.

Blissett, J., Meyer, C., Farrow, C., Bryant-Waugh, R., & Nicholls, D. (2005). Maternal core

beliefs and children's feeding problems. *International Journal of Eating*

*Disorders*, 37(2), 127-134.

Blissett, J., Meyer, C., & Haycraft, E. (2006). Maternal and paternal controlling feeding practices

with male and female children. *Appetite*, 47(2), 212-219.

- Bohman, B., Rasmussen, F., & Ghaderi, A. (2016). Development and psychometric evaluation of a context-based parental self-efficacy instrument for healthy dietary and physical activity behaviors in preschool children. *International Journal of Behavioral Nutrition and Physical Activity*, 13(1), 1-9.
- Bradley, R. H., Pennar, A., & Glick, J. (2014). Home environments of infants from immigrant families in the United States: findings from the new immigrant survey. *Infant mental health journal*, 35(6), 565-579.
- Brann, L. S., & Skinner, J. D. (2005). More controlling child-feeding practices are found among parents of boys with an average body mass index compared with parents of boys with a high body mass index. *Journal of the American Dietetic Association*, 105(9), 1411-1416.
- Clark, F. A. (2000). The Concept of Habit and Routine: A Preliminary Theoretical synthesis. *Occupational Therapy Journal of Research*, 123-137.
- Cole, R., Kitzman, H., Olds, D., & Sidora, K. (1998). Family Context as a Moderator of Program Effects in Prenatal and Early Childhood Home Visitations. *Journal of Community*

Psychology, 37-48.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.

Conger, R. D., McCarty, J. A., Yang, R. K., Lahey, B. B., & Kropp, J. P. (1984). Perception of child, child-rearing values, and emotional distress as mediating links between environmental stressors and observed maternal behavior. *Child development*, 2234-2247.

Dallacker, M., Hertwig, R., & Jutta, M. (2019). Quality Matters: A meta-Analysis on Components of Healthy Family Meals. *Health Psychology*, 1137-1149.

Deater-Deckard, K., Scarr, S., McCartney, K., & Eisenberg, M. (1994). Paternal separation anxiety: Relationships with parenting stress, child-rearing attitudes, and maternal anxieties. *Psychological Science*, 5(6), 341–346.

Dickinson, D. K., & Tabors, P. O. (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H Brookes Publishing.

Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual review of psychology*, 41(1), 417-440.

Dush, C. M. K., Schmeer, K. K., & Taylor, M. (2013). Chaos as a social determinant of child health: Reciprocal associations? *Social Science & Medicine*, 95, 69-76.

Eisenberg, N. V. (2003). Longitudinal relations among parental emotional expressivity children's regulation, and quality of socioemotional functioning. *Developmental Psychology*, 3-19.

Eisenberg, N., et al (2004). The Relations of Effortful Control and Impulsivity to Children's Resiliency and Adjustment. *Child Development* 75 (1), 25-46

Evans, G. W., & Wachs, T. D. (2010). Chaos and its influence on children's development. Washington, DC: American Psychological Association, 6(2-3), 66-80.

Fiese, B. (2006). *Family Routines and Rituals*. New Haven: Yale University Press.

Fiese, B., Foley, K., Spagnolia, M. (2006). Routine and ritual elements in family mealtimes: Contexts for child well-being and family identity. *New Directions for Child and Adolescent Development* 2006(111), 67-89

Fiese, B. H., & Jones, B. L. (2012). *Food and Family: A Socio-Ecological Perspective for Child*



Development. *Advances in Child Development and Behavior*, 307-337.

Fiese, B. H., & Metcalfe, J. J. (2018). Family Food Involvement is Related to Healthier Dietary

Intake in Preschool Aged Children. *Appetite*, 195-200.

Fiese, B. H., Foley, K. P., & Spagnola, M. (2006). Routine and Ritual Elements in Family

Mealtimes: Contexts for Child Well-Being and Family Identity. *New Direction*

for Child and Adolescent Development, 67-89.

Fiese, B. H., McIntyre, L. L., Eckert, T. L., D, D. F., & Wildenger, L. K. (2007). Transition to

Kindergarden: Family Experiences and Involvement. *Early Childhood Education*

Journal, 83-88.

