IMPACTS OF PARENTAL INSECURE ATTACHMENT AND WEIGHT TALK ON CHILD INSECURE ATTACHMENT AND BODY WEIGHT PERCEPTION

By

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The impact of obesity is studied amongst health professionals and researchers over the past few decades. Mitigating the negative health effects of obesity is explored in a variety of populations. Conversations about weight has emerged within society as a prevalent topic between social influencers, professionals, and families. Researchers have identified a connection between parental insecure attachment behaviors and emotional feeding and overeating with their children has been identified. Some parents experience pressure to control their children's weight due to the influence of societal messages and health professionals. Due to this pressure, parents who exhibit attachment anxiety or avoidant behaviors may engage in increased or decreased weight talk through the forms of encouragement to diet, teasing their child about their weight, or dieting to lose weight. This study explored the connections between parents' insecure attachment behaviors and weight talk and whether this impacts their child's attachment style and body weight perception.

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CHAPTER 1: INTRODUCTION

Studies suggest that obesity impacts up to 42.4% of adults, leaving many scholars to consider obesity a prevalent public health concern (Hales et al., 2020). There are numerous adverse effects of obesity like the increased risk of cardiovascular problems, chronic diseases, and morbidity/mortality (Reilly et al., 2003). While the research is clear that obesity impacts physical health, researchers have identified the connection between obesity and relational health such as attachment quality and body mass index (Wilkinson et al., 2010; Cooper & Warren, 2011; Diener et al., 2016). Mood was a partial mediator linking attachment with obesity (Cooper & Warren, 2011). This research suggests that relationships may be a protective factor in mediating stress and regulating mood resulting in decreased risk for obesity.

One link researchers have explored is the prevalence of weight talk within the parent-child relationship over the past three decades (Bauer et al., 2013; 2021; Dixon et al., 1996; Fulkerson et al., 2002). The connection between attachment and eating behaviors (Faber et al., 2015; 2018; Hardman et al., 2016; van Durme et al., 2016) has also been identified. However, few studies explore the impact of attachment on conversations surrounding weight in families, particularly within the parent-child relationship. Weight talk involves conversations surrounding physical appearance including topics such as “being fat” or needing to lose weight, body perception in regard to size and shape, or eating foods that could contribute to obesity. Discussions surrounding losing weight for health purposes or changing specific body parts were found to be incorporated in negative based weight talk (Berge et al., 2016). The purpose of this study is to examine the influence of maternal and paternal insecure attachment behaviors and weight talk on their child’s insecure attachment style and body weight perception.

Attachment, Obesity, and Societal Messages

From an attachment perspective, scholars have attempted to understand the interplay between emotions and family interactions in relation to obesity (Stenhammar et al., 2010). Attachment theory suggests that an internal working model is developed within the parent-child relationship depending on how a caregiver responds and interacts with their child. This internal working model contributes to how a child views themselves and others. Children who develop a secure attachment with their caregiver typically feel a strong sense of self and develop the ability to trust other people (Cassidy & Shaver, 2016). Individuals who experience unstable relationships may develop an insecure attachment. They often view themselves negatively and struggle with trusting others (Feeney & Monin, 2016).

In relation to obesity, researchers have found that parents who experience anxiety and difficulty managing their emotions may cope with distress using food (Bost et al., 2014). Children who develop anxiety and are emotionally reactive may have parents that cope with these negative emotions using food to soothe them (Hardman et al., 2016). For example, parents may give their children food to calm down in response to their child crying or expressing anger. As children learn to use food to cope with their emotions, they may develop increased body weight status (Diener et al., 2016). Concerns from health professionals, researchers, media, and peers may place pressure on parents to control their child's weight creating a distressing family environment.

The "thin-ideal" is a societal standard that is permeated throughout Western culture (Thompson & Stice, 2001). Parents who are concerned about their child being overweight may fear that their child will be seen as inferior or a target for bullying in social settings (Puhl & King, 2013). The pressure to conform to the messages of staying thin to be considered healthy or attractive may increase discussions about weight in the parent-child relationship (Bauer et al.,

2013). Additional societal messages surrounding gender may also influence ways that parents respond to distress and manage their emotions (Scarborough, 2019; Thomassin & Seldon, 2019). While the literature has not connected the topics of insecure attachment and weight-talk, theoretically, it may be expected that discussions surrounding weight may occur at a greater frequency with parents who are insecurely attached. Anxiously attached parents, who fear rejection from others, may feel vulnerable to societal messages putting extensive pressure on their children to achieve the "thin-ideal." Avoidant parents may not participate in weight talk at the same frequency, yet their children may feel that they are emotionally disengaged leading to them using food to cope with the lack of connection. Because of the interplay between anxious and avoidant attachment behaviors increasing distress within the family system, there may be increased discussion about weight which may also impact perceptions regarding body weight status.

Weight Talk and Body Weight Perception

Weight talk may negatively impact how a child views themselves and their body weight status. Researchers have identified three types of weight talk to categorize what these discussions may be like (Berge et al., 2016). First, weight teasing has been recognized as a prevalent form of weight talk within families (Hillard et al. 2016). Second, encouragement to diet is also another category of weight talk (Bucchianeri et al., 2016). Third, dieting to lose weight is identified as an indirect form of weight talk which conveys a similar message like encouragement to diet within the parent-child relationship (Balantekin, 2019). Because weight talk may occur within familial settings and increase distress, it is likely that parents and children may develop perceptions about their body weight status (Pudney et al., 2019).

The perception that a person has about their body weight status is known as body weight perception (Frank et al., 2018). Body weight perception was examined in this study because

researchers have linked body dissatisfaction amongst parents to body dissatisfaction in their children (Rieves & Cash, 1996). Parents also who perceive their child as overweight are likely to pass this perception down to their children as well (Robinson & Sutin, 2017). Therefore, if parents experience distress related to body weight perception, they may influence their child's body weight perception through engaging in weight talk within the family environment.

Purpose

The purpose of this study was to explore the influence of parents' insecure attachment behaviors, weight teasing, encouragement to diet, and reports of dieting to lose weight on child insecure attachment behaviors. Second, this study examined how parents' insecure attachment, family teasing, encouragement to diet, and reports of dieting influence their child's body weight perception. We anticipated that mothers' anxiety and avoidance and weight talk was associated with greater anxiety and avoidance in children. We also anticipated that fathers' anxiety or avoidance and weight talk was negatively associated with their child's anxious and avoidant attachment style. We hypothesized that parents with greater anxiety and avoidant attachment behaviors who engaged in higher amounts of weight talk would have children who had poorer body weight perception.

Because obesity negatively impacts physical health and has increased in prevalence, many health professionals, researchers, and families engage in conversations about losing weight. Because there is an increase in weight talk within society, individuals may engage in weight teasing, encouragement to diet, and dieting to lose weight. Researchers have examined different elements of weight talk in the family system; however, less is known about whether attachment behaviors impact conversations about weight. The following section will review the literature surrounding obesity, attachment, and weight talk.

CHAPTER 2: LITERATURE REVIEW

Obesity has been described as a global epidemic in many countries worldwide in both adults and children (Cominato et al., 2018). Approximately 35% of men and women are obese (Yang & Colditz, 2015) and between 2011-2014, the prevalence of child and adolescent obesity was at 17% (Ogden et al., 2018). The obesity epidemic has led health professionals and social influencers to participate in weight talk on a large scale which is impacting the health and wellbeing of families, particularly within parent-child relationships.

Due to the societal influences of achieving a "thin-ideal", individuals are pressured covertly and overtly to avoid weight gain which may increase anxiety and conversations about weight (Puhl & Heuer, 2009; Stice & Shaw, 2002). Weight teasing, encouragement to diet, and dieting to lose weight are identified as elements of weight talk (Berge et al., 2015; Hillard et al., 2016; Balantekin, 2019) which in turn influences body weight perception (Pudney et al., 2018). Given the harmful outcomes of weight talk within families (Neumark- Sztainer et al., 2010; Berge et al., 2016) and the literature highlighting how individuals with insecure attachment behaviors struggle with managing their emotions (Mikulincer & Orbach, 1995; Fuendeling, 1998; Hardman et al., 2015), there may be increased prevalence of individuals with insecure attachment behaviors engaging in weight talk.

Researchers have explored the prevalence of weight talk (weight teasing, encouragement to diet and dieting to lose weight) and the connection between insecure attachment tendencies and eating behaviors in the parent-child relationship (Faber et al., 2018; Wilkinson et al., 2018). However, there is a gap in the literature connecting insecure attachment (anxiety, avoidance) and weight talk within the parent-child relationship and how this impacts body weight perception. The purpose of this study is to explore whether parental attachment (both maternal and paternal anxiety and avoidance), influence the level of maternal and paternal weight teasing,

encouragement to diet, and dieting to lose weight and to explore if these levels of weight talk and behavior have a negative influence on their child's attachment (both anxiety and avoidance) and their body weight perception (BWP).