Fiese, B., & Hammons, A. (2011). Is Frequency of Shared Family Meals Related to the

Nutritional Health of Children and Adolescents? *Pediatrics*, 1565-1575.

Finnigan, K. M., & Vazire, S. (2018). The incremental validity of average state self-reports over

global self-reports of personality. *Journal of Personality and Social*

Psychology, 115(2), 321.

Flores, G., Tomany-Korman, S. C., & Olson, L. (2005). Does disadvantage start at home?: racial

and ethnic disparities in Health-Related early childhood home routines and safety

practices. *Archives of pediatrics & adolescent medicine*, 159(2), 158-165.

Frankel, L. A., & Kuno, C. B. (2019). The moderating role of parent gender on the relationship between restrictive feeding and a child's self-regulation in eating: Results from mother-only samples may not apply to both parents. *Appetite*, 143, 104424.

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, 18(3), 233-239.

Fulkerson, J. A., Strauss, J., Neumark-Sztainer, D., Story, M., & Boutelle, K. (2007). Correlates of psychosocial well-being among overweight adolescents: The role of the family. *Journal of Consulting and Clinical Psychology*, 75(1), 181- 186. <https://doi.org/10.1037/0022-006X.75.1.181>

Fulkerson, J. A., Telke, S., Larson, N., Berge, J., Sherwood, N. E., & Neumark-Sztainer, D. (2019). A healthful home food environment: Is it possible amidst household chaos and parental stress?. *Appetite*, 142, 104391.

Gable, S., Chang, Y., & Krull, J. L. (2007). Television watching and frequency of family meals are predictive of overweight onset and persistence in a national sample of school-

age children. *Journal of the American Dietetic Association*, 107, 53-61.

Gevers, D. W., van Assema, P., Sleddens, E. F., de Vries, N. K., & Kremers, S. P. (2015).

Associations between general parenting, restrictive snacking rules, and adolescent's snack intake. The roles of fathers and mothers and interparental congruence. *Appetite*, 87, 184-191.

Gehring, T. M., Aubert, L., Padlina, O., Martin-Diener, E., & Somaini, B. (2001). Perceived

stress and health-related outcomes in a Swiss population sample. *Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie*, 60(1), 27.

Giray, C., & Ferguson, G. M. (2018). Say yes to “Sunday Dinner” and no to “Nyam and Scram”:

Family mealtimes, nutrition, and emotional health among adolescents and mothers in Jamaica. *Appetite*, 128, 129-137.

Goldsmith, H. H., Buss, K. A., & Lemery, K. S. (1997). Toddler and childhood temperament:

Expanded content, stronger genetic evidence, new evidence for the importance of environment. *Developmental Psychology*, 33, 891–905.

Gouveia, M. J., Canavarro, M. C., & Moreira, H. (2019). How can mindful parenting be related to emotional eating and overeating in childhood and adolescence? The mediating role of parenting stress and parental child-feeding practices. *Appetite*, 138, 102-114.

Gross, J. J. (2009). *Handbook of Emotion Regulation*. New York: The Guilford Press.

Hamilton, Susan K., and Jane Hamilton Wilson (2009). "Family mealtimes: Worth the effort?" *ICAN: Infant, Child, & Adolescent Nutrition* 1(6), 346-350.

Hackman, D. A., & Farah, M. J. (2009). Socioeconomic status and the developing brain. In *Trends in Cognitive Sciences* (Vol. 13, Issue 2, pp. 65–73). Elsevier Current Trends.

Hancock, C., & Carter, D. R. (2016). *Building Environments That Encourage Positive Behavior: The Preschool Behavior Support Self- Assessment*. Young Children.

Hammons, A. J., & Fiese, B. H. (2011). Is frequency of shared family meals related to the nutritional health of children and adolescents? *Pediatrics*, 12(6)

<https://doi.org/10.1542/peds.2010-1440>

Harris, H. A., Fildes, A., Mallan, K. M., & Llewellyn, C. H. (2016). Maternal feeding practices

and fussy eating in toddlerhood: a discordant twin analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 13(1), 1-9.

Harris, H. A., Jansen, E., & Rossi, T. (2020). 'It's not worth the fight': Fathers' perceptions of family mealtime interactions, feeding practices and child eating behaviours. *Appetite*, 150, 104642.

Hastings, R. P., & Brown, T. (2002). Behavior problems of children with autism, parental self-efficacy, and mental health. *American journal on mental retardation*, 107(3), 222-232.

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication monographs*, 85(1), 4-40.

Hendy, H. M., Williams, K. E., Camise, T. S., Eckman, N., & Hedemann, A. (2009). The Parent Mealtime Action Scale (PMAS). Development and association with children's diet and weight. *Appetite*, 52(2), 328-339.

Hofferth, S. L., & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and Family*, 63(2), 295-308.

Howe, G. W. (2002). Integrating Family Routines and Rituals with other Family Research

Paradigms: Comment on Special Section. *Journal of Family Psychology*, 437-440.

Huang, Y. P., Chang, M. Y., Chi, Y. L., & Lai, F. C. (2014). Health-related quality of life in fathers of children with or without developmental disability: the mediating effect of parental stress. *Quality of life research*, 23(1), 175-183.

Hughes, S. O., & Shewchuk, R. M. (2012). Child temperament, parent emotions, and perceptions of the child's feeding experience. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 1-9.

Jansen, E., Harris, H. A., Mallan, K. M., Daniels, L., & Thorpe, K. (2018). Measurement invariance of the Feeding Practices and Structure Questionnaire-28 among a community of socioeconomically disadvantaged mothers and fathers. *Appetite*, 120, 115-122.

Jansen, E., Thapaliya, G., Aghababian, A., Sadler, J., Smith, K., & Carnell, S. (2021). Parental stress, food parenting practices and child snack intake during the COVID-19 pandemic. *Appetite*, 161, 105119.

Jarret, R., et al. (2016). "We pray, and we read... I let them watch some TV": African American

preschoolers' bedtime experiences with literacy. *Western Journal of Black Studies*  
40(3), 174-191

Jones, J., & Mosher, W. D. (2013). Fathers' involvement with their children:

United States, 2006-2010

Jones, T. L., & Prinz, R. (2005). Potential roles of parental self-efficacy in parent and child  
adjustment: A review. *Clinical Psychology Review*, 341-363.

Karevold, E., Ystrom, E., Coplan, R. J., Sanson, A. V., & Mathiesen, K. S. (2012). A prospective  
longitudinal study of shyness from infancy to adolescence: Stability, age-related  
changes, and prediction of socio-emotional functioning. *Journal of abnormal child  
psychology*, 40(7), 1167-1177.

Keim, S. A., Daniels, J. L., Dole, N., Herring, A. H., Siega-Riz, A. M., & Scheidt, P. C. (2011).

A prospective study of maternal anxiety, perceived stress, and depressive  
symptoms in relation to infant cognitive development. *Early Human*

*Development*, 87(5), 373–380, <https://doi.org/10.1016/j.earlhumdev.2011.02.004>

Khandpur, N., Charles, J., & Davison, K. K. (2016). Fathers' perspectives on coparenting in the

context of child feeding. *Childhood obesity*, 12(6), 455-462.

Kliewer, W., & Kung, E. (1998). Family moderators of the relation between hassles and behavior problems in inner-city youth. *Journal of clinical child psychology*, 27(3), 278-292.

Kopp, C. (1992). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology*, 199-214.

Kiang, L., Glatz, T., & Buchanan, C. M. (2017). Acculturation conflict, cultural parenting self-efficacy, and perceived parenting competence in Asian American and Latino/a families. *Family process*, 56(4), 943-961.

Kong, A., Jones, B. L., Fiese, B. H., Schiffer, L. A., Odoms-Young, A., Kim, Y., ... &

Fitzgibbon, M. L. (2013). Parent-child mealtime interactions in racially/ethnically diverse families with preschool-age children. *Eating behaviors*, 14(4), 451-455.

Konstantareas, M. M., & Stewart, K. (2006). Affect regulation and temperament in children with autism spectrum disorder. *Journal of autism and developmental disorders*, 36(2), 143-154.