Obesity

Much of the foundational literature on obesity is related to the effects of physical health such as cardiovascular health (Freedman et al., 1999), diabetes (Hypponen et al., 2000), and increased rates of mortality (D'Souza et al., 2018). Obesity presents many social and economic challenges, placing a heavy burden on healthcare systems (Tremmel et al., 2017). Not only does obesity impact physical health, researchers have established the connection between BMI and relational characteristics such as attachment quality in children and adults (Trombini et al., 2003; Anderson & Whitaker, 2011; Bahrami et al., 2013; Cooper & Warren, 2011; Goosens et al., 2012; Hintsanen et al., 2010). Overall, these studies have indicated that higher BMI was associated with attachment insecurity (Deiner et al., 2016). Researchers discovered that the prevalence of obesity in children with an insecure attachment was higher (23.1%) compared to 16.6% in children with a secure attachment (Anderson & Whitaker, 2011). Another study discovered that the quality of children's attachment directly affects eating management and obesity (Bahrami et al., 2013), and BMI was bidirectionally associated with attachment behaviors (Hintsanen et al., 2010). Overall, researchers recommend that considering attachment in the context of obesity research may support efforts to prevent obesity (Santos et al., 2021).

Societal Messages

Images within the media depicting the "ideal body type" have emphasized that a high degree of thinness is the ideal standard (Striegal-Moore et al., 1986). For decades, companies have advertised products with slim models showcasing an unrealistic body type that is the

standard of success and desire. For example, fast food restaurants advertise food with slim actors sending the message to purchase their products but to also maintain a thin body type as well. The "thin-ideal" is reinforced by society as well as in families (Thompson & Stice, 2001) creating pressure for people to conform to a thin, slender body to be seen as successful or desirable (Stice et al.,1994). As a result, society has created an impossible standard to achieve the ideal body weight, as well as mixed messages surrounding how to attain the ideal body type. Pressure from the media as well as health professionals to avoid obesity has increased weight stigma, shame, and the levels of conversations about weight in the family environment (Berge et al., 2015; Pudney et al., 2019).

Gender Messages

Women experience immense pressure to adhere to the thin-ideal because achieving this body type is associated with beauty and seen as desirable. The most attractive feature to achieve a standard of feminine beauty is thinness (Calogero et al., 2007). Mass media affects the ways that men view their bodies as well. Achieving a thin, muscular body type for men is also permeated through society. Pressures from the media have been correlated to levels of body satisfaction, self-esteem, and behaviors associated with losing weight in men (Barlett et al., 2008).

Researchers have discovered that children respond to interactions with parents in different ways based on gender. Because of cultural influences, expectations are placed on mothers to share and express emotions especially in times of distress to protect their children and fulfill their role to be an effective caregiver. Historically, parents have been found to discuss emotions more with daughters than sons (Thomassin & Seldon, 2019). Because of this cultural phenomenon, distress related to body weight status may influence mothers to have conversations about weight with their children more than fathers. Mothers may feel responsible to not only

maintain a thin body type but to also prevent their children from gaining weight. If there is fear surrounding whether their child is being bullied for their weight or whether their child will not be successful, then mothers may react to these feelings by making comments or engaging in behaviors to regulate their child's food intake in response to the pressure they experience. Mothers with increased dissatisfaction with their daughters' body shape contributed to daughters' body dissatisfaction because they provided more negative comments to their child about their body shape and food consumption (Cooley et al., 2008).

Fathers may also experience the pressure to conform to societal standards associated with masculinity by playing a supportive role to the mother in the parent-child relationship (Scarborough, 2019). By participating in a supportive role, fathers may feel pressure to follow "gender specific rules" surrounding expressing feelings and emotions related to their relationships (Thomassin & Seddon, 2019). Pressures within the parent-child relationship and parent relationship for fathers may be overwhelming leading to a higher likelihood of fathers feeling inclined to play a dismissive role within these relationships (Scharfe and Bartholomew, 1994).

Society significantly impacts interactions between mothers, fathers, and their children. Although families may experience pressure to have conversations about weight because of societal messages, there may be additional underlying reasons that contribute to parents experiencing distress in relation to body weight status. The following section explores key concepts of attachment theory and highlights the relationship between insecure attachment behaviors, parent-child interactions, and obesity.

Attachment Theory, Insecure Attachment, and Connections to Body Weight Status

Attachment theory is a framework with concepts that may inform behaviors, thoughts, feelings, and overall interactions between parents and children especially related to the topic of

obesity. Parents with an insecure attachment style may exhibit anxious or avoidant behaviors especially if they are vulnerable to societal pressures to achieve the "thin-ideal" (Stice & Shaw, 2002). Additionally, health professionals may contribute to these messages by recommending that children lose weight to avoid health risks. Scarce literature has examined whether maternal and paternal insecure attachment tendencies and increased weight talk may influence their child's insecure attachment style while also impacting their child's body weight perception. Based on the literature from weight talk identified within the family system and the literature surrounding the symptoms of insecure attachment behaviors, it may be expected that parents with an insecure attachment style may contribute to the problems associated with weight talk because it creates a cycle of distress. As parents with insecure attachment behaviors become distressed due to their inability to regulate their emotions, they may begin to engage in more weight talk. A child hearing excessive weight talk may experience increased stress and anxiety exacerbating the symptoms of their insecure attachment style. As children hear these weight related messages from their parents, they may perceive their body size negatively. This study aims to understand the relationships between mothers' and fathers' insecure attachment behaviors, their reports of weight teasing, encouragement to diet, and reports of dieting to lose weight and whether this influences their child's insecure attachment style and body weight perception.

Attachment theory explains how individuals develop a bond with their primary caregiver to explore and make sense of the world (Bowlby, 1982). The child's experiences with their caregiver leads to an internal working model which establishes two cognitive representations, their sense of self and their sense of others. As an individual trusts their primary caregiver (sense of others), the caregiver becomes a safe haven sheltering the individual from harm and the child develops a strong sense of self, a sense that they are worthy of being loved. Having a strong

sense of self and a trust in others are the two hallmarks of a secure attachment (Ainsworth et al., 1978, Bartholomew, 1990).

When a caregiver is not available for their child, then they do not feel a sense of security. If an individual is rejected by their primary caregiver, this develops a sense of mistrust of the world and increases distress which results in the development of an insecure attachment (Bowlby, 1988). There are three insecure attachment styles defined in the literature: anxious preoccupied, dismissive, or fearful avoidant (Bartholomew, 1990). Individuals with an anxious-preoccupied attachment style may experience deep feelings of unworthiness and a desire to gain approval from others. During stressful situations, they may be hyperactivated and their emotions become magnified resulting in an excessive reliance on other people (Mikulincer & Shaver, 2003). Adults with an anxious attachment have increased levels of self-criticism due to the absence of attachment security (Thompson & Zuroff, 1999; Faber et al., 2018). Individuals with a dismissive-avoidant attachment style hold a positive view of themselves and a negative view of others. Dismissive-avoidant individuals typically suppress their emotions by avoiding close relationships to preserve a sense of independence (Feeney & Monin, 2016). People who experience a fearful avoidant attachment style desire social connection and intimacy, however they experience fears of rejection due to their attachment figure failing to be a safe haven. Those with this attachment style hold a negative view of self and others because they are afraid of both intimacy and autonomy (Feeney & Monin, 2016). Researchers have explored the connection between the impact of attachment on eating behaviors in the parent- child relationship (Faber et al., 2018; Wilkinson et al., 2018).

Insecure Attachment and Eating.

The connection between attachment, emotional regulation, and eating is reinforced in the literature (Aldao et al., 2010; Nolen-Hoeksema, 2012; Faber et al., 2018). Eating behaviors are

often a result of how a person processes their emotions. Anxiously attached individuals develop coping mechanisms by using external sources (people, food) to provide comfort in times of distress (Hardman et al., 2015). Food may serve as a coping mechanism to regulate distressing emotions like emotional instability and fear abandonment (Hazan & Shaver, 1987, Mikulincer et al., 1993, Faber et al., 2018). For individuals with an avoidant attachment style, they develop a protective mechanism usually controlling their emotions and preventing them from being seen by others (Mikulincer & Orbach, 1995; Fuendeling, 1998). Avoidant individuals reported experiencing fewer positive emotions and supportive behaviors increasing the likelihood that they will leave conflicts unresolved or escalated (Mikulincer & Shaver, 2007). For those who tend to be avoidant, food may serve to numb feelings and escape from the present moment. This may be a reason why a common finding within the attachment and emotion regulation literature is that those who experience difficulty in regulating emotions often overeat and experience increased body weight (Stice, 2002; Ansell et al., 2012).

Influence of Insecure Attachment in Interpersonal Relationships.