- Krishnan, V. (2010). Early Childhood Development: A conceptual Model. Early Childhood Council Annual Conference (pp. 1-17). New Zealand : Early Child Development Mapping Project Alberta.
- Kuther, T. L. (2017). Socioemotional Development in Early Childhood. USA: Sage.
- Larson, R. W., Branscomb, K. R., & Wiley, A. R. (2006). Forms and functions of family mealtimes: Multidisciplinary perspectives. New Directions for Child and Adolescent Development, 2006(111), 1–15. <https://doi.org/10.1002/cd.152>
- Larson, K., Halfon, N. (2010). Family Income Gradients in the Health and Health Care Access of US Children. Matern Child Health J, 14, 332-342.
- Larson, R. W., Branscomb, K. R., & Wiley, A. R. (2006). Forms and functions of family mealtimes: Multidisciplinary perspectives. New directions for child and adolescent development, 2006(111), 1-15.
- Lawrence, S. D., & Plisco, M. K. (2017). Family mealtimes and family functioning. The American Journal of Family Therapy, 45(4), 195-205.
- Lawrence, J., Haszard, J. J., Taylor, B., Galland, B., Gray, A., Sayers, R., ... & Taylor, R. (2021). A longitudinal study of parental discipline up to 5 years. Journal of Family

Studies, 27(4), 589-606.

Le, Y. (2015). Parenting stress mediates the association between negative affect and harsh parenting: A dyadic perspective.

Lelkes, Y., Krosnick, J. A., Marx, D. M., Judd, C. M., & Park, B. (2012). Complete anonymity compromises the accuracy of self-reports. *Journal of Experimental Social Psychology*, 48(6), 1291-1299.

Levine, L., & Munsch, J. (2016). Social and Emotional Development in Early Childhood. In L. Levine, & J. Munsch, *Child Development from Infancy to Adolescence* (pp. 324-353). Canada: SAGE.

Lengua, L. J., Wolchik, A. W., Sandler, I. N., & West, S. G. (2000). The additive and interactive effects of parenting and temperament in predicting adjustment problems of children of divorce. *Journal of Clinical Child Psychology*, 29, 232–244

Liew, J. (2012). Effortful control, executive functions, and education: Bringing self-regulatory and social-emotional competencies to the table. *Child Development Perspectives*,

406-425.

Livingston, G., & Parker, K. (2019). facts about American dads. Pew Research Center,.

Published.

Litman, L., & Robinson, J. (2020). Conducting online research on Amazon Mechanical Turk and

beyond. Sage Publications.

Loth, K. A., MacLehose, R. F., Fulkerson, J. A., Crow, S., & Neumark-Sztainer, D. (2013).

Food-related parenting practices and adolescent weight status: a population-based

study. *Pediatrics*, 131(5), e1443-e1450.

Lundahl, B. W., Tollefson, D., Risser, H., & Lovejoy, M. C. (2008). A meta-analysis of father

involvement in parent training. *Research on Social Work Practice*, 18(2), 97-106.

Marvicsin, D., & Danford, C. A. (2013). Parenting Efficacy Related to Childhood Obesity:

Comparison of Parent and Child Perceptions. *Journal of Pediatric Nursing* , 422-429.

Mitchell, S. J., Hilliard, M. E., Mednick, L., Henderson, C., Cogen, F. R., & Streisand, R.

(2009). Stress among fathers of young children with type 1 diabetes. *Families*,

Systems, & Health, 27(4), 314.

Mckelvey, L., Schiffman, R., Brophy-Herb, H., Bocknek, E. L., Fitzgerald, H. E., Reischl, Deluca, M. (2015). Examining Long-Term Effects of An Infant Mental Health Home-Based Early Head Start Program on Family Strengths and Resilience. Infant Mental Health Journal, 353-365.

Murphy, B. C., Eisenberg, N., Fabes, R. A., Shepard, S., & Guthrie, I. K. (1999). Consistency and change in children's emotionality and regulation: A longitudinal study. Merrill-Palmer Quarterly, 45, 413-444.

Neumark-Sztainer, D., Eisenberg, M., Fulkerson, J., & Story, M. (2008). Family meals and disordered eating in adolescents. Pediatric and Adolescent Medicine, 17-22.

Newbury, J. B., Arseneault, L., Moffitt, T. E., Caspi, A., Danese, A., Baldwin, J. R., & Fisher, H. L. (2018). Measuring childhood maltreatment to predict early-adult psychopathology: Comparison of prospective informant-reports and retrospective self-reports. Journal of psychiatric research, 96, 57-64.

Nicholson, J., Barton, J., (in preparation) Parental Self-efficacy for Promoting Dietary Behaviors in Preschool Children.

Nicklaus, S., & Remy, E. (2013). Early Origins of Overeating: Tracking Between Early Food Habits and Later Eating Patterns . *Psychological Issues*, 179-184.

Nigg, J. T. (2006). Temperament and developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 47(3-4), 395-422.

Noar, S. M., & Zimmerman, R. S. (2005). Health Behavior Theory and cumulative knowledge regarding health behaviors: are we moving in the right direction? *Health education research*, 20(3), 275-290.

O'Sullivan, J. M. (2013). *Head Start and Child Outcomes: Select Analyses of FACES 2009*. New York : Nova Science Publishers .

O'Connor SG, Maher JP, Belcher BR, Leventhal AM, Margolin G, Shonkoff ET, et al. (2017) Associations of maternal stress with children's weight-related behaviors: a systematic literature review. *Obes Rev*;18(5), 514–25.

Orrell-Valente, J. K., Hill, L. G., Brechwald, W. A., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2007). "Just three more bites": an observational analysis of parents' socialization of children's eating at mealtime. *Appetite*, 48(1), 37-45.

Owen, J., Metcalfe, A., Dryden, C., & Shipton, G. (2010). 'If they don't eat it, it's not a proper

meal': Images of risk and choice in fathers' accounts of family food

practices. *Health, Risk & Society*, 12(4), 395-406.

Pratt, M., Hoffmann, D., Taylor, M., & Musher-Eizenman, D. (2019). Structure, coercive

control, and autonomy promotion: A comparison of fathers' and mothers' food

parenting strategies. *Journal of health psychology*, 24(13), 1863-1877.

Putnam, S. P., & Rothbart, M. K. (2006). Development of short and very short forms of the

Children's Behavior Questionnaire. *Journal of personality assessment*, 87(1), 102-112

Pulley, C., Galloway, A. T., Webb, R. M., & Payne, L. O. (2014). Parental child feeding

practices: how do perceptions of mother, father, sibling, and self

vary?. *Appetite*, 80, 96-102.

Pollak, S. D. (2012). The role of parenting in the emerging of human emotions: New approaches

to the old nature nurture debate. *Parenting: Science and Practice*, 232-242.

Powell, F., Farrow, C., Meyer, C., & Haycraft, E. (2017). The importance of mealtime structure

for reducing child food fussiness. *Maternal & child nutrition*, 13(2), e12296.

Rajan, S., Jahromi, L., Bravo, D., Umaña-Taylor, A., & Updegraff, K. (2019). Maternal Self-

Efficacy is Protective for Child BMI (but not Mother) BMI among Mexican-

Origin Children with Negative Temperament. *Journal of developmental and*

*behavioral pediatrics: JDBP*, 40(8), 633.

Rothbart, M. K., Sheese, B. E., Rueda, M. R., & Posner, M. I. (2011). Developing mechanisms

of self-regulation in early life. *Emotion review*, 3(2), 207-213.

Rouse, M. H., & Goodman, S. H. (2014). Perinatal depression influences on infant negative

affectivity: timing, severity, and co-morbid anxiety. *Infant Behavior and*

*Development*, 37(4), 739-751.

Sanders, M. R., Dittman, C. K., Keown, L. J., Farruggia, S., & Rose, D. (2010). What are the

parenting experiences of fathers? The use of household survey data to inform

decisions about the delivery of evidence-based parenting interventions to

fathers. *Child Psychiatry & Human Development*, 41(5), 562-581.

Santrock, J. W., Deater-Deckard, K. D., & Lansford, J. E. (2004). *Child development* (p. 656).

New York: McGraw-Hill.

Sarkisian, K., Van Hulle, C., Lemery-Chalfant, K., & Goldsmith, H. H. (2017). Childhood

inhibitory control and adolescent impulsivity and novelty seeking as differential

predictors of relational and overt aggression. *Journal of research in*

*personality*, 67, 144-150.