Dimensions of insecure attachment like anxiety and avoidance affects thoughts, feelings and behaviors surrounding body weight status in various ways especially pertaining to gender. For women who experience low self-esteem and high body dissatisfaction (Troisi et al., 2006; Koskina & Giovazolias, 2010), an insecure, anxious attachment style may exacerbate symptoms surrounding negative self-image and increase pressure on interpersonal relationships (i.e. parent relationship, parent-child relationship) (Broberg et al., 2001). This may occur due to the loss of control parents experience within familial relationships resulting in a shift to control food-intake within themselves or their relationships (Cole-Detke & Kobak, 1996). Children may use eating as a coping mechanism because their parents offer food to them when they are anxious or upset (Blisset et al., 2010). Mothers who experienced high levels of stress and anxiety were

found to have higher emotional eating scores and emotional feeding scores (Rodgers et al., 2014, Hardman, 2016). Mothers may be more vocal about weight-related problems they notice in their child creating pressure on their children (Wertheim et al., 1999, Cromley et al., 2010) because they may experience feelings of insecurity and a fear of failing as a parent to take care of their children's health and well-being. They may also be afraid themselves of having an increased body weight status, because of the societal messages to be thin, resulting in increased conversations about managing weight. Parents who feel like they need to take control of their child's health may begin to tease their child about their weight or encourage dieting for their children to reverse the impact of them regulating their emotions with food. Parents who are insecure of their own body weight status may also start to diet themselves because they experience pressure to conform to societal standards, inevitably talking about dieting and teaching their child that dieting is an effective strategy to lose weight and be healthy.

Fathers experiencing an insecure attachment style may exhibit behaviors such as hiding distress by suppressing emotions and avoiding involvement in relationships due to societal expectations surrounding sharing emotions with family members and being a supportive parent (Scarborough, 2019; Thomassin & Seddon, 2019). This may lead to fathers exhibiting avoidant behaviors in relation to discussing topics surrounding body weight status, in general (Koskina & Giovazolias, 2010). Insecure attachment behaviors influence the way families engage in conversations impacting family interactions (Mikulincer & Florian, 2004; Waters et al., 2010). Therefore, anxiously attached parents may be more likely to engage in conversations about their own weight and child's weight, and parents with an avoidant attachment style may be less likely to engage in conversations about body weight status because avoiding the distress is a protective mechanism.

The Impact of Weight Talk on Family Interactions

Weight Talk

This section will review the literature that exists when considering various types of weight talk. The first type of weight talk is the levels of teasing the child experiences at home related to their weight. Second, parents who encourage their child to diet in order to lose weight. Third, parents dieting to lose weight. Each of these types of weight talk conveys insight into the overall focus of weight within the family dynamics and conversations because each of these messages are impacting their children in the home. Due to the uniqueness of these types of weight talk, the following section will review the literature describing each element and how it influences family dynamics.

From an attachment perspective, weight talk may exacerbate symptoms associated with an insecure attachment in the forms of weight teasing, encouragement to diet, and dieting to lose weight. While the literature surrounding weight talk examines the parent-child interactions and conversations, there is scarce literature examining the connection between insecure attachment behaviors and weight talk. This study aims to explore how children's insecure attachment style are influenced by parental figures with an insecure attachment style and their reports of weight talk.

Weight teasing, encouragement to diet, and dieting to lose weight exist due to the societal pressure surrounding a thin-ideal (Puhl &Heuer, 2009; Stice & Shaw, 2002). Due to the impact of the "thin-ideal" on individuals, researchers identified the relevance of negative weight talk occurring in families related to losing weight or changing body parts. For example, Berge et al. (2016) discovered that 40% of mothers used negative weight-based talk to motivate their children to lose weight by focusing on managing food intake and improving physical health. Additionally, 38% of fathers within the study identified a specific body part to encourage their

child to lose weight and to focus on changing this area of their body. The study design was also influenced by family systems theory. Given the relational interactions within a family, negative weight-based talk may be perpetuated in familial relationships. A parent may engage in negative weight talk with their child which could trigger a negative emotional response within the child. The child may attempt to regulate their emotions through using food which could lead to increased weight gain. This interaction cycle between the parent and child may perpetuate negative weight talk due to the child gaining weight from the increased food consumption (Berge et al., 2016).

Because of this interaction between the parent and child related to negative weight-based talk, an insecure attachment style may exacerbate these interactions. Researchers have identified the connection between attachment and negative eating behaviors due to insecurely attached individuals lacking coping skills to effectively manage stress and regulate emotions (Faber et al., 2018). Additionally, anxiously-attached mothers were found to engage in "emotional feeding strategies" resulting in their child engaging in emotional overeating (Hardman et al., 2016), and a child's insecure attachment was associated with overeating (Goosens et al., 2011; Faber & Dube, 2015). Given these findings, researchers have pointed to the need to explore the underlying impacts of insecure attachment and emotional eating within the parent-child relationship (Alexander & Siegal, 2013) due to the association between insecure attachment and eating pathology (Van Durme et al., 2015).

Weight Teasing.

Within the family, weight teasing may occur perpetuating the idea that a larger body is undesirable and problematic (Puhl & King, 2013). Eisenberg et al. (2003) offered that images in the media of thin women and muscular men lead to individuals developing negative body image which influences weight-teasing. Parental weight-based teasing has been linked to body

dissatisfaction (Shaefer et al., 2014), low self-esteem (Pearlman et al., 2019), negative eating behaviors, and an increased likelihood that siblings will engage in the teasing as well (Keery et al., 2005). Despite the link between weight teasing and problems with emotional health (Eisenberg et al., 2003), parents in a study described participating in weight teasing with their children in response to a health professional's concerns about their child's physical health (Berge et al., 2015). This is an example of the combination of pressures from the media and health professionals surrounding obesity influencing parents to respond to these pressures (Berge et al., 2015). Parents may experience a combination of body dissatisfaction or low self-esteem which could increase distress within their relationships. As parents experience these negative feelings about their own body weight they may fear for their child's health and well-being. However, their negative feelings may trigger a negative reaction such as increased weight-teasing within the parent-child relationship. For parents, these influences stem from their own attitudes towards body dissatisfaction or low self-esteem. As a result of these negative feelings, parents may tease their child about their weight to prevent their child from becoming obese. In response to the teasing a child may experience increased body dissatisfaction and BMI, due to the inability to cope with the negative interaction with their parents. Researchers discovered strong correlations between family weight teasing, increased body weight dissatisfaction and BMI (Neumark-Sztainer et al., 2010). Furthermore, weight teasing was associated with negative self-perception amongst a sample of children (Gillison et al., 2014).

Because of the negative outcomes of weight teasing in the family this type of weight talk may cause considerable distress within families especially those where individuals have an insecure attachment style. Given the finding that parents and children with insecure attachment behaviors have decreased abilities to manage emotions (Fuendeling, 1998; Hardman et al., 2015), parents with an insecure attachment style may either anxiously engage in conversations

about weight or participate in avoiding conversations about weight. Therefore, weight teasing may magnify the distress insecurely attached parents and children experience. Because there is scarce literature examining the connection between insecure attachment behaviors and weight teasing, this study aims to include parents' anxious and avoidant attachment behaviors and weight teasing to examine the influence on their child's anxiety and avoidant attachment behaviors and body weight perception.

Encouragement to Diet.

Parental encouragement to diet is another form of weight talk influenced by societal pressures and the thin-ideal (Bucchianeri et al., 2016). This form of weight talk was also found to be connected to low self-esteem and negative eating behaviors (Fulkerson et al., 2002). Many studies have explored parents encouraging their children to diet and the effects this has on eating behaviors in the family (Fulkerson et al., 2002; Balantekin et al., 2014; Hillard et al., 2016). However, research within the topic of parents encouraging their children to diet has not focused on the underlying reasons why parents engage in this weight talk or what may influence a child to report this type of weight talk in the family.

Researchers have established the prevalence of this form of weight talk. Fulkerson et al. (2002) discovered that one third of mothers in their study reported encouraging their adolescent children to diet. Additionally, researchers identified that a sample of daughters' BMI percentile was correlated with both maternal and paternal encouragement to diet (Balantekin et al., 2014). Furthermore, scholars have connected these findings by discovering that high levels of encouragement to diet from mothers was associated with increased motivation from their daughters to achieve the "thin-ideal" (Hillard et al. 2016). Thus, encouragement to diet along with weight teasing were both found to be associated with negative self-perceptions within children (Gillison et al. 2017). Although encouragement to diet may not be as harsh as weight

teasing, the impacts of this form of weight talk may be detrimental, contributing to distress within the family. These findings demonstrate that there may be increased dieting and weight status as a negative effect of encouragement to diet, leading scholars to recommend future research to explore characteristics of why parents encourage their child to diet. Additionally, there is scarce research examining this interaction between fathers and children in the literature. This study explored both mothers' and fathers' reports of encouraging their children to diet in order to address this gap in the literature.

Dieting to Lose Weight.