Simons, R. L., Simons, L. G., & Wallace, L. E. (2004). *Families, delinquency, and crime:*

*Linking society's most basic institution to antisocial behavior.* Los Angeles:

Roxbury Publishing Company.

Skafida, V. (2013). The family meal panacea: exploring how different aspects of family meal

occurrence, meal habits and meal enjoyment relate to young children's

diets. *Sociology of health & illness*, 35(6), 906-923.

Skala, K., Chuang, R. J., Evans, A., Hedberg, A. M., Dave, J., & Sharma, S. (2012). Ethnic

differences in the home food environment and parental food practices among families of

low-income Hispanic and African-American preschoolers. *Journal of Immigrant and*

*Minority Health*, 14(6), 1014-1022.

Skeer, M. R., Sonnevile, K. R., Deshpande, B. R., Goodridge, M. C., & Foltz, S. C. (2018).



Going beyond frequency: A qualitative study to explore new dimensions for the measurement of family meals. *Journal of Child and Family Studies*, 27(4), 1075-1087.

Snethen, J. A., Broome, M. E., Kelber, S., Leicht, S., Joachim, J., & Goretzke, M. (2008).

Dietary and physical activity patterns: Examining fathers' perspectives. *Journal for specialists in pediatric nursing*, 13(3), 201-211.

Snow, C. E., & Beals, D. E. (2006). Mealtime talk that supports literacy development. *New directions for child and adolescent development*, 2006(111), 51-66.

Spagnola, M., & Fiese, B. (2007). Family Routines and Rituals: A Context for Development in the Lives of Young Children. *Infants and Young Children*, 248-299.

Story, M., & Neumark-Sztainer, D. (2005). A perspective on family meals: do they matter? *Nutrition Today*, 40(6), 261-266.

Surjadi, F. F., Takeuchi, D. T., & Umoren, J. (2017). Racial and ethnic differences in longitudinal patterns of family mealtimes: link to adolescent fruit and vegetable consumption. *Journal of nutrition education and behavior*, 49(3), 244-249.

Swyden, K., Sisson, S. B., Morris, A. S., Lora, K., Weedn, A. E., Copeland, K. A., & DeGrace,

B. (2017). Association between maternal stress, work status, concern about child weight, and restrictive feeding practices in preschool children. *Maternal and child health journal*, 21(6), 1349-1357.

Tabachnick, B. G., & Fidell, L. S. (2012). Normality, Linearity, and Homoscedasticity of Residuals. In B. G. Tabachnick, & L. S. Fidell, *Using Multivariate Statistics*.

Pearson

Tazouti, Y., & Jarlegan, A. (2016). The mediating effects of parental self-efficacy and parental involvement on the link between family socioeconomic status and children's academic achievement. *Journal of Family Studies*, 250-266.

Tschann, J. M., Martinez, S. M., Penilla, C., Gregorich, S. E., Pasch, L. A., De Groat, C. L., ... &

Butte, N. F. (2015). Parental feeding practices and child weight status in Mexican American families: a longitudinal analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 1-10.

Ventura, A. K., & Birch, L. L. (2008). Does parenting affect children's eating and weight status?. *International Journal of Behavioral Nutrition and Physical Activity*, 5(1), 1-12.

Videon, T., & Manning, C. (2003). Influences on adolescent eating patterns: The importance of

family meals. *Journal of Adolescent Health*, 365-373.

Walker, S. P., Wachs, T. D., Grantham-Mcgregor, S., Black, M. M., Nelson, C. A., Huffman, S.

L., Baker-Henningham, H., Chang, S. M., Hamadani, J. D., Lozoff, B., Gardner, J.

M. M., Powell, C. A., Rahman, A., & Richter, L. (2011). Inequality in early

childhood: Risk and protective factors for early child development. *The Lancet*

378(9799), 1325–1338

Whitesell, C. J., Teti, D. M., Crosby, B., & Kim, B. R. (2015). Household chaos,

sociodemographic risk, coparenting, and parent-infant relations during infants’

first year. *Journal of Family Psychology*, 29(2), 211.

Zhang, L., & McIntosh, W. A. (2011). Children’s weight status and maternal and paternal

feeding practices. *Journal of Child Health Care*, 15(4), 389-400.

Zhu, P., Sun, M. S., Hao, J. H., Chen, Y. J., Jiang, X. M., Tao, R. X., ... & Tao, F. B. (2014).

Does prenatal maternal stress impair cognitive development and alter

temperament characteristics in toddlers with healthy birth

outcomes? *Developmental Medicine & Child Neurology*, 56(3), 283-289.

**Table 1***Descriptive Statistics and Correlations of Continuous Variables*

Continuous Measures	Shared Family Mealtime Subscales						
	Full sample n = 204	Structure .759	Reward .845	Problem .918	Stress .877	Concern .971	Behavior .943
Age	34.87 (7.09)	.176*	-.019	.02	-.013	.004	-.04
Number of Adults 18 or Older in the Household	2.08 (.69)	-.09	.08	.207**	-.07	.215**	.157**
Target Child Age	4.42 (1.21)	-.052	.06	.159*	-.192**	.129	.11
Total Number of Children Between 6 and 18	.959 (1.04)	-.073	-.057	.009	-.077	-.034	.038
Total Number of Children less than 6	1.09 (.36)	-.041	-.147*	-.026	.014	-.077	-.002
Education	6.67(1.21)	.117	.005	.037	.014	.016	.015

**Table 2***Descriptive Statistics and Categorical Variables ANOVA*

## Shared Family Mealtime Subscales

Categorical Measures	Full sample n = 202	Structure .759	Reward .845	Problem .918	Stress .877	Concern .971	Behavior .943
Caregiver		3.6 (.64)	2.7 (.87)	2.1 (.94)	3.6 (1.2)	2.5 (1.4)	2.3 (.85)
Mother	94	3.7 (.65)	2.6 (.90)	2.2 (.90)	3.5 (1.08)	2.5 (1.3)	2.4 (.82)
Father	102	3.6 (.61)	2.6 (.86)	2.1 (1.0)	3.7 (1.13)	2.6 (1.3)	2.3 (.88)
Race/Ethnicity		3.7 (.64)	2.7 (.88)	2.3 (.85)	3.6 (1.1)	2.6 (1.4)	2.4 (.85)
Caucasian/White	136	3.7 (.61)	2.7 (.87)	2.2 (.97)	3.6 (1.15)	2.5 (1.31)	2.4 (.85)
Black/African American	26	3.4 (.73)	2.9 (.84)	2.3 (.93)	3.5 (1.05)	3.3 (1.5)	2.4 (.93)
Asian – American	22	3.6 (.70)	2.7 (.81)	2.3 (.81)	3.8 (1.0)	2.7 (1.51)	2.3 (.81)
Other	18	3.8 (.65)	2.7 (.92)	1.9 (1.02)	3.9 (.95)	2.2 (1.3)	2.1 (.75)
Marital Status		3.7 (.64)	2.7 (.87)	2.1 (.93)	3.6 (1.09)	2.6 (1.4)	2.3 (.85)
Living with partner	164	3.7 (.58)	2.7 (.86)	2.2 (.92)	3.6 (1.1)	2.6 (1.4)	2.4 (.83)
Not living with partner	36	3.5 (.84)	2.4 (.90)	1.9 (.93)	3.5 (1.08)	2.4 (1.3)	2.2 (.90)

*Note.* There were no statistical differences found between the categorical variables and The Meals in Our Household (Anderson et al., 2012) variables explored for this study.