Researchers have also identified that overweight adolescents report frequent dieting behaviors compared to normal weight adolescents due to societal pressures related to the "thin-ideal" (Neumark-Sztainer et al., 2002; Bucchianeri et al., 2016). Literature has also connected parental encouragement to diet and family weight teasing with exploring reports of dieting to lose weight (Balantekin, 2014; 2019). For example, male and female participants in a study who witnessed their parents dieting were found to struggle with maintaining a healthy weight from adolescence to adulthood (Balantekin, 2019). Researchers have also compared samples of parents who reported dieting and parents who did not diet. In the sample of parents who dieted, there was an increased prevalence of conversations with their children about their weight. These parents were also 41% more likely to have conversations about dieting as well with their child (Winkler et al., 2018). Researchers identified that parents may contribute to weight talk through weight teasing and encouragement to diet, however, it is possible that they also contribute to weight talk through modelling dieting behaviors. As children watch their parents diet, they may internalize the message that dieting is necessary to control and avoid weight gain, thus dieting to lose weight is an indirect form of weight talk. As parents model certain dieting behaviors, they may discuss their reasoning behind dieting or have conversations about avoiding weight gain

which could lead to encouragement to diet (Balantekin, 2019). Although researchers have identified mixed results of whether parental dieting directly influences their child to diet as well, the literature suggests that the combination of encouragement to diet, weight teasing, and modeling of dieting negatively impacts a child's body weight status (Balantekin, 2019). From an attachment perspective, dieting to lose weight may contribute to familial distress increasing anxiety surrounding body weight status. It may be predicted that parents with an anxious attachment style may lack the ability to control tendencies to manage their emotions in relation to anxiety.

The anxiety may lead to increased weight talk (weight teasing, encouragement to diet, dieting to lose weight). Individuals with an avoidant attachment style may handle the distress related to body weight status through disengaging from weight talk, yet this disengagement may be interpreted by their children as possible disappointment or suggesting that the children are unlovable. Children may internalize that they are overweight, therefore receiving a similar message as a parent with an anxious attachment style.

Body Weight Perception

BWP (body weight perception) is defined as how an individual perceives their weight in relation to their body weight status (Frank et al., 2018). Body weight perception (BWP) is examined within this study because scholars have found that body dissatisfaction amongst parents has been connected to children's body dissatisfaction (Rieves & Cash, 1996) which is important to consider when exploring weight-related conversations within the family. Body image and the perception of body weight internally has motivated individuals to increase or decrease their weight (Frank et al., 2018). Researchers identified the connection between weight stigma and weight talk. Studies found that a large portion of adults who reported experiencing weight stigma were teased about their weight or faced discrimination (Puhl & Suh, 2015;

Vartanian & Porter, 2016). Therefore, weight talk may lead to individuals internalizing weight stigma by applying weight-based stereotypes (e.g. "lazy, unsuccessful, unintelligent) to themselves and participating in self-blame due to their body weight status (Puhl & Brownell, 2001; Pudney et al., 2019). The connection between weight stigma and weight talk is known as weight internalization bias (Pudney et al., 2019). Scholars also identified that weight internalization bias influences how parents talk with their children about weight (Berge et al., 2015; Pudney et al., 2019). The literature has identified the connection between parents perceiving their child as overweight linked with their children perceiving their own body as being overweight. These overall perceptions from parents and children may increase stress responses and emotional overeating within children leading to increasing weight gain (Robinson & Sutin, 2017).

Gaps in the Literature

While there is a growing body of literature surrounding the topics of attachment, obesity, and eating behaviors, much of the literature focuses on attachment and pediatric obesity or adolescent populations and eating disorders. Many studies focus on parent-child interactions and the connection between attachment and eating behaviors. However, less is known about the impact of insecure attachment behaviors and weight talk on the parent-child relationship which demonstrates a missing link in the literature. Therefore, young adult populations and their parents are a population that have not been understood in depth within the weight talk literature.

Purpose and Hypotheses

The purpose of this multivariate analytical study was to explore the influence of maternal and paternal attachment anxiety and avoidance, weight teasing, encouragement to diet, and reports of dieting to lose weight on their child's attachment anxiety and avoidance. Second, this study examined the influence of maternal and paternal anxious and avoidant attachment

behaviors, weight teasing, encouragement to diet, reports of dieting on their child's body weight perception.

Research question 1: Are maternal and paternal anxious and avoidant attachment behaviors associated with their child's anxious or avoidant attachment style?

Hypothesis 1: We hypothesized that mothers who report high levels of anxiety and high levels of avoidance would have children with high levels of anxiety and high levels of avoidance (see Appendix A).

Hypothesis 2: We hypothesized that fathers who report high levels of anxiety and high levels of avoidance would have high levels of anxiety and high levels of avoidance in children (see Appendix A).

Research question 2: Are maternal and paternal weight teasing, encouragement to diet, and dieting to lose weight associated with their child's anxious or avoidant attachment style?

Hypothesis 3: We hypothesized that mothers who report greater weight teasing would have children with high levels of attachment anxiety and low levels of attachment avoidance in children (see Appendix A).

Hypothesis 4: We hypothesized that mothers who report greater encouragement to diet and dieting to lose weight will have moderate levels of attachment anxiety and avoidance in children (see Appendix A).

Hypothesis 5: We hypothesized that fathers who report greater weight teasing would have children with high levels of attachment anxiety and low levels of attachment avoidance (see Appendix A).

Hypothesis 6: We hypothesized that fathers who report greater encouragement to diet and dieting to lose weight will have high attachment anxiety and low avoidance in children (see Appendix A).

Research question 3: Are maternal and paternal anxious and avoidant attachment behaviors different based on the child's body weight perception?

Hypothesis 7: We anticipated that parents' anxiety and avoidance will differ based on their child's body weight perception (see Appendix B).

Research question 4: Are maternal and paternal weight teasing, encouragement to diet, and dieting to lose weight different based on the child's body weight perception?

Hypothesis 8: We anticipated that parents' weight teasing, encouragement to diet, and reports of dieting to lose weight will differ based on their child's body weight perception (see Appendix B).

Conclusion

In recent decades, the prevalence of obesity has been identified as an epidemic. Due to the detrimental health effects of obesity, researchers and health professionals have contributed to conversations discouraging obesity. Societal messages surrounding a thin-ideal impact individual eating behaviors to achieve an "ideal" body type. Gender messages have also contributed to the ways men and women express emotions especially in relation to interacting with their children which elicits certain behaviors and roles within families. Because of increased conversations about weight in society, previous literature has examined the prevalence of weight talk in the family system. The unique forms of weight talk are weight teasing, encouragement to diet, and dieting to lose weight. From an attachment perspective, it would be expected that families with insecure attachments would likely engage in more destructive types of weight conversations which may negatively influence a child's attachment behavior and body weight perception.

CHAPTER 3: METHODS

Methodology

The purpose of a quantitative methodology is to formulate a study to understand the relationships between variables to produce objective data that may be replicated. To answer the research questions effectively a quantitative methodology was chosen because this study examined the association between maternal and paternal insecure attachment behaviors and weight talk variables on student insecure attachment behaviors and body weight perception. Regression analyses were used to examine the influence that the 15 independent variables have on 2 dependent variables by isolating the predictor variables and determining the change in variance on the outcome variables. Additionally, ANOVAs were conducted to compare the means between the independent variable body weight perception and 15 dependent variables.

Data Collection

Data collection consisted of height and weight measurements for the BMI measure amongst participants as well as an online survey. The survey assessed parent/caregiver and child weight-talk, body weight perception, health behaviors, mental health status, and attachment. Given the finding that self-report is one of the most common limitations in BMI research (Befort et al., 2012) it was decided to measure height and weight objectively using a Seca height board and scale. All weight measurements for student participants were conducted in a confidential space to ensure safety and comfort of the participants due to the sensitive nature of gathering this data. The staff member gathering the data was the only one who could see the numbers on the scale. To increase confidentiality, staff members recorded and arranged measurements in a confidential space. Additionally, the scale produced measurements in kilograms instead of pounds to limit the staff members knowledge of the weight. Next, the students were given a numeric code to connect their responses to their parents' responses. Since most parents who

participated were not local, asking them to come to a secure setting to be measured in person was not possible. However, because of the limitations to self-report discussed previously, it was felt that height and weight measurements needed to include something more precise than the parents simply entering their own measurements. Parents were asked to upload a photograph either showing themselves on a scale or measuring their height with a measuring stick. While not as reliable as in person measurements it was deemed that this was a better option than simply relying on self-report. Both students and parents were asked to complete an online survey which assessed for attachment behaviors, encouragement to diet, weight teasing, BWP, BMI, depression, anxiety, and eating behaviors. Demographic information was included within the surveys. To create a triadic dataset, students were assigned a numeric code including their initials and birthdate. Students were required, as part of the procedures, to give this specific code to their parents. Parents were not able to complete their surveys without entering their child's unique code.

Sample and Procedure

This study was a secondary data analysis that received IRB approval. The original data was gathered from students associated with a large southeastern university and their parents. Student participants were enrolled in an undergraduate parenting class and were offered an incentive of extra credit points for completing the study. To meet inclusion criteria, all participants were required to be 18 years old and speak English. To collect triadic data, students were offered additional extra credit points for their parents to participate in the study as well.

Demographic Information

Students. There were 136 students who participated in the study. The students involved in the study were 89.7% female and 10.3% male with a mean age of 21.41 and a standard deviation of 2.256 ranging from 19-35 years old. Most of the participants identified as White

(74.3%). However, there was a noteworthy representation of minority groups amongst the participants. Students reported identifying as Black (14.9%), Other (6.6%), Asian (3.3%), Hispanic (0.8%). Due to the small number of males included in the sample and consequently the extremely limited statistical power to make inferences associated with this group, generalization of results to males was deemed unlikely. Therefore, male participants were dropped from the sample and researchers persisted with only female participants in subsequent data analysis procedures.