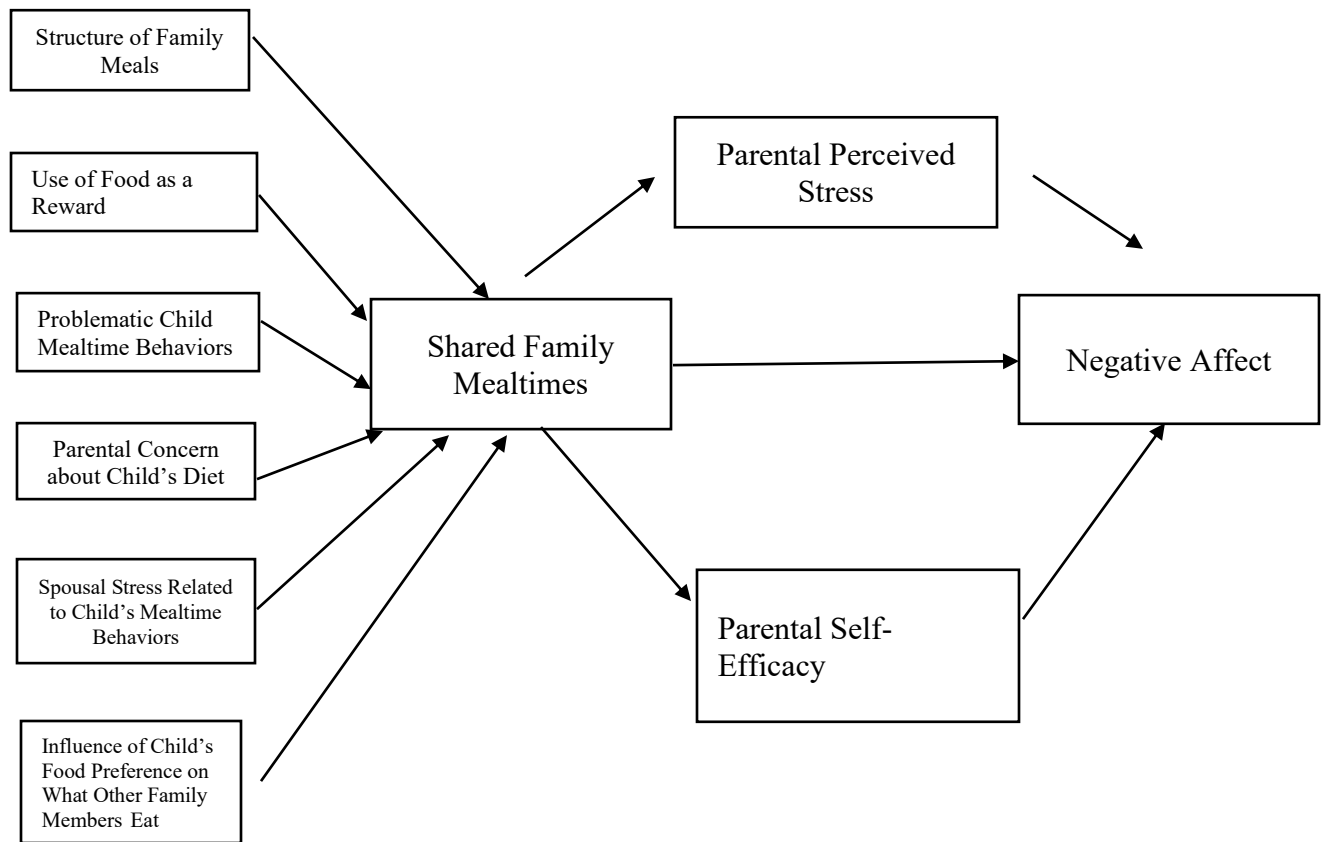
**Table 3**

*Regression Coefficients, Standard Errors, and Model Summary Information for the Parallel Multiple Mediator Model Depicted in Figure 2*

Antecedent	Consequent								
	M1 (Parental Perceived Stress)			M2 (Parental Self-Efficacy)			Y (Negative Affectivity)		
	Coeff	SE	<i>p</i>	Coeff	SE	<i>p</i>	Coeff	SE	<i>p</i>
X	-.49	.065	< .001	11.12	1.81	< .001	-.265	.134	.05
M1	-	-	-	-	-	-	.721	.134	< .001
M2	-	-	-	-	-	-	-.001	.004	.77
Constant	3.49	.243	< .001	23.86	6.76	< .001	3.78	.66	< .001
	$R^2 = 0.246$			$R^2 = 0.175$			$R^2 = 0.268$		
	$F(1,177) = 57.78, p < .001$			$F(1,177) = 37.73, p < .001$			$F(3,175) = 21.35, p < .001$		

**Figure 1**

*Family Mealtimes Leading to Less Negative Child Behavior Through Parenting Characteristics such as Parental Perceived Stress and Self-Efficacy*



**Figure 2**

*Path Analysis Model on Parental Perceived Stress and Parental Self-Efficacy as Mediators of the Relationship Between Shared Family Mealtimes and Negative Child Affectivity, \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$*