Parents. The mean age of fathers was 50.65 with a standard deviation of 5.583 with ages ranging from 38-72. The mean age of mothers was 52.80 with a standard deviation of 6.356 with ages ranging from 35-70. Fathers within this study identified as White (82.2%), African American/Black (11.9%), Asian (3%), Hispanic (2%) and Other (1%). Mothers identified as a variety of ethnicities as well: White (75.8%), African American/Black (15%), Asian (5%), Other (3.3%) and Hispanic (.8%).

Measures

As a result of the specific research questions included in this study, several variables and measures from the original study were not used (i.e., eating behaviors, anxiety, depression). The following section highlights the specific measurements that were used for this study with a short description of each measurement included.

Experiences in Close Relationship Scale (ECR). The ECR measures two dimensions of adult romantic attachment through a 36-item self-report instrument. There are 18 items each that measure anxiety and avoidance. The anxiety scale explores fears related to abandonment and availability and responsiveness of romantic partners. A sample item for the anxiety subscale would be, “I often worry that my partner will not want to stay with me”. The avoidance scale assesses discomfort with dependence, closeness, and intimate self-disclosure with others. A

sample item from the avoidance subscale would be, “I find it difficult to allow myself to depend on romantic partners”. The scores range from one to seven where one represents “strongly disagree” and seven represents “strongly agree”. Higher scores demonstrate higher levels of anxiety or avoidance. A score above four on the anxiety scale and below four on the avoidance scale would demonstrate an insecure-anxious attachment style. A score above four on the avoidance scale and below four for the anxiety scale would determine an insecure-avoidant attachment style. Studies have demonstrated high reliability with Cronbach alpha coefficients of .91 for anxiety and .94 for avoidance scales (Brennan et al. 1998). The ECR is one of the most reliable measures of adult attachment and validated across many cultural contexts (Busonera et al., 2014). For this current study, females’ anxiety had a Cronbach alpha coefficient of .95 the avoidance scores had a coefficient of .91. Mothers’ anxiety and avoidance scores had coefficients of .93 and .92, respectively. Fathers’ anxiety and avoidance scores had coefficients of .91 and .88, respectively. Overall, the Cronbach alpha coefficients demonstrate that the ECR had high reliability.

Family Weight Teasing. To assess parents and students’ experience of weight teasing, a statement was used from the Perception of Teasing Scale-Weight Teasing Frequency (POTS) subscale (Thompson et al., 1995). This scale demonstrates positive psychometric qualities due to researchers conducting a study and reporting a Cronbach alpha of .95 with a sample of female adolescents (Schultz et al., 2002). Participants chose a number on a 5-point Likert scale where one represented “never” and five represented “very often”. This was the question used to assess students’ perception of weight-based teasing in the family: “My family teases me about my weight…”. The parents recorded their responses to this statement, “I tease my child about his/her weight”. Since only one question from the POTS scale was used, a sample Cronbach’s alpha is not available.

Parental Encouragement to Diet. The questions used to assess parental "encouragement to diet" were derived from two studies that used this measure which demonstrates good reliability (Neumark-Sztainer et al., 2008; Bauer et al., 2013). In the study by Neumark-Sztainer et al. (2008) the researchers presented the parents reports of engaging in weight talk as having good reliability with a Cronbach's alpha of .85 in a sample of 61 parents. Participants chose a number on a 5-point Likert scale where "never" was represented by one and "very often" was represented by five. These were the statements that assessed the student's perspective of their parents encouraging them to diet: "My father encourages me to diet…", "My mother encourages me to diet…". Mothers and fathers recorded on a 5-point Likert scale their responses to this question, "I encourage my child to diet". For measuring encouragement to diet only one question was used therefore there is no Cronbach's alpha provided since it's a single question.

Parental Dieting. The statements used to assess reports of dieting to lose weight amongst parents were derived from two studies that assessed the parents report of encouraging their child to diet (Neumark-Sztainer et al., 2008; Bauer et al., 2013). Although there is no empirical measure of "dieting to lose weight" found in the literature, these studies used this measure demonstrating good reliability. These were the statements used to assess the students' perception of their parents dieting to lose weight: parental dieting: "My father diets to lose weight or keep from gaining weight" and "My mother diets to lose weight or keep from gaining weight". Parents recorded their responses to this statement: "I diet to lose weight or keep from gaining weight". Parents and students were asked to select a number on a 5-point Likert scale. One represented "never" and five represented "very often". For measuring "dieting to lose weight" only one question was used therefore there is no Cronbach's alpha provided since it's a single question.

Body Weight Perception (BWP). The question measuring Body Weight Perception (BWP) was this: "Do you see yourself as: healthy weight, underweight, overweight, or obese". Students chose the weight category options that fit their perception of themselves. Although there is no empirically tested measure that exists to measure BWP, many research studies have used a similar question to assess BWP (Atlantis & Ball, 2008; Chang & Christakis, 2003).

Data Analysis

The research questions were addressed by running univariate, bivariate, and multivariate analyses as well as ANOVAs. Univariate analyses such as means, standard deviations, and ranges were performed to identify patterns within the data. Second, bivariate analyses were conducted to identify the correlations amongst the variables and will be presented in a correlations table. The correlated variables determined the variables included in the multivariate analyses (multiple regression). Two regression models were conducted to determine the variance in the dependent variables accounted for by independent variables. We conducted correlations followed by linear regressions to determine whether maternal anxiety and avoidance, paternal anxiety and avoidance, maternal and paternal weight teasing, encouragement to diet, dieting to lose weight is significantly associated with child anxiety and avoidance. In order to explore the relationship between the dependent variables and the categorical independent variable body weight perception, we conducted one-way ANOVAs to determine group differences by body weight perception on attachment and weight talk variables.

This study examined the influence of maternal and paternal anxious and avoidant attachment behaviors, weight teasing, encouragement to diet, dieting to lose weight on child's anxious or avoidant attachment style using linear regression models. This study also examined the differences in means between body weight perception and attachment and weight talk variables

using ANOVAs. Parents completed measures of attachment, weight teasing, encouragement to diet, and dieting to lose weight. Children completed measures of attachment, family weight teasing, parental encouragement to diet, parental dieting to lose weight, and body weight perception. The linear regression models and ANOVAs are displayed in Appendix A.

CHAPTER 4: RESULTS

This study examined the influence of maternal and paternal anxious and avoidant attachment behaviors, weight teasing, encouragement to diet, dieting to lose weight on child's anxious or avoidant attachment style using two linear regression models. This study also examined the differences in means between body weight perception and attachment and weight talk variables using ANOVAs. The first section of this chapter presents the results of the descriptive statistics and intercorrelations. The second section presents the results of the regressions that were conducted as well as the ANOVAs.

Descriptive Statistics and Correlations

To answer the research questions, descriptive statistics and intercorrelations were examined (see Table 1). We, first, found that in the sample the average score for mothers who reported attachment anxiety was 2.79 (*SD* 1.04) on a scale of one to seven where higher scores demonstrate higher levels of anxiety. This score indicates that participants in this sample who identify as a mother had low levels of attachment anxiety in their intimate relationships. Next, the fathers had a slightly lower mean score of 2.59 (*SD* .975) for attachment anxiety. This is similar to the maternal participants in that the score means that there are low levels of attachment anxiety in their intimate relationships. For mothers' avoidant attachment, participants showed a mean score of 3.23 (*SD* 1.04). This score means that maternal participants had moderate levels of attachment avoidance. For fathers' avoidant attachment, participants showed a mean score of 3.48 (*SD* .92) which means that they had moderate levels of attachment avoidance. These results show that on average maternal and paternal participants had higher attachment avoidance than attachment anxiety.

Mothers weight teasing showed a mean of 1.17 (*SD* .53). Fathers weight teasing showed a mean of 1.18 (*SD* .55). These scores indicate that mothers and fathers reported low levels of

weight teasing. Child reports of family weight teasing showed a mean of 1.57 (*SD* .95) indicating that children perceived there to be low levels of weight teasing in the family. Mothers' report of encouragement to diet showed a mean of 2.02 (*SD* 1.13). Fathers' report of encouragement to diet showed a mean of 1.88 (*SD* 1.11). The child report of mothers' encouragement to diet showed a mean of 2.35 (*SD* 1.23). The child report of father's encouragement to diet showed a mean of 1.92 (*SD* 1.18). These scores indicate that there were low levels of encouragement to diet from both mothers and fathers from each of the mother/father/child perspectives.

For mothers dieting to lose weight the mean score was 2.80 (*SD* 1.15). For fathers dieting to lose weight the mean score was 2.56 (*SD* 1.13). For child's report of mothers dieting to lose weight with a mean score of 2.93 (*SD* 1.22). For child's report of fathers dieting to lose weight the mean score was 2.49 (*SD* 1.25). These scores indicate that there were moderate levels of parents dieting to lose weight from the mothers' and fathers' perspective as well as the child perspective. In terms of the dependent variables, children reported an anxious attachment of 3.39 (*SD* 1.30) which indicates moderate levels of attachment anxiety. Children also reported an average score for avoidant attachment of 3.33 (*SD* 1.00). This indicates low levels of avoidant attachment.

Correlational analyses of variables were conducted and yielded several significant associations. Mothers' anxiety was positively associated with fathers' anxiety ($r=.28, p < .05$), mothers' avoidance ($r=.40, p < .01$), fathers' avoidance ($r=.24, p < .05$), and mothers' report of weight teasing ($r=.21, p < .05$). Fathers' anxiety was positively correlated with mothers' avoidance ($r=.24, p < .01$) as well as fathers' avoidance ($r=.38, p < .05$). Mothers' weight teasing was positively correlated with fathers' weight teasing ($r=.37, p<.01$) as well as the child's report of their father encouraging them to diet ($r=.22, p < .05$). Fathers' weight teasing was positively correlated with child's report of family weight teasing ($r=.42, p<.01$) as well as

fathers' encouragement to diet (*r=.32, p<.01*) and the child's reports of their mothers' encouragement to diet (*r= .23, p<.05*) and child's report of their fathers' encouragement to diet (*r=.30, p<.01*). Child's report of family weight teasing was positively correlated with fathers' encouragement to diet (*r=.29, p<.01*), and the child's report of their fathers' encouragement to diet (*r=.28, p<.01*), and the child's report of their father dieting to lose weight (*r=.27, p<.01*). Mothers' encouragement to diet was positively correlated with fathers' encouragement to diet (*r=.66, p<.01*) as well as the child's report of mothers' encouragement to diet (*r=.56, p<.01*) and fathers' encouragement to diet (*r=.33, p<.01*) and father's dieting to lose weight (*r=.43, p<.01*) and child's reports of mother dieting to lose weight (*r=.27, p<.01*). Fathers' encouragement to diet was positively correlated with the child's report of the mothers' and fathers' encouragement to diet (*r=.45, p<.01; r=.42, p<.01*) as well as the fathers' report of dieting to lose weight (*r=.44, p<.01*). The child's reports of mothers' encouragement to diet was positively correlated with the child's report of fathers' encouragement to diet (*r=.55, p<.01*) as well as both fathers' report of dieting to lose weight (*r=.35, p<.01*) and the child's report of fathers dieting to lose weight (*r=.44, p<.01*). The child's report of the fathers' encouragement to diet was positively correlated with both fathers' report of dieting to lose weight (*r=.32, p<.01*) and the child's report of fathers dieting to lose weight (*r=.56, p<.01*). Mothers' report of dieting to lose weight was positively correlated with fathers' report of dieting to lose weight (*r=.30, p*<.01) and the child's report of both mothers and fathers dieting to lose weight (*r=.58, p<.01; r=.29, p<.01*). Fathers' report of dieting to lose weight was positively correlated with the child's report of fathers' dieting to lose weight (*r=.44, p<.01*). The child's report of mothers' dieting to lose weight was positively correlated with the child's report of fathers' dieting to lose weight (*r=.36, p<.01*). The child's report of anxious attachment was positively correlated with mothers' report of weight teasing (*r=.25, p<.01*), fathers report of weight teasing (*r=.29, p<.05*), and the child's report of

family weight teasing ($r=.38, p<.01$) as well as mother's report of encouragement to diet ($r=.21, p<.05$). The child's report of avoidant attachment was positively correlated with the child's report of anxious attachment ($r=.40, p<.01$).

Table 1. Descriptive statistics and intercorrelations for study variables (N= 336)

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. Mother anxious attachment	-																	
2. Father anxious attachment	.28*	-																
3. Mother avoidant attachment	.40**	.24**	-															
4. Father avoidant attachment	.24*	.38*	.19	-														
5. Mother weight teasing	.21*	-.00	-.02	-.16	-													
6. Father weight teasing	.13	.12	.06	.10	.37**	-												
7. Child family weight teasing	-.01	.12	-.13	.09	.17	. 42**	-											
8. Mother enc. to diet	-.06	.14	.01	.04	-.00	.22	.28	-										
9. Father enc. to diet	.13	.20	.09	.01	.05	.32**	.29**	.66**	-									
10. Child mother enc. to diet	-.02.	.17	-.10	-.01	.17	.23*	.49	.56**	.45**	-								
11. Child father enc. to diet	-.11	.14	.03	.07	.22*	.30**	.28**	.33**	.42**	.55**	-							
12. Mother diets to lose weight	.14	.19	-.01	.05	.09	.08	.06	.35	.19	.12	.08	-						
13. Father diets to lose weight	.10	.11	.08	.01	.07	.25	.30	.43**	.44**	.35**	.32**	.30**	-					
14. Child mother diets to lose weight	.06	.15	-.05	.00	.07	.08	.12	.27**	.06	.40	.05	.58**	.13	-				
15. Child father diets to lose weight	.02	.03	-.01	-.05	.29	.16	.27**	.16	.05	.44**	.56**	.29**	.44**	.36**	-			
16. Child anxious attachment	.14	.16	-.10	-.02	.25**	.29*	.38**	.02	.13	.21*	.17	.02	.40	-.05	.12	-		
17. Child avoidant attachment	-.07	.20	.02	.04	.05	.13	.11	.05	.16	-.04	.14	.04	.08	-.10	-.10	.40**	-	
18. Child body weight perception	.15	.07	-.01	.04	-.06	-.05	-.04	-.06.	-.07	-.18	-.00	.17	-.07	-.01	.01	.02	.08	-
M	2.79	2.59	3.23	3.48	1.17	1.18	1.57	2.02	1.88	2.35	1.92	2.80	2.56	2.93	2.49	3.39	3.33	2.46
SD	1.14	.975	1.04	.921	.528	.553	.945	1.13	1.11	1.23	1.18	1.15	1.13	1.22	1.25	1.30	1.00	0.56

Note: Enc.= Encouragement; *p<.05, **p<.01

Regressions and ANOVAs

After conducting the univariate and bivariate analyses we examined the relationships between the independent and dependent variables through two linear regressions. We explored the association between the independent variables (mother anxious attachment, father anxious attachment, mother avoidant attachment, father avoidant attachment, mother weight teasing, father weight teasing, child report of family weight teasing, mother encouragement to diet, father encouragement to diet, child report of mother and father encouragement to diet, mother dieting to lose weight, father dieting to lose weight, child report of their mother and father dieting to lose weight) and child attachment anxiety. The results showed that the child's report of family weight teasing (β=.48, $p < .05$) was significantly associated with child attachment anxiety controlling for all other variables in the model (see Appendix C). The model for child attachment avoidance was not significant and did not produce any significant associations with the independent variables.

Table 2. *Summary of regression analyses linking the study dependent variable with child anxious attachment (*N=*336)*

	Child Anxious Attachment	
Variable	*B*	*SE B*
Constant	3.6	.84
Mother Anxious Attachment	.01	.16
Father Anxious Attachment	.14	.18
Mother Avoidant Attachment	-.33	.17
Father Avoidant Attachment	-.12	.18
Mother Weight Teasing	.25	.35
Father Weight Teasing	.27	.29
Child Family Weight Teasing	.48	.18*
Mother Enc. to Diet	.00	.20
Father Enc. to Diet	.15	.20
Child "mother enc. to diet"	-.06	.23
Child "father enc. to diet"	-.11	.19
Mother Diets to Lose Weight	.10	.18
Father Diets to Lose Weight	-.13	.18
Child Mother Diets to Lose Weight	-.29	.19
Child Father Diets to Lose Weight	.13	.20
R^2		.34
F for change in R^2		1.92

Note: Enc.= Encouragement
B = Unstandardized Coefficient; *SE B* = Standard error of the unstandardized beta coefficient
*p < .05

Next, we examined the relationships between the categorical independent variable body weight perception and 15 dependent variables using a one-way ANOVA to determine group differences. One-way ANOVA results and mean differences by BWP for the dependent variables are found in Table 3. The results demonstrated that there were no significant differences for the

two BWP groups for attachment anxiety or avoidance. However, Tukey's post hoc analyses show that those who saw themselves as overweight/obese reported significantly more family weight teasing, maternal and paternal encouragement to diet, the child's report of their mothers' encouragement to diet, and that their fathers' diet to lose weight more than those who saw themselves as having a healthy weight.

Table 3.

ANOVA Table

Variables	*df*	*F*	*η*	*p*
Mother anxious attachment	1	.039	.051	.844
Father anxious attachment	1	.731	.704	.395
Mother avoidant attachment	1	1.12	1.23	.292
Father avoidant attachment	1	1.04	.889	.312
Mother weight teasing	1	.351	.099	.56
Father weight teasing	1	.767	.238	.383
Child family weight teasing	1	6.41*	5.51	.013
Mother enc. to diet	1	33.7*	32.5	.001
Father enc. to diet	1	24.2*	23.7	.001
Child mother enc. to diet	1	8.62*	12.3	.004
Child father enc. to diet	1	.581	.581	.447
Mother diets to lose weight	1	1.22	1.62	.271
Father diets to lose weight	1	3.29*	4.07	.073
Child mother diets to lose weight	1	3.29	.070	.073
Child father diets to lose weight	1	.046	1.46	.830

Note: Enc.= Encouragement
Differences are significant at the $p < .05$ level.

Conclusion

To answer the research questions and hypotheses, correlations were conducted as well as two regression models and ANOVAs. The results demonstrated that there were significant key associations amongst the variables. Within the first regression model, the child's report of family weight teasing was significant while holding all other variables constant within the model. There was no significance found within the second regression model. Amongst the ANOVAs that were conducted five variables were significant. The following chapter will provide insight into clinical implications and future directions for this research.

CHAPTER 5: DISCUSSION

The purpose of this study was to explore the association between parents' insecure attachment behaviors, weight teasing, encouragement to diet, and reports of dieting to lose weight on child attachment anxiety and avoidance as well as body weight perception. The goal of this study was to contribute to the literature exploring the underlying causes and interactions between attachment and weight talk within the family system. The most current weight-talk literature focuses on establishing the presence of weight teasing, encouragement to diet, and dieting to lose weight within the family system and does not explore the underlying causes that contribute to weight talk. However, scarce literature has explored weight talk within the family system and attachment variables, therefore this study aimed to explore the associations between attachment and weight talk variables on child attachment anxiety and avoidance and body weight perception.

Parental Attachment Anxiety and Avoidance

Our hypothesis that mothers and fathers who report high levels of anxiety or avoidance will be more likely to have daughters with high levels of anxiety or avoidance was not confirmed. This may be related to a limitation of our attachment measure. While some literature suggests that parental attachment behaviors may predict child attachment behaviors (Nordahl et al., 2020), there was no correlation found between parents and daughters within our results. Due to this limitation, future research could measure attachment through additional measures.

Parental Weight Talk

Our hypothesis that mothers and fathers who report greater weight teasing, encouragement to diet, and dieting to lose weight will be more likely to have daughters who report greater anxiety or avoidance was partially confirmed. The regression model revealed that there was significance with the child's report of family weight teasing and the child report of

attachment anxiety. From an attachment perspective, those who have an anxious attachment rely extensively on others to provide security, comfort, and reassurance for them especially surrounding their identity (Cassidy & Shaver, 2016). Weight talk may exist on a continuum ranging from people modeling dieting behaviors, encouraging others to diet, or directly teasing people about their weight (Berge et al., 2015; Balantekin et al., 2019). An environment of weight teasing in a household may create a distressing environment for children experiencing anxious tendencies. Weight teasing may also be more directly harmful compared to encouragement to diet and dieting to lose weight creating a problematic environment for the individual experiencing it (Eisenberg et al., 2003). Weight teasing may injure a person's sense of self, leading them to feel unsafe in certain relationships impacting their self-esteem (Thompson et al., 1995). In relation to gender differences, women who experience weight teasing may be at risk for experiencing a decrease in self-esteem or high body dissatisfaction (Koskina & Giovazolias, 2010). They may feel hopeless and overwhelmed with damaged self-esteem due to these types of criticism. Additionally, the literature shows that in recent decades there is extensive societal pressure for women to have the "ideal" thin body type (Thompson & Stice, 2001) which may contribute to insecurities for individuals within families. If a female is exhibiting anxious attachment behaviors and teased about their weight in their family, they might experience increased anxious tendencies because they are overwhelmed with negative societal messages about body weight coupled with negative messages about weight from their family.

The model for including parents' attachment anxiety and avoidance and reports of weight talk did not reveal significance within the regression model for child's attachment avoidance. These results may align with the literature surrounding attachment avoidance where those who are avoidantly attached have been found to have a negative view of others and positive view of themselves (Feeney & Monin, 2016). Due to these people creating a metaphorical emotional

barrier between themselves and others out of protection, these individuals may not report that they experience weight-based teasing or comments from their parents due to the protective mechanisms they have set in place. Although, this finding may align with the literature surrounding attachment avoidance, more literature should be conducted to explore underlying experiences that individuals have when engaging in avoidant attachment behaviors in response to stress in the family.

Attachment, Weight Talk and Body Weight Perception

Finally, our hypothesis that maternal and paternal attachment anxiety and avoidance and weight talk would differ with body weight perception (BWP) was partially confirmed due to there being some significance with certain dependent variables. When comparing the means between the variables and BWP, these findings revealed that daughters who identified as overweight/obese reported significantly more family weight teasing than healthy weight individuals. Mothers' and fathers' encouragement to diet and child reports of mothers' encouragement to diet and fathers dieting to lose weight were more prevalent in overweight/obese individuals than healthy weight individuals. These findings align with the research surrounding weight discrimination and weight teasing (Puhl & Suh, 2015). Due to the prevalence of weight stigma and weight bias (Puhl & Brownell, 2001), researchers have found that those who are categorized as overweight/obese may be at risk for experiencing weight stigma (Pearl, 2018). Our findings align with previous studies where researchers identified that parents' weight teasing was more common in daughters with a higher body mass index (Neumark-Sztainer et al., 2010). This may increase the risk for mothers and daughters to develop attitudes of body dissatisfaction especially because researchers have found that mothers with increased dissatisfaction with their daughters' body shape contributed to daughters' body dissatisfaction because there were more negative comments about their daughters' body shape

and food consumption (Cooley et al., 2008). Parents' encouragement to diet was also associated with higher risk for overweight and obesity in a sample of adolescents (Berge et al., 2018). The findings of these results also demonstrate that there is potential for increased risk for overweight/obese daughters to have gained the perceptions about their weight from their parents (Robinson & Sutin, 2017).

Implications for Parents and Daughters

These findings have important implications for parents and their daughters. While the weight talk and attachment literature is established (Berge et al., 2015; Cassidy & Shaver, 2016) researchers have not conceptualized parents' weight talk combined with attachment anxiety and avoidance and the associations with daughter's attachment anxiety and avoidance or body weight perception. Our findings align with the discoveries researchers have established about the ways that children respond to interactions with their parents differently based on their gender. From a societal perspective, it is normalized for mothers to express and display emotions when they feel distressed to protect their family. Parents may discuss emotions more openly with daughters (Thomassin & Seldon, 2019). This type of cultural phenomenon may explain why distress in relation to body weight status may influence mothers' anxious tendencies which is connected to fathers' anxious tendencies based on the correlations in our results. The family unit should be a place were growth and development can occur safely for family members. Exploring underlying dysfunctional behaviors and patterns is important as it relates to insecure attachment behaviors. Our findings demonstrate that parents' weight teasing was significantly associated with daughters' attachment anxiety. The significance of weight teasing impacting attachment anxiety aligns with literature that shows that weight teasing contributes to other harmful tendencies such as increased risk for obesity and adverse eating behaviors (Puhl et al., 2016).

Clinical Implications

The findings of this study can support clinicians especially in working with families in various treatment settings. For example, therapists working in a clinical setting may be able to work with families to normalize the anxiety and systemic pressures they may feel in relation to body weight perception and anxious and avoidant attachment behaviors.

Within the initial stages of family therapy, this study demonstrates the benefit for exploring attachment behaviors with various family members as well as the presence of weight talk (Berge et al., 2015). Given the correlational nature of mothers' anxiety and mothers' report of weight teasing within the results, it may be helpful for therapists to normalize and provide psychoeducation for mothers within the family to alleviate the pressure they experience within their family and assess for the presence of weight talk. Clinicians may offer psychoeducation about behaviors and tendencies related to attachment anxiety and avoidance and emotion regulation for parents and daughters (Vahedi et al., 2016). Given the influence of weight teasing and the negative impact it can have on daughters within the family system, from an attachment perspective, these types of weight comments may injure and harm relationships deeply. Therapists could also provide psychoeducation about attachment injuries (Johnson, 2019) and the impact they have on relationships especially in relation to sharing about the harm of weight teasing. Additionally, the more weight talk there is in families than the more anxious tendencies there are especially amongst multiple family members. Mother's anxious tendencies are related to fathers' anxious tendencies especially in families where there is more weight talk.

If therapists notice that female clients have anxiety related to their weight, they might explore some of the underlying interactions within the family system especially as it relates to conversations surrounding weight. Clinicians may also begin conversations by exploring direct communication between parents and daughters to break down the generational transmission of

weight talk (Berge et al., 2018) about body weight perception and how each family member perceives their own body weight especially as it relates to reports of weight talk in their family. Conversations about specific types of weight talk as well as learning about insecurities that are associated with daughters' self-esteem may also be beneficial to make overt within the family (Passanisi et al., 2016).

Limitations and Future Research

A main limitation of this research is that the scores within the Experiences of Close Relationships measure for attachment anxiety and avoidance indicate that the score an individual receives only applies to them in the moment. Therefore, this study cannot determine causality with the variables. Our results reveal that there are some relationships between the variables at the time the data was collected. Future literature could use the measures within this study conducting a longitudinal data analysis to explore the impact of weight talk and attachment to determine causality amongst more specific variables within the family system over time.

Future researchers may gain more insight if they were to conduct a qualitative study and interviewed individuals about their attachment anxiety or avoidance as well as experiences surrounding weight teasing, encouragement to diet, or dieting to lose weight within the family context. While this study shows that the child's report of family weight teasing is associated with the child's attachment anxiety, more research is needed to understand how individuals conceptualize and make meaning of family weight teasing as well as how this impacts their own behaviors related to attachment anxiety. Additionally, future studies could also explore the impact of attachment anxiety and one of the weight talk variables like weight teasing in greater depth through creating longer surveys to assess individuals' experiences more fully. More research is especially needed to explore the impact of how BWP is impacted by family weight teasing as well as parental encouragement to diet.

Conclusion

The distress that stems from insecure attachment has been linked to emotional overeating (Hardman et al., 2016). Additionally, the weight talk literature has established that prevalence of weight teasing, encouragement to diet, and dieting to lose weight within the family system. However, there is scarce literature exploring the underlying reasons why these types of weight talk are present within the family. This study contributes to the weight talk literature through combining the perspective of attachment theory. These results show that from the child's perspective family weight teasing is associated with their attachment anxiety and certain elements of weight talk is reported significantly more in individuals who perceive themselves as overweight/obese which can inform clinicians when treating individuals who have identified having had an attachment injury/traumatic experience as well as the presence of weight talk in their family system. While child attachment avoidance was not found to be significantly associated with maternal and paternal attachment anxiety/avoidance or their reports of weight talk, future research could examine these variables in more depth to explore the meaning individuals attribute to attachment anxiety or avoidance and their own body weight perception.

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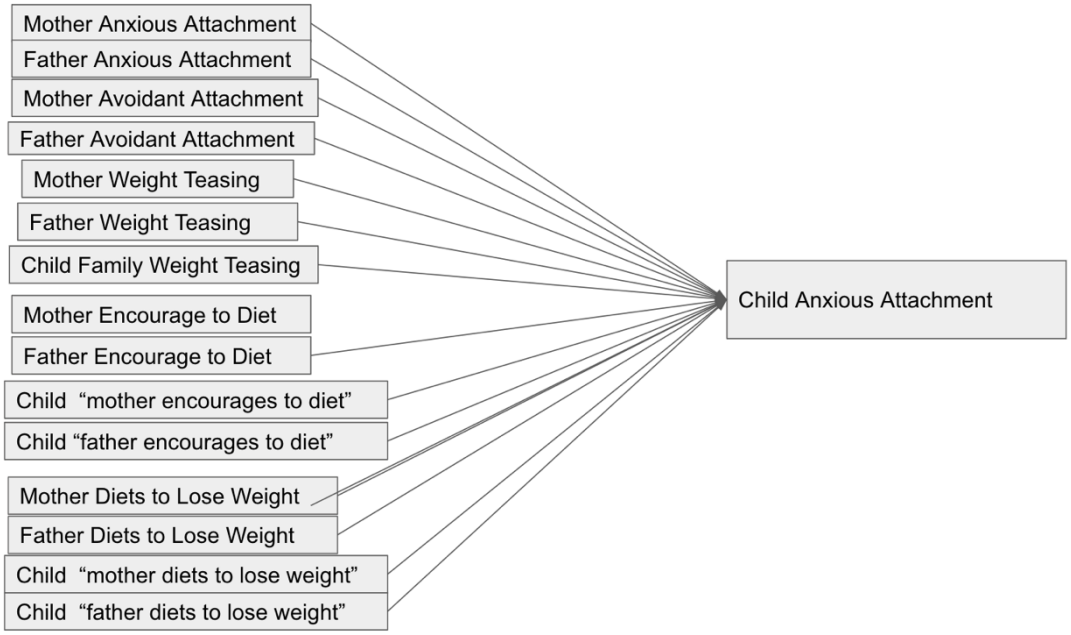
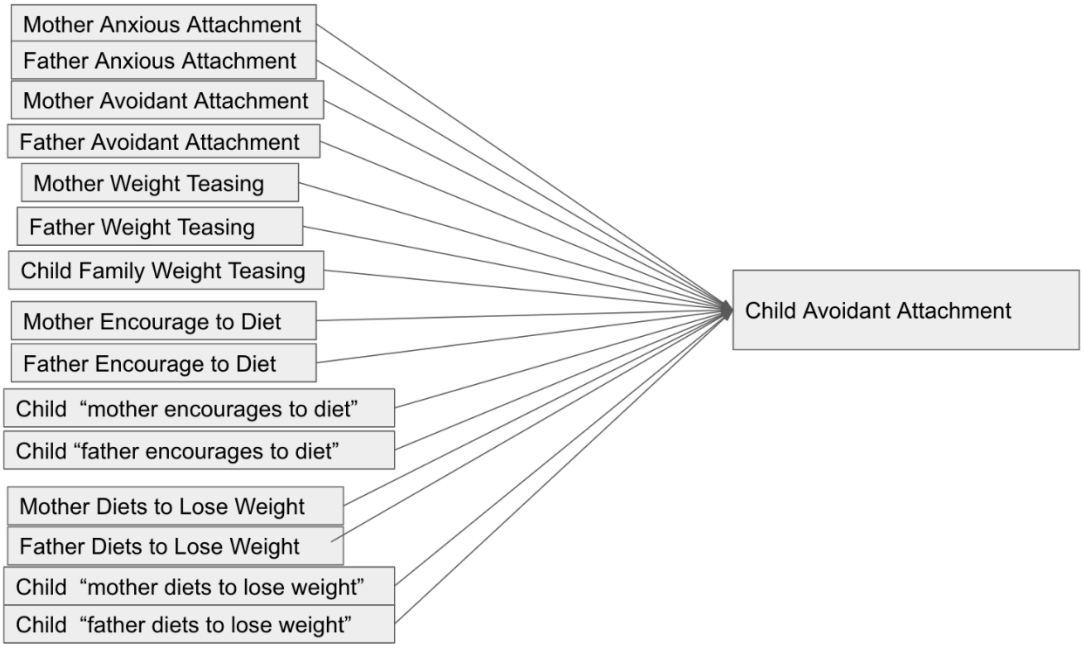
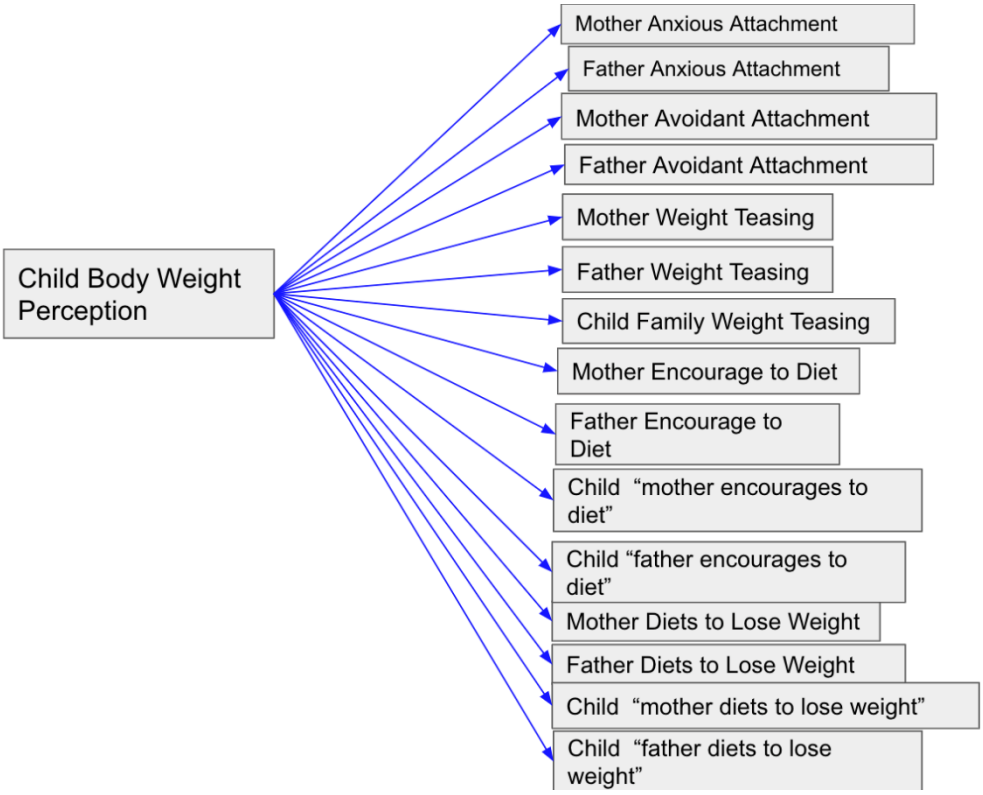
APPENDIX A: ILLUSTRATION OF MODEL





APPENDIX B: ILLUSTRATION OF MODEL



APPENDIX C: ILLUSTRATION OF MODEL